

A GRAMMAR OF OLD TURKIC
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LEIDEN
BRILL

2004

FOR
ERAN
AND
TALIA

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PREFACE

Writing a grammar of Old Turkic has for two main reasons proven a quite formidable task. The first reason is the sheer size of the corpus, which has, during the last decade, kept growing at a breathtaking pace. At present, none of the three most voluminous sources, the *Suvarnaprabhāsa*, the *Maitrisimit* and the *Daśakarmapathāvadānamālā* has as yet been edited in a way integrating all available manuscripts. Especially the *DKPAM*, with its lively narrative content containing so many specimens of direct speech, will no doubt further contribute to our knowledge of the language. As it is, I was not even able to work myself through all the extant published material so that, in principle, surprises in any section of the grammar are still possible. The only thing I can say is that such surprises have come less and less often during the last months.

Another reason why this task has proven to be a formidable one is the number of articles which appeared over the years on various phonological and morphological matters relevant for the questions which I have tried to answer. Although I have unfortunately been able to take this literature into account only to a limited extent, many will feel that I have indulged too much in argumentation with colleagues, thus giving various passages the air of papers in a journal. The fact is that I have, in many sections, felt the need not only to state my views but also to justify them as against competing opinions. This motive may soetimes also have led to an overaccumulation of examples, making reading difficult. However, those wishing to continue research into various topics will, I think, be thankful for a wealth of material which will, hopefully, help them reach their own judgements.

I would encourage colleagues to come forth with their criticisms. One domain which should be further developed is tense and aspect. Another matter which I have left for others is a detailed appraisal of the sources from a dialectological and diachronic point of view. The work will be attacked for having handled such diverse sources as the Orkhon inscriptions, Uyghur Tantric literature and the *Qutadgu Bilig* in a single grammar. This approach is, I think, at present justified by the fact that not all isoglosses seem to fit into neat bundles. Where mss. in Sogdian script share several linguistic features with the *Qutadgu Bilig*, where Orkhon Turkic forms and constructions find their specific explanation in Uyghur patterns, it would be highly counter-productive to split up the description. The present work is in any case quite unlikely to be the last

word on the grammar of Old Turkic. Or so I hope, expecting this book to attract new scholars to this domain of research.

The passages quoted should not be mistaken for editions; for exact and full rendering of the texts the reader is referred to the work of the editors, or better to the facsimiles of the mss. as far as Uygur is concerned: Most of these are now readily available in excellent quality on the internet and all the ones extant in Germany will be available in the foreseeable future. Within the VATEC project Peter Zieme, Klaus Röhrborn and the present author have, together with our assistants M. Knüppel, Z. Özertural, J. Taube and, above all, Irina Nevskaya, undertaken the reedition of Uygur manuscripts (including the ones in runiform script). This electronic reedition offers a full transliteration, a transcription, interlinear morphological analysis, a German or English translation and a full thesaurus. In the present grammar I have – to enhance readability – sometimes felt free to tacitly disregard small lacunae, to spell out words which scribes traditionally write in abbreviated form (e.g. with missing vowels) and the like, especially in sections dealing with syntax. The runiform inscriptions deserve better documentation than is available to date.

I should apologize for not having offered interlinear morpheme and lexeme analysis of words and interlinear translations, which would have much enhanced usability for readers not all too familiar with Turkic. Doing that would, however, have lengthened the book by hundreds of pages, making its publication impossible.

Irina Nevskaya and Mark Kirchner read earlier versions of the book and offered valuable remarks (not always heeded); Peter Zieme helped with some information on readings. Mehmet Ölmez is undertaking the difficult task of preparing some indices. I would like to express my gratitude to these dear friends as well as to Patricia Radder from the Brill publishing house, who put enough pressure on me to bring the work to an end, but not too much for me to despair of it completely. And of course to Yona – for support during the last twenty years.

December 2003

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CHAPTER ONE

INTRODUCTION

Since prehistoric times, pastoral nomads roamed the Eurasian steppe belt while hunters and gatherers populated Siberia, the vast stretch of land to the north of this belt. South Siberia, with its fertile regions as the Minusa valley, served as meeting ground for these two types of cultures as well as attracting invaders from afar. Accounts about the inhabitants of these regions can be found in written documentation left to us by the Chinese, the Greeks and others who used writing before they themselves did so. Archæology also has unearthed much about them and will no doubt bring more to light in the future. Some of these ethnical groups were Indo-European or, more exactly, Indo-Iranian and presumably also Proto-Tokharian. Others no doubt were Turkic or akin to the Turks: Chinese sources report towards the middle of the 6th century A.D. that people with this name had a sort of monopoly on iron mining in the Altai mountains. The modern or recent groups now lumped together as Palæo-Asiatic must have been indigenous to North Asia. In addition, some Uralic groups, coming from Western Siberia and North Eastern Europe, probably moved into this part of the world in fairly early times, as also Mongolic and Tunguz groups, which, however, came from the east. Although the languages of these peoples by all available evidence differed in genetic affiliation, their shared environments and their contacts over time must have generated various sorts of affinity among them as to material and spiritual culture and, indeed, anthropological characteristics. Through confederations among Central Eurasian ethnical units as well as the subjugation of one group by another, political entities were created, as a result of which culturally or linguistically differing groups found themselves within larger states. Language contact and convergence are among the normal results of such processes.

1.1. *Early and Proto-Turkic and Altaic*

In this book, which deals with language, we are interested in linguistic identity, in this case in ethnicities speaking varieties of Turkic; not in anthropological or cultural identity as documented in descriptions by neighbouring societies or unearthed by archaeologists, nor in ethnical or political identity as emerging from the accounts accumulated among

nations in Western or Eastern Asia. Whether such early North East Asian peoples as the Xiung-nu, Central Asian peoples as the Wusun or Eastern European peoples as the Huns spoke Turkic languages is not known; their identity is therefore irrelevant for the intents and purposes of the present work. When differing tribes shared one political fate either of their own will or after having been incorporated into some framework by force, they would, in the course of time, converge in various ways, not only administratively but also culturally and linguistically. Thus, tribes not being Turkic by origin might have adopted some form of Turkic language or dialect, modifying it even while adopting it, whereas some Turkic tribes may have given up their Turkic idiom. What interests us here is linguistic identity to the exclusion of all other ways in which ethnic groups can be labelled. Turkic-speaking state elites would have made their variant of Turkic into the national language, sometimes causing other (Turkic or non-Turkic) groups to use it, perhaps as a written language, beside the idiom they themselves spoke; this may have been the case in the Khazar state, for instance. On the other hand, Turks could well have had to use some language beside their own if they found themselves in a political, ethnical or cultural constellation in which some other language occupied the central position; or, alternately, they may have used another language for writing purposes instead of beginning to write their own: For instance, the Turkic military elites of the Ghaznavid and Sälčük states (starting with the 10th century A.D.) wrote Persian or Arabic but no Turkic. Thus, the identity of the elite of the first Türk empire (6th-7th centuries A.D.) is of no interest to us here as long as their only text which (at present) is known to us¹ is a Sogdian inscription, no possible Turkic etymologies being available for any of the titles mentioned in it. Similarly, it would not make much sense to try to delimit an ethnic identity which spoke Proto-Turkic, although Proto-Turkic is a useful linguistic tool worth constructing (or 'reconstructing').

Turkic does start to become tangible as a linguistic entity at least around the beginning of the Christian era, when neighbouring nations learn and document words which we can identify as being clearly Turkic (by morphological shape, for instance): A case in point is the term *suv+lag* 'watering place', found in early Chinese sources,² where

¹ The Bugut inscription, written around 580 A.D.: See Kljaštornyj & Livšic 1972; latest readings in Yoshida & Moriyasu 1999.

² Cf. Schmitt 1971. There were several places of this name, one of them being Kāšgar.

at least the suffix is definitely Turkic.³ The matter is often not as simple as in this case, in that foreign documentation often consists of titles, which tend to get passed from one language to another: If, in Hungary, the Avar ruler was called *kaganus*, this by itself does not mean that the Avars were Turks: As it happens, the source of this title appears not to have been Turkic in the first place, and it was also borrowed by other Central Eurasian nations. Some further evidence *may* indicate that the Avars spoke some form of Turkic.

The Turkic languages are genetically fairly close-knit although they have, of course, diverged in time (and, in certain cases, converged). Reconstructing the hypothetical Proto-Turkic language through the genetic comparison of the Turkic languages seems to be a feasible goal, but work in this direction has been slow, sometimes marred by dilettantism: Much of it took place in the Soviet Union, where too much weight was put on modern evidence at the expense of earlier stages of the language. Scholars have put much less energy and thought into a model of inner-Turkic genetic affinities than into the Altaic problem: the question whether the great number of lexical and grammatical units and typological traits which Turkic shares with the Mongolic group of languages and, to a considerably lesser extent, with the Tunguz languages, Korean and Japanese points at a genetic relationship or whether it is attributable to borrowing, copying activity or coincidence. This question, which deserves collective treatment by specialists for the different languages and language groups, will not be dealt with here.⁴ What is certain is that a lot of the contact involving the copying of specific items in all domains of language between Turkic and Mongolic on the one hand, Mongolic and Tunguz on the other hand took place before the peoples speaking these languages began putting them into writing. It is therefore in any case useful to speak of 'Altaic languages' as a term covering at least these three language groups; as an areal term if not as a genetic one. Turkic and Mongolic may well be related genetically (my knowledge of the other languages is quite insufficient for me to make any statements in this respect) but adequate serious research on the nature of their relationship is still lacking.

³ Not to be confused with +IXg, which is found also in Mongolic. The symbol + here used marks nominal juncture, whereas - is used to indicate juncture between verbs and their suffixes.

⁴ The author has pointed out in a review (Erdal 1997) that clear similarities exist also with Hurro-Urartæan; cf. further Erdal 1998 for the domain of verb formation in Turkic and Mongolic.

The earliest discovered documents written in Central Eurasia are Indo-European and Chinese. When, in the 6th century A.D., the first Türk kaghanate was formed in present-day Mongolia, its rulers appear to have used Sogdian, an Iranian language, for writing.⁵ At about the same time, the Turkic-speaking Khazars formed a state in the Turkic Far West, in an area roughly bound by the Caucasus, the Ural river (called *Yayık* in Turkic, *Δάιξ* in Greek sources) and present-day Ukraine. Runiform inscriptions discovered in this region and further west were presumably inscribed some time during the second half of the first millennium A.D.. They can be attributed to the Khazars, to the Avars, to the equally Turkic Pechenegs or Bolgars or to other Turkic ethnic entities, but interpretations proposed for them are unsatisfactory and doubtful.

The earliest readable, understandable and datable Turkic texts are the official inscriptions of the second Turk kaghanate, the Orkhon inscriptions, the first of which appears to have been from slightly before 720 A.D.; the runiform alphabet in which these inscriptions are written was deciphered by Vilhelm Thomsen in 1893. The age of the inscriptions found in South Siberia near the upper Yenisey river, most of which are in the same script, is not known for certain; some of them may well be older than the Orkhon inscriptions. The Bactrian mss. from Afghanistan edited by Sims Williams (2000a) contain a number of Old Turkic words and word groups; they are no doubt linked to the domination of the Western Türk after they vanquished the Hephthalites together with the Sassanians. The earliest of these documents have been dated into the first half of the 7th century; they are thus the earliest sources containing Old Turkic phrases (and not just single terms): These words and phrases (e.g. *tapaglig* ‘revered’ in a document from 640 A.D.) are clearly in the same language as other Old Turkic sources.⁶ Through their appearance in the West Asian part of Turkic expansion, the term ‘East Old Turkic’ used by Johanson (2001 and elsewhere) to refer to this language is made obsolete: Old Turkic as here described was presumably, with minor variation, used in West Turkestan as well (which is, after all, where Qarakhanid is documented), and all the way south to Bactria.

The earliest accessible Turkic sources in Eastern Europe are the few sentences left to us by the Danube Bolgars, which (like Bactrian) are in

⁵ See above, and footn. 1.

⁶ *kinžuy* ‘queen, consort’ may actually be more archaic than Old Turkic *kunčuy* in view of the shape of the source of this term in Early Middle Chinese; the Bactrian ms. in which *kinžuy* appears seven times in reference to a Khaladj princess is dated to the year 711, which makes it contemporaneous with the Orkhon inscriptions.

Greek writing and belong to the 9th or 10th centuries:⁷ While all early Asian documentation represents a single fairly close-knit language, the sparse and difficult Danube Bulgarian material is aberrant, represents a different idiom and is not taken into consideration here. Nor are the Volga Bulgarian inscriptions, which date from the Middle Turkic period (13th-14th century); both corpuses in any case represent different languages than the one described here.⁸ To this latter material one might add words borrowed from varieties of early and middle European Turkic into Hungarian. This rich evidence is important for the reconstruction of Proto-Turkic and but unlikely to give specific evidence for the language dealt with here. Kāšġarī in the 11th century gives linguistic information on a number of Turkic dialects or languages of his time; see Brockelmann 1921 and Dankoff & Kelly 1985 on this.

The corpus of extant Turkic is conveniently divided into three periods, old, middle and modern. The end of the Old Turkic period was brought about by the impact of the Mongol invasion in the 13th century, which covered everything from South China to Poland and Hungary, from Eastern Siberia to Syria and Central Anatolia. Involving the whole of the Turkic world, it at first put most of the Turks to flight, breaking up social structures and rearranging ethnic geography. Subsequently, most Turkic groups were engulfed in the boundless Mongol empire and its successor states, in which they were usually the culturally and ethnically dominating though not the leading element; this had the effect of enhancing inter-Turkic linguistic contact and leveling. During the Middle Turkic period, which was ushered in by this upheaval, most of the Turkic world became Islamic; except, that is, those parts of it which were dominated by China and later by the (Mongolian) Kalmyks. Islam brought about greater literacy among much of the Turkic world. The Eastern part of Chinese Turkestan, Gansu, Mongolia and Southern Siberia including and east of the Altay range remained outside the influence of Islam. In this eastern and north eastern part of Asia, Turks went on adhering to Buddhism or to varieties of Shamanism, partly influenced by Buddhism. In Eastern Europe there were also Christian and Jewish Turkic-speaking groups, but very little written material has survived from them from the early Middle Turkic period; the 14th century Codex Comanicus is one important Christian Middle Turkic source (in Latin characters). Middle Turkic is, on the whole, characterized by two or three written languages in the Islamic literary tradition,

⁷ See Erdal 1988 for one important such source and its relationship with the Danube-Bulgarian inscriptions.

⁸ See Erdal 1993 for the Volga Bulgarian corpus.

often quite distinct from the dialects and languages spoken by the authors, evolving over time and actually varying from author to author and indeed from manuscript to manuscript. However, the sources of this period practically from the beginning show a clear division between four ethnically and geographically distinct dialect groups crystallizing into written languages: Eastern Turkic, Kipchak, Bulgarian and Oguz.

Northern and central parts of all this was then gradually incorporated into Russia. The Modern Turkic period starts around the middle of the 19th century, when scholars such as Castrén, Vámbéry, Raquette, Böhtlingk or Radloff described as yet unwritten Turkic languages and dialects of High Asia. At about the same time, Christian missionaries initiated the alphabetisation of some of these languages with the purpose of spreading their faith; this is how the first sources of Chuvash or Shor were printed. Travellers such as Stralenberg or Pallas had, since the 18th century, supplied the scholarly world with some preliminary information about such languages. By the end of the 19th century Kazakh, Azeri or Ottoman authors were increasingly making their written languages look like their speech. For languages like Tatar or Turkmen, parting from the Arabic alphabet in the 20th century was the decisive step into a relatively faithful representation of national tongues.

Old Turkic as described in this book comprises all extant texts written in early *Asian* Turkic as well as phrases appearing in sources in other Asian languages such as the Bactrian mss. or the *Mahrnāmag* edited by F.W.K. Müller (SEddTF III 151-190). Since early *European* Turkic is practically nonexistent as an unstarred entity, no confusion can, we think, come from using the term 'Old Turkic' to refer not to an abstract stage in the history of the Turkic languages in general, but to a specific language once spoken in central regions of Asia, and delimited by the corpus which represents it. My use of the term 'Common Turkic' is explained in the following section.

1.2. *The Old Turkic corpus and its parts*

This book deals with the remains of what was written down in the Asian domains of the early Turks, which consists of three corpuses:

1) Two hundred odd inscriptions in the Old Turkic runiform script, presumably 7th to 10th century. These were discovered mostly in present day Mongolia (the area covering the territory of the second Türk empire and the Uygur steppe empire following upon it) and in the upper Yenisey basin (the domains of the Qırqız and Čik tribes) in central South Siberia. A few readable runiform inscriptions were discovered

further west, in the Altay mountains all the way to the Irtysh river, sporadically all over present-day Kazakhstan and Kirgizstan (here especially in Talas, the capital of the Western Second Türk kaghanate) and the north eastern part of Chinese Turkestan; see e.g. Vasil'ev 1976/78 for a short survey. Most of these are epitaphs, but some are mere graffiti on prominent rocks by the side of main roads. There also are some objects (e.g. coins, mirrors, bricks, a spindle whorl, bowls) inscribed with the same script. Many of the runiform inscriptions from Mongolia are official, but most of the other ones stem from common (though sometimes obviously highly regarded) individuals.

2) Old Uygur⁹ manuscripts from the eastern part of present-day Xinjiang and Gansu (China), from the 9th century on, in the Uygur, Manichæan, runiform,¹⁰ Brāhmī, Sogdian, Syriac, and Tibetan scripts. Most of them are kept in Berlin but there are collections also in London, St. Petersburg, Paris, Kyōto, Stockholm, Helsinki, Ankara, Istanbul and China itself; a few pieces have landed elsewhere. The Uygur ms. corpus is by far the most extensive among the three. Much of it consists of Buddhist, Manichæan or Christian religious material, but there are also legal documents such as contracts, personal or administrative letters, medical or astrological treatises, glossaries, folkloric sources and prose and verse narrative texts. Approximately three quarters of the whole corpus consist of Buddhist sources (mostly belonging to its *māhāyana* branch). Manichæan sources make up less than 10%, but most of these are relatively old. The Christian texts are the least numerous and do not seem to be particularly early. The present description tries to base itself in principle primarily on mss. thought to antedate the (mid-13th century) establishment of Mongol rule. Sources from the rule of the Yuan (i.e. Mongolian) dynasty were by their authors meant to be in the same language as earlier sources, however, and can be difficult to tell from earlier ones.

Uygur scholars nowadays broadly distinguish three stages: The pre-classical stage including most of the Manichæan material but also Buddhist texts like the extensive Sängim ms. of the Maitrisimit; the so-

⁹ We will, henceforth, use the term Uygur to refer to Old Uygur as being described here, rather than to Modern Uygur now spoken in Xinjiang, Kazakhstan etc., or to Middle Uygur as documented from Ming and other pre-modern sources.

¹⁰ There is sometimes some confusion regarding the linguistic assignment of the runiform mss., e.g. in Johanson 1998: 85: These are written in the same language as the rest of Xinjiang Uygur (within which there are dialect differences); the language of the runiform inscriptions of the Uygur Empire found on steles in Mongolia is, on the other hand, practically the same as that of Orkhon Turkic.

called koiné¹¹ stage, including e.g. the translations made from Chinese by the team of Šiņko Šali Tutuņ or the DKPAM, and, thirdly, the late Uygur stage which we find in Tantric texts like the Totenbuch edited by Kara and Zieme. Criteria for the linguistic dating of Old Turkic sources were first offered in Erdal 1979 (a reformulation of a section in Erdal 1976). The topic was subsequently taken up by several scholars, fullest by Doerfer 1993. We will come back to the question of relative dating within Uygur further on in this section.

3) 11th century Turkic texts from the Qarakhanid state: In Arabic writing, the *Qutadgu Bilig*, a poem consisting of six thousand odd couplets by Yūsuf the Chamberlain,¹² and the *Dīvānu luġāti 't-Turk*, an Arabic-Turkic lexicon and encyclopedia featuring morphological, derivational and dialectological notes, by Maḥmūd of Kāšġar.¹³ Land sale documents in Uygur writing found in Yarkand¹⁴ are the only direct Turkic Muslim ms. evidence from the period, since the three QB mss. and the only ms. of the DLT are not autographs but somewhat later copies. Maḥmūd also quotes forms from dialects other than his own, the DLT thus serving as earliest evidence¹⁵ for other early varieties of Turkic. Material from other varieties is, in general, excluded from the present work: Qarakhanid grammar is close enough to Uygur grammar to make a single description for both corpuses meaningful, which is not necessarily the case with other material quoted in the DLT. Features of other dialects are not, however, disregarded; e.g.: The Oguz cognates of

¹¹ This term (used by Röhrborn and Laut in a number of their publications at least since 1984) is, I think, unfortunate, as it is misleading to outsiders: Greek κοινή means 'common'; *koinè diálektos* was the name originally given to the relatively late, post-classical variety of Greek which was mostly based on the Ionian dialect and replaced practically all the (other) Greek dialects to serve as common language not only to Greeks but also to others who came under their sway or adopted their culture. The variety of Uygur which is, I think, better just called 'Classical' or 'Standard' is a stage in the development of the language and of its spelling when it had established relatively strong and clear norms. The language apparently was, at this stage, spoken more or less as it was written, which was probably no longer the case for Late Uygur sources.

¹² Edited by Arat (1947), translated into English (with important notes) in Dankoff 1983. Tezcan 1981 will also be important for a better edition in the future.

¹³ Dankoff & Kelly 1982-85 is an edition of the Turkic (transcribed and transliterated), couched in an English translation of the Arabic parts of the text.

¹⁴ Erdal 1984.

¹⁵ The reliability of the DLT cannot be wholly taken for granted in this specific matter, as Maḥmūd was not, of course, a field researcher in the modern sense; but his evidence does seem convincing. Most of the information supplied by Kāšġarī on the dialects has not yet been matched with modern and comparative data and there is as yet no conclusive investigation of this question.

äšgäk 'donkey', *buš-gak* 'asthma' and the dative suffix *+kA*, which lack the velars of the quoted forms altogether, are certainly relevant for our view on the shape of these Old Turkic elements; they show that *äšgäk* and *bušgak* must have had *g* and not *k* although *k* would have been a possible reading of what is documented, and that there must, beside *+kA*, also have been an early variant dative suffix *+gA*. *koymanjiz* and *kijmanjiz*, which are in DLT fol.289 quoted as Oguz and Kipčak forms for the negated 2nd person plural imperative, are relevant for Turkic in general, because they show that */d/ > /y/* had taken place in at least some Early Turkic dialects already in the second half of the 11th century, and that *-(X)ŋ-lAr* had not been generalised to all early dialects.

The legend of Oguz Kagan, which is considered to be in Old Turkic e.g. by Ščerbak 1961 and in the DTS, is written in a form of Chagatay, a stage of Turkic which is quite different from Old Turkic and much later. Buyan Ävirmäk, a text stretch found at the end of the 18th century Petersburg ms. of Suv, was added at a very late stage and cannot be called 'Old Turkic' either. Nor can the 12th century Atabatu 'l-Haqā'iq, which should be considered to belong to Middle Turkic though its composition took place in the Qarakhanid realm. A weakness of descriptions of Old Turkic by Soviet scholars was that they described Uyğur together with such Middle Turkic sources, taking all of them to be expressions of a single language. Among the three mss. of the QB, ms. A is very late; its content is not evidence for the text except when considered together with mss. B and C. R.R. Arat had, in 1947, published an edition of the QB based on all three mss.; not knowing this edition or disregarding it, Soviet scholars quoted each of the three mss. as if each were a source by itself.¹⁶

The three source groups mentioned constitute all the early written remains of Common Turkic¹⁷ in so far as they can be read at present: Many short inscriptions discovered west of Chinese Turkestan and South Siberia, e.g. in the Altay region, are hard to decipher: Where aberrant forms have been read, there is the possibility of misreadings.

¹⁶ Thus also in the DTS. Such errors can have long-lasting influence. E.g., Anderson 2002 gives *kir-* as an inchoative auxiliary verb, quoting a phrase '*sevä kirsä*' for "KB II 42" from Ščerbak 1961: 153. It turns out that this is a reference to what ms. A alone has in QB 403, while the other ms. extant for this passage has something quite different. There is no other 'evidence' for *kir-* as auxiliary in Old Turkic.

¹⁷ I here use 'common' in the sense of 'ordinary', to refer to what Schönig 1997: 119-120 calls 'Norm Turkic'. Schönig there uses 'Common Turkic' to refer to the diasystem + 'diadictionary' which is the lowest common denominator of all Turkic languages; this is a concept for which I have no use and which is *not* what I have in mind. The term 'Norm Turkic' sounds, I feel, too normative.

Turkic words and phrases found in sources in Bactrian, Sogdian or other Indo-European languages of Asia sometimes constitute useful material on what is clearly the same language. Non-Bulgarian forms of Middle Turkic appear to be relatively close to Old Turkic, allowing for dialect differences mostly already attested in the DLT. Their predecessors may thus not have been very different from Old Turkic, though the language of most Middle and Modern Turkic sources does not go back directly to Old Turkic as we have it documented in the corpuses mentioned above. If some modern Turkic languages seem much too aberrant to go back to dialects closely akin to Old Turkic, this is often due to substrates or adstrates.

Old Turkic is not identical with Proto-Turkic, nor is it the ancestor of Common Turkic in the sense that (Vulgar) Latin is the ancestor of the Romance languages. *bän* ‘I’, e.g., is still retained in Modern Turkish, but the Bilgä Kagan and Köl Tegin inscriptions from the banks of the Orkhon river have only *män*, the assimilated secondary form. *buyur-* ‘to command’ has in Old Turkic (including Orkhon Turkic) been replaced by *yarli(g)ka-* but lives on in practically all Turkic languages outside Siberia and is the source of the Old Turkic title *buyruk*. *ud-* ‘to follow’ survives only in the Oguz languages, but the adverb *udu* ‘following, after’, which is common in Old Turkic, must come from it.¹⁸ Various Common Turkic features have dropped out from Old Turkic: The *-gAn* participle, which is alive in practically all Turkic languages, had disappeared from most of Old Turkic except in a few petrified forms (and in some sources written in Sogdian writing); the *-gAy* form, which is used as future or optative or with content related to epistemic mood in a great number of Turkic languages including Uygur, had disappeared from Orkhon Turkic, though there are some examples in the Yenisey inscriptions. Proto-Common Turkic would also have had an element related to Turkish *değil* for negating nominal predicates. Nor can *-(A)llm* for the 1st person plural hortative have been primary, since a number of Common Turkic languages also have *-(A)ll* and *-(A)llŋ* as 1st person exclusive or inclusive or some such meaning; the additional *m* clearly comes from general 1st person marking and *-(A)ll* may have been the original form.¹⁹ Extending our scope of ‘Old Turkic’ beyond the Orkhon inscriptions, we find additional secondary features: e.g.

¹⁸ In view of its limited documentation, *ud-* could, in principle, also have come from *udu* by back-formation.

¹⁹ This is a matter mentioned also by Doerfer 1975-76: 9, who writes: "Atu. is, so to say, not the grand-father of all modern Ctu languages but their grand-uncle. It shows some specific (dialect) features."

vowel roundings after onset *b* in words such as *biit-* ‘to come to an end, be perfected’, *buzagu* ‘calf’ or *bulit* ‘cloud’ in runiform mss., whereas a number of modern Turkic languages have the original unrounded vowels; also, e.g., words starting with /m/ < /b/ when the next syllable has a nasal. Verbal forms like *kod-ma-η-lar* ‘don’t put (pl.)’ are also secondary, as is the alternative form in *-mA-η-Xz* which, as already Kāšgarī says, was used by the Oguz. The ancestor of Common Turkic (as a theoretical construction) was, in any case, probably quite similar to Old Turkic in many respects. Old Turkic must therefore be taken note of as a very central ingredient of any reconstruction of Proto-Turkic (the ancestor, that is, of Common Turkic, Khaladj, Chuvash etc.). Another important source for this reconstruction is evidence from Mongolic.

Due to some of its characteristics (e.g. the hortative in *-(A)llm*, the future in *-dAčI* instead of *-gAy*), Doerfer 1975-76a: 83 thought that Orkhon Turkic was especially close to Oguz Turkic;²⁰ other scholars e.g. Tezcan) have also subscribed to this view, which deserves further consideration.

The three corpuses mentioned above represent a coherent group of fuzzy dialects differing most in the lexicon (as they belong to different cultural domains), certainly also in morphology and in some ways also in phonology. Syntactic differences may in part be due to the fact that the corpuses contain different textual types, but also reflect the gradual Turkification of much of the population using Uygur, and historical development. Translations, which constitute most of our corpus 2 (though by no means all of it), were, in particular, carried out by bilingual committees. Corpuses 1 and 2 are not dialectally homogeneous; phonic and grammatical differences between the corpuses are probably not greater than those found within them. Geographical dialects can hardly be worked out within group 2, as mss. for public use would travel and be copied by scribes differing in dialect;²¹ personal documents are relatively short and rather repetitive. Phonic and morphological differences are not as great as to necessitate distinct descriptions for different texts or text groups. Nevertheless, our description cannot pretend to be based on a homogenous corpus but will, where deemed

²⁰ Johanson 1998: 85 writes about the language of the Orkhon inscriptions: ‘Though it exhibits some features that are later typical of Oguz, it may well be taken to represent a Common Turkic that has not yet split into Oghuz, Kipchak and Uyghur.’ This is clearly mistaken.

²¹ Some features possibly characterising the dialect of Khotan are mentioned further on in this section. See Doerfer 1993: 3 and the reference given there to work of Bazin for the exact coordinates of places where mss. and inscriptions were discovered.

appropriate, include observations on dialect variation and diachrony as well. We will straightway mention phonetic, phonological, morphological and syntactic features with which scholars have tried to characterise the variation between the different texts; detailed discussion of these features will then take place in the different sections of the grammar dealing with the elements affected. The differences within Old Turkic are by no means greater than e.g. within Old Greek.

There are, however, some clear differences even between the runiform inscriptions from Mongolia: Tuñ has *bän* as independent pronoun but uses *män* within the verb phrase,²² while KT and BQ have *män* everywhere; ŠU from the (later) Uygur kaghanate again has *bän* as independent pronoun, however, and Taryat even has *bän* following a verb form. These differences can be qualified as ‘progressive’ vs. ‘regressive’ as they do not fit into the ‘earlier’ / ‘later’ scheme which Doerfer 1994: 111 tries to apply to them. He there (p.109) also shows that it is the KT and BQ inscriptions (and ŠU from the Uygur kaghanate) which most often do not leave /e/ implicit but write it as *i*, whereas the earliest inscriptions Tuñ, Ongin and KČ on the one hand, the Uygur inscriptions Tariat and Tes on the other, practically always leave it unexpressed. It is again (same work, p.110) KT, BQ and ŠU that always write /e/ out as Y in open syllables, and again KT and BQ which show the sound change [yä] > [ye] in the beginning of the words *yäg* ‘better’, *yägirmi* ‘20’, *yär* ‘place’ and *yäti* ‘seven’.

Several linguistic criteria can serve to distinguish between language forms within Uygur, either as dialects or as historical stages. The fate of early Old Turkic /ñ/ has been much discussed in the literature and is here dealt with in section 2.33; all agree that its retention as a distinct phoneme (as in Lena Turkic) is archaic. It converged with /n/ in the Argu dialect as documented by Kāšgarī, but there are hardly any traces of such a feature in any variety of Uygur: It will be found in section 2.33 that ‘*anīg*’ < *añīg* ‘bad’ and ‘*könür-*’ < *köñür-* ‘to burn (tr.)’, given as only examples in the literature for NY turning to N, can in fact be read as *añ(i)g* and *köñür-* in all instances referred to. I have found a single possible exception, mentioned below. In most Uygur texts, all words containing /ñ/ in runiform sources appear with /y/. Where Uygur texts have both NY²³ and Y in these words, such as *kanyu* ~ *kayu* ‘which’ both found in the (early) London scroll of the Säkiz Yükmäk Yarok (TT VI), we take either the language to have been in transition to

²² This distinction later led to the generalization of the person category in verb forms.

²³ Small capitals are used for transliterating Semitic alphabets.

the progressive variant with /y/, or scribes whose language had already lost /ñ/ to have made copies from mss. which still had /ñ/, introducing the change sporadically. In Oguz Turkic /ñ/ becomes /yn/ (with a vowel intruding between /y/ and /n/ when demanded by syllable structure) but this does not (except in the word *koñ* > *koyn* ‘sheep’) happen in Uygur. All of Uygur can therefore be characterised as a bundle of y dialects, like many of the Turkic languages today; the runiform mss. are a possible exception, and there is the exception of some mss. in Sogdian script, where we seem to find a clear instance of *anig*; see further on in this section for that. If, as pointed out by Röhrborn 1983, the Sängim ms. of Mait exclusively has /ñ/ > /y/ but on the other hand all the characteristics of early Uygur texts, this should come as no surprise: The copyist of this ms. was more efficient than e.g. the one of the London scroll of TT VI in doing away with instances of /ny/; had the latter’s personal language not already undergone the process, he would not have made the replacement at all.

Additional characteristics which are used for the distinction between dialects or between pre-classical and classical sources (depending on the viewpoint) are the presence of the converb suffixes $-(X)pAn^{24}$ or even $-(X)pAnXn$ instead of or beside $-(X)p$ (all dealt with in section 3.286); the use of the case ending $+dA/+tA$ and not $+dIn$ to express ablative meaning (discussed in section 4.1106);²⁵ the inscriptional use of the projection participle in $-sXk$ where all mss. except the Xw use $-gU$ and $-gUIXk$ instead (see all three in section 3.284);²⁶ the appearance of low unrounded vowels in the genitive, instrumental and accusative²⁷ case suffixes and in the accusative allomorph for the 3rd person possessive suffix, in the 1st and 2nd person singular and plural possessive and perfect suffixes, the 1st person singular and plural and 2nd person

²⁴ A dash before a suffix signifies that the base is a verb stem; the plus sign signifies that it is not. Vowels placed in brackets are dropped when the base ends in a vowel; consonants in brackets, as in $+(s)l(n)$, are dropped when following upon consonants or under other conditions specified in the grammar. Capital letters in transcriptions of suffixes refer to archphonemes, realizations being specified in the phonology; see section 2.51 for the realizations of /X/, /U/ etc.. Note that the letter X refers to a vowel archphoneme in transcriptions but (in slightly smaller font) to a Semitic consonant letter (*heth*, normally used for representing /k/ and /g/ in back vowel contexts) in transliterations.

²⁵ The presence of the variant $+dAn$ is clearly also relevant to chronological and dialectological questions.

²⁶ In the runiform inscriptions $-gU$ appears only in one or two lexemes while $-gUIXk$ is used twice in a proverb; these forms would have survived from an even earlier stage of the language.

²⁷ This suffix and other suffixes containing /g/ get lowered also in texts which are by no means early, by adjacency with this consonant; see section 2.402.

plural volitional suffixes, the converb suffix $-(X)p$, the formatives $+lXg$ and $+sXz$ and the passive suffix $-(X)l-$, which all generally have high vowels (section 2.24);²⁸ the appearance of /š/ as *s* in one ms. (discussed in section 2.35); rounding in verbal inflexional affixes in some mss. in Sogdian script and two others, discussed further on in this section; the appearance of the instrumental suffix as $+(X)n$ and not as $+(I)n$ (q.v. in section 3.124); the non-nasal shape of $-dX\eta$ as e.g. *käl-tig* ‘you came’ in Pañc 192 which accords with similar realisations of /ŋ/ as /g/ in runiform inscriptions (as discussed in section 2.34); the distribution of the participles in $-(X)gII$ and $-(X)gmA$ (in productive use only in early texts; see section 3.282) and the (mostly agentive) forms ending in $-gUčI$ and $-dAčI$ (discussed in sections 3.113 and 3.282): The Orkhon inscriptions have $-dAčI$ ($-mAčI$ in the negative) as future suffix while the rest of Old Turkic has $-gAy$. Opinions have varied on whether differences concerning such criteria may be indications of dialects²⁹ or of different stages of the language or both. Doerfer 1993, who devoted a monograph to the topic of the dating of Old Turkic, uses 30 characteristics for this purpose, some of them graphic (see section 2.1), or in the phonological, the morphological and the lexical domains.

Many Manichæan texts appear to be pre-classical, but the Pothi book (TT III etc.) has clear signs of lateness. Among Buddhist texts, the Sängim ms. of the Mait, the London scroll of TT VI, BuddhBio and another section of a Buddha biography edited in U II 4-7, possibly the KP text³⁰ and (not noted hitherto) the Vairocana fragment T I D 200 (Mainz 774) last edited by Zieme in a footnote in *AoF* VIII (1981): 242 show signs of being early. BuddhKat was by its editors Maue &

²⁸ The lowering appears also in *bar-am* ‘livestock’ formed with the formative $-(X)m$, attested in M III Nr.6 III r7, in a ms. belonging together with M I 7-17 and ManErz I. The feature of lowering is assigned to the Oguz dialect by Kāšgārī but in Uyğur it is a variable characteristic of early sources where /a ä/ are not conditioned by specific adjacent consonants. If Kāšgārī is right this may mean that there was an Oguz influence on early texts, or that the Oguz were relatively numerous among the Manichæans. It would also go well with the idea that there is a special Oguz – Orkhon Turkic connection, as Orkhon Turkic influence on the language of the inscriptions of the Uyğur Kaghānate is obvious.

²⁹ One should here remember that the distribution of dialects need not be geographic but can also be linked to communities. The Arabic dialects spoken in Baghdad in the first half of the 20th century by Muslims, Christians and Jews, e.g. were quite distinct; in one town in Western Persia Jews and Christians spoke two dialects of Neo-Aramaic which were not even mutually intelligible.

³⁰ This ms. appears to be, more than some other sources, a late copy of a quite early text by a rather sloppy copyist, who not only made a number of mistakes but also introduced some very late forms towards the end.

Röhrborn declared to be pre-classical because it has low vowels where the standard ms. write high ones and has several examples of the *+dA* form serving in ablative meaning. On the other hand *-sA* as conditional suffix instead of *-sAr* and *käräk* ‘necessity, necessary’ instead of *kärgäk* as well as the haplology of syllables containing /r/ are late or at least progressive features. Vowel lowering in BuddhKat has no significance in this matter, however, as it takes place only beside /g/ and /r/. Whether *+dA* never serves in standard Uygur texts in the constructions found in BuddhKat needs to be checked. Cf. the following: The Mait (both mss.) shows a number of ablative locatives, one instance of the converb in *-(X)pAn* and two in *-(X)pAnIn* (the Hami ms. has at least two additional ones of the latter), a few instances each of *-(X)gmA* and *-(X)gII* and, as a spelling feature, a number of instances of /ŋ/ spelled in both front and back contexts with K alone. The pre-classical features of the London scroll of the *Säkiz Yükmäk Yarok*, edited in TT VI, are the lowering of vowels, six instances of *kanyu* ‘which’ beside 12 instances of *kayu*, more than 20 examples of *anig* (presumably to be read as *any(i)g*; cf. the end of section 2.33) and of a derivate, instances of the superfluous *alef*, the *+dA* form used as ablative and productive use of *-(X)gII*.

Some fragments of mss. written in Sogdian script (edited by D. Fedakâr) clearly show a distinct dialect: They have some loss of pronominal *n* (e.g. *san+i+čä*) as found in Eastern Middle Turkic and in the Southeastern group of modern Turkic languages and the phrase *öl-gän+dä kurtul-* ‘to be saved from dying’, with the participle in *-gAn* used as event noun. A conspicuous feature of these fragments is the vowel rounding in inflexional suffixes when adjacent to a labial consonant (*kurtgar-dum*, *tap-un-tïlar*, *ämgän-üip*; *tak+umuz*, *sï-dumuz*, *bačama-dumuz*); cf. section 2.402 for more details on this process. The possessive suffix *+XmXz* is replaced by *+UmUz* and the preterit suffix *-dXmXz* by *-dUmUz* also in one ms. of the Xw, and the ms. Pelliot Ouïgour 2, HamTouHou 18,7 has the forms *tilädiimüz istädiimüz*. This latter is a letter written in Khotan (as the text says); that particular Xw ms. and the mss. in Sogdian script could therefore also reflect the Khotan dialect.³¹ On the other hand, *anig* ‘bad’, damaged but visible in a fragment in Sogdian script, shows that what we have here is a rare

³¹ *ävigä* ‘to his home’ in HamTouHou 18,4 is not necessarily an instance of the loss of pronominal *n*, as ‘WXLK’ for *ogliya* ‘to his son’ in l.10 shows that the ms. spells /ŋ/ as K: /g/ would have been spelled as X in a back-harmony word. The genitive form *minig* for *mäniŋ* ‘mine’ in l.6 probably has the same explanation. The 2nd person imperative plural form read *istäglär* in the same line is not necessarily an instance of /ŋ/ > /g/ either, as it can also be read as *ist(ä)ŋlär*.

instance of the so-called *n* dialect (see section 2.33). Both *-dUm* and *ñ > n* are, according to Kāšgarī,³² characteristics of the speech of the Argu; these Sogdian script mss. may therefore also represent this dialect. Another noteworthy feature of the Sogdian script mss. are several examples of an extended form of the 3rd person imperative (e.g. *artamazuni*), found also in the QB.³³ We know that Argu was spoken in Balasagun, and Yūsuf, the author of the QB, was born in this town. This as well should therefore be an Argu feature. A further feature shared by the Sogdian script mss. with the QB are the fused impossibility forms (*alumadi* < *ali umadi*, *alkumaz* < *alka umaz*). Balasagun was in West Turkistan; this proximity to the original homeland of the Sogds may explain their Sogdian palæography and spelling characteristics.

On the other hand, the Sogdian script fragments have also retained the pre-classical feature of sporadic and unconditioned vowel lowering. Laut 1986 considers a Buddhist text to be pre-classical also when it has Indian loans in Sogdian shape and adds a further criterion for early dating: the introduction of superfluous *alefs*, not in the onset and unjustified through any likely pronunciation before vowels within words; e.g. *yig'it* 'young man' or *av'uč* (the name of a hell called *avīci* in Sanskrit). For these two reasons he also adds the Saddh to his list of pre-classical texts, although it lacks all other criteria. Superfluous *alefs* in a Manichæan text and in the Sängim ms. of the Mait are given in Laut 1986: 69-70; instances in mss. in Sogdian script are listed by Fedakâr in *UAJb N.F.* 10(1991): 93-94 (to be used together with the glossary in *UAJb N.F.* 14(1996): 196-201 and the transliterations). The lowering of unrounded high vowels is apparently equally common in the Sängim and Hami mss., though not necessarily in the same words.

Gabain in several places expressed the view that the texts written in Brāhmī script constitute a dialect of their own. According to her they are characterized by (among other things) *p* in the onset of words and by *o* in non-first syllables. These sources do indeed seem to use *p* and *b* indiscriminately in onset position; however, this may have been caused by influence from the Uygur writing system, which spells all /b/s with

³² The DLT (fol.504) ascribes the pronunciation *bardum*, *käldüm* (vs. *bardam* among the Oguz and *bardim* among the other Turks) to the dialect of the Argu.

³³ Gabain 1976 expresses the view that this *°I* is the possessive suffix but there seems to be no sense in that. I could imagine that it is a truncated *id!* 'Let go!', comparable to English 'Let him do this'. *id-* also serves as actionality auxiliary for energetic action which became morphologised in some modern languages, and should also be behind the *°I* which we find at the end of imperative forms of certain Khaladj verbs. As Doerfer has shown in various places, Argu as described in the DLT shares several linguistic features with Khaladj.

the letter P. As for *o* and *ö* in second or subsequent syllables, that appears also in texts in Tibetan writing like the catechism from Dunhuang and in the hippological glossary in southern Brāhmī and reflects, we think, general Uygur pronunciation: The Uygur, Manichæan and runiform writing systems do not distinguish *o* from *ö* and *u* from *ü* in any case. Are there any explicit differences which distinguish Brāhmī texts from others? Such is, for instance, the syncopated spelling of the suffix *+ldUrXk*, which appears as *+ldruk* in *sakaldruk* ‘throat strap on a headstall’ and *kö müldrüx* ‘breast strap’ in the hippological word list in Southern Brāhmī, and *boyontrok* in TT VIII A (Northern Brāhmī): Sources in both the Uygur and Arabic scripts consistently spell the suffix with explicit W after the alveolar. There is an instance or two where a stem-final *i* appears as *ö* in a converb form in *-(X)p*. BuddhKat, a quite early text in Tibetan script, has other relevant characteristics: the conditional in *-sA* instead of *-sAr*, otherwise documented e.g. in Uygur medical texts (which were presumably written more carelessly than, e.g., religious texts), the haplogical dropping of syllables featuring an */r/*. BuddhKat and three medical texts in Brāhmī have *käräk* instead of *kärgäk*, while even very late texts in Uygur script practically always write *kärgäk*. *käräk* is also what we find in Qarakhanid sources and also as a loan word in Mongolian, already in the (13th century) Secret History. Rather than pointing at a different dialect, such traits show that texts in Indic scripts stayed outside the written norm and reflected characteristics of the spoken language; the *g* of *kärgäk* probably dropped away from the dialect(s) underlying Uygur already in the 10th century.

As for the syntactic characteristics of Brāhmī sources, these appear to emanate from the fact that some of them follow the syntactic structure or just the word order of their source text, and sometimes even its morphological structures³⁴ rather slavishly. Unusual syntax need not, on the other hand, always be the result of direct copying even in translated texts. In Christian texts, for instance (e.g. the first text in U I or the Christian one in ChrManMsFr), the finite verb is less often at the end of the sentence than in other sources and relativisation is more right-branching with conjunctive particles than left-branching with participles. These features may, however, also have been characteristic of spoken language, Central Asian Christians possibly being less bound by the written norms of mainstream society.

³⁴ Late Sanskrit, the source of some of these texts, is prone to extensive compounding; moreover, it expresses even predicates in a preponderantly nominal manner.

In general, the degree of the slavishness with which Uygur texts follow their sources is a parameter worth watching in all texts. However, quite a number of Uygur texts are not translations but ad hoc communications (e.g. letters); others are original creations or paraphrases (expansions or summaries), and even translations often contain interpolations and alterations of the translator.

Criteria for lateness are *aŋa* and *muŋa* as datives of *ol* ‘that’ and *bo* ‘this’ instead of *aŋar* and *muŋar* (discussed in section 3.132); the introduction of helping vowels beside /r/ and metatheses mostly involving /r/ such as *ädräm* < *ärdäm* ‘virtue’ (section 2.406); the appearance of *idi* ‘master’ as *iä* or *igä*; the change *yarligka-* ‘to command etc.’ > *yarlika-*; the change of the causative formative from *-Xt-* to *-It-* (section 3.212) and the change of the vowel in the converb and aorist suffixes used with this formative from /I/ to /U/ (see section 3.233 and especially Erdal 1979b and 1986 for this and for the next item); change in other aorist forms such as *älit-ir* ‘he/she leads’ > *el(i)tür*, *bil-ir* > *bilür*, *al-ir* > *alur*, *ögir-är* > *ögirür* etc.; the change from accusative to nominative when postpositions govern nouns with possessive suffixes or pronouns (section 4.21); the replacement of the accusative suffix *+(X)g* by its pronominal counterpart *+nI* (section 3.124); the regularisation in the negative conjugation found in *-mAČI* (future) > *-mAdAČI* and *-mAdOk* (perfect and evidential) > *-mAmIš* (section 3.232); *kärgäk* ‘need’, *äšgäk* ‘donkey’ > *käräk*, *äšyäk*; *-sAr* > *-sA* as the conditional suffix (section 3.287); the change of the imperative particle from *gIl* to *gUl*;³⁵ *birlä* ‘with’ > *bilä(n)* (section 3.32); *burun* ‘nose’ > ‘before’ (attested e.g. in *burun+kä* ‘earlier’ in Suv); counting by the higher decade replaced by counting by the lower decade (section 3.14), and *ayig* ‘bad’ > *ayï* when used with the meaning ‘very’. One other conspicuous matter is the free alternation in late texts between *t* and *d*, *s* and *z* and, in the scripts where it can be observed, *k* and *g* replacing earlier (e.g. runiform) adherence to either the voiced or the unvoiced consonant.³⁶ Doerfer 1993: 115-119 mentions that this phenomenon does not occur in Qarakhanid and explains why it must be

³⁵ We take *-gUl* to have fused from *-gU ol*, a marker of impersonal mood, but in some of its instances it appears in parallelism with *gIl*; the matter is not completely clear.

³⁶ As Zieme 1969: 23 notes in connection with the Pothi book where such confusions are especially prominent, they are referred to as ‘Mongolisms’ because they generally appear during Mongol domination (which is rather late as far as Old Turkic corpus is concerned); he does not, however, draw the conclusion that the Pothi book must be late. Occasional confusions such as *sägiz* for *säkiz* ‘eight’ in the Xw are called “irrtümliche Schreibungen”. Zieme explains their generally rare occurrence in Manichaean texts by the traditional care which the Manichaeans showed in the production of mss..

due to contact with Mongolian and the way that language was written. These processes did not all occur simultaneously, nor did they all automatically apply to texts we know to have been late: Knowledge of the standard language clearly lingered on into Yuan times, to varying degrees with different individuals. We have already noted the rather early appearance of the truncated variant of the conditional suffix *-sAr* and of *käräk* as ‘necessity, necessary’ in the catechism in Tibetan writing. The fact that medical and astrological texts have such phenomena more than late religious texts shows that they mark progressiveness, suppressed when writing or copying something venerable.

What should be kept in mind in this connection is that the spelling of written texts, especially when adhering to a norm, rarely exactly reproduces one to one the pronunciation of the people who write them; fluctuations often reflect a conflict between the means put at the writer’s disposal by the writing system and how he thinks the words *should* be pronounced, as well as between *his* pronunciation and traditional spelling. If the London scroll in TT VI 89-90 shows thrice the spelling *ärkligin yorigli* and once the spelling *ärkligän yorigli*, the chances are that the scribe thought that 1) consistence was not important, 2) neither spelling the word with *alef* nor spelling it with *yöd* was fully appropriate for his purpose (which may or may not have been directly linked to what he would be pronouncing). We know from phonetic recordings that pronunciation can also fluctuate freely, but this is not the only determinant of spelling. Some of the traits thought to be phonic may be due to graphic fluctuations preceding standard spelling, or to texts outside the spelling traditions. Laut’s (1986) explanation for the inconsistent and uneven nature of the evidence is that the texts as we have them represent the result of alterations by copyists under the influence of their own dialect.³⁷ I agree with this and have said as much in connection with the *ñ > y* process.

Uyghur texts which have Arabic, New Persian or Mongolian loans or change /d/ to /y/ e.g. in *kaygu* < *kadgu* ‘sorrow’, *kayit-* < *kadit-* ‘to return (intr.)’ should not be considered to be part of the Old Turkic corpus: Proto-Turkic /d/ has been preserved as an alveolar in some Turkic languages to this day, so that the presence of the feature /y/ < /d/ (when preceded by a vowel in the same stem or suffix) is a dialect

³⁷ Pp.61-62. He thinks the changes were deliberate, arguing against R.R.Arat who considered them to be accidental. The correction from *başlag* to *başlig* visible in the ms. in Mait 73v20 is no proof, however, as the copyist may, in this particular case, have been trying to prevent a misunderstanding: *baş+lig* could have been misunderstood as *başla-g*, which also exists.

characteristic no less than a sign of lateness: It is, in fact, documented as such already by Kāšġarī (fol.289), who states that the Oguz and Kīpčak say *koy-* instead of *kod-*. InscrOuig, an Uygur inscription from the year 1334, is an example for a text which has Persian and Mongolian loans as well as this sound change.

Sources range from imperial inscriptions to personal letters sent to family members and graffiti scribbled by travellers on rocks. After the Mongol invasion, the differences between the language of texts intended for public and especially for religious use and that of the private documents grew, the former being conservative and showing more of a dependence on foreign sources. For the period described, it appears that the progressive texts are quite close to the spoken language,³⁸ the vital vehicle of an expanding society, quickly replacing the last vestiges of local Iranian and Tokharian vernaculars in all spheres of life. Stylistic differences and registers are discernible: Personal letters, medical texts and scribblings represent a colloquial language with consonants and morphology progressive in a few points, a few consonant elisions and word order even freer than otherwise. More formal language was, however, just as 'real' in its use. The distinction between registers does not, of course, apply only to an overall classification of sources, but also to the presentation of utterances within narrative texts, to the polite reference to the addressee in the plural, to lexical devices, to address verbs marked on the politeness scale and the like.

The texts show some code switching: When a stretch in a non-Turkic language is included in an Old Turkic text, we do not consider it to part of our corpus if it contains a predication, i.e. if it is a clause, a sentence or more. One example is the Parthian sentence *Man astar hirza* 'Forgive my sins!' repeatedly found in the X^wastvānīft. This text is the Manichæan confession prayer; pronouncing the sentence is part of a ritual and not meant to serve communication with humans. A similar case are dhāraṇīs (incantations) included in Buddhist texts, which make no sense in Uygur (and sometimes not in any other language either). Another situation arises when communicating individuals are bilingual in the same two languages; this makes switching possible from one into the other. Examples are the Turkic–Sogdian texts edited by Hamilton & Sims-Williams or Turkic–Chinese land sale contracts published recently. Code switching will be relevant for Old Turkic syntax in case

³⁸ I see no reason to agree with Tenišeŷ 1979 and scholars following his views on the matter, who think that the language spoken by the Old Turkic population is substantially different from their written language.

it happens within one sentence, if, e.g., a foreign clause is included in an Uygur sentence. Foreign stretches are not, in any case, relevant for Old Turkic phonology: The /h/ which we find in the X^wastvānīft formula, for instance, cannot be considered to be one of the Old Turkic phonemes. The situation is different for loan words: *lenxwa* ‘lotus’, e.g., was clearly used freely in Uygur; the onset /l/ and the cluster *xw* at the syllable onset must therefore have been within the competence of users of this language, at least for the register concerned, and assuming the word was pronounced as it was written.

In naming the Old Turkic corpus or parts of it, scholars’ practices sometimes differ from our formulation. For some, Old Turkic’ is only the language of the Orkhon inscriptions and does not include any Uygur or even the runiform inscriptions of the Uygur Steppe Empire.³⁹ Others group the texts of the A dialect together with the inscriptions, calling this ‘Türkü’ or ‘Türküt’. Some exclude Qarakhanid from Old Turkic, assigning it instead to Middle Turkic. The view that the variants of Old Turkic as listed above should be taken to be alike unless explicitly shown to be different has become the standard among scholars specialising in Old Turkic. This view is not shared by all scholars, however: In his (1980) review of Tekin 1968, e.g., Benzing proposed that the verb *okī-* ‘to call etc.’ should in Orkhon Turkic be read as *okki-* because the velar retains its voicelessness in the northwestern Turkic languages (where single voiceless consonants become voiced between vowels). No Uygur source writes *okki-*, however, although Uygur does not follow the Orkhon Turkic practice of spelling geminates as single consonants: Benzing did not consider the possibility that Proto-Turkic may have had **okki-* and that the geminate could have been simplified in Old Turkic *including* Orkhon Turkic. This was not *necessarily* the case and the Orkhon Turkic verb may indeed have been pronounced with a geminate, left implicit in the writing. This would mean transporting Proto-Turkic into Old Turkic, however, and I think scholarship should better assume coherence among the (rather close) dialects of Old Turkic in every matter for which the data do not prove it to be otherwise. The present work tries, among other things, to provide such distinguishing data; that, e.g. *-yOk* is not used in runiform inscriptions, used in the Manichæan texts just as participle and put to general use only in Buddhist texts. This type of remark, or the reference to phenomena as ‘late’ or ‘early’, are scattered throughout the work. The

³⁹ Thus e.g. Johanson 1979 : 8. The fact is that none of the sub-corpus is really homogeneous.

discovery of relevant features for Old Turkic text classification is still going on, and we have not attempted any synthesis on this topic here.

1.3. *History of research*

1.31. Sources

We can look back to more than one century of research into Old Turkic, initiated by W. Radlov's edition in 1891 of the QB ms. in Uygur writing⁴⁰ and especially by W. Thomsen's decipherment of the runiform script in 1893. Runiform inscriptions had been discovered by travelers to Siberia centuries earlier, and then by Fins exiled to that country and by Russian archeologists; they were made accessible to the scholarly world in 1892, through drawings and facsimiles in Finnish and Russian publications. In the first 50 years of research, runiform inscriptions were edited by Thomsen himself, by W. Radlov, S.E. Malov, G.J. Ramstedt and others. Orkun 1936-41 is a collected reedition of all this material. A great many short runiform inscriptions were then discovered or rediscovered, edited or reedited in the Soviet Union, mostly by D.D. Vasil'ev, I.L. Kyzlasov, S.E. Kljaštornyj and I.V. Kormušin. Lists of runiform inscriptions can be found in Vasil'ev 1976/78 and Sertkaya 1984.

The Uygur corpus of Old Turkic was made available by Russian, Japanese, German, British, French and Swedish expeditions to East Turkestan and Gansu, the greatest number of mss. reaching Germany. The writing itself was known in the West at least since Klaproth 1820. The task of editing the sources discovered since the turn of the century is still going on, the first editors being F.W.K. Müller, A. v. le Coq, W. Bang, V. Thomsen, W.W. Radlov, P. Pelliot and G.J. Ramstedt.⁴¹ Between 1920 and 1970, Uygur texts were edited foremost by A.v. Gabain, and also by S.E. Malov, G.R. Rachmati (subsequent name R.R. Arat), T. Haneda, M. Mori, N. Yamada and Ş. Tekin. In recent decades the activity of editing Uygur mss. (mostly in Germany, but also in Japan, France, Turkey, the Soviet Union, the United States, China and Finland⁴²) expanded greatly; published dictionaries (see below)

⁴⁰ The ms. edited by Radloff is actually the latest of the three existing mss. of this source and shows certain characteristics of Middle Turkic. Even this ms. is, however, certainly closer to Old Turkic than Chagatay sources, which Thomsen and other scholars otherwise had as guidance for their texts.

⁴¹ Scholars are listed more or less in the order of their importance in this domain.

⁴² Order of listing again by approximate volume of activity. I don't see much point in

simplified the work, knowledge of the language was deepened, texts were routinely published together with their facsimiles and a growing number of source texts was identified.⁴³ The publication of facsimiles is becoming less necessary as the great majority of Uygur sources is now becoming accessible on the internet.

C. Brockelmann and B. Atalay contributed much to the constitution and interpretation of the DLT, the former writing several papers on various aspects of this source and presenting its lexical material in dictionary form, the latter editing the text and publishing it with index and facsimile. R.R. Arat edited (1947) the three extant mss. of the QB in what attempts to be a critical edition of this extensive source. Dankoff & Kelly (1982-85) presented the definitive re-edition of the Turkic elements in the DLT, translating the Arabic matrix text into English; Dankoff's (1983) translation of the QB is, in many points, a highly successful reinterpretation of the text.

1.32. The Lexicon

Most Uygur texts published until the 1970s were accompanied by glossaries. Brockelmann 1928 is an index to the DLT, an invaluable source for our knowledge of the Old Turkic lexicon in general. This work was useful for scholars working on Uygur and inscriptional sources, though based mostly on the faulty edition of Kilisli Rifat (1917-1919). This makes it inferior to Atalay's glossary to his re-edition, which itself is now superseded by vol. 3 of Dankoff & Kelly 1982-85. The year 1931 saw the appearance of the *Analytischer Index* by Bang & Gabain, which unites the (corrected) lexical material of TT I-V and of two other texts edited by the authors. Caferoğlu 1934 is the first dictionary to unite the material of all the Uygur sources (including runiform mss.); its second edition (1968) includes Uygur material published till 1964. The fourth volume of H.N. Orkun's *Eski Türk Yazıtları* and the first edition of Gabain's *Altürkische Grammatik* both appeared in 1941. The former covers all runiform lexical material (including proper names and uninterpreted strings of signs), while the latter's

giving a full list of editors; see the index of the UW for their names and publications. The most prolific editor is probably P. Zieme, who is in charge of this task at the Berlin-Brandenburg Academy of Sciences.

⁴³ Religious Uygur texts, which are the majority, are normally translations, reformulations, expansions etc. of texts in other languages; Chinese, Indic, Iranian or Tokharian if the text is Buddhistic, Iranian if it is Manichaean, Iranian or Syriac if it is Christian.

glossary is meant to be a listing of all understood lexemes both in Uygur and inscriptional Old Turkic.

The first dictionary attempting to bring together the lexicon of the whole of Old Turkic as defined in the present work (i.e. also including Qarakhanid Turkic) was Nadeljaev et al. 1969 (the DTS). Clauson 1972 (the EDPT) has the same scope; both books only cover publications which appeared till the early 1960s, in spite of their publication dates. The EDPT is more sophisticated (e.g. in dealing with the QB) and more internally consistent than the DTS and is also useful in quoting Middle and Modern Turkic evidence for the entries as well as related Mongolian forms, including reference to the TMEN etc.; it is, on the other hand, weaker on phraseology, disregards (unlike the DTS) most borrowings into Old Turkic and is, furthermore, sometimes prone to unwarranted ‘emendations’ to the text. These two works supersede Caferoğlu’s and Orkun’s lexicons. Arat’s *İndeks* to the QB (1979), in fact mostly the work of students after his death, contains lexical material from this text which is only partly included in the EDPT and the DTS, but it must be used together with Tezcan 1981. Six fascicles have until now appeared of Röhrborn 1977-1998 (the UW), the most recent Old Turkic dictionary. It has, to date, only covered one letter and a half, but is highly dependable, exhaustive as far as Uygur is concerned⁴⁴ and valuable also because the numerous passages quoted for context are reinterpretations reflecting present understanding. The OTWF, finally, can also serve for lexical documentation, mostly of derived lexemes. The Old Turkic lexicon is, then, still incompletely accessible in dictionary form, although the situation is vastly better in this domain than (hitherto) with the grammar.

1.33. Grammar

When Radlov and Thomsen worked on the runiform inscriptions which they published in 1895 and 1896 respectively, understanding their grammar appears not to have been a very difficult task for them: The difference between Old Turkic and modern Turkic languages is not greater than that which we find between the Turkic languages for which there already existed good descriptions at the time: the work of Kazembek, Castrén, Radlov or Böhrling, not to speak of the many grammars

⁴⁴ It covers only Uygur mss. excluding the runiform ones among them, but includes the few inscriptions in Uygur script. Since our knowledge of Old Turkic advances continuously, it is natural for details in the UW to need revision already while getting published; this is often done in subsequent fascicles.

of Ottoman which were readily available. Radlov published his *Grammatische Skizze der alttürkischen Inschriften* already in 1897. The first western scholars dealing with particular aspects of Old Turkic were concerned with the sound system; cf. Foy 1900 and V. Grønbech 1902 on the vowels. The earliest linguistic arguments on Old Turkic were those between Thomsen and Radlov and concerned the consonants: Radlov thought these should be read as in today's South Siberian languages. This was denied by Thomsen (1901; text of a lecture held in 1897), whose opinion found wide acceptance; Thomsen's argument was based on the QB, a Qarakhanid source. When Uygur mss. were discovered around the turn of the 20th century, they were immediately seen to have been written in the 'same language' as the runiform inscriptions, though in a different dialect (or different dialects). Thomsen, Müller, Le Coq, Bang and others occasionally dealt with points of Old Turkic phonology and morphology in notes to text editions, when some suffix needed an explanation: It was only natural for scholars to put their linguistic abilities under the service of text interpretation and philology and to concentrate their endeavours on making a corpus available to the public before proceeding to grammatical syntheses. The first publications devoted to the language of the Old Turkic sources in general are Foy 1904 (on the fragments in Manichaean writing) and Radlov 1909-1912. In the numerous papers which Bang published between 1896 and 1934 on various text passages or on comparative Turkic grammar, he sometimes expresses ideas concerning Old Turkic morphology (e.g. on the collective nominals in +AgU and on the onomatopoeic verbs in Bang 1919); however, these get lost among his endeavours to prove dubious hypotheses concerning proto-language. The only other monograph studies which Old Turkic scholars of the first generation devoted to language were Thomsen 1913-18 and 1916 on inscriptional matters, le Coq's 'Kurze Einführung in die uigurische Schriftkunde' (1919; to this day the only Uygur paleography) and two papers by Brockelmann (1919 and 1921) on linguistic aspects of the DLT.

Beside A.v. Gabain, whose *Alttürkische Grammatik* dates from 1941, Bang had several Tatar students who presented general Turkic dissertations, later emigrated to Turkey and founded philological Turcology in that country:⁴⁵ G.R. Rachmati (also Rachmatullin; in Turkey R.R. Arat), S. Schakir, (later S. Ishaki, in Turkey S. Çağatay)

⁴⁵ Before these, Turkish Turcology had been mainly limited to Ottoman studies. The founder of the study of the history of the Turkic peoples in Turkey is Z.V. Togan, also a Tatar.

and the younger A. Temir. Rachmati's dissertation (on auxiliary verbs and converbs in Altay Turkic, published in 1928) was fully linguistic, but his significant contribution to Old Turkic studies remains within the domain of philology; an important late (1963) paper documents and describes orientational terminology. Schakir's dissertation (1933) on word formation also covers Old Turkic, and three papers of hers (1940-41 and 1943 respectively) deal with Uygur. Gabain continued to publish on Old Turkic grammar (1940, 1940a, 1950, 1950a, 1957, 1964, 1970 on selected topics and the general description in PhTF I in 1959), but her interest gradually shifted away from the texts and their language; her editing activity also ended in 1958. Temir published papers on Uygur particles (1949, 1956). K. Grønbech (the son of V. Grønbech and a student of V. Thomsen) and A. Salonen were the first to deal with grammatical categories and some aspects of the syntax of Old Turkic in a general linguistic context (1936 and 1937 respectively).

Németh 1939, Mansuroğlu 1957 and K. Thomsen 1957 (K. Grønbech's student) all deal with the origin and nature of Turkic /e/ as distinct both from /ä/ and /i/ (but not necessarily from /ä:/); cf. also Doerfer 1994. This topic is highly relevant even now, as none of the alphabets used for writing Old Turkic has a special character for this phoneme; its existence is therefore sometimes still contested.

Gabain 1957 deals with another matter which brought about some discussion: the so-called 'connective vowels', thought by many to have been reduced vowels introduced to 'help pronunciation'; cf. Erdal 1979a, Doerfer 1981-82 and 1993a and Erdal 1996. The traditional view (presented e.g. in Gabain 1941/1950/1974) is that they followed fourfold high harmony (*i / i̇ / ü / u*), but Doerfer (and, following him, Johanson – still in Johanson 2001) have, in a number of publications, argued that these are reduced low vowels (*a/ä*). Doerfer 1993a would like to see these introduced into the transcription of runiform sources.

Kowalski 1949 explores an interesting aspect of Old Turkic grammar (as of that of some modern Siberian languages), touching both upon verb formation and syntax: the causative of transitive verbs, whose meaning can get close to that of a passive. Röhrborn 1972, Nigmatov 1973, Johanson 1974, Kormušin 1976 and the OTWF have contributed to the clarification of this topic.

In 1953 there appeared E.R. Tenišev's 'Avtoreferat' of his thesis on Uygur grammar based on the (Radlov–Malov edition of the translation of the) *Suvarnaprabhāsa*. As far as I have been able to discover, this is the first paper since the work of Radlov dealing with the Old Turkic language to appear in the Russian empire and the Soviet Union. Nor

were any Uyğur mss. edited there after a publication by S.E. Malov (the student of W. Radlov) in 1932 (as distinct from editions of inscriptions, which did go on). The reason for this gap may have been the fact that Soviet scholars were already busy enough describing the modern Turkic languages spoken in their realm, that such activity seemed more useful and that western scholarship was practically inaccessible to Soviet scholars. Moreover Tenišev, one of the most fruitful Turcologists working on modern languages, wrote only one more paper on Old Turkic (in 1971, proposing an explanation for the replacement of *š* by *S* in the runiform inscriptions). Research in this domain was taken up by other Soviet scholars in the late fifties; we find papers by V.M. Nasilov (1958, on nominals), A.S. Amanžolov (1959 and 1963 on the government of derived and analytical verb forms), D.M. Nasilov (1960 on periphrastic modal constructions and 1966 on the form in *-yOk*), M.Š. Širalijev (1960 on the etymology of the gerund suffix *-XbAn*), V.G. Kondrat'ev (1961 on the function of the form in *-dOk* in runiform sources) and Šukurov (1965 on the form in *-gAllr*). Axmetov 1969, finally, deals with the whole verbal system of the runiform inscriptions. All this work, we find, is related to morphology and grammatical categories. Then we have Ajdarov 1969 on auxiliary words in the Orkhon inscriptions. Borovkova 1966 broached a phonological topic with her paper on the labial consonants in Qarakhanid Turkic.

Scientific discussions taking place in the West were, in those years, mainly concerned with vowels. The discussions around /e/ and around the 'connective vowels' hypothesis which started rather early have already been mentioned. One further vowel problem causing some stir was the question of whether Old Turkic had long vowels; several modern languages have such vowels in inherited Turkic stems and we know that Proto-Turkic already had them, but evidence for Old Turkic is uncertain. Cf. on this question Tuna 1960, Tekin 1967 and Tekin 1975 (reedition 1995a); the problem is discussed also in some general treatises, e.g. in Zieme 1969. Another question concerns the nature of vowels in non-first syllables: Are there the same number of phonemes as in first syllables or are there a smaller number of 'archphonemes'? Does *o/ö* appear in non-first syllables outside Brāhmī texts? Are *o* and *ö* in non-first syllables allophones of other (high or low) vowels appearing only after *o* or *ö* or are they phonemes? Cf. for this topic Clauson 1962, K. Thomsen 1963, Clauson 1966 and Erdal 1996. Clauson 1962 was of course also concerned with a number of other aspects of the language, such as word structure, word formation etc.; in a sense this is preparatory work for the EDPT. Clauson 1966, on the

other hand, again limits itself to phonological matters. Pritsak 1961 can be considered to be obsolete though still quoted in Johanson 1979. Meyer 1965 discovered the rules which apply for the explicit spelling of vowels in the Orkhon inscriptions, and partly also in other runiform texts; more attention to this paper would have prevented many a misled interpretation of those sources.

PhTF I, a handbook bringing together descriptions of most Turkic languages, appeared in 1959. Gabain's account of Old Turkic presented there is basically a summary of the grammar in Gabain 1941; Mansuroğlu wrote the chapter on Qarakhanid. Pritsak 1963, another short account of the whole corpus, is quite undependable. To this day, Gabain 1941 has remained the standard grammar of the language;⁴⁶ it reappeared, with a few additions and corrections, in 1950 and again in 1974. In Russia, meanwhile, short general descriptions of the corpuses were presented by A.M. Ščerbak (1961, dealing with Old and Middle Turkic as if these were a single language) and V.M. Nasilov (1961 on the runiform inscriptions and 1963 on Uygur). Then came Ajdarov 1966 on the language of the Kōl Tegin inscription and Kondrat'ev 1970 on the whole Old Turkic corpus. Tekin 1968 and Ajdarov 1971 both describe the language of the Orkhon inscriptions, while Kononov 1980 describes the runiform sources as a whole. Tekin's work covers all grammatical domains of this small corpus in structuralist exhaustiveness and also presents a full concordance of the lexicon including proper names as well as new editions and translations of the texts. Zieme 1969, which is highly authoritative but remains unpublished, deals with the graphemics, the phonology and morphology (but not the syntax) of the whole corpus of Manichæan sources (part of which he published later). Concerning Qarakhanid there is a description of syntax by Abduraxmanov (1967), of the verbal system by Ercilasun (1984); Hacıeminoğlu 1996 is a full (but rather superficial) account of Qarakhanid grammar. Erdal 1998a is the most recent and concise description of the language of the whole Old Turkic corpus while T.Tekin 2000 deals with the whole corpus of inscriptional and manuscript runiform sources (and not only with the Orkhon inscriptions, as its title would imply).

One question which has intrigued scientists and become the object of numerous publications is the origin of the runiform script. Hypotheses have stated either that it is of Semitic origin, that it comes from tribal

⁴⁶ In spite of its name, this work deals not only with grammar and related matters but also contains an anthology, a dictionary and a large bibliography also covering many non-linguistic aspects of the early Turks' world.

marks (used on gravestones, for branding animals, to mark domain borders etc.) or that it comes from ideograms (e.g. the sign for ^wq looking like an arrow, *ok* in Turkic). This question and the literature on it (from before decipherment till this day, e.g. by Emre, Clauson, Tryjarski, Pritsak, Róna-Tas, Ščerbak and many others) will not be followed up in the present work. What we are interested in is the system of writing and its relationship to the sound system; two publications on this are Kormušin 1975 and Hovdhaugen 1979. Vasil'ev 1983 is a book on runiform palæography. Much about the runiform, Brāhmī and Tibetan writing systems can be found in Róna-Tas 1991; the chapters on the use made of the Tibetan and Khotanese Brāhmī scripts is especially important. Handbooks such as Gabain 1941 and Caferoğlu 1969 also have palæographical sections. The early palæography of Le Coq for the Uygur script has already been mentioned; cf. also Laut 1992. Moriyasu has done serious work on the diachronical palæography of the Uygur script, stating that what he calls the square style is found only in the pre-classical stage; the other three styles he posits are semi-square, semi-cursive and cursive, which is always late.

For the phonological domain cf. Doerfer 1971. We already mentioned some of the work on the vowels of Old Turkic. Röhrborn 1996 is about synharmonism in foreign words. The introductions to *BuddhKat* (a text in Tibetan writing) and Maue 1996 contain valuable observations to the vowel system as emerging from these sources.

Sims Williams 1981 should be basic reading for anyone dealing with the Old Turkic consonants. Among the consonants the labials were discussed by Borovkova 1966 and Hitch 1989, the alveolars by Maue 1983, the gutturals by Maue 1984 and Röhrborn 1988. Maue's papers and Johanson 1979 reflect scholarly activity around the phonetic value of the Old Turkic consonants based mainly on the Brāhmī sources. The latter monograph propounds bold hypotheses also concerning a number of aspects of Orkhon Turkic (as stated in several reviews, among them Gabain 1982). In the runiform inscriptions, suffixes which have [š] in most modern languages are spelled with S, for which Tenišev (1971) tried to find an explanation. There is also a Manichæan ms. showing the same phenomenon, but Zieme (1969) thought that that was a mere orthographical matter. It has been noticed for some time that the opposition between /ŋ/ and /g/ is weak, the latter often replacing the former in modern languages, in Orkhon Turkic (cf. e.g. Tekin 1968) and in the DLT (cf. the introduction to Dankoff & Kelly 1982-85). Hamilton 1977 pointed out that the replacement exists also in some Uygur texts connected with the city of Khotan. Doerfer 1995 deals with

the alternation *ï- ~ yï-* in Old Turkic: The author had shown in his work on Khaladj that the phoneme /h/, which appears at the beginning of words in that language, must have its source in Proto-Turkic, and that it correlates with an unstable onset /y/ in Old Turkic. Here he proposes that /h/ be read in these words also in Old Turkic. The fact that the opposition between Proto-Turkic /r/ and /z/ is neutralized both in the Chuvash-Bolgar branch of Turkic and in the Mongol words corresponding to Turkic lexical or grammatical units with /z/ has occupied Altaistic research for some time. An apparently irregular alternation *r ~ z* exists also within Old Turkic, as described, among others, by T. Tekin (various publications), Xelimskij 1986 and the OTWF.

A number of scholars, a.o. Röhrborn, Laut, Maue, Shōgaito and Moriyasu, have in the last two decades dealt with the phonic shape of Indic terms borrowed into Old Turkic; this reflects whether they came over Chinese, Tokharian or Sogdian, showing the immediate source of translations of Buddhist texts, the flow of cultural contacts and the degree of Sanskrit erudition of the translators and scribes.

W. Bang's often adventurous contributions to word formation did not quite distinguish between etymology and this domain of grammar; indices to Bang's voluminous work would be very welcome. Gabain 1941 and Räsänen 1957 generally do make this distinction but do not distinguish at all between deverbal nouns on the one hand, and participles on the other. Kobešavidze 1972 and the introductions to Schulz 1978 and OTWF (as already Erdal 1976) try to clarify this question. A systematic listing of formatives can be found in Clauson 1962. Schakir 1933 and Nigmatov 1971 both deal with denominal formation. OTWF might be said to supersede much of what preceded it in connection with word formation simply because it was based on a much wider material basis. One particular point of that work is corrected in Röhrborn 1995, which deals with the nominal use of 'adjectives'. Doerfer 1982 gives examples for lexical units used as both nominals and verbs; that this is possible in Old Turkic grammar is denied in Erdal 1976/1991.

There are several relatively recent papers on Old Turkic case forms. Gabain 1970 constructs a distinction between primary case forms as the accusative, the instrumental and the genitive, and secondary case suffixes, whose juncture seems to be looser in Old Turkic. The genitive and the accusative forms are dealt with by Doerfer (1983 and 1990), who thinks that the form of nominals demanded by postpositions is not the accusative but an 'oblique' stem. T. Tekin 1991 and 1996a are

papers on Old Turkic case forms motivated by the Altaic hypothesis: The first (correctly) states that the Orkhon Turkic comitative is to be linked to a Mongolic case form and not to the suffix *+IXg*; the second tries (unacceptably, I think) to posit an Old Turkic dative-locative suffix *+A* parallel to the Mongolic suffix of the same shape (an idea adopted also by L. Bazin). Sertkaya 1992 describes the recursivity of case suffixes with pronouns, Erdal & Schönig 1990 the vowel alternation in the case forms of demonstrative pronouns. T.Tekin 1985 and Zieme 1992 deal with postpositions; the former paper is about *üzä*, in which the author finds the dative-locative suffix *+A* to which he returns (again) in 1996a. Barutçu 1992 deals with the elements *kaltı* and *nälök*, both of pronominal origin and signifying ‘how’, which have very different functions. Moerlose 1986 is about the manifold functions of the element *ulati*, which is hard to assign to a part of speech; it is a conjunction only in some of its uses. Erdal 1991a deals with the Orkhon Turkic pragmatic particle *gU*, found also in some modern Turkic languages and in Mongolic.

Ehlers 1983 discovered how the last decade of every hundred numerals is expressed in the counting system of early Old Turkic; Clark 1996 has a quite plausible theory on the source of that system.

The morphology of the verbal system is covered well by Zieme 1969 for Manichæan sources, T.Tekin 1968 for Orkhon Turkic, Ercilasun 1984 for the QB, by Brockelmann 1919 and Dankoff & Kelly 1982-85 for the DLT and Gabain 1974 for the rest. Erdal 1979b describes the distribution of the vowels of the converb and aorist suffixes in simple and derived verbs of inscriptional Turkic and Uygur, Erdal 1986 of Qarakhanid Turkic; T.Tekin 1995 shows how some of these are explained through Mongolian. Eraslan 1980 describes the verbal nominals of Old Turkic, while T.Tekin 1997 focuses on *-dOk*. Röhrborn 1993 tries to delimit the border between the nominal and the verbal domain; Röhrborn 1998a proposes *är-gäy* as etymology for the particle *ärki*. Šervašidze 1978 deals with analytical verb forms in the runiform inscriptions, Tekin 1996 with two such constructions; cf. also the introduction to Schönig 1996. Šervašidze 1979, Telicin 1987 and Johanson 1988 are about Old Turkic converbs.

Syntax is a relative newcomer to Old Turkic studies; what we find in Gabain 1941 is morphocentric and rather erratic. Schinkewitsch 1926, although dealing primarily with the language of (early Middle Turkic) Rabghūzī, refers to syntactic aspects of Qarakhanid, Uygur and Orkhon Turkic sources as well and is also important for the way he views

Turkic syntactic problems. Abduraxmanov 1967 and Nigmatov 1975a are general descriptions of Qarakhanid syntax; there is nothing similar for Old Turkic proper.

The first papers I could discover on specific syntactic topics are Ş. Tekin 1965 on oblique clauses and Poppe 1966 on nominal phrases and nominal compounds; this latter is the topic also of Adams 1981 and Röhrborn 1987. Both Adams and Kayra 1994, who deals with adjectives and adjective phrases, limit their paper to the Orkhon inscriptions; by far the greatest volume of linguistic and philological research has been carried out on this group of texts, although it constitutes only a minute fraction of Old Turkic sources. Uygur uses the suffix *+IXg* to form nominal phrases with metaphorical content. These structures were first described by Erdal 1976; in 1981 this description was presented at a symposium organised by C. Röhrborn, who published only a greatly abbreviated version of the paper in 1982. Röhrborn himself dealt with the same topic in the 1980 volume of *MT*, which came out in 1983 (Röhrborn 1983b). The 1976/1981 text finally appeared in print as part of OTWF. Röhrborn 1983a is about the syntactic behaviour of Indic loans. Nigmatov 1975 describes the semantic and syntactic functions of Qarakhanid case forms.

Old Turkic verbal government is the topic of Amanžolov 1969, while Kuznecov 1971 describes clauses formed with *-dOk* in the inscriptions. Johanson on Turkic “hypotaxis” (1975) and on Turkic converb clauses (1995) is concerned also with Old Turkic. Schulz 1978 is a doctoral thesis on Old Turkic adjunct clauses. Tuguševa 1986 is an overview of nominal sentences with the pronoun *ol* as topic or comment. Subaşı Uzun 1995 wrote a text grammar of the Orkhon inscriptions. Erdal 1998b, finally, is about diachronic syntax: It shows how the early Old Turkic so-called ‘construction of two subjects’ brought about the adnominal nominative construction.

The use of much of the work mentioned is relatively limited, as it does not take the very substantial text editions of the last thirty years into consideration; this is especially true of the Soviet Union, where western publications got known with delays of up to a decade. In many domains of Old Turkic grammar, Gabain 1974 is still the last word. It can be considered to approximate adequacy only in morphology. Much has to be added even in that domain, as some phenomena happen to have first come up in texts which appeared more recently. Many questions about the sound system are still open and partly have to be given tentative answers; for a number of areas (especially in syntax) the description offered below is a first attempt.

1.34. Dialectology and language change

Since the beginnings of research into Old Turkic it was clear that there are a lot of similarities and also some dissimilarities between the language of the different corpuses mentioned in section 1.2. Gradually it also became clear that there were some differences within these corpuses, both among classes of Uygur texts and among runiform inscriptions, whether due to dialect, historical development, different sources or style. Bang & Gabain wrote in 1929 in a note to TT I 151-152 that there are dialects within Uygur: Referring to what they read as the diminutives *ašnukina* and *amtikina* in that passage, they state that earlier Old Turkic *ñ* became *n* in Manichæan texts which, as they thought, were mostly written by Oguz Turks, but *y* in most other, mainly Buddhist texts.⁴⁷ In the n. to l. 1826 of her ‘Briefe der uigurischen Hüentsang-Biographie’, which appeared in 1938 (pp. 367-369 in SEddT-F), Gabain set out her views on this topic in greater detail and with a number of characteristics: She now distinguished three dialects, the *n* dialect, the *y* dialect (for the distinction of which she adduced further criteria) and the dialect of the Brāhmī mss., adding a short list of sources said to belong to the *n* dialect. She rightfully stressed that the dialects mix these characteristics (a point also made by Hazai & Zieme 1970: 132, Gabain 1974: 3-8, Schulz 1978: XIII-XVII and Laut 1986: 61), but thought that they predominate one way or the other in all texts, making classification into the two groups possible.

Recent discussion on the question of Uygur dialects was initiated by Zieme 1969: 173-182 (published with slight alterations as the second part of Hazai & Zieme 1970), who gives detailed information on all (published and at that time as yet unpublished) Manichæan sources available to him concerning a number of points and lists some linguistic criteria likely to distinguish between dialects as found in mss. clusters. Batmanov 1971 tries to find correlations between Old Turkic dialects and modern Turkic languages; in this connection it may be mentioned that Doerfer 1975-76 and 1975-76a state the language of the Orkhon inscriptions to be the earliest stage of Oguz Turkic. In the EDPT Clauson (1972; xiii ff.) distinguished between “Türkü”, which he

⁴⁷ The question of the development of early Old Turkic /ñ/ is taken up in section 2.33. There is a contradiction in Bang & Gabain’s statement on TT I as this text is not, in fact, Manichæan. In the UW, these instances are reinterpreted as instrumental case forms of *+kIyA*, i.e. *ašnuk(i)yan* and *amtikiyan* respectively, while Röhrborn 1981-82: 298 reads *ašnukiča* and *amtikiča*. That some Manichæan texts show similarities with the language of the runiform inscriptions had already been noticed by W. Radloff in 1908.

conceived of as including Orkhon Turkic as well as runiform mss. and Manichæan texts retaining /ñ/ such as the Xw, and two distinct “but closely related” Uygur dialects, “Uygur” and “Uygur-A”. The EDPT’s ‘Uygur’ covers not only what is generally called by this name but also the runiform inscriptions inscribed in Mongolia during the Uygur Steppe Empire; Uygur-A was defined by the lowering of high vowels referred to in section 1.2. Kondrat’ev 1973, Tuguševa 1974, Tenišev 1976 and Blagova 1977 discuss the differences between Orkhon Turkic and Uygur and try to answer the question whether these are dialects or different languages.

Erdal 1976: 10-48 (published with minor changes as Erdal 1979) dealt with a set of linguistic characteristics of Old Turkic diachrony as distinct from external characteristics such as palæography, content, explicit dating or the appearance of the document (e.g. whether it is a ms. or a block-print, the latter appearing only under Mongol domination in the 13th century). The paper lists a number of linguistic criteria which can serve for placing texts into older or younger strata of the language, while Zieme 1981 and Bazin 1991 are concerned with extra-linguistic dating. Erdal 1979 thought that the appearance of the runiform letter ñ or the spelling NY in other writing systems is older than the change of /ñ/ to /n/ or /y/ though Zieme 1969: 173-182 had already stated that Manichæan texts could have a fluctuation between NY and N. Röhrborn 1983 thought that fluctuations should be taken to be merely graphic. He suggested they should not be seen as a critical criterion for classifying texts, the Maitrisimit consistently having ñ > y but, on the other hand, most of the other criteria for including it into one group with the texts which either write NY or N for /ñ/. In a text showing both NY spellings and N or Y variants instead of that, the N or Y instances should, he proposes, like NY also be read as [ñ]. The same premiss could also lead one to the opposite conclusions: That the scribe knew the words were supposed to be pronounced with [ñ] but let his own pronunciation, which was [y], interfere with spelling which reflected conservative practice. Other scholars have also thought about this free alternation: Hamilton (in a note to KP) wondered whether there was dialect mixing; below we quote the opinions of Arat and Laut on the question.

Tenišev 1979 developed the theory, subsequently found reiterated by a number of Soviet scholars like also Kondrat’ev 1981, that Old Turkic was a written language which was wholly distinct from the languages and dialects actually spoken by the scribes: These latter could, he thought, have been closer to the earlier stages of modern languages. Erdal 1985 shows that alternants existing side by side in the QB and

chosen for the sake of poetical form are, in fact, real regressive and progressive variants which can be taken to have both existed one beside the other in spoken language.

Important contributions on the history of the Buddhist Uygur corpus came from Shōgaito 1982, who showed that a small early group of Buddhist texts which were linguistically close to Manichaean sources had Buddhist terminology in Sogdian rather than in Tokharian garb, i.e. that there was a correlation between the path of borrowing and the linguistic shape of the Old Turkic texts themselves, and from Röhrborn 1983. Shōgaito thought the spelling of high vowels as low ones in pre-classical texts together with the frequent omission of these vowels meant that they were pronounced short. This hypothesis (which seems plausible) is quite distinct from the ‘helping vowels’ hypothesis, as it does not refer only to suffix vowels, and not only to fourfold harmony vowels (which are not, after all, the only ones affected). Maue & Röhrborn 1984-85: Teil II 77-79 stated that differences conceived of as being dialectal in fact represent different stages of development. On a distinction between pre-classical and classical Buddhist Uygur texts based on orthography, types of loan words and some less linguistic criteria see especially Laut 1985 and 1986: 59-88. These interpret some distinctive characteristics of Zieme 1969 and Erdal 1979 as well as one or two others as indications of language change and not of dialects. Laut embedded his ideas in history: It was the Sogdians who first introduced the Turks to Buddhism in the 6th century.⁴⁸ Those who, in the second half of the 8th century, not only brought Manichæism to the Uygur Turks when they still had their steppe empire in Mongolia, but also got them into adopting this as their state religion and had the first texts translated were also Sogdians. More recently, Moriyasu has come up with a tripartite chronological classification of mss. based on Uygur paleography. As proven by Moriyasu 1990, the Uygurs were actually converted to Buddhism through the efforts of Chinese and Tokharians when, vanquished by the Kīrgīz in 840, they moved into the Tarim basin and got into intensive contact with the Tokharians; all major early Uygur Buddhist texts are translations from Tokharian.

Doerfer 1993 combined 30 different criteria but simplifies and distorts matters a little; cf. the reviews of Tekin 1994 and Zieme 1994. New

⁴⁸ However, an important element in the argument of Laut 1986: 6 has subsequently proved to be groundless: The word understood as *saṃgha* ‘Buddhist community’ in the Sogdian Bugut inscription, dated to around 580 A.D., has now been shown to be the Iranian word for ‘stone’ (i.e. stele), *sang* in Persian. The content of the inscription points towards a quite different religious orientation, an ancestor cult.

research taking numerous texts published during the last decade into consideration as well as the theories of the 1980s (which Doerfer did only to a limited extent) would be highly welcome.

CHAPTER TWO

GRAPHEMICS, SPELLING, PHONOLOGY AND MORPHOPHONOLOGY

The graphic and phonic component of Old Turkic is here presented in the tradition of European structuralism, which uses abstract phonemes as phonological units. Phonemes consist of sets of equally abstract allophones, whose alternation is conditioned by the phonic context. Such context can also let phonemes alternate among themselves, neutralising oppositions between them. Families of phonemes alternating under such neutralisation are called archphonemes. We assume that the graphic data of Old Turkic intend the representation of pronunciation; there is certainly no necessary one-to-one correspondence between graphemes (i.e. 'letters') or grapheme sequences and phonemes or allophones, but spelling choices made by the writer are not a priori taken to be arbitrary: Solid internal evidence has preference over historical, comparative or contact information.

2.1. *Graphemics*

Old Turkic was written in a great number of writing systems.⁴⁹ Most sources use alphabets of ultimate Semitic origin, borrowed through Sogdian: The Manichæan and Syriac scripts were used by Manichæans and Christians respectively; by far the most common was the Uygur script, used by adherents of all religions among the Turks of Eastern Turkestan. It is a variant of the Sogdian script, which, itself, was also put to limited use for Old Turkic. The Yarkand documents, which are Qarakhanid, are also in Uygur writing (though with Arabic characters as diacritics); Kāšġarī lists the Uygur alphabet, calling it the alphabet of the Turks, but both the DLT and QB are written in the Arabic script,⁵⁰ the vehicle of Islam. Indic scripts were used much less than the scripts coming from the West, the Khotanese variety of Brāhmī and the Tibetan script even less than Brāhmī script as used by the Tokharians.⁵¹

⁴⁹ Tables showing the actual letters can be found in all the other handbooks dealing with Old Turkic.

⁵⁰ One of the three QB mss. is in Uygur writing; this is the latest among the mss., however, and there now seems to be no doubt that it is a secondary transcription.

⁵¹ There also are a few Uygur seal imprints and one economical text in 'Phags-pa, a

The sources which use Indic scripts are of great linguistic value, however, as these scripts are highly explicit in their rendering of vowels.

The original Turkic script is the one here named ‘runiform’; it was at first named ‘runic’ because it was thought to be akin to the Germanic runes before it was deciphered. Some of its characters look similar to ones found in early Semitic alphabets; this makes it likely that some such script (one used, for instance, in the Caucasus, where Turkic presence appears to have been quite early as well) was known to its creator(s). The inconsistencies and complications of the runiform script in the voiceless sibilant domain also strongly remind us of the Semitic languages. On the other hand, the fact that the vowels [a] or [ä] can be implicitly understood to be present throughout the word (though not at its end) when nothing is written explicitly are something which we know from Indic systems. However, the appearance of all other vowels in non-first syllables is also left implicit, if they are preceded by a vowel of the same class of backness / frontness and roundedness (though not necessarily equal in height).⁵² The runiform system is certainly not one of *akşaras*.⁵³ It is not a syllabic system either, as some have maintained,⁵⁴ although some characters have been transliterated as ^wk or as ¹k: These signs (to limit oneself here to these examples) cannot be interpreted only as signalling ‘uvular *k* preceded by *o* or *u*’ or ‘uvular *k* preceded by *i*’ respectively, since the vowel whose presence they imply can also follow them. Moreover, they can also be separated from this vowel by /l/ or /r/; thus e.g. *yil+ka* is spelled as y¹l¹k¹A in Tariat E9, S1, 2, 3 and 5 and W2. Similarly, the well-known *körk+lüg* should in IrqB 18 and 64 not be read as ‘*körüklüg*’ just because it is spelled with the ^wk ligature; nor should *Türk*, attested since early times in very

writing system akin to the Tibetan one, invented for writing Mongolian; cf. Zieme 1998.

⁵² Doerfer in several places (also e.g. 1993: 119) states that whatever is implicit in runiform sources is either a / ä or ä / ě. This is in accordance with his view that /X/ was originally realised not as /i i u ü o ö/ but as / ä ě/. In fact, however, it is not only /A/ or /X/ that remain implicit, but any vowel preceded by another vowel of its own class: *yükündür-* in KT E2 and BQ E3 or *sökür-* in KT E18 and BQ E16 are both spelled with only the first of their vowels made explicit, e.g., although the causative suffixes have the shape *-dUr-* and *-Ur-* respectively. See more on this below.

⁵³ An *akşara* is a unit of writing of the numerous Indic alphabets. It consists of any consonant cluster (even one whose consonants belong to different syllables, e.g. *tp*, *cch* or *ntr*) + any subsequent vowel (including nasalised vowels and syllabic sonants).

⁵⁴ E.g. Johanson 2001: 1724b. The table in T.Tekin 2000: 23 gives three characters the readings *baš*, *däm* and *küš* respectively; the first of these has, e.g., been read in Taryat N3 (twice) and 4. All these are rather arbitrary proposals and seem unlikely. See Erdal 2002: 64 footn. 38 for ‘*däm*’, which is probably merely a variant of *d²*.

disparate places, be read as 'türük' only because of such spelling.⁵⁵ Moreover, we find the signs indicating both a consonant and a vowel to be used *beside* explicit vowel letters; e.g. $s^1w^wkws^1mIs^2 = sokušmiš$, $t^1wt^1w^w pn^1 = tutupan$, $t^2w^wkl^2 = tükäl$ in IrqB 2, 16 and 27 respectively. Tekin 2000: 33-36 lists Orkhon Turkic examples where wk , wk and k are used beside explicit w , w and y respectively. Such spellings do not indicate vowel length, as some have thought, as they do not correspond to lengths known from Yakut, Turkmen etc.. All this means that the vowel + consonant signs serve only to show the quality of consonants when pronounced in the vicinity of particular vowel features; they *are* mere consonant letters and not syllabic in character. To sum up, this is an alphabetical system perhaps remotely betraying Semitic motivation. It appears that the runiform script was devised for writing Turkic or some other language showing a number of the typological traits characteristic of the Turkic group:

a) synharmonism⁵⁶ and the presence of the front rounded vowels $ö$ and $ü$, both equally untypical of Semitic, Caucasian, East Asian and early Indo-European: The script distinguishes front and back harmony in rounded vowels and also in most consonants; there are, e.g., sets of very different-looking characters for front b and back b , front y and back y , and so forth;⁵⁷ we transliterate these as b^1 and b^2 respectively. Semitic writing systems distinguish only between velar and uvular /k/ (' k ' and ' q ') and /g/ (often noted g and γ respectively), a distinction which has been used for expressing synharmonism in Turkic languages.

b) no expression of tones, as, e.g., in Chinese.

c) a preponderance of closed syllables as against open ones, unlike Chinese or Japanese: Alphabetical writing systems can be divided into 1) such that have an explicit expression of vowels in the same chain as

⁵⁵ Ms. Mz 386 (TM 333) r2-3 has another instance of *körk* spelled with wk after the /r/, wrongly written as k^2 in P. Zieme's reedition of the fragment in 'A Manichæan - Turkic dispute ...' p.217. The word in r1 of the same fragment cannot, however, be read as '*körüksüz*' and be translated as "ugly": What the ms. has is not $k^2w^r^2wk^2s^2wz$, as both Zieme and Sertkaya before him write, but $b^2w^r^2wk^2s^2wz$; the first character is a bit damaged but can clearly be seen to be b^2 .

⁵⁶ A more correct term widely used in Russian Turcology for what is usually (and often in this work as well) called vowel harmony. Harmony does not affect only vowels but consonants as well (though writing systems used for the Turkic languages reflect this fact less than they might).

⁵⁷ y is a palatal consonant, which sometimes fronts vowels beside it. The fact that the system provides for a back [y] shows that it is necessarily not meant to serve phonetics only, but also the characterisation of syllables as functioning in supra-segmental (morpho-)phonological context.

the consonants, e.g. the Greek alphabet and the ones descended from it or the Germanic runes; 2) *akṣara* systems, in which signs for consonants (or even consonant clusters) are kernels around which vowel (or other) signs are obligatorily clustered, in Indian or Ethiopian alphabets; finally, 3), systems in which the writing of a consonant also implies the presence of a vowel beside it, though vowels can also, optionally, be expressed explicitly. Such implicit vowels *follow* the consonant in systems used for writing Semitic or Indic languages, the character for *t* also being used to note sound sequences such as *ta* or *ti*; the runiform system is alone in this third group in implying preceding vowels, such as *at* or *ut*, when merely writing *t* and not vowels following the consonant. This trait of the runiform system is incompatible also with the root principle in the lexicon, characteristic both of Semitic and early Indo-European. All coda vowels, on the other hand, are written out as separate characters (again unlike the Semitic and Indic systems).

d) A binary distinction of non-nasal consonants at each point of articulation, whether it be called voiced vs. voiceless, strident vs. mellow or stop vs. continuant etc.; most of early Indo-European has a threefold system, Sanskrit a fourfold one and Semitic as well as Caucasian languages have even more complex distinctions. Such characteristics might also be connected with other Altaic languages or with Uralic, but not a single inscription or ms. has as yet been found to bear a runiform text in any of those languages.⁵⁸

e) Such signs as y^1 , which looks like the half full moon (*ay*), $^w k$, which looks like an arrow (*ok*) or b^2 , which has the shape of a tent (*äb/äv* 'house, home') seem to have an ideogrammatic background in Turkic (and not, e.g., in Mongolic).

f) The fact that the runiform alphabet was put to popular use in a vast area (including quite remote Siberian regions) coinciding with the roaming grounds of the early Turks, and not outside them, would equally speak for an original creation; the Tangut and Qïtañ, e.g., have also invented their own writing systems.

Although the runiform script is thus likely to have been devised by Turkic groups, the Türk empires which formed in Mongolia probably first used the Sogdian–Uygur alphabet, because they were introduced to sedentary civilisation by the Sogdians.⁵⁹ The use of the runiform script

⁵⁸ A few runiform ms. texts are in Middle Iranian languages; they were apparently written by Manichaean Uygurs.

⁵⁹ See e.g. Laut 1986: 5-7. The first draft of the Orkhon inscriptions may also have been written in Sogdian–Uygur script: In KT N7 (though not in the parallel passage BQ

in the second Türk empire is no doubt to be seen as motivated by the return to the Turkic way of life as preached by Tuñokok in his inscription, which tried to neutralise the influence of foreign religions and cultures as much as possible. The original home (as distinct from the ultimate source) of this script may not have been in Mongolia but in South Siberia; there it was widely diffused and used by the population at large, as proven by grave inscriptions as well as some scribbles spread over a vast area.

The paleography of all of these scripts as used for Old Turkic will not be dealt with in this work, although what has been published on this topic till now is quite inadequate. For the time being, Gabain 1974: 9-41 (which also contains remarks on phonetics) can be consulted for a general survey, le Coq 1919 for Uygur writing, Róna-Tas 1991: 63-117 for the Brāhmī and Tibetan systems as applied to Old Turkic and Maue 1996: XV-XVIII specifically for Brāhmī. We will be referring to all of the scripts in transliteration, to all texts in transcription.

Old Turkic punctuation cannot be taken at face value; runiform punctuation has been studied but is still poorly understood; hardly any attention has been given to punctuating principles in Uygur texts (though the shape of punctuation marks is often referred to as a clue for the scribe's affiliation). A future paleography will also have to document whether suffixes are linked to or separated from their stem in spelling (as done by a few text editors⁶⁰); separation happens mostly in the nominal domain.

It is useful that the language we are investigating appears in so many different writing systems, as each one of them is inadequate in some ways or other; all of them leave some phonic qualities unexpressed or irregularly expressed even on the phonemic level. One therefore should not endeavour to base information about the sounds and the sound distinctions represented through a text by referring to that text alone. Rather, we have to turn to that writing system which is most adequate for each particular domain of phonology. We read the vowels of the runiform inscriptions as in Uygur, e.g., because Uygur has a much more elaborate rendering of vowels than the vast majority of runiform

E31, which was put to writing some time later) we find the passage *bir uguš alpagu on ärig*, which must be an error for *bir uguš alpagut ärig* as 1) *bir uguš* is a quantifier which makes *on* 'ten' superfluous, 2) a numeral should not stand after a noun and 3) *alp* and *alp+agut* are attested but a collective *alp+agu* is not and would not suit the context. *on* and *t* look quite different in runiform script but could look identical in Sogdian-Uygur writing, and mistaking one for the other could have caused the error. The sentence is interpreted and translated in section 4.631.

⁶⁰ E.g. the editor of TT X on p.9 of her edition.

sources, and is the dialect aggregate closest to inscriptional Turkic; moreover, some runiform texts may not be earlier than the ‘Uyгур’ corpus. In a few cases, using one script for transcribing a text written in some other script can be a tricky matter; here is an example: Whether a certain vowel is to be read as [o] or as [u] can be determined only through instances in the Indic scripts, Brāhmī and Tibetan, beside, of course, modern and comparative evidence. It was originally thought by Gabain and a few others that the Brāhmī sources represent a dialect by themselves. If a stem is written with *o* in a Brāhmī source, is not attested in Tibetan writing and if modern evidence is absent or conflicting, we cannot be sure how to read it in other sources, say ones written in Uyğur writing.

The Uyğur, Manichæan, Sogdian and Syriac scripts do not distinguish /i/ and /e/ from /i/, /o/ from /u/ or /ö/ from /ü/: The shortcomings of the Semitic system were only partly compensated for by (generally) using, in the first syllable, two *alifs* for /a/ to distinguish it from a single one for /ä/,⁶¹ and by creating the digraph WY for front rounded vowels. In some sources, /o/ appears to have been spelt with two Ws in certain monosyllabic stems, apparently to distinguish it from /u/. The non-distinctions of the Semitic system, which distinguishes between high and low vowels in the unrounded domain but not for rounded vowels,⁶² are found also in the runiform script as used in Mongolia. The asymmetry in distinguishing frontness only in the rounded domain, height only in the unrounded one appears in both of these otherwise quite different systems. Some inscriptions of the Yenisey area are more explicit than the Semitic Old Turkic alphabets in having special characters for /e/ or /ä/; most runiform texts write /ä/ with the character used for /a/. I read the runiform vowels as in Uyğur. The Brāhmī and Tibetan writing systems show the greatest distinction in vowels, though the sources in Tibetan script which we have should be used very

⁶¹ In mss. in cursive writing double and single *alef* are not always distinguishable. Onset /a/ is in a part of the lexemes spelled with a single *alef* if two consonants follow, e.g. in *alp* (with *alplan-* but not *alpagut*, *alpal-* or *alpirkan-*), *amra-* (with *amran-*, *amrak*, *amraksiz*, *amrančig*, *amraš-*, *amrat-*), *amrik-*, *amril-*, *amru*, *amtī*, *arslan* (but not *arslanlig*), *artok* (beside the variant with two *alifs*), *artuč* and *artut*. This does not happen if the second consonant belongs to a suffix, as in *ač-mak*, and hardly ever if the consonants become adjacent through syncope, as with *adr-ıl-* or *adr-ok*. *alčak*, *aldirtī*, *alk-*, *alka-* (with a single *alef* in a few early instances of the verb and of *alkatmīš*, *alkinču* and *alkiš*), *alkig*, *alku* and *almir* are, however, spelled with two *alifs*.

⁶² In Arabic writing, e.g., *a* is distinguished from *i* but *o* is not distinguished from *u*; in general, *alif* serves as *mater lectionis* for low unrounded, *yā'* for high unrounded vowels, but there is only one *mater lectionis* (*wāw*) for all rounded vowels.

cautiously: Their spelling is often strongly influenced by the fact that Tibetan itself was not spelled phonetically. Determining the pronunciation of what we find in those ms. has to take into account the expectations of a Tibetan reader alongside the phonetic values of the letters. We have no reason to believe that there was a special Brāhmī dialect (as Gabain did at least at some stage and T.Tekin 2000 apparently still does), although the fluctuation in the pronunciation was clearly such that there were a number of possibilities (as in any language and as shown by variation within Brāhmī and Tibetan evidence itself). Authorities on Uygur now agree that Uygur Brāhmī was used for the same dialect as Uygur script, which of course must have varied over time and space: Two Brāhmī texts, TT VIII K⁶³ and O are found in Uygur script as well, and scribes often introduced Brāhmī glosses or *akṣaras* into mss. in the latter. Wherever a word is attested in Tibetan or Brāhmī script, that evidence is fully followed here as far as its pronunciation is concerned: Since, e.g., the word coming from Skt. *abhiṣeka* over Tokharian A and B *abhiṣek* is in TT VIII D17 spelled as *abišik*, this is what we adopt (as against *abišek* in the UW). The scribe did, after all, have the possibility of writing *e* in the last syllable.⁶⁴

[i] is spelled with *yōd* in all scripts of Semitic origin which were used for writing Old Turkic, except that we sometimes find it spelled with *alef* in a number of pre-classical texts (see section 1.2 above), e.g. in *yalanlar* (MaitH XX 1r19) which stands for *yalinlar* ‘flames’ or, in a Manichæan text, *kap-ap* ‘snatching’ (DreiPrinz 49). This apparently happens in Sogdian and Uygur writing more often than in Manichæan writing; there is no collocational limitation for this spelling. Since *alef* in non-first syllables represents [a], a vowel unrounded and posterior like [i], whereas [i] is unlike [i] in being fronted, this could be a mainly graphic fluctuation, reflecting the intermediate nature of [i]. In no text is /i/ generally spelled with *alef*, the most common spelling of [i] being *yōd* in all sources. Since, however, there are also some instances of *alef* for [i], e.g. *käl+äp* and *äšid+äp* (quoted in the next paragraph), *ig+säz* ‘healthy’ in ChristManMsFr ManFr r9, *ärdäm+imäz* ‘our virtue’ in Mait or the instrumental form *siziks(i)zän* ‘doubtlessly’ in TT VI 305, the phenomenon cannot be merely graphic but must also have a phonetic aspect.⁶⁵ Another matter with less phonic relevance is the non-

⁶³ As yet unpublished; information from P. Zieme.

⁶⁴ See the remarks of A.v. Gabain on p.8 of her 1959 edition of TT X.

⁶⁵ *eligin* in TT VI 89 and twice 90 is, however, spelled with *yōd*, even though the vowel is here beside /g/, which often lowers vowels. ‘*s(ä)vänmiš*’ in Yos 75 should, I think, be read as *sinamiš*.

writing of vowels in first syllables in such words as *tänri*, *kärgäk*, *yarlika-*, *tärk*, *käntii*, *män*, *sän*, *kälti* ‘(s)he came’, *bälgür-* ‘to appear’, *kara* ‘black’ and others. In original Semitic alphabets, only long vowels were explicit in any way, a feature inherited by some other languages (such as Sogdian) when using such alphabets. With time, complementary systems enabling the explicit expression of all vowels were devised for many languages using such alphabets, but in some of these the use of such complementary means remained optional. With a number of Semitic and Indic alphabets it became the rule to leave only low unrounded vowels (such as [a]) unexpressed. The spelling of the Turkic words mentioned was clearly kept from a time when there were such practices also with Turkic. In some groups of cases, however, the spelling of words without an explicit vowel may nevertheless be phonically relevant; e.g. beside /g/ (e.g. in the suffix +lXg more often spelled without than with vowels) or when vowels are absorbed by onset /y/ (e.g. in *ymä* and *ygirmi*).

In later Uygur mss., voiced and voiceless consonant letters (T and D, S and Z etc.) alternate quite freely, clearly without any phonetic or phonological background and without any regular causation.⁶⁶ Uygur script does not distinguish between front /k/ and /g/ at all; the two dots, which are supposed to distinguish back /k/ from back /g/, are not used systematically in late Uygur mss. in any case.⁶⁷ /ŋ/ is in all Semitic alphabets spelled as N + K – or, in Manichæan script, G – (and not X or, in Manichæan script, Γ) also in back-vowel words; otherwise we find some fluctuations in its spelling in early texts, e.g. *siziŋ* as SYZYNNNG in M III Nr. 10 r9 (Manichæan writing) or *biziŋ* as BYZYNNKK in M III Nr. 9 V v6 (Uygur writing). The last mentioned form is actually related to a different phenomenon: the double spelling of consonants in coda position which occurs in Manichæan texts (and also commonly in mss. in Sogdian script). Thus we also have *yäk* (M III Nr.3 r2), *tünäriŋ* (M III Nr.4 r1), *s(ä)väg* (M III Nr.4 r5), *mäŋ(i)zlig* (M III Nr.4 r16), *t(ä)lgäk* (M III Nr.4 v15), *[örk]üčlänmäk* (M III Nr.4 v16), *b(ä)lgülüŋ* (M III Nr.4 r9), *tep* (M III Nr.4 r4⁶⁸) as well as *äsidäp* and *käläp* in ms.

⁶⁶ Gabain 1941: 54 thinks that voiceless consonants may have become voiced between vowels, as happens in the Northern Turkic languages today. This is unlikely, since devoicing, the opposite process, is attested in this position just as commonly; a few examples for that are supplied by Prof. Gabain herself on the same page.

⁶⁷ Late Uygur mss. were mostly written down under Mongol rule. In Classical Mongolian, which also uses the Uygur script, the two dots mark back /g/ and not back /k/.

⁶⁸ The edition’s *tipü*, and *blgülüŋü* in the previous word, are misreadings. Similar mistakes are found in Fedakâr.

T II D (U 268) r10 and r16 respectively all spelled with double final K and P. The double spelling of letters to fill the end of a line can also be found in Buddhist mss. e.g. with additional W after *bo* ‘this’ and *yügärü* ‘facing’ or additional R after *agir* ‘heavy’ in TT X 232, 285 and 299 respectively. Note that it here comprises letters representing vowels and not only consonants.

When *y* is in the word onset followed by a front rounded vowel, mss. in Uygur script normally spell this vowel as if it belonged to the back series; e.g. in *yörüg* ‘interpretation’, *yükiin-* ‘to bow to someone’, *yüräk* ‘heart’, *yüz* ‘face’ and ‘hundred’ or *yügür-* ‘to run’. There are a few other words with front rounded vowels in the first syllable which also spell this vowel as W and not as WY, such as *köñül* ‘heart’ or (e.g. in TT X 440) *kög* ‘music’. The habit of spelling front rounded vowels as WY may have come up gradually, as *yöd-*less spellings for front vowels are much more wide-spread in pre-classical texts than in classical and late mss.. The front variant of the particle *Ok*, which is not a fully independent word, is also spelled without a Y, although it normally has a space before it.

Further spelling characteristics are discussed in sections 2.2 and 2.3.

2.2. *The vowels*

The Proto-Turkic four-dimensional vowel symmetry, still existing e.g. in Yakut, consists of $2^4 = 16$ phonemes generated by four oppositions: back (a, i, o, u) vs. front (ä, i, ö, ü), low (a, o, ä, ö) vs. high (i, i, u, ü), unrounded (a, i, ä, i) vs. rounded (o, u, ö, ü) and long vs. short. In the original Turkic words of Old Turkic, 16 vowel phonemes may have been distinct only in the first syllable; very little is known of the other syllables in this respect. When, perhaps during the course of Old Turkic, the length opposition is given up altogether, there remain 9 vowels: 9 and not 8 because /ä:/ became /e/ and was retained as such.⁶⁹ This /e/ appears, at some stage, to have been joined by [e] which was an allophone of /ä/ when followed by /i/. In non-first syllables, vowel harmony in principle⁷⁰ left morphology with only four possibilities: with only four pertinent oppositions, between the archphonemes /A/ (realised as /a, ä/), /U/ (= /u, ü/) and /I/ (= /i/ and /i/; tending to

⁶⁹ This matter has to do with the genetic comparison of the Turkic languages and is outside the scope of the present work.

⁷⁰ ‘In principle’ because of a tendency to prefer /i/ to /i/ as realisation of /I/, because suffixes show back synharmonism with borrowed bases also when their last syllable clearly is in the front class and perhaps some other factors.

generalize /i/ in the last syllable, particularly when adjacent to palatal consonants) and /X/ (realised as /i, i, u, ü/, depending both on fronting and rounding). Further allophones of /X/ as well as ‘vowel attraction’ and vowel changes caused by adjacent consonants will be discussed in section 2.4. /U/ is realised as /o ö/ before /k/, except when the previous syllable has /u ü/; see section 2.51 for that.

2.21. Vowel length

The distinction between original 8 long and 8 short vowels can be very well reconstructed for first stem vowels; it is today retained to a very large extent in Yakut, Turkmen and Khaladj and has left traces and reflexes in a number of other Turkic languages. The most recent and extensive treatment of primary vowel length in first syllables (to where it may originally have been limited) in the modern and historical Turkic languages is T. Tekin 1995a, which also recounts the history of research of this aspect of Turkic vocalism.⁷¹ Unfortunately the author did not include in it a recapitulation of his 1967 paper, which shows that original Turkic long vowels function as long also for the purposes of the ‘*arūḍ*’ metre of the QB, the 11th century Qarakhanid poem of more than 6000 verses, consistently with the theory that the Proto-Turkic long vowels were preserved in its language. The DLT also appears to make the right distinctions between vowels written only with diacritical vowel signs and those spelled with *matres lectionis* (*alif*, *wāw* and *yā*’, which are the signs of vowel length in the Arabic writing system), especially where a word serves as an entry for itself and is not quoted in a sentence intended to illustrate the use of some other lexeme; this evidence was last brought together in Tekin 1995: 97-113. All in all, vowel length as documented in Qarakhanid sources accords well with the evidence in the modern languages. In Kāšgarī’s dialect, long vowels appear to have gotten shortened when stress went on to a suffix. Referring to stems in which the second letter is *alif*, *wāw* or *yā*’ he writes in fols. 515-516: “Rule. ... the medial ... letter may drop from the word rendering it biliteral in pronunciation, though not in writing; in its

⁷¹ This work is a good base for research in which most of the documentation is brought together. Its weakness concerning written documentation is that any sign that a word contains a long vowel is taken at face value and considered conclusive even if the word is, on other occasions, written short; moreover, Tekin trusts a source’s evidence also when it writes a vowel as long although no modern language testifies to this, sometimes when even he himself considers it to have been short in Proto-Turkic.

written form the letters remain sound.⁷² Example: The ‘forearm’ is called *qōl*. Then you say *aniḡ qolīn aldi* [here spelled without *wāw*] meaning ‘He grasped his arm’. It has become [short] like the word for ‘slave’, *qul* [in spelling and length], since the *wāw* has dropped out. Similarly *yēl* ‘wind’; in the course of speech you say *aniḡ yeli küčlüg* ‘His wind is strong’ It has become like the word for ‘year’, *yil* [in spelling and length]. This is the rule for all nouns and verbs ...’.

In the runiform writing system, first syllable vowel length differences can be expressed only for /a/ and /ä/, since the presence of these sounds in first syllables is understood implicitly without recourse to the *a/ä* character; other vowels have, in general, to be written out (although there are exceptions in some of the inscriptions). The explicit presence of this character can then in principle be used to mark /a:/ and /ä:/. This is done rather consistently for /a:/ in some of the mss. in runiform script, namely the Irq Bitig, the ms. TM 342 and the lapidary text (‘Blatt’): They have *a:gu* ‘poison’, *a:la* ‘motley’, *a:k* ‘white’, *a:rt* ‘mountain pass’, *a:ra* ‘between’, *a:š* ‘food’, *a:t* ‘name’, *a:z* ‘few’, *a:z-* ‘to stray’, *a:zu* ‘or’, *ba:-* ‘to bind’, *sa:kīn-* ‘to think’, *ta:š* ‘stone’, *ta:t-* ‘to taste’, *ya:š* ‘fresh grass’ and some derivatives from these stems.⁷³ These mss. only have very few questionable cases like *ada+r-t-* ‘to harm’ and *añig* ‘evil’ where we do not know whether the explicit A in the first syllable is a reflection of real vowel length for lack of modern documentation, and there are a few additional cases (like *yaš* and *ara* in the IrqB) where a word spelled as long also shows an instance without explicit A.⁷⁴ Where explicit A is, in these mss., used for marking the vowel /ä/, its presence does not appear to indicate length, as the words in which it is used have long vowels in no other source. The practice described here must have been known already to the scribes of the Orkhon inscriptions: *a:č* ‘hungry’, *a:č-* ‘to be hungry’, *a:t* ‘name, title’ and *ta:m* ‘wall’ (KT SE), the only words which are spelled with explicit A in the first syllable in the KT, BQ and KČ inscriptions, do indeed

⁷² As Kelly 1973: 156f., who quotes and comments the passage, remarks, this refers to Uygur writing, where vowel letters do not drop when the vowel is no longer long. This paper is an important contribution to the question of vowel length in Qarakhanid.

⁷³ 1 r5 of the edition of TM 342 (followed by Tekin 1995a: 91) writes the verb *yarat-* as if it had an explicit A in the first syllable, but the perfectly clear facs. shows this not to be the case. No Turkic language has *yarat-* with a long first-syllable vowel.

⁷⁴ Other mss. are more problematic: TM 326, e.g., shows *sa:v* ‘speech’, whose vowel is known to be long from elsewhere, with A, but also spells *sat-* ‘to sell’, which probably had a short vowel, with A as well. The proverb collection reedited by Hamilton and Bazin in *Turcica* 4-5: 25ff. writes the *as* in *tanuk* and *tamga* with A although they are short in the Turkic languages which retain length.

have Proto- and Common-Turkic lengths. Here, however, this practice was applied in an inconsistent and limited way: The word for ‘name’ was more often spelled without A than with it, and *a:k* ‘white’, *a:ra* ‘between’, *a:z* ‘few’, *ba:-* ‘to bind’ and *sa:kin-* ‘to think’, which appear with A in the quoted mss., do not have it in the Orkhon inscriptions. Nor are *bar* ‘there is’ and *bay* ‘rich’, which have long vowels in the modern languages, spelled with A in Orkhon Turkic. That the expression of vowel length is not part of the Orkhon Turkic writing *system* was already observed by Hovdhaugen, 1974: 61. Some additional evidence from the Yenisey inscriptions has been listed in Tekin 1995a: 90-91; it should, however, be checked on the base of newer or more responsible readings of these inscriptions. Doerfer 1981-82a: 111-2 has tried to explain the absence of A in some stems with long vowels by the hypothesis that the stem started with /h/, after which the long vowels are not supposed to appear; he thinks that /ā/ is spelled with A only when the word *starts* with this vowel. This is not the case, as shown by the spelling of *tām*.

In Uygur mss. in both the Manichæan and (much more numerous, naturally) the Uygur script we find that vowels are sometimes written doubly. Scholars have tried to interpret this in two ways. It was stated in the notes to U II 23,14 and 39,89 and then by Zieme 1969: 32 (and cf. Meyer 1965: 190 n.19) that these spellings may be an attempt to distinguish /o/ and /ö/ from /u/ and /ü/. The fact is that most instances represent rounded vowels: There are no *aas*,⁷⁵ as two *alifs* are interpreted as [a] as opposed to [ä] and there never come more than two in a row; there is one single word spelled *īī*⁷⁶ and there are few words spelled with *ii* (to which we return below). Zieme quotes a number of instances of /o/ and /ö/ written doubly, giving place references.⁷⁷ Others, on the other hand, have said that such repetitions are meant to be read as long vowels: This was the opinion of Gabain 1941 §16 (who also quotes some of the instances), Tuna 1960: 247-252, Pritsak 1963 §10, Ščerbak 1961: 34-36 and 1966: 153-154 and Tekin (1975) 1995a:

⁷⁵ Tekin 1995a: 92 misunderstood the n. to M III 17, which says that *ät* ‘flesh, meat’ is sometimes spelled as *at*, and does not refer to *at* ‘name’.

⁷⁶ Rather common, signifying ‘plant’ and possibly with a long vowel like all monsyllabic lexeme stems of the shape CV; the first vowel of its derivate *i+gač* is short, however.

⁷⁷ He gives *booš* ‘empty’, *boo* ‘this’, *noom* ‘teaching’, *ool* ‘that’, *oon* ‘ten’, *oot* ‘fire’ and ‘grass’, *ootači* ‘healer’, *soorgun* ‘a plant’, *ooz-* ‘to prevail’, *toog* ‘dust’ from Manichæan, *booš* ‘empty’, *noomla-* ‘to preach’, *ool* ‘that’, *koog* ‘atom’, *oot* ‘fire’, *kool* ‘arm’, *kooš* ‘a pair’, *toor* ‘net’, *tooz* ‘dust’, *öö-* ‘to remember’ *ööč* ‘revenge’, *ööčä-* ‘to take revenge’, *söö* ‘a long time’ from other sources; /ö/ is here spelled as WYW.

91-94. Thus e.g. *uu* ‘sleep’ in Abhi (a rather late text) 511, 514 and 516 and *uučsuz* ‘endless’ seven times in Abhi, both words with vowel length. The double spelling of vowels is especially regular in some Chinese borrowings such as ‘dragon’ (spelled LWW), ‘army’ and ‘preface’ (both spelled SWW), ‘women’s quarters’ (spelled KWWN) etc.; this phenomenon should be separated from the double spellings of Turkic words: In these cases the spelling *may* also indicate diphthongs ([uo, üö]), and in any case touches upon the pronunciation of the Chinese dialect which served the Uyghurs as contact language. The word signifying ‘preface’ (in this book transcribed as *swö*) appears with *+sI* in HTs VII 18 but with the accusative suffix *+üg* in HTs VII 306, perhaps indicating that a pronunciation as *süw* was an option. Leaving these instances aside, we find that there are numerous counter-examples for both hypotheses: *uu* ‘sleep’ (spelled as *uv* in U III 11,8, but gets the possessive suffix as *+sI*), *uuč* ‘tip, border, edge’, *uutun* ‘vile, insolent’ and *yuul* ‘spring, fountain’ (e.g. in HTs, BT III and Suv) are, together with their derivatives, some of the more common words spelled with WW which have *high* back rounded vowels.⁷⁸ *tooz* ‘beech bark’, *koor* ‘embers’, *tuuš* ‘counterpart’, *uuz* ‘expert’, *yüüz* ‘face’ are among the lexemes with long vowels attested with double W and not mentioned by Zieme. On the other hand, some of the stems attested with double vowels, e.g. *ok* ‘arrow’, *ol* ‘that’, *ot* ‘grass’, *kol* ‘arm’, *tor* ‘net’, *oz-* ‘to prevail’ or *ul* ‘sole’, have short vowels in Turkmen, Yakut etc. and presumably had them in Proto-Turkic as well. The word for ‘wind’ is often spelled as YYYYL although its vowel is short in the modern languages; it might, perhaps, have been pronounced with a diphthong, *yiel*.⁷⁹ The general impression, after looking at quite some texts, is that double spelling tends to occur more with /o/ than with other vowels, and more with long vowels than with short ones, but that it is not all too common in general, single spelling being more common for all words mentioned; some lexemes (with long or short vowels) tend to be more prone to this phenomenon than others.

The ability of some scripts of Indian origin to distinguish between long and short *a*, *i* and *u* is not put to any discernably systematic use;

⁷⁸ Examples quoted in Tekin 1995a: 93. *uut+suz* ‘shameless’ (U II 86,40), also quoted there, is a different case: It is clearly a contraction of the well-attested *uvut*, which has the same meaning. Oğuz *utan-* ‘to feel shy’ is mentioned already in the DLT; the fact that this verb still has a /u/ in Turkish shows that it is not in the same class as the other long vowels (which get followed by /d/).

⁷⁹ *yäm*, which is used for *äm* in U I 7 (Magier), may also stand for some such diphthong as *iäm*.

least of all the BuddhKat with its Tibetan script. Tekin 1995a: 94-96 limited his research on this matter to TT VIII and lists only those cases where a vowel spelled as long correlates with a vowel he expects to be long; the opposite case is mentioned only with a few examples: He does admit, though, that it happens that long vowels are spelled as short and vice versa. See also Maue 1996: XXI for the Brāhmī practice in general. For *i*, the distinction is rare even in Sanskrit portions of the mss.; for *a* and *u* there appears to be free alternation between the signs for short and for long vowels. In the Uygur-Khotanese word list the character *ā* expresses [o] and [ö] and there is no correlation with comparative length at all. Either the language no longer kept up the Proto-Turkic length distinction when the Indian scripts came into use for Uygur (in the 10th century?), or the Central Asian linguistic filters, through which the scripts went before reaching Turkic, had made the distinction into a purely orthographical (i.e. not phonetic) one or into one distinguishing certain qualities of the vowels but not their length. Transcribing inscriptional or Uygur texts as if their language consistently distinguished between long and short vowels (as done e.g. in the glossary of BT III) therefore seems misleading.

2.22. The vowel /e/

The nine vowel phonemes left after distinctive vowel length was given up were /a/, /ä/, /i/, /i/, /o/, /ö/, /u/ and /ü/ plus the phoneme /e/. As shown by Thomsen Hansen 1957, the last-mentioned came from Proto-Turkic long */ä:/ (especially in the first syllable). The opposition between /a/ and /ā/ seems to be still documented in early Old Turkic but that between the six other long vowels and their 'normal' counterparts appear to have disappeared already by our earliest texts.

The opposition */ä:/ > /e/ vs. /ä/ was, however, retained, apparently because it involved an opposition in vowel *quality* as well, disrupting the three-dimensional close-knit structure of the original vowel system. Saving this cube structure appears to have been Bazin's only motive for not recognising /e/ as an Old Turkic phoneme, a view approvingly quoted by Zieme 1969: 33.⁸⁰ Zieme 1969 expressed disbelief in the phoneme /e/ as distinct from /ä/, though he did admit the reality of the sound [e] and mentions phonemic oppositions such as *älig* 'hand; fifty' vs. *elig* 'king'; cf. also *et-* 'to arrange' vs. *ät-* 'to emit a sound'. /e/ did, in fact, stay distinct from both /i/ and /ä/; its early existence in first

⁸⁰ Zieme has, of course, changed his view quite some time ago, but Johanson 2001: 1723a still thinks that it is "kontrovers ... ob dem *ä* ein höheres *e* gegenüberstand".

syllables can be reconstructed from modern Turkic languages (e.g. Azeri or Anatolian dialects). The Middle Turkic Nahju 1-Farādīs distinguishes between [ä], [e] and [i] by spelling the first with *fatha* (sometimes together with *alif*), the second with *fatha* and *yā'* (cf. Clauson 1962: 163) and the third with *kasra* (sometimes together with *yā'*). The spelling of coda /e/ as *fatha* plus *yā'* appears already in the DLT, e.g. in the word *süvre* 'pointed'. Concerning Old Turkic proper, the evidence is as follows: It is always spelled with Y in Uygur ms. sources written in Uygur, Manichæan and also runiform script, with Ä or I in mss. in Tibetan script, with Ä in the hippological word list in Khotanese brāhmī, but it is spelled with explicit E in the bulk of Brāhmī manuscripts.⁸¹ All instances of /e/ in non-first syllables are linked to a preceding /e/ and therefore clearly conditioned by it. /ä/ and /i/ are never spelled with Brāhmī E. Exceptions (e.g. once *kičä* where one would expect *kečä* for 'evening', once *ti-* 'to say' etc.) are quite rare and can be considered mere errors; they may be reflexes of the spelling of Uygur script. Thrice *elig* for *älig* 'hand' may rather have come about through regressive assimilation; the same may be true for thrice *el(i)t-*, which exists beside *ält-*, and for the numerous instances where 'to hear' is spelled with onset *e* beside two Brāhmī instances where this verb is still spelled as *äšid-* (cf. section 2.401). In most runiform inscriptions we find a fluctuation between /i/ and implicit notation (otherwise to be understood as *a* or *ä* in the first syllables of words in the Orkhon inscriptions), whereas no such fluctuation is ever found either with /ä/ or with /i/.⁸² The practice of scholars in Turkey and of the early Berlin

⁸¹ 5 times *bečün / bečen* 'monkey', *bel* 'waist', 6 times *ber-* 'to give' (with derivatives), 18 times *beš* 'five', *egil* 'lay person', 5 times *el* 'tribe', 5 times *elig* or *eleg* 'king', thrice *el(i)t-* 'to carry off, lead away etc.' vs. once *ält-*, *enč* and twice *enčgö* 'peace', *ešič* 'pot', 13 times *ešet-* / *ešit-* / *ešid-* 'to hear' (with derivative) vs. twice *äšid-*, 4 times *et-* 'to prepare' (including derivatives), 9 times *eyin* or *eyen* 'following', 4 times *ken(ki)* 'later, after, finally', 5 times *keñ* 'wide', 7 times *kertü / kertö* 'true, truth' and derivatives, 8 times *ket-* 'to depart' and derivative, *lešp* 'phlegm', *men* 'flour', *sezin-* 'to sense' and 6 times *sezik / sezek* 'doubt', about 60 times *te-* 'to say' and *te-t-* 'to be considered to be' (vs. once *ti-*), *terek* 'poplar', 6 times *tetse / tetsi* (thus once, possibly to be read as *tetsi*) 'student', twice *telä-* vs. twice *tilä-* 'to wish', twice *ye-* 'to eat', 29 times *yeg* 'better', twice *yel* 'wind', *yemiš* 'fruit', *yenä* 'again', 8 times *yer* 'ground', twice *yertinčü* 'world', *yeti* 'seven', *yet-* 'to reach' and *yez* 'artemisia (a plant)'.

⁸² *ilgärü* in KT E21, spelled by the editors without onset I, appears to be the only exception; according to Doerfer 1994: 108 it is spelled with a ligature consisting of I and I² and not in defective manner. For *äl(i)t-* ~ *el(i)t-*, the spelling with onset I in BQ E19 (as against seven instances of defective spelling in Tuñ and KT) appears to show that the variant *el(i)t-* was old. Doerfer (p. 109) finds that there is a great difference between the Ongin, KČ and Tuñ inscriptions, which he considers to be older, and the KT and BQ inscriptions, which he takes to be later, in that defective spelling

school (the tradition going from Müller and Le Coq through Bang, Gabain and Zieme, corrected in recent years) of spelling /e/ as *i* is unjustified: The distinction between *o* and *u*, e.g., is based on just such evidence as that between *e* and *i* (and stands, in a few cases, on just as shaky legs). We may not always be completely sure, but the informed guess founded on as much information as possible must be made. Some South Siberian runiform inscriptions even have a special character for *e* (whereas other inscriptions from that area have instead a letter for *ä* which distinguishes that phoneme from both *a* and *i*). The fluctuation referred to turns up also with a few instances of Proto-Turkic **ä* appearing adjacent to /y/: The (apparently rather early) change *yä* > *ye* created additional /e/s which were not (originally) long, perhaps e.g. in *yet-* ‘to suffice’.⁸³ This is a simple case of assimilation (still taking place in Azeri, which still has the nine vowel system). Orkhon Turkic fluctuation should not be confused with one or two cases where there appears to be a dialect variation between /*ä*/ and /*i*/: There is, in Old Turkic, both *äki* and *iki* ‘two’, but this word probably had no /e/: Orkhon Turkic consistently has /*ä*/ but sources in Brāhmī and Tibetan writing have numerous examples with *i* (not *e*). Manichæan texts fluctuate (there is, e.g., *äkigün* ‘as a pair’ and *äkinti* ‘second’ in M III 14,6₁ and 15,17₁ respectively) while non-Manichæan sources in Uygur script consistently have *Y*. Much evidence concerning the spelling of Old Turkic (and not only inscriptional, in spite of its title) /e/ has been brought together by Doerfer 1994.

2.23. The vowel /i/

Some scholars, e.g. Pritsak 1961: 32 and 1963: 52, denied that there is an opposition /i/ : /i/ in Old Turkic; cf. also Johanson 1993: 87 and Röhrborn 1996: 181f.⁸⁴ In original Turkic words the opposition can of

predominates in the former, I in the latter; he also found that, among the inscriptions of the Uygur steppe empire, Tariat and Tes follow the older, ŠU the newer tradition.

⁸³ After original long vowels, voiceless consonants become voiced in Turkish when they appear between vowels; this does not, however, happen in the aorist form *yet-er* (unlike *yedek* < *yet-* ‘to lead on’, which was originally applied to a horse one led with oneself to mount when the horse one was riding got tired). The sequence #*yä* no longer exists in Brāhmī sources.

⁸⁴ Röhrborn bases his opinion on evidence from the rules of rote rhyme (which serves as base for Old Turkic verse and makes stanzas accord in their beginning and not in their end), stating that *i*^o and *i*^o are made to rhyme. However, *i*^o not only rhymes with *i*^o but also with *e*^o; *o*^o rhymes with *u*^o and *ö*^o with *ü*^o and even *na*^o (in *nayrag* ‘Buddha’s characteristic mark’) with *a*^o: Old Turkic clearly followed eye rhyme (as opposed to ear

course only be found in first syllables, as synharmonism regulates their alternation in non-first syllables, cancelling their opposition in them; this is so for all other vowels as well. The language does appear to have this phonemic opposition in first syllables, in view of such pairs as verbal *tik-* ‘to stuff’ vs. *tik-* ‘to erect’ and *sik-* ‘to squeeze’ vs. *sik-* ‘to copulate (male subject)’, or nominal *kir* ‘mountain’ (and *ki:r* ‘grey’) vs. *kir* ‘filth’, *irk* ‘omen’ vs. *irk* ‘ram’ and *ki:n* ‘sheath, scabbard’ vs. *ki:n* ‘navel; musk’; these are shown to differ by the fact that their velars are spelled differently in most of the writing systems. The pairs *kış* ‘winter’ vs. *ki:š* ‘sable’, *sī:k* ‘shallow’ vs. *sik* ‘penis’ *kiz* ‘box etc.’⁸⁵ vs. *ki:z* ‘girl’ and ‘costly’ and *kir-* ‘to scrape off’ vs. *ki:r-* ‘to enter’ are at least near-minimal, as their vowels are of different length, in so far as the length opposition was kept up in dialects of Old Turkic: Evidence for this is, however, rather weak; my spelling of ‘to enter’ as *ki:r-* in the previous sentence may therefore be anachronistic. The opposition *irkla-* ‘to consult the omens’ vs. *irklä-* ‘to tread on something’ may have been perfect only for some varieties of Old Turkic, as the latter verb appears to have had an onset */h/.⁸⁶ Strangely enough, finding such pairs in words involving /g/ seems to be more difficult: There is *tigra-* ‘to be tough’ (rare, but cf. *tigrak* ‘tough’) vs. *tigrä-* ‘to emit certain sounds’, and cf. *yigtür-*, a hapax in the DLT which might signify ‘to squeeze’, vs. *yigtur-* ‘to cause to heap’. As against *iglä-* ‘to be or become ill’ we have *igla-* ‘to weep’, but the more common variant of the latter is *yigla-*, pointing towards **higla-*. Oppositions not involving velars, which receive suffixes in their back-vowel and front-vowel alternants respectively, are even harder to come by. One example is *tin* ‘breath, spirit’ vs. *tin* ‘halter’; both words are spelled with and without *yā* in the DLT. If one does not insist on staying within one part of speech one could mention *siz*, the imperative of the verb signifying ‘to ooze’⁸⁷ vs. *siz* ‘you (pl.)’. Otherwise one seems to find only imperfect pairs such as

rhyme), which was in use in Ottoman verse as well: The rhyme was visual and not auditive; since *o* and *u* look alike in Uygur and Manichaean writing, the two (and similarly the members of the other sets) were made to ‘rhyme’. If, therefore, *p*^o of foreign words is considered to alliterate with *b*^o, this should not be considered evidence for absence of any phonic difference. Rote rhyme therefore cannot help us solve this problem.

⁸⁵ DLT and base of the common verb *kizlä-*.

⁸⁶ The *y* in *yilkä-* in UigPañc 66 and 88 (with normal metathesis and loss of /t/ before /k/) must be a reflex of that. Nor would *irkla-*, which is an ad-hoc derivative from *irk* ‘omen’, be prone to such phonetic processes.

⁸⁷ There is no reason for this verb to have had a long vowel as it does not have one in modern languages; the EDPT ascription of vowel length is apparently based on the spelling in some of the DLT instances, which are influenced by Arabic word patterns.

tī:t- ‘to tear to shreds’ (and *tīt* ‘larch tree’⁸⁸) vs. *tīt-* ‘to renounce’, and *īl-* ‘to descend’ vs. *i:l-* ‘to catch, cling, attach’; the last mentioned verb in fact originally started with an /h/, as the numerous examples with #y⁸⁹ show. Johanson 1991: 85 gives the DLT opposition *il-* : *il-* as an example for the reality of the front / back distinction in Qarakhanid. Kāšgarī (fol.94) does, indeed write that the infinitive of the former is spelled with *kāf*, that of the latter with *qāf*, and that the former’s aorist is *ilār*, the latter’s *ilur*. The aorist distinction between the two verbs is borne out also by the QB; not, however, the backness distinction; there, both verbs are front: From the verb signifying ‘to descend’ we find *ilgū* in QB 1086 (ms. AB; C replaces it with the better-known *en-*) and *ilmäk* in 1762 (only C; A *yılmaq*, B *enmäk*); the meanings are clear in both cases. Although, therefore, the grammarian Kāšgarī living in Bağdād was aware of the backness of the verb signifying ‘to descend’, that no longer corresponded to Qarakhanid usage of his time, at least as far as Yūsuf is concerned. The opposition /ī : i/ thus seems to be rather linked to the presence of /k/ and /g/; we know that the front and back realisations of /k/, transliterated as *q* and *k* respectively, are audibly different in all Turkic languages, and should have been so in Old Turkic as well. Note the runiform character ^ıq ~ q^ı, which is used for representing voiceless velars specifically when they appear beside /i/. We might therefore consider following Dankoff & Kelly 1982: 61-62, who dispense with /i/ as a phoneme altogether, assuming a phonemic distinction /k/ : /q/ (as e.g. in Arabic) instead, and complement it with an opposition /g/ : /ġ/. How do we know, in fact, that the opposition is not merely an underlying one, as e.g. in Classical Mongolian, where there was no [i] but only [i]? Because the Mongolian writing system (coming from the Uygur script) always uses K and not X with /i/, the opposition manifesting itself only in the synharmony of subsequent syllables,⁹⁰ whereas Old Turkic does distinguish between front and back consonants also in the same syllable as these vowels. In the runiform script this is the case not only with /k g/, as in the Semitic writing

⁸⁸ The DLT spelling of this with *yā*’ as second letter could be due to Arabic triradical word patterning.

⁸⁹ I use the degree sign as a sign of abbreviation, as done in transcriptions of Sanskrit; this means that there are further sounds to follow, that – in this case – this is /y/ at the beginning of a word.

⁹⁰ I mean the fact that the genitive of the 3rd person demonstrative, e.g., is *inu* and not **inü*. Even assuming genetic relationship between Turkic and Mongolic, however, the situation in Mongolian cannot be used as an argument for believing in a neutral /i/ in Proto-Turkic, as some other details make it likely that the opposition /i : ī/ was a real one in Pre-classical Mongolian.

systems, but also with /b t d y l n r s/, in some Yenisey inscriptions also with /ŋ/: Thus *üdok* ‘sacred’ is spelled with d^1 in the Orkhon inscriptions, *üdti* ‘he sent’ as It^1I (due to assimilation of the alveolars) and so forth. Dankoff & Kelly’s view therefore cannot apply to Old Turkic as a whole; nor would one gain anything by adopting it for Qarakhanid, because [k] and [q] would still have to function as allophones in all syllables having vowels other than the high unrounded ones. Still, as there was little functional load on the opposition /i/ : /i/ except in the contiguity of /k/ and /g/, this opposition was bound to weaken, were it not for synharmonism and for the symmetries of the harmony system.

A breakdown in the syllable of the vowel itself, not making the whole word follow suit, can be observed best when the scribe used runiform writing, in which the front and back alternants are distinguished for most of the consonants. In Orkhon Turkic the commonest consonants with this phenomenon (listed in Tekin 1968: 71-72) are /s/ are /y/, e.g. in $s^2Iy^1U = si-yu$ ‘breaking’ or $y^2Imšak^1 = yimšak$ ‘soft’. Cf. even *sigüt* ‘sob’ spelled with s^2 but g^1 . Such instances do not *have* to be of phonic significance, however, as s^2 and y^2 are sometimes used in the Orkhon inscriptions also in conjunction with the back vowels /a/, /u/ and /o/ (though s^2 and y^2 are admittedly a bit more common with /i/); see Tekin 1968: 39-40. Examples with /t/ are $t^2Iŋl^1A = tiŋla$ ‘listen!’, $t^2Id^1A = tida$ ‘holding back’ (KT N11) and $t^2Il^1g^1 = til-iġ$ ‘the news (acc.)’ (Tuñ 32). Nor is it easy to classify the fronting in $Id^2mIs^2 = id-miš < id-$ ‘to send’ in O F2, as the *-miš* suffix is always spelled with front *s*.

It is rare for a front consonant to appear not before but after **i*; I would therefore take the verb to really have been pronounced as *id-* in this case (before *-miš!*). Note, in this connection, the n^2 appearing in the codas on the 3rd person possessive, the volitive and the negative converb suffixes $+(s)I(n+)$, $-(A)yIn$ and $-mAtI(n)$, also when added to bases with back synharmonism. The high vowels of these three suffixes and of *-miš* may, in the Orkhon inscriptions, always have been pronounced as [i] and not as [i̠]: The consonant of the instrumental suffix $+(X)n$ is never spelled as n^2 even when its expected vowel was /i/. Such fronting found in Orkhon Turkic becomes marginal in the inscriptions of the Uygur steppe empire and completely disappears in the runiform mss., which are in the Uygur dialect. We have no way of knowing how these suffixes were pronounced by the authors of Uygur mss. in other scripts, but cases like the consistent Uygur spelling of the suffix sequence *-miš+kA* with the letter X come to show that the fronting of /i/ in suffixes was subphonemic if it existed at all. The language of the

Second Türk Empire thus shows synharmonism irregularities related to the presence of /i/ while no such phenomenon is discernible in Imperial or Xinjiang Uygur, also where written in runiform script.

The contiguity of the palatal consonants *č*, *y*, *ñ* and *š* was no doubt one of the early factors causing the first-syllable passage *i* > *i* to affect the whole word: e.g. in IrqB 53, where *biš-* ‘to ripen’ is used in the form *biš-di*, spelled with *b*² and *d*²; similarly the converb form *bič-ä* ‘cutting’ appears to have been used in IrqB 37, whereas Uygur normally has the verb in the form *bič-*. Similarly *iy-* ‘to suppress’, whose fronted forms and derivatives are partly documented in the OTWF (see index). Another word with a palatal consonant which got fronted at an early stage is *i:š* ‘work’: Its numerous examples in the DLT have back vowels with a single exception, we find *išlarig* in Pothi 80 (Manichæan) and the instance spelled ʾYSʾNKZN in M I 10,13 is likely to have had back vowels.⁹¹ However, two examples in the (equally Manichæan) Xw have suffixes with front *k*, that is the rule also in Uygur texts and *išlä-* and its derivatives have front vowels in the DLT. The existence of *inčä* beside *inča* should also be ascribed to fronting with the concomitant influence of /č/ (though other explanations are also possible for the existence of this variant; see section 3.132). *yiltizlig* in BT XIII 12,53 shows that *yiltiz* ‘root’ had a fronted variant.

birgarudun siḡar ‘in the direction towards the south’ in M III nr.4, 10,14₁ (ms. U 47 in Uygur writing; double-dotted X) shows that the numerous forms of *birdin*, *birgärü* and *biryä* in Orkhon Turkic and other Manichæan sources must all be secondary.⁹² *i* ‘vegetation’⁹³ normally has back vowel suffixes but appears with a fronted dative suffix in Ht V 4 a24. *til* ‘tongue’, finally, has no palatal consonants and is well attested with back harmony (also still in the DLT’s derivatives *til+ak* and *til+ik-*) but appears as *til* with suffixes showing front *k* e.g. in U II 7,10, U III 72,28, KP 12,2 and the DLT.

⁹¹ /i/ is more often spelled with *alef* in preclassical texts than /i/. Scholars have confused *i:š* ‘work’ with *eš* ‘debt’, the two lexemes surviving in Yakut as *i:s* and *iäs* respectively. What the runiform inscriptions have in a binome with *küč* is *eš* ‘debt’ and not *i:š* ‘work’, which explains the front vocalism; cf. OTWF 456 (with n.55) for additional details.

⁹² Clauson (EDPT 361) assumes that the instance is an error; this would have been likely if the ms. had been in Manichæan writing, where G and Γ have rather similar shapes. As it is, we cannot simply ‘emend’ it away.

⁹³ I take the original shape to have been **hi*, in view of the fluctuations in the shape of (y)*ḡgač* ‘tree’, which probably was a derivate from this. There is no reason to assume vowel length, as done by Clauson and Tekin, in spite of the spelling with two *yöd* in Uygur.

When we find the word for ‘thousand’ spelled with b^2 in BQ S1 and Tuñ 14 (as against b^1 in Tuñ 16 and 18), we cannot know whether any suffix added to it would have had front or back vowels. I would assume that the pronunciations *biŋ* and *biŋ* existed side by side, or that the actual pronunciation was in between, i.e. that the opposition was neutralised. The older pronunciation is supported by *bīŋa*, a term denoting a military unit among the Uygurs of the Steppe Empire (attested at least thrice in ŠU) and by the second vowel of *minggan*, the Mongolian word for ‘a thousand’; the latter by *miŋlig* in TT II,2 57 (an early Manichæan text). The situation of a conservative and a progressive variant existing side by side is made use of in the QB for poetic purposes, when we find both *tiil* and *til* used to suit the rhyme. When there are fluctuations, I take all /i/s to have been primary and the /i/ variants to have been secondary: I take this direction to be the more natural one in the absence of any additional factors (as e.g. glottalization would have been). I therefore take Turkmen *i:z* ‘trace, track’ to show the original shape of what sometimes appears as *iz* in Old Turkic.⁹⁴ Note that none of the stems mentioned as having passed from back to front harmony contained any velar consonants: It would seem that velars prevented the passage $\bar{i} > i$ in the stem.

Most Turkic languages today do have an *i*, both phonologically, i.e. for the intents and purposes of synharmonism, and phonetically. A few have, through centuries of intensive language contact, fronted the /i/ phonetically but have left its phonemic value unchanged, e.g. Urban Uzbek or Standard New Uygur under Persian / Tajik influence. Looking at the Turkic world as a whole one finds that *i* has, all in all, shown itself to be very resilient. What contact influence could the speakers of Old Turkic have undergone? The early Turks were, till the 9th century, bilingual mainly in Chinese and Sogdian. From Chinese they borrowed words with /i/, e.g. *mīr* ‘honey’, *čīn* ‘true’, *šīk* ‘a measure of capacity’, *sīr* ‘lacquer’ or *čīg* ‘a foot (as a measure of length)’. Sogdian short /a/ has been taken to have had central vowels as allophones. When we find that the Sogdian word for ‘sandalwood’, transliterated as *cntn* and ultimately coming from Sanskrit *candana*, is borrowed into Old Turkic as *čīntan*, we take it that the Uygurs got their /i/ from Sogdian.⁹⁵ The

⁹⁴ I disagree with T.Tekin 1995: 183 on this lexeme; the QB has it with both front and back forms of the accusative.

⁹⁵ Uygur does not itself raise vowels. We know that the Uygur vowel was /i/ and not /i/ because it is attested in the runiform Irq Bitig spelled with n^1 , the back N. I don’t think Sogdian had *i* in the first syllable of this word, as that would have been spelled with *mater lectionis*, i.e. *Y*.

language which the Turks mostly got into contact with when, most numerous from the 9th century on, they streamed into the North Eastern part of the Tarim basin, was Tokharian. The Tokharian *schwa*, transliterated as *ä*, can, in certain circumstances, perhaps be stated to have been less front than /i/ and higher than /a/; the Uygurs might perhaps have assimilated it to their [i]. It does not, in short, seem likely that the languages which Uygurs can be presumed to have been bilingual in would induce them to abandon their /i/.

The contact situation could have been different in West Turkestan, where Qarakhanid developed, especially when New Persian started to be the *lingua franca* in the 10th century. In the DLT the opposition /i : i/ in so far as it affects suffix harmony is retained approximately to the same degree as in Uygur: Dankoff & Kelly 1982: 61 give a longer list where original harmony exists and where stems consistently show back or front vowel suffixes respectively, and a shorter list of stems with fluctuations. Some of the fluctuations have already been mentioned, as they reflect a situation found already in Uygur; others are due to errors on the part of the editors⁹⁶ or to the second hand which changed around a lot in the ms.⁹⁷

Most of the writing systems used for writing Old Turkic do not have a special character for [i] and generally use for it the same character as for [i]. There is, however, one alphabet, not much used for writing this language, with which a distinction does appear to be made: As stated already by Gabain 1974: 391 (note 14), texts written in Tibetan script do seem to make the difference, though the means are highly irregular. This statement is largely corroborated by Maue & Röhrborn 1984:292-4 for the Catechism, the relatively early and most important such text.

Another important feature speaking for the reality of /i/ is the alternation *alef* ~ *yōd* in non-first syllables, much more common in back than in front synharmony, whether it be the mere graphemic alternation described in section 2.1 or the phonetic lowering caused by /g r l/, documented in section 2.402. These two phenomena, which gave the same result but have a different distribution both in terms of sources

⁹⁶ *bičäk* 'knife', e.g., attested in Uygur and the DLT, does not come from *bič-* but is a diminutive from *bi:* 'knife'; the base of *tišä-* and its derivatives is not identical with *tü:s* 'tooth'.

⁹⁷ The Middle Turkic 'corrector's' work is well discernible by its different ink. It changed *tizlä-mäk* to *tizlamaq*, e.g., whereas *tiz* 'knee' never had a back vowel. *yid+i-mäk* 'to be putrid, to stink' is also by the second hand, while the first hand still wrote *yidīmaq*, reflecting original pronunciation. For *yili-š-* it was apparently the first hand which wrote down both possibilities, both *kāf* and *qāf*, but then this stem has two palatal consonants.

and of phonetics, can be explained only if [i] was a phonetic reality in non-first syllables beside /i/ being a phonological one. /i/ may often have been fronted in first syllables except where a velar was around, both as a synchronic alternant and as a diachronic process; this did not, however, generally have any effect on subsequent syllables, which stayed back-vocalic. The presence of /i/ outside first syllables appears to have been quite solid, except in a few suffixes such as *-mlš*.

2.24. The archphoneme /X/

The widespread view that the vowels serving as realizations of /X/ were ‘reduced’ (the graphemes *ī* and *u* representing ‘/ǎ/’, the graphemes *i* and *ü* ‘/ě/’) is unfounded; in section 1.33 above I quote some authors’ thoughts on this matter. Most recently, Johanson 2001: 1725b has expressed the view that the element “*o*” (as he calls it iconically) “in phonetischer Hinsicht vermutlich ein *schwa* oder reduzierte Vokale (*ǎ*, *ě* usw.) darstellte”. Vowels of the archphoneme /X/ are usually not written explicitly in runiform texts; nor, however, are vowels of suffixes containing other archphonemes if their realisations show the same phonemes: e.g. /u/ in the suffix *-gUr-* (not ‘*-gXr-*’) of *tur-gur-u* (Irk Bitig), where the previous syllable contains an /u/. Vowels of all archphonemes can get syncopated in non-first non-last syllables (by no means only /X/, as still maintained in Johanson 2001: 1723a), syllable structure and consonant tactics permitting, e.g. /I/ in the stems of the common *ögr-ünč*, *ögr-ünčü* and *ögr-inčü* < *ögir-* or *kürgäk* < **küri-gäk*, /U/ in *ärgür-* < **ärü-gUr-*, *čomrurlar* (DKPAMPb 70) < *čom-Ur-* or *šišrun-* < **šiš-Ur-Xn-*; /A/ in *öt-üm* < *ötä-l-* as discussed in OTWF 293, *tirgök* < *tirä-* or *targak* from *tara-*.⁹⁸ *ört-*, a variant of *ör-it-*, and *yort-*, a variant of *yori-t-*, also result from the syncopation of /I/. Syncopation is well documented within stems (as described in section 2.403), before and in derivational affixes and even perhaps within inflectional suffixes. Onset vowels of enclitics (of any archphoneme) are elided after vowels (e.g. *inčäk* < *inčä ök* ‘just this way’ in the runiform ms. TM 342, 2 v2); so are suffix vowels in the coda if the next word starts with a vowel (at least in verse, as poetic licence).

There appear to be no suffixes ending in /X/. This is, again, no proof that /X/ was shorter than the other vowels. Nor is the fact that Mongolic cognates of Turkic words often have a different additional vowel a sufficient reason for assuming that that vowel can be attributed to

⁹⁸ Low vowels are, however, less readily syncopated than high vowels, as shown by lexemes such as *yaraši*, *tänjäši* and *yöläši*.

Turkic. *är* ‘man’, e.g., does not necessarily come from **ärä* only because that form existed in Mongolic (to use the example given by Johanson 2001: 1723a): Mongolic *ärä* may, e.g., have been copied from the plural form *är+än*, the /n/ getting metanalysed through analogy with Mongolic *°n* stems.⁹⁹ Mongolian *saya-* ‘to milk’ does not go back to Proto-Turkic **sagā-* either, as assumed by Róna-Tas 1998: 72: Mongolian ‘X’ is a spelling convention for [ā]; that it has no phonetic or diachronic significance whatsoever is seen, among other indications, in loan words such as *Šayam* [Šām] ‘Syria’. As a circular corollary to their assumption of general coda syncopation, Johanson¹⁰⁰ and Róna-Tas think that ‘retained’ coda vowels (such as in *kara* ‘black’) must have been long; there is no evidence for this claim.

Vowels (again not only /X/) appear to have gotten reduced by adjacency to certain consonants. Spellings like *t(ä)lgäk* (M III Nr.4 v15), *b(ä)lgülüg* (M III Nr.4 r9) or *k(ä)l-* (DreiPrinz 25, 26, 28 and 29) in early texts should probably be understood to show that /l/ could ‘swallow up’ the vowel, getting syllabic itself. The /l/ no doubt helped in the reductions of *näglük* from *nä+(A)gU+lXk* in TT X 265,¹⁰¹ *aglik* ‘treasure house, storehouse’ from *agī+lik* in KP 7,5 and 8 and *orla- < ori+la-*. Some other such phenomena are discussed in section 2.403.

The question of the quality of the vowels participating in the archphoneme /X/ is a vexed one. In the vast majority of instances in non-Indic alphabets they are spelled with Y, W or WY (or the runiform character signalling a front rounded vowel) and not with ‘. In section 2.402 we show that /i/ is lowered when adjacent to /r l/ and especially /g/, so that it does come to be spelled with characters indicating a low back unrounded vowel, and this in all stages of Old Turkic and in texts of all spelling and cultural traditions. This is a clear conditioned lowering of one vowel, which may be participating in /X/, in /l/ or may not be assignable to any of the two. In section 2.1 I pointed out that it was natural for /i/ to sometimes be spelled like /a/ even when not lowered: Y traditionally denotes /i/, and /i/ is unrounded and back-vowelled like /a/ though it also is unrounded and high like /i/. This only happens in early texts, mostly but not necessarily Manichæan. These

⁹⁹ Anatolian Turkic *äränlär* may show that *ärän* was, when left as the only plural form ending in *+An*, taken to be a singular. A related process is connected with Turkic *süt* ‘milk’, which, by back-formation, became *sün* in Mongolic – because *süt* was felt to contain the Mongolic plural suffix.

¹⁰⁰ View expressed already in Johanson 1976: 145 quoting Ramstedt, Poppe and Clauson.

¹⁰¹ I take the rather common *nälik* to be a further contraction from this form.

two points are not sufficient for explaining all the facts, however, as there also are Manichæan instances where /i/ is also spelled with *alef*. Adjacency to /g r l/ does not predominate here, so that combinatory lowering cannot be the explanation: Doerfer 1993: 121-125 lists¹⁰² *elig+(i)mäz* (M I 8,11, TeilBuch), *ämgäk+(ä)mäzin* (M I 11,19, TeilBuch), *käl-tämäz* and (M I 10,12, TeilBuch) *išlä-dämäz* (M I 11,14, TeilBuch) with *+(X)mXz*, *bägädmäk+äniz(i)n* (DreiPrinz 66), *ärmäk+änjälär* (M III nr.27 r14) and *iš+änjäl(i)n* (M I 11,19, TeilBuch) with *+(X)ηXz*, *elig+äg* (DreiPrinz 94) and *tämir+äg* (M I 8,12, TeilBuch) with *+(X)g*, *yüz+ünjüzän* (M I 10,9, TeilBuch) with the accusative ending after possessive suffixes, *kiši+näj* (M I 8,14 and 15, TeilBuch), *bäg+näj* and *yäklär+näj* (U IVA 152 and 168) with *+(n)Xη*, *tämir+än* (M I 8,11, TeilBuch), *ärklig+än* (TT VI 90 ms. L, beside three instances of *+in* in the sentence) and *t(ä)v+än* (M III nr.4 r11) with *+(X)n*, *ig+säz* (ChristManMsFr ManFr r9) with *+sXz*, *s(ä)v-äg* (M III nr.4 r5)¹⁰³ with *-(X)g*, *il-än-mägäy* (M I 15,5, TeilBuch) with *-(X)n-*, *är-änjälär* (M III nr.4 r7) and *ämgät-änj* (TT II A 51) with *-(X)η*, *kir-äp* (ChristManMsFr ManFr v6) and *tirl-äp* (M I 15,9, TeilBuch) with *-(X)p*. Interestingly, the lowering of /i/, common in one or two Manichæan texts but rare otherwise, seems to take place only when the /i/ is part of the archphoneme /X/. It would appear, then, that at least the unrounded members of /X/ may, in some archaic variants of Old Turkic (with a few remnants in texts of the standard stage) not have been phonetically identical to the members of /I/ and /U/ but lower. The graphematic hypothesis for the spelling of /i/ may also be unnecessary. This by no means signifies, however, that any /X/ vowels were shorter than vowels of other archphonemes.

2.3. The consonants

The consonant system for early Old Turkic, not including sounds found only in loan words, is the following:

¹⁰² The genitive forms he writes as *+änj* have not be taken over here as they can, if written in Uygur script, also be read as *+n(i)η*.

¹⁰³ What precedes this should have been read as *kiz agar* ‘precious and honoured’ and not as read by the editor.

| | unvoiced orals | voiced orals | nasals | sibilants | liquids |
|-----------|-------------------|-----------------|--------|-----------|---------|
| labials | p | v | m | | |
| alveolars | t | d | n | s z | l |
| palatals | č | y | ñ | š | |
| velars | k | g | ŋ | | r |

The difference between the first and the second column of consonants must have been one both of voice and of tension, i.e. strong (more energetic, *fortis*) vs. weak (less energetic, *lenis*) pronunciation; the two distinctions must have been joined to varying degrees. The term ‘stop’ applies to /p t k/ but not to /č/, which is an affricate. It does not apply to the voiced orals, whose main variants are fricative: We could have written /d/ as /δ/ but found it more convenient here — following the practice of most work on Old Turkic — not to use Greek letters either in transcription or in transliteration. /d/ was realised as a stop [d] only when it was preceded by one of the voiced continuants /r l n/ or (in some cases) /z/. There is a [b] at the word onset; within words, [b] appears only in late texts: Onset [b] could be equally assigned to /v/ as to /p/. We use the letters *b* (in onset position) and *v* (elsewhere), *d* and *g* to transcribe the voiced oral consonants in all positions. Among the velars, fricativity was not characteristic of the voiced member of the opposition but rather of the voiced and partly also the unvoiced allophones obtaining in back-harmonic syllables.

The nasality opposition is fullest for the alveolar domain. It is weakest among the palatals, since the opposition /y : ñ/ is cancelled for the great majority of sources not written in runiform script. The opposition between oral labials and /m/ is cancelled for most of Old Turkic when an onset [b] is (after a vowel) followed by a nasal, as [b] is then replaced by /m/. In marginal sources we also sometimes witness a /v ~ m/ alternation between vowels, as in the DLT’s *küvürkän / kümürkän* ‘wild onion’. A /g ~ ŋ/ alternation is found in verbs such as *äg-* ~ *äŋ-* ‘to bend’; suffixes containing /ŋ/, e.g. the 2nd person possessive suffixes, are often (especially in inscriptional Turkic) found with /g/ instead of the nasal.

/s/ and /z/, the unvoiced and the voiced alveolar sibilants, are put into one column for convenience. The placing of /r/ among the velars is arbitrary; we do not know how this phoneme was pronounced.

2.31. The labials

In referring to runiform texts, scholars have often assumed that the voiced labial consonant in inscriptional Turkic is [b] wherever it appears, also between vowels. They give ‘*äb*’, ‘house, home’, for instance, where I write *äv* also when transcribing runiform texts, or ‘*yabiz*’ and not *yaviz* for ‘bad’. It was V. Thomsen who chose this rendering, presumably in view of the principle that the runiform characters *b*¹ and *b*² should be transcribed the same way wherever they appear; he was followed e.g. by Tekin 1968: 7. I find myself in agreement with Clauson 1962: 77 and Zieme 1969: 36 in this matter. Since there is no runiform character for [v]¹⁰⁴ (or for [f]), there is no solid basis for Thomsen’s assumption, as the users of the alphabet had no choice but to use the *b* letters; nor was any additional letter needed for any relevant phonemic distinction. Unless proven otherwise, I therefore take the realisation of this phoneme in runiform sources (*some* of which were, after all, not older than some mss. written in Uygur script) not to differ from that of other Turkic languages retaining the labial in such words (especially not from Old Uygur). A number of scholars have taken the realisation as *b* (even between vowels) to be one of the characteristics of the oldest (Orkhon Turkic) stage of Old Turkic, and then assumed a passage *b* > *v* in the transition to the second oldest stage; this characterisation of the earliest Old Turkic is, I think, fictitious. The fact that the runiform script is unable to distinguish between a stop and a fricative cannot be a reason for assuming that there was only one realisation each of *b*¹ and *b*².

The non-plosive main allophone of the voiced-lenis consonant could in principle have been a labio-dental ([v], voiced counterpart of [f]), a bilabial fricative continuant ([β], the voiced counterpart of [φ], the blowing sound) or a bilabial flap ([w]). [w] appears not to have been meant when the Uygurs used the letter *beth* for writing it both in the Uygur and in the Manichæan script:¹⁰⁵

wāw is in fact also used as consonant – rarely and only in foreign words; e.g. *waxšig* ‘dæmon’ e.g. in ManUigFr r1 (Manichæan) or TT V

¹⁰⁴ This might speak for a Semitic origin for the script, as no early Semitic languages or writing systems possessed a *v* as distinct from *b*, though they did possess a *w* (which could also serve as *mater lectionis* for rounded vowels). Semitic scripts in use for writing Old Turkic do use W when rendering the consonant [w] in borrowings and the like (see below). The Indic Devanāgarī script also only has two and not three characters to represent the labial oral consonants.

¹⁰⁵ Gabain used the letter *w* for [v], following German orthography, and the letter *v* for [w] in her publications, including her text editions and grammar (1941, 1974). Hamilton uses *β* in his transliterations of the oral weak labial.

B 124 (Buddhist), *widvag* ‘chapter’ (Saddh 30 and two other places¹⁰⁶ mentioned in the note thereto), *tawčay* ‘sedan chair’ e.g. in HTs VII 1111, *lenxwa* ‘lotus’, *narwan* ‘elm’ (ManUigFr r4) or the divinity name *äzrwa*. Such spelling is quite consistent, indicating that words were probably actually pronounced with a bilabial voiced consonant at least by some individuals. Runiform O / U is also used in this way: Cf. *kew(a)n* ‘Saturn’ in Blatt 10 and cf. the remark on this on p. 298 of the edition (p.607 of the reedition). Note that this /w/ could appear both at the onset and coda of syllables. The interjection *awu* also has the sound [w], but interjections often contain sounds not otherwise used.

The DLT distinguishes (fol.26) between consonantal *wāw* and thrice-dotted *fā*, which is said to have been pronounced “between the points of articulation” of *fā* and *bā*; the Oguz are said to pronounce *wāw* where the other Turks have the three-dot *fā*. Dankoff & Kelly p.55, who discuss the instances where this is defined and used, take the three-dot *fā* to refer to a bilabial which they transcribe as *w*, while they take the letter *wāw* to refer to a labiodental voiced consonant, [v]. They base their argument on the fact that the Oguz and the Persians nowadays pronounce the sound as [v]; therefore, they think, this must also have been what Kāšgarī meant with *wāw*. Borovkova 1966 (supported by Doerfer 1993: 52) had held the opposite opinion, taking *wāw* to have been used with the sound value which it has in normal Arabic. My use of the letter *v* to refer to this phoneme also when quoting the DLT should not be understood as implying a choice for one of the three possible pronunciations mentioned above. *ū* ‘sleep’ is spelled as *uv* once in U III; *uvšat-*, *uvšan-* and *uvšal-* ‘to crumble (tr. and intr.)’ and *uvšak* ‘petty’ are, on the other hand, often spelled without *v* (with *ugak* ‘mortar’ from the same root), and *kuvrat-* ‘to assemble (tr.)’ is sometimes spelled as *kurat-*. Cf. *su* < *suv* ‘water’ in DhāSū 36. This would speak for a bilabial pronunciation of /v/ at least after /u/. The Manichæan and Uyгур script use of *wāw* exclusively for transcribing [w] in foreign words clearly speaks for a labiodental pronunciation of normal Old Turkic /v/.

In the word onset [b] could, as an alternative to being an allophone of /v/, be assigned to the phoneme /p/; this would correct the system asymmetry following from the absence of [p] in this position in original

¹⁰⁶ One of these has now been shown by Zieme to be a Vimalakīrtinirdeśa fragment and not Manichæan, as Maue & Röhrborn thought. Zieme proposes (*SIAL* 18 (2003): 147) *yör]üg widvag* but *böl]ök widvag* would be better: *widvag* here (as elsewhere in Uyгур) does not signify ‘interpretation, explanation’, the primary meaning in the source language Sogdian, but ‘chapter’, the second meaning it has in Sogdian.

Turkic words¹⁰⁷ though all the other unvoiced phonemes except /š/ do appear in onset position. Several modern (e.g. Siberian) Turkic languages have just this postulated /p/ in onset position (with sporadic appearance of #p- in some other Turkic languages, e.g. Turkish). Brāhmī mss. also use the letter *p* more often than *b* and *bh* for [b],¹⁰⁸ proving at least that the phonemic load on the distinction between these was not very important to the scribes. The fact that the Uygur script has Semitic and Sogdian *pe* for [b] supports this idea but is no automatic proof for it: Sogdian used Semitic *beth* (as well as *gimel*) to represent fricatives and not stops, and [b] is no fricative. The Manichæan writing system does use Semitic *beth* to render [b], using *beth* with two super-scripted dots to write [v].¹⁰⁹ The [v : b] opposition seemed more worthy of explicit representation than the [p : b] opposition to those adapting the Sogdian alphabet to Old Turkic, but the [p : b] opposition was treated as the more essential one by the adapters of the Manichæan script to this language. The fact that the runiform script, which was in use both in Mongolia and in East Turkestan, used the two *b* runes after vowels for what appears as [v] in all Turkic languages and also for representing the labial stop in the onset of words strongly speaks against the possibility that the Old Turkic labial in this position was a [p].

Uygur /v/ appears to remain a fricative even after /r l/, as shown by instances of the suffix -vI (q.v. in OTWF section 3.115) and by such stems as *alvīr-* ‘to rave’ (near-minimal pair with *alpirka-* ‘to find something difficult’), *arvī* ‘doubt’, *yelvi* ‘magic’, etc. Instances of the realisation of /v/ as [b] beside /l/ are discussed in section 2.409.

The realisation of /p/ between vowels is not very clear. On the one hand we have two words in Indic scripts which show *b* between vowels: *koburga* ‘owl’ in TT VIII O4 and *abag* ‘sheltered’ from the stem *apī-*, in TT VIII I 4 and BuddhKat 20 (in both cases with lowering of the /i/ due to the adjacent /g/). This labial must be an allophone of /p/, as the

¹⁰⁷ Uygur texts do have it there in numerous borrowings from Sanskrit, Chinese etc.; see section 2.404 for what cannot appear in the onset and for possible reasons.

¹⁰⁸ Cf. Róna-Tas 1991: 83: ‘Onset *b* is as a rule transcribed with *p-*. In the manuscripts F, H and I we find as a rule *bh-*. The manuscript K has in most cases *ph-*. The writing with *b-* is relatively rare, but occurs in the most frequent words such as *bilig*, *bilge*, *baš*, *beš*. The word *burxan* is always written with *b-*, and in the two manuscripts where we find also *p-* (A, E) it occurs together with forms written with *b-*.’

¹⁰⁹ These two dots are occasionally dropped, making [v] appear as *b*, e.g. in *suv* ‘water’ spelled as *sub*, or in the noun *kīv* in BT V 134. Three lines further, in BT V 137, the dots are there, however, making it likely that in this passage, as in texts in Manichæan script in general, the omission is merely graphic and is not to be understood as reflecting pronunciation.

voiced oral labial would in this position be realised as [v].¹¹⁰ On the other hand we have *tupulgak* / *topolgak* ‘cyperus’ attested with *p* in Brāhmī script (TT VIII M29 and ms. Mz 202 r1). Concerning Old Turkic *töpö* ‘hill’, *tapa* ‘towards’, *tapin-* ‘to worship’, *tap-ig* ‘service’, *topol-* ‘to pierce’, *kapar-* ‘to swell up, form a blister’, *kapag* / *kapig* ‘gate’, *kopuz* ‘stringed instrument’, *köpik* / *köpük* ‘foam’, *sipir-* ‘to sweep’, *yipar* ‘musk’ or the DLT’s *tüpi* ‘a high wind’, *sapan* ‘a plough’, *tapan* ‘the sole of the foot or a boot’ or *čipik* ‘a stick’ no evidence is known to me of a pronunciation with [b].¹¹¹

[f] is an allophone of both /p/ and /v/ appearing before /š/: *yafšur-* < *yap-iš-ur-* ‘to stick or fasten something onto something else’, e.g., is spelled with F in Pothi 127; this text is in Manichaean writing, which has a special character for [f].¹¹² The form spelled as *yavšuru* (< *yap-iš-*) in ShōAgon 1,365 has the same meaning; using Semitic B (which signals a voiced labial fricative in Uygur as in Sogdian), the scribe might actually have meant [f]. He may, however, also really have been thinking of [v]: Kāšgarī (fol.485) states that the verb has the shape *yapčur-* but that there is a variant which he spells with WJ instead of BJ adding that this is pronounced with *fā*. Dankoff & Kelly think that what he means is [w] because they believe Kāšgarī pronounced *wāw* the Persian way, as [v]. They may be wrong, as [f] and [v] share the feature of labiodental articulation as against *kapšur-* (not ‘*kabšur-*’, as transcribed), appearing in BT III 935 beside *kavšur-* elsewhere in that text. *tapšur-* ‘to hand over’ is also likely to have been pronounced as *tafšur-*, but *tapčur-* in DLT fol. 354 shows that the Qarakhanid dialect did not participate in such a development; in that source we also find the variant *kikčür-* < *kikšür-*. *p* > *f* and *k* > *x*, which both take place before /š/, are attested only in back-harmony syllables. The runiform, Uygur, Brāhmī and Tibetan scripts have no character for [f].

[f] is otherwise found in borrowings; a very well attested one is *frišti* ‘angel’ spelled with *v* (Semitic B) e.g. in ManUigFr r3. The note to BT V 241, where *frišti* is also attested, lists the four ways in which the first sound of this word is spelled in Uygur writing: either with B (one

¹¹⁰ *koburga* could be read with *p* in DLT fol. 245, where Dankoff & Kelly write *b*; Kāšgarī uses *bā* also to represent the sound [p]. See OTWF for Uygur instances of *apī-* and *apīt-* not mentioned in the EDPT or the UW. The latter writes *abig* and *abūilmaksız* with *b*, which is justified by the Brāhmī spelling, while *apī-* etc. is phonemic.

¹¹¹ If Turkish has *kabar-*, *saban* and *çubuk* this is because these words had long vowels in their first syllables in Proto-Turkic and Proto-Oguz.

¹¹² Note, though, that the verb *ävir-* is also spelled with F in TT IX 117, also in Manichaean writing.

example beside the one just mentioned) or with P with a pair of dots over or under the letter or (most commonly) with a line under the letter P. The word spelled as *Porom* in KT E 4 and BQ E 5 in fact represents *Forom*, coming from *From*, the Parthian form of the name of (East) Rome or Byzantium. In runiform mss. it is the characters b¹ and b² (also used for writing /v/) rather than p (as in the inscriptions) that are used for rendering [f].

We had, in the table, given /p/ and /v/ as unvoiced and voiced oral labial consonants respectively. With the addition of foreign words we get /p/ and /w/ as unvoiced and voiced oral bilabial consonants (/m/ presumably also being bilabial and voiced) and /f/ and /v/ as unvoiced and voiced oral labiodentals respectively.

2.32. The alveolars

It is clear that Old Turkic had a /t/; the question is whether the voiced counterpart of this was /δ/ and not /d/ in the whole of Old Turkic. The Proto-Turkic voiced alveolar *might* have been /d/, seeing that this is what appears in Sayan Turkic, and that the Proto-Turkic phoneme fused with /t/ in Yakut. A change *δ > d is, however, possible even between vowels under substrate or adstrate influence, and the Yakut development is secondary in any case. Evidence will be presented below for the thesis that the main allophone of the voiced alveolar consonant was [δ] and not [d] in all Old Turkic including Orkhon Turkic (against the view of T. Tekin and some others). The runiform and the Uygur and Sogdian scripts have two characters to represent the non-nasal alveolars, the phonemes referred to above as /t/ and /δ/; the Semitic scripts use the Semitic *tau* or *teth* character for the former and *lamed* for the latter. Semitic *daleth* is not used at all in Sogdian and Uygur writing and is in Manichæan script used only after *n*. The runiform script has, in addition, two ligatures, one to express an /l/ followed by an alveolar, the other an /n/ followed by an alveolar. The Qarakhanid authors writing in Arabic script had at their disposal three letters (here disregarding the glottalised consonant characters) to represent non-nasal alveolars, *tā*, *dāl* and *dhāl*. These three letters can be said to reflect a differentiation along two trait distinctions: *tā* is voiceless or fortis while *dāl* and *dhāl* are voiced or lenis; alternately, *tā* and *dāl* are stops while *dhāl* is a continuant. Dealing with the distinction which the DLT makes between *dāl* and *δāl*, Dankoff & Kelly 1982: 55-56 find that there is a lot of fluctuation between the two; cf. examples such as 10 times *boδun* vs. 17 times *bodun* in their footn. 80. The reason for

this can very well be graphic, as the graphic difference consists of a superscribed dot; such diacritics of the Arabic writing system notoriously get lost in the mss. whatever the language.¹¹³ Note, on the other hand, that there are e.g. nearly 50 instances of *aḍak* and not a single *adak* in the DLT. The QB mss. sometimes differ among themselves in this respect, B e.g. often writing *kadaš* where C has *kadaš*. As Dankoff & Kelly 1982: 55 note, Kāšgarī explicitly mentions a *d* ~ *ḍ* alternation in connection with two words and in at least three places in the *Dīvān* has separate subheadings for the two letters; he also states that those dialects which change *ḍ* to *y* also change *d* to *y*. All these bits of information do not prove that there were two distinct voiced oral alveolar *phonemes*. Most authorities describing Old Turkic spoke of *d* and not of *ḍ*. I think the main allophone of the single voiced non-nasal alveolar was /*ḍ*/; I agree in this with Johanson 1979 and Sims-Williams 1981, scholars of quite different background and outlook who reached this opinion independently.¹¹⁴ Sims-Williams' arguments are based mainly on the fact that *lamed* never denoted a stop in Sogdian, the language from which the Uygurs got their main alphabet. The main point in Johanson's thought is that suffixes like *+dA* (locative), *-dAĕI* (future participle) or *-dXm* etc. (past tense), which normally have the *d* runes, write these suffixes with the *t* runes when they are preceded by /*r l n*/ and rarely /*z*/ (unless, in the case of *l* or *n*, there is a ligature). Variants of suffixes starting with the voiced alveolar are dealt with singly in the morphology chapter of this book; it turns out that different suffixes behave differently, some of them showing the stop allophone only after /*l n*/ and some after /*r*/ and even (rarely) /*z*/ as well. Johanson states that the *t* runes in these cases do not represent a different phoneme but the stop (i.e. [d]) allophone of /*ḍ*/. Other languages where the main allophone of the voiced oral alveolar is a fricative, like Greek and Spanish, do the same when this phoneme appears after /*n*/. The ligatures are, accordingly, to be read neither as '[nt, lt]' nor as '[nḍ, lḍ]' but as [nd, ld]. See section 2.409 below for further discussion of the phonotactic aspects of this matter. The evidence for these sounds to be gleaned from Brāhmī mss. has been discussed most authoritatively (and based on the widest evidence) by

¹¹³ The authors consider two other possibilities: '2) the phoneme was between [d] and [ḍ], and Kāšgarī uses D and Ḍ interchangeably to indicate it ...; 3) the wavering reflects dialect mixture.'

¹¹⁴ Sims-Williams (1981: 354), unaware of Johanson 1979, writes: „Further arguments could be adduced, but I hope that those already mentioned will be sufficient to indicate the desirability of a reconsideration of the whole question by a competent Turcologist.“

Maue 1983. Brāhmī sources also appear to distinguish between these three alveolar sounds, using the letters or letter sequences *tt* or *td*, *t*, *dh*, *d* and a special additional character serving in some manuscripts in the same way as *dh* serves in the others. *tt* and *td* clearly represent [t], *t* is [t] or [d], and *dh* or the special character represent [d] or [δ]. The letter *d*, which is only used in the ligature *nd*, is not relevant if, as Maue 1983: 55 n.11 thinks, it was preferred over *nt* because *nt* looked so similar to *tt*. Relevance does become evident, however, if one remembers that the Manichæan script uses *daleth* only after *nun*, and that one of the three sonant + consonant characters of the runiform script links the alveolar with /n/. The alternative view (which we find e.g. in Tekin 1968) takes runiform writing at face value, stating that the opposition between /d/ in /t/ is neutralised after /r l n/ in favor of /t/: This is, it is there said, what happens in Chuvash, where Proto-Turkic /d/ coalesced with /r/ everywhere except after /r l n/, in which position it becomes /t/. The fact is, however, that Chuvash /t/ is, in this position as between vowels, pronounced as a weak stop. This is also what might have happened at some stage in Old Uygur: If /t/ acquired a voiced allophone in certain positions, the [d] allophone of /δ/ might, e.g. at the stage when the mss. begin to use the *t* and *d* characters interchangeably, have joined the phoneme /t/. T.Tekin 1968: 7 takes the stop pronunciation of *adak* ‘foot’ or *tod-* ‘to be satiated’ to be characteristic of Orkhon Turkic, assuming these to have become *aδak* and *toδ-* respectively in subsequent stages of the language. This assumption need not be made for Orkhon Turkic, as the script did not have the possibility of distinguishing between the two alveolars (as it was also unable to distinguish between [b] and [v] and between [g] and [ɣ]). The suffixes +*dA*, -*dOk* etc. have to be distinguished from suffixes like -*tUr-*, which originally started with /t/ and show T in all positions in Orkhon Turkic; when they appear with D in late Uygur, this is the result of voicing assimilation coming up at that stage.¹¹⁵

2.33. The palatals

¹¹⁵ The remaining problem is why +*dA*, +*dAn*, -*dAçl*, -*dOk*, -*dI* etc. surface with /d/ and not /y/ in all those Middle and Modern Turkic languages which turned all [δ] to /y/ within and at the end of stems although [δ] is supposed to be their main allophone. The answer given by Johanson 1979: 52, that a locative suffix ‘+yA’ would get confused with the dative is not convincing because 1) the dative has this shape in quite a small part of the Turkic world, 2) no similar explanation holds for any of the other suffixes mentioned, and 3) case suffixes *have* been known to disappear because of diachronic sound laws. Rather, at some stage, presumably already in varieties of Old Turkic, [d] was generalised at the onset of syllables or at least suffixes.

Old Turkic /y/ is a consonant and not a semivowel alternant of /i/: When a stem ends in /y/, a 3rd person possessive suffix following it starts without onset /s/, and if a suffix (e.g. -(X)t- or -(A)lIm) starting with a vowel follows it, the vowel is not dropped. Vowels + /y/ give diphthongs neither in originally Turkic nor in borrowed elements.¹¹⁶

/y/ is not the direct voiced counterpart of /č/, which is an affricate starting with [t] whereas the former is a fricative. Proto-Turkic onset /y/ does, however, appear as the voiced affricate [j] in a number of Turkic languages including Volga Bulgarian, and also in cognates in Mongolic (which itself does have onset /y/ beside onset /j/ in original Mongolic words with no Turkic counterparts).¹¹⁷ Whether Old Turkic speakers also pronounced the affricate [j] (the voiced counterpart of /č/) in any context is unknown; this may have been the case e.g. with *važir* ‘vajra’, which is often also spelled with C: [j] may for some have been less unpronounceable than [ž]. We do not know exactly how /č/ was pronounced. The sequence /ts/ appears to have become /č/ in *süči-* ‘to be sweet and pleasant’ (Qarakhanid) and *süčig* ‘sweet’ (found already in Orkhon Turkic; late meaning ‘sweet wine’), since they probably come from **süt+si-* ‘to be like milk’.¹¹⁸ In TT IX 24 /č/ is, Manichæan writing, spelled with the letter Z.

čalinlig appears as variant of *yalin+lig* ‘brilliant’ in completely fragmented context, followed by a lacuna, in BT XIII 5,188 and also, in the binome *čalinlig čoglug*, in ShōAv XIIa9. This spelling may be the result of reborrowing from Mongolian, where *yalin* appears as *jali(n)*, and/or *čoglug* (which may possibly have stood in the lacuna also in BT XIII) may have had some alliterative influence. Zieme invokes the appearance of č° for Old Turkic (and Oguz etc.) y° in some modern languages, but this word by itself is not enough for assuming that there was such a dialect also among the users of Old Turkic texts.

/ñ/ could have been either a palatalised nasal as in Dolgan or a nasalised [y] as in Yakut (both Lena Turkic languages); it is retained also in Tofa. Our evidence for this phoneme is rather scanty: Among the original stock we can discern, perhaps, one suffix, one pronoun, eight nouns and adjectives, three verb stems, the proper name *Tuñukok*

¹¹⁶ Editors nowadays adapt the spelling of borrowed words to what is known about Old Turkic phonotactics. Only *maytri*, the Uyghur name of the future Buddha Maitreya, is still transcribed ‘traditionally’, as “*maitri*”.

¹¹⁷ It is not clear on what base Johanson 2001: 1723b assumes the existence of /j/ in ‘Ost-Altürkisch’ (as he calls the language).

¹¹⁸ This is made likely in OTWF 204 and 534; cf. Persian *šīrīn* ‘sweet’ < *šīr* ‘milk’ and the fact that Turkmen *süyt* and *süyji* both have long vowels.

and the ethnic name *Kītañ*. A character for this sound exists only in the runiform script; the palatal nasal of the Indic writing systems is not used for representing it. Runiform sources (listed in Clauson 1962: 91) have /ñ/ (beside proper names) in the diminutive suffix *+kIñA* and in the stems *añig* ‘bad’, *čīgañ* ‘destitute’, *turña* ‘crane’,¹¹⁹ *kañu* ‘which’, *koñ* ‘sheep’ (also in *koñčī*) and *yañ-* ‘to disperse’. However, a Turfan fragment (MIK III 34b = T II T 20 in *KöktüTurf*, p. 535 in *SEddTF*) listing runiform characters together with their pronunciation in Manichæan script in fact gives ʸYY (to be read *iy* or *ïy*) for the runiform character *ñ*. This could mean that there was a transitional stage, in which this character was still known and could still be used when writing in runiform script, but its pronunciation had changed. Therefore, if we find a word spelled with runiform *ñ*, this in itself does not guarantee nasal pronunciation, and the convergence of /ñ/ with /y/ may partly have taken place earlier than assumed hitherto. Alternatively, the author of this fragment may have felt *y* to be the representation closest to the nasalised voiced palatal consonant he knew.

In Old Turkic written with other alphabets, */ñ/ in most texts becomes *y*. *turña* ‘crane’, e.g., appears as *turya* in TT VIII P 29; Zieme’s correct interpretation of this is quoted in *SIAL* 17 (2002): 83 (footn. 43). There are, however, conspicuous exceptions: A few Manichæan mss. have the digraph NY also in Semitic writing systems. We find it in *bir+kinyä* ‘single’ (M I 23,32) and in *kanyu* in *Wettkampf* 43, six times in the London scroll of TT VI (according to Laut 1986: 81), Pañc 192 and ManTüFr 7, with an additional 10 examples for *kanyu* mentioned in the note to this latter instance. Two of these examples appear in a Buddhist fragment quoted in the n. to TT V A 23, showing that the retention of /ñ/ was not limited to Manichæan sources (as generally thought).¹²⁰ The spelling ʸNYΓ for ‘evil’ in Manichæan script in the X^wastvānīft, 21 times in Uygur script in the TT VI London scroll (again according to Laut) and no doubt elsewhere as well can be read either as *anig* or as *añ(i)g*, depending on whether one believes that /ñ/ lived on unchanged in this text or that it became /n/. In mss. in Uygur writing, this may also be a misreading of *a(y)īg*, when the editor assumes defective spelling of *a* with a single *alef*, since N and *alef* mostly look the same in that script

¹¹⁹ I do not think the spelling with ʸNY in the IrkB indicates a pronunciation placing Ñ and Y into separate syllables: There are in that text many instances of a double sign being redundantly accompanied by a simple one, e.g. *Türk* getting spelled with the character for rounded front vowels followed by ^wk. *turñya* is probably just to be read as *turña* (or possibly as *turuña* in view of some modern forms).

¹²⁰ *kanyuda* has also been read in U II 6,13, also Buddhist, but the ms. is now lost.

(see also the UW entry *ayig*). We encounter similar problems with **kōñ-* ‘to burn (intr.)’, the other verb ending in /ñ/, whose *-Ur-* derivate seems to be attested with NY, YN, Y or N in Manichaean sources (see OTWF). The only example which may *have* to be read as *anig* because there is a superfluous *alef* after the N appears in Fedakâr 549 (Sogdian script) in very fragmentary context; the Y is also damaged. *künäš* ‘a sunny place’ in IrqB 57 is an exception, explained through contamination with *kün* ‘sun’: This runiform ms. otherwise consistently retains /ñ/, in *koñ*, *añig*, *turña* and *čigañ*.¹²¹

koyñ ‘sheep’ is an exception, consistently spelled thus in most Uyghur sources. Some examples are listed by Doerfer 1993: 129,¹²² who considers this to be mostly an archaism for what was already pronounced as /y/. In view of the five cases¹²³ where this word is spelled in Brāhmī writing as it is spelled in Uyghur scripts, I do not think its pronunciation as a single syllable containing a nasal stretch or feature can be doubted. *koy* is normal in Qarakhanid but is rare even in late Uyghur.

ñ > *yn* is otherwise characteristic of Oguz, e.g. in *boynuz* ‘horn’,¹²⁴ and *doynak* ‘horse’s hoof’ < **toñok*. We can add the DLT’s evidence on Oguz *baynak* ‘dung’, which corresponds to *mayak* in Uyghur and Qarakhanid. At the end of stems, *yn* is in Oguz realised as *yXn*, e.g. *koyun* ‘sheep’, Ottoman *göyün-* < *kōñ-* ‘to burn’, *beyin* ‘brain’ < **bāñi* (coda vowel presumably metanalysed as possessive suffix).

Kāšgarī mentions it as a characteristic of the dialect of the Argu that they changed /y/ to /n/ in the words *kanak* ‘the skin on milk, cream on the top of milk’, *kanu* ‘which’, *kon* ‘sheep’ and *kön-* ‘to burn’. The last three are attested in Old Turkic with /ñ/, while the first one is found in this shape in Yakut. The Argu dialect, then, is one which Kāšgarī knew to have changed /**ñ*/ to /n/. This is also what happened among the

¹²¹ Uyghur otherwise has *kuyaš* < **kuñāš*, which lives on as *kuñās* ‘warm weather’ in Yakut and Dolgan. The IrqB form conforms with Xaladj *künäš* / *kinäš* ‘sunny’ and Oguz *günäš* (Turkmen ‘sunny, sunlight, sunny place’).

¹²² *koyin* in BuddhKat 20 is not the nominative, as he thinks, but the accusative form of stem + possessive suffix; the passage reads *atın, adgırın, koyın yikisın ... idalayur*. This rather early source has progressive *-sA* instead of the conditional suffix *-sAr*, and *koy* ‘sheep’ could be another progressive feature; but then, [ñ] could also have been a too difficult a task to tackle in the Tibetan transcription. In Brāhmī there are several instances of the word, all spelled *koyñ*.

¹²³ In TT VIII P, reedited together with an additional fragment in Maue 2002. The 1st person singular modal suffix is also practically always spelled with final YN.

¹²⁴ It follows from the Brāhmī spelling in Maue 1996 Nr.44 b B 8 that Uyghur *muyuz* had back vowels (and not front ones as written in the EDPT); spellings in Uyghur writing are ambiguous.

ancestors of the Khaladj, whose dialect has *n* where Proto-Turkic had **ñ*.¹²⁵ The shape of **yuñ* ‘peacock’ follows form Uygur *yuy* (twice Suv and twice Pañcarakša) and the DLT’s (twice) *yun*.¹²⁶ Above, we had seen that *turña* ‘crane’ became *turya* in Uygur, as still today in Tuvan; in Qarakhanid this bird name as well became *turna* (DLT fol.550 and QB 74 and 5377), as in Oguz, Kipchak and South-Eastern Turkic.

The diminutive suffix +*kIñA* became +*kIyA* (spelled as +*kyA*) in most of Old Uygur. It has been assumed since Gabain’s first treatment of the dialect question that the passage *ñ* > *n* had taken place in some Uygur sources as well, but this hardly seems to be the case. She bases her idea among other things on two TT I words which she read as containing the diminutive suffix +*kInA*, but these subsequently turned out to be misreadings of +*kI+čA*. *azkina* ‘quite little’ appears with /*n*/ in two Uygur (U 139 v5 in the note to BT V 175 in Manichæan script, and KP 7,6) instances, but the UW quotes dozens of others which have /*y*/. There also are two QB instances of *azkina* (3964 and 5440 in all three mss.) and cf. *azrakkina* in QB 6633 in both mss.. The scribe in DLT fol.601 seems to have done the appropriate thing when, in a quatrain rhyming *sözkiyä*, *tuzkiya* and *közkiyä* he adds dots for *nün* on the first and third word without crossing out the dots for *yā*; all dots seem to be by the first hand. The */*ñ*/ in this suffix appears to have an exceptional history in any case, as it turns up as +*kInA* in Middle and Modern Kipchak and in South Eastern Turkic, whereas other original /*ñ*/s appear as /*y*/ in those branches of Turkic.¹²⁷ If +*kIñA* had become +*kIyA* among the ancestors of the speakers of Middle or Modern Kipchak languages or Uzbek or Uygur, they could not have reversed the process; there must have been one or more populous dialects where this suffix was retained with some sort of nasal.

Secondary /*ny*/, the sequence of two phonemes, also got simplified to /*y*/ in Qarakhanid, as shown by the shape of -*yOk* derivatives of bases ending in /*n*/: *ögräyök* ‘custom’ from *ögrän-*, *bulgayok* ‘confused’ from *bulgan-*, *osayok* from *osan-* and *sarkiyok* from *sarkin-*; verbs of the shape ‘*ögrä-*’, ‘*osa-*’ and ‘*sarkä-*’ are not attested and *bulganyok* is lexi-

¹²⁵ Doerfer considers this language to be new Argu, as it were, but material in Sims Williams 2000 shows that Turkic Khaladj lived as a nation in Northern Afghanistan already before the appearance of the Argu in the sources.

¹²⁶ Cf. Zieme 1969: 226 for a probable Mongolian cognate. Dankoff & Kelly read the DLT word as *yün* and are followed by Hauenschild 2003: 249-250. The EDPT (entry *yo:n*) is wrong in stating that ‘there is no native Turkish word for ‘peacock’.

¹²⁷ Another exception is *tur(u)ña* ‘crane’, mentioned above; contiguity with /*r*/ may there be the reason.

calised already in Uygur. If the DLT's *kayak* and Argu *kanak* (Middle and Modern Turkic *kaymak* except *kanak* in Khaladj) go back to *kayna-* 'to boil' and the base of *kayintur-* as suggested in Doerfer 1993: 130, then the source of the *n* ~ *y* alternation should, in this word, also not come from /ñ/ but from the phoneme sequence /yn/ or even /ym/.

One piece of evidence for original *ñ as second consonant are those cases where there is, in an originally Turkic word, /m/ at the beginning of a word without there being a nasal following it. Such cases are Uygur *moyum* 'confused', *muyuz* 'horn', *mayak* 'dung', the DLT's *mayil* 'overripe' and its cognates, *muyga* 'headstrong' and *muygak* 'female maral deer'. Uygur *meji* 'brain' corresponds to *meji* in the DLT, *mähä* in the QB, both attested solidly; I do not think that this should make us posit '*ǰ' as an additional phoneme for Proto-Turkic, as is believed by some: Note that **buñuz* also became *müñüz* or *muñuz* in the latest Uygur and in the DLT, but cf. Chuvash *măyraka* (with diminutive suffix). The *b* > *m* change thus gives us an indication for the original state of affairs in stems starting with labials. The number of */ñ/s which we do not know about because the stem started with /t/, /č/, /k/ or vowel, not being attested in the earliest texts or in Khaladj must, taken together, have been much greater. In a Yenisey inscription we find *tañ-larim* 'my colts'. This noun is otherwise attested in the DLT and the QB, in Middle and Modern Turkic but not in Uygur; generally it has the shape *tay* and Yakut has *tïy*. Had it not been for this one inscription, we would not have known of the possibility that the word may have had a palatal nasal; this is a matter of coincidence. In view of the state the Yenisey inscriptions are in, the Ñ may also be error.

To sum all this up from the dialectological point of view, post-inscriptional Turkic had varieties in which /ñ/ was in some form or other retained as an independent phoneme; elsewhere it became /yn/ or fused with the phonemes /n/ or /y/. ñ > n is attested in Argu and Khaladj, for two nouns in Qarakhanid; *+kIñA* had a special development. In Uygur /ñ/ was gradually reduced to /y/ with fluctuations, but there was no *n* dialect within Uygur. Wherever scholars have found an N for *ñ in Uygur, there practically always is a Y beside it, again giving /ñ/; assuming defective spelling (which is common in all texts and especially in the ones in question) the (in any case rather rare) instances for N can all, with one exception in Sogdian writing, be read as NY or YN. Clauson 1962: 118 had proposed that these NY, YN and N are all spellings for ñ. Röhrborn 1981-82 accepted this view and further proposed that the Y < ñ appearing in these texts should be read as [ñ] as well: I think the opposite is true: NY was, at any rate in mss. in

Manichæan and Uygur script, an archaic and obsolete spelling for what was presumably already being pronounced as [y] by most of the population. This could partly have been true even for the runiform mss., even if they consistently wrote Ñ.

2.34. The velars and */h/

The pronunciation of /k/ is likely to have been rather different in back-vowel and front-vowel surroundings, at that time as in most modern Turkic languages: All the writing systems of Semitic origin, all varieties of the runiform script as well as Old Turkic texts in the Northern Brāhmī used different letters to render these two. In the latter there are two traditions for rendering the guttural consonants, as shown by Maue 1985, both involving three signs: In one tradition, voiced and unvoiced are distinguished in the back-vowel domain, while front /k/ and /front /g/ go undistinguished. This is clearly influenced by the system of the Uygur script, where *gimel* and *heth* represent back-vowel /g/ and /k/ respectively in pre-classical Uygur texts, double-dotted *gimel-heth* assuming the task of [q] in Classical Uygur, whereas no voice distinction is made explicit among the front velars.¹²⁸ We have the same situation in the Qarakhanid system, where *ghain* and *qāf* are voiced and voiceless respectively, whereas *kāf* also serves for /g/ in the front domain. In the other Brāhmī tradition, which is closer to phonological reality, back and front /k/ are distinguished, but not back and front /g/. In Tibetan writing, [q] is generally (but not in BuddhKat) spelled as GR at the beginning of words and syllables though not at the end of syllables. The hippological bilingual in southern Brāhmī (Emmerick & Róna-Tas) uses K both for front and back /k/, while BuddhKat often uses G for both at the onset of words.

Runiform Q rendered a fricative [x] especially in foreign words; e.g., in the Orkhon inscriptions, the proper name *Maxarač* and the city name *Buxaraq*. The title *kan* was probably also pronounced as *xan*; the opposition *kan* ‘blood’ vs. *xan* ‘ruler’ must be considered a minimal pair, insofar as vowel length was no longer distinctive.¹²⁹ *xan* may have been an early borrowing into Turkic from a language which died out without direct documentation, and is also the source of the second

¹²⁸ I know of only one text in Uygur writing which uses K and X indiscriminately: HamTouHou 16, a letter written by an ambassador from Khotan to China, who appears not to have been all too familiar with Uygur spelling; it shows other irregularities as well, e.g. *bešinč* ‘fifth’ written as PYŠYC.

¹²⁹ The word for ‘blood’ had a long vowel in Proto-Turkic.

syllable of *burxan* ‘Buddha’.¹³⁰ Since *xan* must have been within the Old Turkic lexicon for centuries, we are entitled to consider it to be part of the legitimate base for determining the phoneme inventory. [x] would have been considered a phoneme if there had been more distinctive load on the opposition, if it had not been an allophone of /k/ and perhaps a free alternant as well. The voiceless velar may sometimes have been pronounced as a fricative also in front harmony words: We find a word for ‘breast-strap’ spelled as *kömlüdrüx* with H in a list of hippological terms in Khotanese Brāhmī (Khot 21).

The realization of Sanskrit *h* in loans in Uygur texts in Uygur script is explored by Röhrborn 1988. As he shows, it was spelled as X before the vowels /a u o/; before the vowels /i e/, however, K was used to represent what had been Sanskrit *h*. The reason, probably, is that the sources of the Uygur *q* character are in fact the Semitic letters *gimel* and *ḥeth*, which were in Sogdian used to express the voiced and the unvoiced velar fricatives respectively.¹³¹

When originally Sanskrit words containing the consonants *k*, *g*, *kh* or *gh* appear in Uygur, they are spelled as K even when they share syllables with back vowels. Borrowed terms appear often to have been taken over through Sogdian, the script is in any case adapted from Sogdian and this is Sogdian spelling practice. The explanation proposed by Johanson 1993a: 96 that the Uygurs had used K and not X to represent the foreign unvoiced gutturals because they had felt them to be less velar than the back-vowel dorsal of their language (represented by X) may be just as valid. Röhrborn 1996 has a third explanation, that they were chosen because *caph* was unequivocally plosive while *gimel/ḥeth* had primarily been fricative in Sogdian, was still so in Uygur in the voiced domain and partly also in its unvoiced counterpart ([q ~ x]). The Sogdians could in any case not have used *gimel* or *ḥeth* for expressing stops as these letters exclusively represented fricatives in their language.¹³² Röhrborn states that the spelling rules of Old Turkic

¹³⁰ The first syllable is said to come from an early Chinese pronunciation of this name (the modern Mandarin pronunciation being *fó*).

¹³¹ See Röhrborn 1996: 179-180 on this question. Röhrborn approvingly quotes Clauson 1962: 103 and 105, taking his side against Sims-Williams 1981: 355, n.26 on the matter of Clauson’s consistent reference to *gimel-ḥeth* where Sims-Williams distinguishes between the instances of *gimel* and of *ḥeth*, but Clauson was referring to Sogdian (and was wrong about that) whereas Röhrborn refers to the Uygur letter.

¹³² Such a situation has actually developed spontaneously in Modern Hebrew, where *qoph* is the only letter used for rendering foreign [k] although *caph* also most often is pronounced as [k], because *caph* can also render the sound [x]; when quoting foreign

need not be expected to hold also for borrowings, since the coexistence in one word of velar characters respectively serving front and back harmony is possible only in them. While this is correct, I still see a problem with Röhrborn's argument in the fact that the phenomenon is not limited to the Sogdian-Uyghur alphabet but also appears in the Manichæan one, where both *caph* and *qoph* are used for both the front and the back velar (the latter dotted); but we find, in Manichæan writing, in M II 12,8, *trazuk* 'scales for weighing' with front K. Suffixes added to borrowings were spelled the Turkish way, which lead to words like *š(u)lok+ka* 'to the poem' (< Skt. *śloka*) being spelled with K in the stem but X in the suffix. Cf. also Erdal 2002: 5-7.

In Turkic words [x] is, among other things, the allophone of /k/ in contiguity with /š/ in back-vowel words, e.g. in *oxša-* 'to caress'. The DLT fol.144 also spells *ogša-* 'to resemble' (as well as a number of derivatives from this verb) with *xā*, but that is the result of assimilatory devoicing which appears to have been rare in Uyghur.¹³³ There, this verb had a voiced velar fricative, [oγša-] presumably still differing in pronunciation from *oxša-*. *ogša-* 'to resemble' is also spelled with *h* in at least six Brāhmī instances mentioned in OTWF 780, while we know from Windg 50 (Manichæan writing) that it there (still) was a voiced and not an unvoiced velar; Brāhmī *h* was also used for representing [γ]. *takšur-* 'to compose verses' was probably also pronounced as *taxšur-*; the velar hardly ever seems to be spelled with the *q* dots in Uyghur writing. The same applies to the onomatopoetic verbs *kaxšašu čaxšašu yori-* in Ht IV 1541, the base of the latter appearing as *čaxša-* in DLT fol.569, and *sixšal-* 'to get dense' in Ht V III 1838. Finally *yaxšī* 'fine, appropriate', not attested before DLT and QB, clearly comes from *yak-iš-* 'to be suitable'. Sogdian *čγš'pδ*, perhaps pronounced as *čxš'pδ*, comes from Sanskrit *śikṣāpada*; this may mean that the spirantisation of velars before /š/ may have been an areal phenomenon.

Zieme 1969: 36 gives a list of instances where *x* is written instead of *q* between vowels; these may either reflect a free alternation between stop and fricative, or they may be simple errors: Both in the Uyghur and the Manichæan scripts, *x* differs from *q* only in that the former has one dot above the letter, the latter two.

Kāšgarī says that the Oguz and Kipchak pronounce onset back-harmony k as [x] in such words as *xayu* 'which', *xanda* 'where' and

terms or when outright borrowing them, this orthographic distinction serves unambiguous reading as [k] or [x].

¹³³ The EDPT is therefore probably wrong in spelling all Uyghur instances of *ogša-* (discussed below) as *oxša-* as well.

xizim ‘my daughter’. Ottoman *hangi* and *hani*, Azeri *hara* ‘where’ and *haysi* ‘which’ show that there was such a process in the interrogatives; the velar of *kiz* is a fricative in Volga Bulgarian (late 13th century).

The realisation as stop (i.e. as [g] or even perhaps as [k]) after sonants is partly observable also for /g/ (and not only for /δ/), as indicated by the word spelled *ärkli* in the Orkhon inscriptions: Phonologically or at least morphophonologically speaking this is *är-gli* with the participle suffix *-(X)gli*. What may have led to the pronunciation [ärkli] with [k] is the syllabification *ärkli*, Old Turkic having no coda cluster [rg]. If the first velar character in *yapirgāk* ‘leaf’ is double-dotted in HTs VIII 15, this can, however, very well mean that it was pronounced as a stop and not as a fricative, rather than pointing towards a pronunciation ‘*yapirkak*’. Further instances to be considered in this connection are *burki* ‘frowning; wrinkled (face)’ attested in Uygur, Brāhmī and Arabic script and formed with the formative *-gl* described in OTWF § 3.110, the particle *ärki* which has been proposed to come from *är-* ‘to be’ by different suffixes starting with /g/, or the rather opaque *kulkak* < **kulgak* ‘ear’. In other positions, the pronunciation of the soft velar appears to have been fricative. The /g/ of the words *arüt-gali* ‘for cleaning’ and *yumurtga* ‘egg’ is spelled with *h* in BuddhKat: This can just mean that /g/ was here pronounced as a fricative [ɣ], but it could also have been pronounced as [x]: To judge by the diacritics of the verbs *agtur-* ‘to raise’, *agtin-* ‘to rise, climb, get to’ and *agtar-* ‘to throw, turn or roll something over, to translate’ in Uygur script and the Manichæan and Brāhmī spelling of *agtin-*, their velar had already gotten devoiced in Uygur; evidence is discussed in the UW entries and in OTWF 586, 734. The DLT a number of times spells *agtar-* as *axtar-*. The Turkic-Khotanese hippological glossary also often spells /g/ as *h* after back vowels, e.g. in *agz+i* ‘mouth’, *kirig* ‘selvage of the saddle’, *azig* ‘elephant tusk’ or *kasig* ‘inside of the cheeks’ and even after front vowels, in *yig* ‘bridle bit’, *ilig* ‘attachment’, *bügsäk* ‘upper chest’ and *bögür* ‘kidney’. Editors often transcribe /g/ as *g* in words with front harmony but as *ɣ* in words with back harmony, implying that the back-harmonic variant of this phoneme was a spirant whereas the front variant was a stop. This practice reflects the spelling on the Semitic scripts adopted for Old Turkic: Semitic *gimel* was a velar spirant in Sogdian, the language from which the Uygurs took the script they used most often, whereas *caph*, which served for both front /k/ and /g/, represented a stop in Sogdian. Taking *ɣ* to symbolise a voiced velar fricative and an accent sign to symbolize palatal pronunciation, Doerfer’s *ý* and *γ* (as e.g. in Shor, or in Anatolian dialects retaining the

velar pronunciation of /g/ after vowels) are in fact probably more exact renderings of /g/ when not preceded by /r l n/.

As already noticed in OTWF 747, a number of verbs formed with the suffix +gAr- (with G documented as such in sources in runiform, Manichæan, brāhmī or Arabic script) are causative counterparts of +(X)k- verbs: *äd+ik-* > *äd+gär-* as dealt with in OTWF 743 and in the UW, *ič+ik-* ‘to submit, enter, capitulate’ > *ič+gär-* ‘to introduce, subdue, conquer’ and *taš+ik-* ‘to go or step out’ > *taš+gar-* ‘to bring, give or get out’ are formed with the addition of the causative suffix -Ar-. In *and+gar-* ‘to make somebody swear an oath’ < *ant+ik-* ‘to swear an oath’ and *čün+gar-* ‘to investigate something’ < *čün+ik-* ‘to be confirmed, found genuine’ the /g/ is solidly documented only by the DLT and further research is needed to determine whether especially *čingar-* and the petrified converb *čingarü* were pronounced as here spelled in Uygur as well. The alternation between the two velars is not necessarily one of voice; it may also be that G was chosen for the causative because the velar was, in this position, pronounced as a fricative and not as a stop. This, however, is only a hypothesis. The alternation is no doubt related to a distributional difference which we find in Orkhon Turkic¹³⁴ concerning the appearance of the letters *k* and *g* after consonants within stems: /k/ is found practically exclusively after /r l/, in *alkin-*, *ilki*, *kulkak*, *yilkü*, *arka*, *arkiš*, *tarkan*, *tarkinč*, *tokurkak*, *irkin*, *ärkli*, *ärklig*. The only exception is *yuyka*, attested twice in Tuñ 13.¹³⁵ No such limitations exist, on the other hand, for /g/: Beside lexemes with /lg/ such as *bilgä*, *bulga-* or *tolgat-* and /rg/ such as *kärgäk* or *tirgür-* we also find ones such as *ičgin-*, *adgür*, *ädgü*, *tamgačü*, *amga*, *ämgäk*, *ingäk*, *kisga*, *bašgu*, *tavišgan*, *bošgur-* or *kazgan-*. There thus appears to have been a complementary distribution within stems, which does not hold before inflectional suffixes, but +gAr- clearly did not count as inflectional: The dative suffix is always spelled with K, e.g., while the directive suffix always has G.¹³⁶

The phonemic opposition /k/ : /g/ is solid after vowels, e.g. in *akü* ‘generous, virtuous’ vs. *agi* ‘treasure’, *äk-* ‘to sow’ vs. *äg-* ‘to bend’

¹³⁴ This is based on the documentation of Tekin 1968: 88-91; proper names and what I consider to be errors have been excluded.

¹³⁵ This shape of the word is isolated, as Old Uygur has *yuka* and Qarakhanid *yuvka* or *yupka*. The word is well attested in Middle and Modern Turkic languages but none show a *y* or any reflex of one. I don't think one can take it to be a mason's error if a word occurs twice, as assumed by EDPT 874a; it might be a dialect peculiarity, however, and is in any case likely to be secondary.

¹³⁶ See section 3.124 for a discussion of the nature of the velar of the dative suffix.

and *oxša-* ‘to carress’ vs. *ogša-* ‘to resemble’. However, it seems difficult to find such minimal pairs for other positions.

The alternation /ŋ/ ~ /g/ (i.e. the neutralisation of the opposition of nasality in the velar domain) occurring in Orkhon Turkic is not a purely phonic matter, as it there takes place only with the 2nd person possessive suffix (used also in the preterit suffix); it is documented in section 3.122. This is a dialect characteristic which, according to DLT fol.350, also occurs in some Argu dialects. It does not happen in the 2nd person plural imperative suffix (where /ŋ/ is in the coda as with the possessive singular), nor with the genitive (whose Orkhon Turkic variant after consonants is +Xŋ) nor, in Orkhon Turkic or in Uygur, in stems. As a quite different phenomenon, the Mait (as listed in Laut 1986: 71-74), the HamTouen text 18, a few Manichaean texts and the DLT sporadically spell /ŋ/ as K in Uygur and Arabic script (where this letter is used also for /g/). This is a purely graphic matter, as (front) K appears in back-vowel words as well. A few Uygur mss. (dealt with by P. Zieme in a lecture with the title ‘Gab es Entnasalisierung im Altuigurischen?’ held at the VATEC symposium in Frankfurt, September 2002) spell [ŋ] as K with a superposed dot. Rarely, /ŋ/ and /g/ do alternate in the DLT: ‘elephant’ there is *yaŋan* (not among the Oguz) or *yaŋan* (cf. Uygur *yaŋa*); *sā*, ‘to you’ < *saŋa* in DLT fol.536 and the address *tārim* < *tāŋrim* in DLT fol.199 presumably passed through a stage with /g/.

/ŋ/ does not consist of the sequence /ng/, although the Semitic writing systems spell it that way under front synharmonism. /n/ + /g/ gives /ŋ/ neither in stems like *ingäk* ‘cow’, nor when a stem ending in /n/ is followed by suffix (e.g. the directive) starting with /g/. This may have been different prehistorically in view of the fusion of +gArU with the 2nd and 3rd person possessive suffixes to give +(X)ŋArU and +(s)IŋArU and taking *ärŋäk* ‘finger’ and *yaŋak* ‘cheek-bone’ to come from *är+än* ‘men’ and *yan* ‘side’ respectively.¹³⁷ Cf. also *käliŋünüm* ‘my daughters-in-law’ in Orkhon Turkic KT N9, assuming *kälin* ‘daughter-in-law’ + collective suffix +(A)gU + pronominal /n/ + 1st person possessive suffix (which is not completely regular, as the collective suffix otherwise loses its first vowel only after vowels). The 2nd or 3rd person possessive suffixes in the dative case, +(X)ŋA and +(s)IŋA, show an otherwise unattested prehistorical contraction /nk/ > /ŋ/.

There is no doubt that Proto-Turkic had an */h/ phoneme in the word onset; this */h/ is retained systematically in Khaladj and sporadically in

¹³⁷ See OTWF 75 for these etymologies and cf. OTWF 165-166 for *oŋay* ‘easy’.

other modern languages, and has left reflexes in Old Turkic. The matter is dealt with in Doerfer 1980 (text of a lecture presented in 1976; German translation Doerfer 1995), who showed that /h/ appeared in some words which became parts of ethnonyms appearing in a Tibetan document from the 8th century (see below) and that an Old Turkic onset alternation *yī* ~ *ī* is a reflex of */h/. Doerfer 1980/1995 only deals with cases where the vowel preceding sporadic /y/ is /i/, e.g. (y)īgač ‘tree’, (y)īgla- ‘to weep’ or (y)īrak ‘far’. Sporadic /y/ does, however, appear also before other high vowels: We have *yün-* ‘to come up’ in Blatt 16 and 22 where most sources have *ün-*; *ürt-* ‘to cover’ has a variant *yürt-* in *yürtgün* (Mait 167 v 31) and *yürt-ül-* (Maue 1996, Mz 652 = T II S 19 b v4 in Brāhmī). Uygur *ışig* ‘cord, cable’ corresponds to Qarakhanid *yışig*; on the other hand, Uygur *yirig* ‘rotten’ corresponds to the DLT’s *irig* (twice).¹³⁸ Cf. also Gabain 1941: 52 and see the (approximately ten) verbs discussed in the OTWF as mentioned in the glossary (858b-859a): Most of these have high vowels in the first syllable; two instances with /ö/ are less certain. /h/ did occur at some stage before low vowels as well, as shown by the tribe names *Ud hadaklig* ‘bovine-footed’ and *Hala yuntlug* ‘possessing parti-coloured horses’ appearing in the 8th century Tibetan itinerary on the peoples of the north (see Ligeti 1971, Tezcan 1975 and Moriyasu 1980); the words *hadak* and *hāla* are the ones normally known as *adak* ‘foot’ and *ala* ‘parti-coloured’.¹³⁹ Another term twice appearing with *h*^o in that source is the title known well as *irkin* from Orkhon Turkic and Qarakhanid sources. The itinerary is not written in Turkic but in Tibetan, which could have borrowed them at an earlier stage or from a dialect (like Khaladj) which did (unlike Old Turkic as attested in the sources) regularly retain /h/. Doerfer 1981-82a has argued that Orkhon Turkic also had /h/ as an actual sound, from the fact that the runiform character A sometimes (but not always) appears in the onset when comparative evidence makes us expect a word to start with *ā*, but never when it makes us expect that a word starts with *hā*. This argument does not really seem to be convincing, as the data he adduces are scant and inconclusive. Is there any proof that this *h* did *not* exist as such in Old Turkic, then? The runiform and Uygur script just had no such character, and the *y* ~ \emptyset alternation, which is a rather common reflex of */h/ in Uygur (including

¹³⁸ *yirig* / *irig* comes from Qarakhanid *iri-* / Uygur *yirü-* ‘to decay, rot’ and may be related to *yiriḡ* ~ *iriḡ* ‘pus’.

¹³⁹ With other words in the itinerary, among them *Ho-yo-hor* referring to the Uygurs (= *Hui hu* in Modern Mandarin Chinese, *Hayhurlar* in the late Kaš Xatun text presented by Peter Zieme in Mainz in 2002), matters are a bit more complicated.

the runiform manuscripts), does not appear to take place in the inscriptions of the Türk and Uygur kaghanates. The Manichæan script did have a letter for this sound: We find it several times in the Xw in the Parthian sentence *man astar hirza* ‚Forgive my sins!‘ and also, without phonetic value, to fill in the ends of lines (e.g. *közünür+tä+kih* ‘the present’ in TT IX 46) or before holes in *pothi* leaves (e.g. *burxan+lar+kah* in TT IX 52). The Xw sentence is an instance of code switching (or it may have been an unintelligible formula for some of the lay people) and the words cannot be treated as borrowing. One might think that [h] should have appeared explicitly in texts written in Manichæan script if original Old Turkic words had retained it in these sources. However, the Uygur, Manichæan and Syriac scripts were all taken over from the Sogdians, whose language had lost this sound: Doerfer mentions Sogdian *ʾbt* corresponding to Persian *haft* etc. So we get no help in this question from Manichæans and Christians. Then the scripts of Indic origin should have been explicit about this sound if the individuals using them had had *h*^o, but we find that the relevant characters are not used. Words in texts in Brāhmī script spell the relevant words without H, with the exception of the word *hükün* ‘heap’. Doerfer already noted that the small texts in Tibetan script dealt with by Clauson do not show onset /h/ and says that these and the Brāhmī texts are late. Nor, crucially, does the presumably 10th century Buddhist catechism in Tibetan script have the letter *h* in Turkic words: *adak* ‘foot’, *adir-* ‘to separate’, *ag-* ‘to change’, *äv* ‘house’, *ogri* ‘thief’, *öl* ‘wet’, *öl-* ‘to die’, *üz-* ‘to rend’ are here spelled without initial H although their Khalaj cognates do start with /h/; *üntür-* ‘to bring out’ is spelled with *y*^o but so is *üč* ‘three’. In view of all this, no unvoiced pharyngeal fricative can be posited for Old Turkic proper.

2.35. The sibilants

We take Old Turkic in general to have distinguished between two voiceless sibilants, alveolar /s/ and palatal /š/, though not all runiform texts and sources in Uygur writing consistently distinguish between them. Manichæan writing has two quite different characters, but a few Manichæan texts (quoted by Zieme 1969: 37-38) show S where other Turkic sources have Š. This appears to be a phonological or phonetical rather than a graphemic matter, as shown by the fact that /š/ is spelled in regular fashion in the same mss. in Middle Iranian stretches. Zieme

thinks that this might be a dialectal characteristic of these texts. The various runiform characters for front and back /s/ and /š/ also alternate in the different runiform inscriptions, both in that different inscriptions show different distributions and as alternation within the same inscription; e.g. the BQ inscription has much more Š characters than the largely parallel KT inscription, which is two years earlier. This complex matter was dealt with by Thomsen 1896: 38, T.Tekin 1966 and 1968: 61-2 and 93-98, Amanžolov 1970 and Tenišev 1971. S.E. Malov proposed in this connection that /š/ probably existed in the literary language but that the Orkhon Turks actually pronounced both common Turkic phonemes as /s/, and Tekin 1968: 94 agrees with him.¹⁴⁰ The inscriptions of the Uygur Steppe Empire and most runiform mss. (notably the IrqB) have no Š letter at all; some runiform mss. use s² with a diacritic line above it to represent š². The suffix *-mlš* is regularly spelled as *-mls²* in the Orkhon inscriptions, which do have the letter Š (also after stems with back synharmonism); the Uygur runiform ŠU inscription, which does not have Š, does use *-mls¹* with back-harmony stems. The problem posed by such alternation has not been satisfactorily explained as yet.

/z/, the voiced counterpart of /s/, is solidly attested and well discernible in the writing system; see the next section for /z/ ~ /r/ alternations.

/ž/, the voiced counterpart of the palatal fricative /š/, is found in borrowings, e.g., in *ažun* 'existence, life', *užik* 'letter of an alphabet', *küžäl* 'nice', *trižul* 'trident', *arži* 'rši (a class of beings in Indian religions)', *možag* (a Manichæan title), *č'inžu* 'truth', 'tathatā, thus-being' or *küži* 'incense'. In case it did exist in genuine Turkic words, then only as an alternant of the unvoiced palatal affricate /č/ (see below). In Suv, we often find *ažun* spelled as *ašun*: This may be an instance of voice confusion in spelling; it may also be, however, that we here have evidence that this foreign sound was replaced by the indigenous /š/. The same can be said e.g. in the case of *arži*, which is also spelled with Š a few times in late mss. such as BT III, Shō, Suv and some from the ETŞ (see UW 221).¹⁴¹

The 3rd person imperative suffix *-zUn* possibly had a voiced palatal fricative [ž] or affricate [j] in its onset: It is, in one instance in a runiform ms., spelled with the relevant diacritic on the Z sign and, in one inscriptional case, with the runiform letter for /č/; see section 3.23.

¹⁴⁰ Texts reflecting a more spoken language, such that wrote e.g. *-sA* for the conditional suffix *-sAr* or *käräk* for *kärgäk* 'necessary', show no evidence for /š/ becoming /s/.

¹⁴¹ These instances are less likely to be reminiscences of the Sanskrit form.

2.36. The liquids

The liquids /r l/ and the alveolar nasal /n/ are sometimes grouped together as ‘sonants’ because they share certain traits of behaviour; in some cases /z/ also behaves like them. The sonants have certain characteristics in common, which also distinguish them from other consonants: Among other things they can be used as first element in consonant clusters at the ends of syllables; other consonants (e.g. the voiced alveolar) appear with stop allophones when preceded by them.

Sitting astride on the synchrony / diachrony distinction on the one hand and the word formation / morphology distinction on the other is an irregular and badly understood alternation between /r/ and /z/. In morphology we find /z/ in the suffix of the negated aorist, where the positive aorist has /r/: -r (a variant of the suffix appearing after vowels) vs. -mA-z. Other instances of the alternation fall more into the domain of etymology. The cases of +sXz, the privative suffix vs. the formative +sIrA- derived from it, *sämiz* ‘corpulent’ vs. *sämri-* ‘to be or become corpulent’, *sekiz* ‘sharp-witted’ vs. *sekri-* ‘to jump, hop’, *sāz* ‘pale’ vs. *sariğ* ‘yellow’ (< **sāri-g*) replacing it, *yultuz* ‘star’ vs. *yultri-* ‘to gleam or shimmer’, Ottoman *yaldiz* vs. Old Turkic *yaltri-* ‘to glimmer’, *töz* ‘root, origin, element’ vs. *törö-* ‘to come into existence’ and *yaviz* ‘bad’ vs. *yavri-* ‘to be or become weak’ may all be explained by the fact that the /z/ appears at the end of its stem while /r/ is followed by a vowel; all these instances are discussed in the OTWF. One might want to decide that the /r/ is primary and the /z/ secondary by making the coda position responsible or one could see it the other way around, considering the /r/ to be caused by the presence of a vowel after it. Looking at *äsiz* ‘woe; alas’ vs. *äsirkä-* ‘to regret the loss of someone or something’, *kāz* ‘notch’ vs. *kārt-* ‘to notch’, *kiz* ‘girl’ vs. *kirkin* ‘maidservant’ or *közsüz* ‘eyeless’ vs. *kösürkän* ‘mole’¹⁴² one would prefer the first explanation: In all these cases the /z/ is at the end of the stem while the /r/ is not, though there is a great variety in what follows the /r/. The final position of /z/ in *küntüz* ‘during daytime’ vs. /r/ in the composite suffixes +dXrIn, +dXrAn and +dXrI points in the same direction. There is a related alternation z ~ rs in *tirsgäk* ‘elbow’, presumably from *tiz* ‘knee’, and *borsmok* ‘badger’ and *borslan* (a jingle with *arslan*), both in the DLT, presumably from *boz* ‘grey, grey-brown’. Here, again, the /z/s are at the end of the stem while the /rs/s are inside theirs. The same

¹⁴² See the discussion in OTWF 88.

explanation could be appropriate for *köz* ‘eye’ vs. *kör-* ‘to see’ and *kutuz* ‘raving dog etc.’ vs. *kutur-* ‘to rave’, taking into account the fact that verb stems appear much oftener with suffixes than nominal stems.¹⁴³ All this does not help us on in a case like *tägzin-* ‘revolve, rotate, travel about’ (with derivatives and /z/ cognates such as *tägzinč*, *tägzim*, *tägzig* etc.) vs. *tägrä* ‘surrounding’, *tägriglä-* ‘to assemble people around something’, *tägirmi* ‘around’, *tägirmän* ‘mill’, unless we are ready to make some bold etymological assumptions. The explanation could, however, very well apply to *-mAz* vs. *-r*, if we take the suffix to have originally had an additional vowel.¹⁴⁴ This vowel would have dropped in the negative form earlier than in the positive, as stress was on the syllable preceding *-mA-* in the first case but on the suffix in the second. When it dropped from the positive form as well, the $^{\circ}r\# > ^{\circ}z\#$ rule would no longer have been operative. Some of the mentioned connections may admittedly be spurious, but our account of the evidence has not aimed at exhaustiveness; there will in any case remain enough evidence for the alternation $r \sim z$, which got so intertwined with the Altaic question.¹⁴⁵ The OTWF discusses a similar alternation between /l/ and /š/.¹⁴⁶

¹⁴³ The stem of *kör-* might also possibly originally have been **körü-*, seeing that the aorist of this verb is *körüür* and not **körür* (as would be expected from simple single-syllable verbs).

¹⁴⁴ The aorist suffix has been connected with a Mongolic suffix which does have an additional vowel.

¹⁴⁵ Common Turkic /z/ appears as /t/ in cognates in Chuvash-Bolgar and Mongolic.

¹⁴⁶ The note to HTs VII 670 derives *ötlüm* from *ötür-*, appearing to assume an /l/ ~ /t/ alternation; but no such alternation is attested in Old Turkic. I would consider it more likely for *ötlüm* to be related indirectly, by coming from an *-Xl-* derivative of the base.

2.4. *Phonotactics and phonetic processes*

Phonotactic rules may have been different for genuine Turkic words and for borrowings. *bodisatv* (with variant *bodisavt*; class of Buddhist deities) was, e.g., probably pronounced with a coda cluster which was not found in Turkic words, and probably mixed front and back vowels. When writing down borrowed words scribes could always to some degree be guided not only by the way Turks pronounced these, but also by how they were spelled in their original languages and especially in transmitting languages; this is true especially for religious texts, and in particular in source languages like Sogdian, for which the same writing systems were used as for Uygur. Still, Turkic phonotactics did interfere, e.g. by putting vowels before /r/'s which appear at the beginnings of foreign words, or by occasionally breaking up consonant clusters. Concerning borrowings, therefore, we cannot content ourselves with looking at single spelling instances of words, but look at the whole set of variants, to see how pronunciation and spelling might have evolved in the context of the conflicting tendencies of Turkisation on the one hand and learned rendering on the other. To give just one example, the word signifying 'planet' spelled as KRX cannot automatically be expected to have been pronounced as 'grax' and get transcribed as *gr(a)x* just because it had an onset cluster in Sanskrit; the Turks might just as well have broken up this onset cluster. Nor should one automatically assign changes in borrowed lexemes to the influence of Turkic: If Sanskrit *bodhisattva* appears in Uygur also as *bodisavt*, the loss of the coda vowel should have taken place already in the Aryan dialect which served as source of the borrowing; the metathesis *tv > vt* might be an internal Turkic matter but *could* also have existed in an intermediate language through which the word reached Uygur; the shape of a lexeme in the ultimate source language is not really relevant. What interests us primarily in this descriptive work are the synchronic rules which can be extracted from our material: e.g. the fact that all parts of Old Turkic show quite a number of borrowed words with onset /l/ as compared to the scarcity of onset /r/, even though both are equally barred from original Turkic phonotactics.

2.401. Vowel assimilation by vowels

The central phonotactic phenomenon of Turkic languages is synharmonism, a grammaticalised progressive assimilation functioning on the level of syllables, determining the choice between classes of vowel phonemes and between allophones of consonants; it has been called

vowel harmony because it typically works on the subphonemic level for consonants but on the phonemic level for vowels. The structure of Old Turkic synharmonism has already been referred to in section 2.2 and its functioning at morpheme junctures will be described in section 2.51. It could also have been described among phonotactic phenomena in that it consists of a set of relationships between elements in the sound syntagm constituting the word. It has been often stated that vowel harmony determines the borders of the word; this is true of the phonological word only: The morphological word is often shorter than the phonological, in that clitics are included in synharmonism; the lexical or semantic word is often longer than the phonological, in that lexical units can consist of several morphological words. The identity of Old Turkic sounds is not, however, determined by synharmonism alone.

Backward vowel assimilation can concern lip rounding, raising or fronting. Backward rounding of vowels can be observed occasionally, e.g. in *ärtünjü* < *ärtiñjü* (KP 3,8), *tägülök* < **tägil-ök* ‘blind’¹⁴⁷ (KPZieme 1), *sugun* < *sigun* (TT VII 29), *tañusok* < *tañisok* (< *tañ+sok*, BT XIII 46,35), *tägünür män* in a text in Tibetan script excerpted in Clauson 1962: 99, *yertünčü* < *yertinčü* (KP 14,8, 47,6 and 78,3, BuddhKat 24 and 42), *kügür-* < *kigür-* ‘to introduce’ (see OTWF 750 and 817) or *nugoš[ak]* in ms. Mz 169 (= T I x 21, published in Sertkaya 1985). In *körtgünč* < *kertgünč* (UigSukh 38) and *örgür-* < *er-gür-* (documented in OTWF 575, 749 and 755-6) low vowels are rounded. *yaratunu uma-* in KT E 10 shows that the phenomenon is old.¹⁴⁸ Backward unrounding is rarer; it happens with the instrumental ending, e.g. in *ögrünčüligin* < *ögrünčü+lüg* (MaitH XX 1r7) or *umugsizün* (Suv 19,17 together with *inagsizün*) < *umug+suz*.¹⁴⁹ Accusative forms such as *özimin* < *öz+üm+in* or *ögimin* < *ög+üm+in* are attested a number of times in DKPAM mss., and cf. *yumiš+čü* < *yumuš* in BT VII A387. These could, however, be mere spelling peculiarities, as we also find

¹⁴⁷ The generally attested derivate from *tägil-* ‘to be blinded’ is *tägl-ök*. The additional second vowel is more likely to be secondary (as with the next word mentioned) than to have been retained from the original verb base. Cf. *yañilok* < *yañil-* in U II 87,54 and *basurok* < *bas-ur-* in ShōAv 317 and BT XIII 39,22, where the old and widely attested variants of ‘error’ and ‘oppressor’ are *yañlok* and *basrok*.

¹⁴⁸ There appears to be another inscriptional instance in l.4 of part B of the Qara Balgasun inscription (Uygur Steppe Empire): In a footn. to Blatt p.301 Thomsen proposes reading *nugoš[ak]*, basing his proposal among other things on Radloff 1894: 293. Orkun 1938: 38 followed the Finnish Atlas, which has the impossible $n^1wg^1wr^2$.

¹⁴⁹ Cf. $+s^2zn^2$ in Tuñ 35 in a back-vowel word. On the other hand, $+sXz$ may have been originally unrounded, as shown by the formative $+sIrA-$ derived from it.

yumış in BT VII B35 and also the accusative form *ögiz+üg* < *ögüz* ‘river’ in BT VII B31 and 33.

Backward raising influence is found in forms such as *ešidtür-* (e.g. U I 6,3 in a Christian text), *eštil-* and *eštür-* from *äšid-* ‘to hear’; Brāhmī sources in fact have 13 instances of *ešet-* / *ešit-* / *ešid-* ‘to hear’ (with derivates) vs. only two of *äšid-*. Thrice *el(i)t-*, which exists beside *ält-*, and thrice *elig* for *älig* ‘hand’ in Brāhmī sources (thus making it homophonous with the word for ‘king’) in Brāhmī sources must also have come about through regressive assimilation. The emergence of *iki* (not *eki*; see the end of section 2.22) from *äki* ‘two’ may have the same explanation.¹⁵⁰

Backward fronting can only take place when two words become one, as Turkic words by themselves are front or back as wholes. We have this phenomenon in *bökün* ‘today’ in *bökün bar yaran yok* ‘here today and gone tomorrow’ (Mait Taf.118r12 = MaitH Y 12b27, colophon re-edited by Laut in Ölmez & Raschmann 2002: 133) < *bo kün* ‘this day’.

Beside synharmonism and the mechanism described in section 2.51 which makes /o ö/ appear in suffixes in which alternating back and front vowels are followed by /k/ unless the vowel preceding the suffix is /u/ or /ü/, Old Turkic in addition had what can be called vowel attraction. By this phenomenon (found in Kirgiz, Kazakh¹⁵¹ or Turkmen), not only [o] and [ö] but also [e] turn up in non-first syllables of Turkic words: Texts in Indian scripts show that /u/ was often realised as [o] and /ü/ often [ö] and /i/ was *sometimes* realised as [e] when they were preceded by these same low vowels (see section 2.22), with full assimilation. Even more rarely than the last mentioned assimilation, there sometimes also took place a lowering of vowels even when they were not similar in roundedness: [e] could (rarely) cause [ü] to become [ö] and [ö] could (rarely) cause [i] to become [e]. This is neither palatal nor labial harmony but an attraction in the domain of vowel height. In all of these processes it does not matter to which archphoneme a sound belongs; members of /X/ are by no means more prone to assimilation than members of other archphonemes, as maintained by various scholars from Gabain to Doerfer. /o/ and /ö/ did exist in non-first syllables of nominal and verbal stems with /o ö/ in the first syllable, as shown by spellings in alphabets which make the distinction between *o* and *u* and between *ö* and *ü* visible, namely the Tibetan script and the Tokharian and Khotanese varieties of Brāhmī (the latter in the Turkic-

¹⁵⁰ The same process is responsible for Yakut *ilii* ‘hand’ and *tirit-* ‘to sweat’ which is related to *tär* ‘sweat’.

¹⁵¹ See Erdal, 1994.

Khotanese hippological glossary below referred to as Hippol). These writing systems represent different traditions, and the texts our statement is based on were written down over several centuries in widely differing places and cultures. This assimilation is found in numerous lexemes and suffixes, often in free alternation with *u* and *ü*. We find *kolo* ‘moment’ (twice in Maue 1996), *könöl* ‘spirit’ (twice BuddhKat; in TT VIII and Maue 1996 14 times *könöl* vs. 9 times *könül*), *kövdön* ‘body’, *ordo* ‘army camp’, *oron* ‘place’ (TT VIII L & D and twice in Maue 1996 vs. *orun* in Maue 1996 nrs. 26 and 27), *orto* ‘middle’ (TT VIII L, Hippol, Maue 1996 Nr.24 but possibly (*o*)*rtu* in TT VIII I23),¹⁵² *osog* ‘manner’ (Maue 1996 Nr.52), *öjöč* ‘larynx’ (Hippol), *sögöt* ‘tree’ (TT VIII K10),¹⁵³ *toko* ‘belt buckle’ (Hippol), *tokoz* ‘nine’ (Buddh Kat, Maue 1996 Nr.51 against *tokuz* in TT VIII L), *töpö* ‘hill, top’ (twice in TT VIII K3),¹⁵⁴ *törö* ‘teaching’, *yogon* ‘thick’, *yogto* ‘mane’, *yorončga* ‘clover’, *odog* ‘awake’ (TT VIII E25 and 41), *ogol* ‘son’ (thrice in TT VIII D and O) *bodo-* ‘to paint, copy’ (Maue 1996 Nr.21), *olor-* ‘to sit’ (TT VIII B16 and C 12 and ÄtSü 4 v c), *odon-* ‘to wake up, be awake’ (4 times in TT VIII E), *topol-* ‘to pierce’.

If we were to propose taking these vowels to be members of archphonemes, we would have to state to which ones they belong: They may be instances of the lowering of /U/ or the rounding of /A/. Comparative evidence speaks for the latter in the case of Turkish *orta*, *toka*, *tepe*, *gövde*, *boşa-*, *boya-*, Chuvash *lar-* ‘to sit’ which correspond to Old Turkic *orto*, *toko*, *töpö*, *kövdön* and *olor-*, but for the former in the case of Turkish *ordu*, *gönül*, *sögüt*, *dokuz*, *yoğun*, *oğul*, which correspond to *ordo*, *könöl*, *sögöt*, *tokoz*, *yogon* and *ogol*; but then one would have to investigate the matter in a way taking other Turkish languages as well into consideration. Classical Mongolian *orda* and *töre* are no proof, as second syllable Old Turkic /U/ also has /A/ as Mongolic counterpart: cf. Old Turkic *altun* ‘gold’ and *küdägi* ‘son-in-law’ vs. Mongolic *altan* and *küregen*. Nor is Yakut evidence

¹⁵² The source of the unrounding in *otra* (e.g. DKPAMPb 13 or HTs III 334 and 339) may be the case form in *+rA*, among the instances of which ‘middle’ fits in very well semantically. *otira* with helping vowel (e.g. Abhi A 109a9) is a further development. Pure unrounding, as found in Turkish *säksän* ‘80’ and *toksan* ‘90’ < Qarakhanid *säksön*, *tokson* (< earlier *säkiz on*, *tokuz on*) does not seem to occur in Old Turkic but is typical for Mongolic (e.g. *altan* ‘gold’).

¹⁵³ The editor has a wrong interpretation, as guessed in the EDPT; correct reading in Maue 1983: 64, n.51.

¹⁵⁴ By the editor misread as ‘*töhö*’ and translated as ‘Hirse’; read correctly by Maue 1983: 59 n.40. The /i/ of *tögi* ‘crushed millet’ would not have been rounded.

significant, in view of, e.g., the Yakut causative suffix *-tAr-* corresponding to Old Turkic *-tUr-*.

The assimilation of [u] to [o] takes place also in suffixes; we have it in the following forms: the vowel converb *-U* appearing with *-o / -ö* in *tol-o*, *ör-ö*, *kötör-ö* and *ötr-ö* (thus 5 times in Maue 1996, TT VIII and BuddhKat vs. once *ötrü*); with *-gU*, the suffix of projection participles, in *öl-gö+s[in]tä* (Maue 1996 Nr.4); with the formative *-(U)t* in *yogr-ot* ‘yogurt’; finally, in the aorist suffix *-Ur* as *-or / -ör* in *olor-or*, *kod-or*, *odon-or*, *ökön-ör* (vs. *-ür* in the same environment in *közön-ür*) and the very common *b(o)lor* (41 times in Maue 1996 and TT VIII vs. 6 times *bolur* in the same sources and 4 times *bolur* in BuddhKat). With *bošo-* in *ǰgüläri bošomišig* [in Maue Nr.27,16, translated by the editor as “den, dessen [...] (pl.) befreit sind”, the matter is more complicated.¹⁵⁵

We find the assimilation to /o ö/ also within the archphoneme /X/ in *yör-ög* (Maue 1996 Nr.14 and 26) with the formative *-(X)g*, in *kötröl-* thrice in Maue 1996 with the passive formative *-Xl-*, in *kötör-öp* in Maue 1996 Nr.30 with the converb suffix *-(X)p*, in *nom+og* and *yörög+ög* in the accusative suffix in Maue 1996 Nr.28, in *osog+log* ‘like, in the manner of’, *tör+lög*, *nom+log* and *öz+lög* with the suffix *+lXg*, in *ögrönčlög* (TT VIII A6) with the suffix *-(X)nč* in *köñöl+öñöz+lärtin* (TT VIII E47) with a possessive suffix, etc. The last-mentioned instance shows that /A/ is not rounded. Sometimes assimilation does not take place even with /U/ and /X/, e.g. in *köl-ük* ‘vehicle’ and *törlüg* (both Maue 1996 Nr.51), *töz+üg* and *bol-zun* (both Maue 1996 Nr.33; the latter also 7 times in Maue Nr.79 and in TT VIII G vs. twice *pol-son* in TT VIII E) or in *taloy+nuñ*, *öñ+dün*, *bogunlug*¹⁵⁶ and *adrok+suz* (all four Maue 1996 Nr.21). The mss. Maue 1996 Nr.3 (*öl-ür-sär* and *ätöz+üg* vs. thrice *bol-or*), 29 (*örkün* ‘throne’, *yör-üg*, twice *olur-* ‘to sit’, twice *nom+ug*) and 44 (*törtünč*, *tözlüg*, twice *törü*,

¹⁵⁵ Old Turkic has a transitive denominal formative *+A-* and an intransitive *+U-*. As discussed in OTWF 477-8, Qarakhanid *bošu-* or *bošo-* is both tr. and intr., while only tr. *bošu-* or *bošo-* was hitherto documented in Uygur, until Maue proposed his translation. This would accord with our expectations, as it would be normal for *+U-* to be realised as [o], were it not that the context of this instance is so fragmentary and that no other intr. *bošu-* / *bošo-* seems to have turned up in Uygur. For /a/ to become /o/ seems unusual for Old Turkic as a whole, however, and for the *+A-* formation in particular, as we find unrounded *ota-*, *kora-*, *tona-*, *tölä-*, *öčä-*, *köñlä-* and *orna-*. So word formation will have to stay with its irregular tr. *+U-* as far as this verb is concerned, and can assume an intr. *+U-* beside it, which lowered its vowel in this Brāhmī passage.

¹⁵⁶ Wrongly spelled *togunlug*, which gives no sense. *bog-un* ‘articulation in a person’s limbs or in the trunk or stalk of a plant’ – discussed in OTWF 305 – is no doubt an *-Xn* derivate from *bog-* ‘to strangle’.

twice *nom+ug*) appear to have /u/ after /o/ rather consistently; 23/12 has *öηlüg*, *[ö]ηdüin*, *bölük* and *tözlüg* in one sentence vs. numerous instances of *o – o* elsewhere in the text.

In a few cases, the lowering of /U/ and /X/ takes place also when the preceding syllable has /e/.¹⁵⁷ It is noteworthy (and difficult to explain if not coincidental) that /a ä/ do not cause such lowering. As these environments are thus limited to the presence of low vowels in the preceding syllable, the presence of the phonemes /o ö/ in non-first syllables would not follow from these instances. Old Turkic non-first syllables thus had /o ö/ as phonemes (e.g. in *idok* ‘sacred’), and in addition [o] and [ö] as allophones when preceded by these same phonemes.¹⁵⁸

2.402. Vowel assimilation by consonants

In contiguity with /g r l/, what we would expect to be /i/ is quite often spelled with *alef* (e.g. *amal* ‘spiritual peace’, *tat-ag* ‘taste’, *bar-amlg* ‘well to do’, *yaran* ‘tomorrow’ or *+lag* for *+lXg*), reflecting a real lowering of the vowel in these surroundings. This is not to be confused with the general spelling of [i] with *alef* which we find quite often though irregularly in pre-classical texts. We know about this lowering primarily from evidence in Indic scripts, the texts which use these generally not being particularly early. In *BuddhKat*, e.g., we find /i/ realised as [a] (or at least psychologically assigned to the /a/ and not the /i/ phoneme) when adjacent to /g/ in *aba-g* (< *apī-g*), *ara-g* ‘clean’ (beside *ari-g*), *arag* ‘wood (small forest)’ < *arīg*, *at+lag* (beside *at+liḡ*) ‘rider’, *didim+lag* ‘wearing a diadem’,¹⁵⁹ *ayag* ‘bad’ < *ayīg*, *kač-ag* ‘point of contact with the physical world’ and *sarsag* ‘repulsive’.¹⁶⁰

¹⁵⁷ E.g. *etgö özi* (Maue 1996 Nr.50) < *et-gü özi*, *ençgölögkä* (TT VIII A36), *kertgönčlög* (TT VIII A 33) < *kertgünčlög* or *yertönčö* ‘world’ (TT VIII N4) < *yertünčü* < *yertünčü*.

¹⁵⁸ This was still doubted in Gabain 1974 § 23 and Zieme 1969: 43. As evidence against the presence of /o ö/ in non-first syllables, Zieme mentions the adverb *küntämäk* ‘daily’, analysing it as **kün+täm äk* with the particle *Ok*. I would rather analyse this word as **kün+tä (y)mä (ö)k* with two particles, and the vowel of *(O)k* elided; see section 3.342 for *mA* as variant of *ymä*. The derivational suffix *+dAm* forms nominals denoting similarity to the base noun, a meaning which does not suit this word. Cf. *inčäk* ‘thus’ < *in+čä (ö)k*.

¹⁵⁹ See the section 2.52 for the possibility that this be read with an [i] in the second syllable and for the harmony rules for suffixation in borrowings in general.

¹⁶⁰ I am only giving those instances where the reading as *a* is unequivocal; some further spellings might be considered as well.

Brāhmī writing has such variants especially in the ms. TT VIII I.¹⁶¹ Evidence for this phonetic phenomenon in Semitic scripts is by no means limited to Manichæan or pre-classical texts, as sometimes thought; in TT X, e.g., we have *tap-ag* ‘service’ and the accusatives *sav+ag* ‘word’, *burxan+ag* and *arxant+ag*, in KP *kar-am*, *as-ag* ‘benefit’ and *tat-aglig* ‘tasty’ (beside *u-ma-dam* ‘I was unable’, which has none of the lowering consonants). In the runiform ms. Blatt 14 we read *taš+ag alsar* ‘if one takes the stone (acc.)’.¹⁶² The phenomenon is documented even earlier than Orkhon Turkic: Among the Turkic terms appearing in Bactrian as edited in Sims Williams 2000 we have *tap-ag+lig* ‘revered’ in texts dated to the years 640, 679 and 682; the Greek writing used for Bactrian clearly distinguishes between α and ι. The spelling of the name + title *tapglg saḡun* in Mahrnāmag (= Müller, Doppelblatt) 56 is also better interpreted in this way.¹⁶³

Occasionally we find what looks like the opposite process, low vowels getting raised beside /r/ or /l/: *arīla-* < *ara+la-* ‘to intercede’, *aričī* < *ara+čī* ‘intercessor’, *övkilä-* < *övkä+lä-* ‘to be furious’, *bulitčūlayu* / *bulitčūlayu* ‘like a cloud’, *ančūlayu* and *munčūlayu*, *bizinčūläyü*, *siničūläyü* and *sizničiläyü* all < +čA+lAyU. This must be related to the fact that /r/ /l/ have the potential for syllabicity.¹⁶⁴ However, raising of middle vowels takes place also when +dA is repeatedly added to personal pronouns in *sin+di+dä* and *min+di+dä*. So this might be part of a more general process, which led to the general middle vowel raising of Modern Uygur. In RH08 and 11 (SammlUigKontr 2) *nä+čä* appears as *ničä*.

The labial consonants round vowels in some cases in Orkhon Turkic, more so in Uygur and even more often in Qarakhanid. *amül* ‘gentle(ness), (marked by) spiritual peace’, e.g., always appears as *amul* in the DLT and the QB and occasionally in Manichæan and Buddhist

¹⁶¹ It has the accusatives *aš+ag* ‘food’ (2 and 8) and *turmak+ag* ‘remanence’ (22), the deverbal formatives *ak-ag* ‘flow’ (7) and *aba-g* ‘protected’ (21), the +lXg derivatives *tuprak+lag* ‘having earth’ (18) and *yag+lag* ‘oily’ (19) and the adjective *agar* ‘heavy’ (12) < *agīr*. Also, however, the converb form *asn-ap* (17) ‘hanging (a neckace) on oneself’ which has no consonant causing such a shift and suggests the ms. must have been written by someone within the pre-classical spelling tradition.

¹⁶² And not *tašīg*, because the second vowel of the first word is implicit; it has to be [a] and not [ī] because all other [ī]s of this text are spelled out explicitly.

¹⁶³ HTs VII 2051 should, however, better be read as *azkya tapīglik tavar iddimüz* ‘We have sent a little present for reverence’; not ‘*tapīglik*’ and as read by the editor.

¹⁶⁴ Analogy from the common *munčūlayu* could be the reason for the rounding of the vowel also with unrounded bases.

sources.¹⁶⁵ The second syllable of *yagmur* ‘rain’, must be such an instance, as *almir* and other nouns show that they are derived with a suffix of the shape *-mXr* (OTWF § 3.326). The process happens to second-syllable [i, i] also in mss. written in the Sogdian script, e.g. in *avuč* < *avič*, the name of a hell, *amul* or *tap-ug* ‘service’; *tapug* as well as *tapugčī* and *tapugsak* appear in the DLT as well, and hundreds of times in the QB. Elsewhere we find this process sporadically, e.g. in *kamuš* ‘reed’ in the IrqB, in *säv-üg* as documented in OTWF 201-2¹⁶⁶ or in *tamdul-* ‘to get ignited’ < *tamit-il-* in Suv, BT XIII 39 and ETŞ. In *köpük* (IrqB XX and Heilk II 1,103) < *köpik* ‘froth’ and *köpür-* < *köpür-* ‘to froth’ (documented in OTWF 239-40) the rounding of the second syllable is caused more by the /p/ than by the first vowel. The rounding in the DLT’s *yaprul-* could either come from the /p/ or be a reflex of the syncopated /U/. The DLT’s *tap-uz-*, *tapuzgu* and *tapuzguk* ‘riddle’, *arvuš*, *čalpuš* and *kap-uš* in QB 6482 all get their /u/ from the labial consonant. The rounding in the last syllable of borrowed *karmaput* << Skt. *karmapatha* and *čaxšaput* < Manichæan Sogdian *cxš’pδ* took place within Old Turkic. Uygur *tämür* ‘iron’ appears as *tämür* in MaitH XXV 2v11 or BT XIII 4,31; *Tämür* is a common proper name in late documents and was the base of Chinggis Khan’s name *Temüjin*. The DLT also writes *tämür* and has *äm-üz-* ‘to breastfeed’ and *tamuz-* ‘to drip’ where Uygur has *ämiz-* and *tamiz-*. *tumlug* and *tumlüg* ‘cold’ are equally well attested from the earliest Uygur on but *tumli-g* must clearly be the source. The name of the mythical mountain Sumeru is generally spelled as SWMYR in Uygur, which we transcribe as *sumer*. The rounded variant SWMWR in BT VIII can be read either as *sumur* or *sumor*.

While rounding by labial consonants is thus a wide-spread phenomenon both in Turkic and borrowed stems and in derivational affixes, rounding in inflexional verbal suffixes including diathesis morphemes appears to be a dialect characteristic. We find *tilädümüz istädümüz* ‘we wanted and searched’ in HamTouHou 18,7, in a ms. written in Khotan; *+UmUz* and *-dUmUz* instead of normal *+(X)mXz* and *-dXmXz* is attested also in one ms. of the (Manichæan) Xw. In fragments written in Sogdian script, whose dialect is aberrant also in other respects, we have *tak+umuz* (251) instead of *takimüz* and, with the preterit form which has the same suffixes, *sī-dumuz* (256) and *bačama-dumuz* (258);

¹⁶⁵ *amal*, another Uygur variant, is caused by the process described above, whereby /i/ is lowered to /a/ through the contiguity of /l/.

¹⁶⁶ Sims-Williams 2000 reads the name of a Khaladj queen said to be a Turkic lady in a document from the year 711 as *Bilgä Säviüg*; the ms. has *bilgah savoh*; concerning the last syllable, note that the script does not distinguish between different rounded vowels.

kurtgardum (600) ‘I saved’ instead of what is usually *-dXm*, *tapuntilar* (2) with the reflexive suffix which otherwise has the shape *-(X)n-* and the converb form *ämgäniip* (240) which otherwise ends in *-(X)p*. Such rounding is characteristic also for early Anatolian Turkish (as is the *+nUŋ* genitive mentioned in section 3.124).

We get first syllable rounding in *bin-* (Orkhon Turkic) ‘to mount, to ride’ > *min-* (IrqB) > *mün-* (Qarakhanid and other Uygur sources) and, as a prehistorical process, in *büt-* ‘to be completed’ < **bit-* (still attested in Turkish) and *mU*, the question particle, < **ml*.¹⁶⁷ *müntada*, a variant of *mun+ta+da* as well as *mün+ča* and *mün+tün* (section 3.132) show that the demonstrative stem *bu+* might originally have had the shape *bī+* (unless these are two different stems). The first vowel of *bödi-* ‘to dance’ may have been rounded secondarily, to judge by Middle Turkic evidence mentioned in OTWF 184 and by some modern forms. The DLT has *mönjilä-* < *mänjilä-*. *bučgak* ‘segment’ (a.o. in *buluŋsuz bučgaksız*, TT VI 427) presumably comes from *bič-* ‘to cut’. *bulit* ‘cloud’ comes from **bilit*, as made likely by Yakut and Chuvash cognates; *bürgä* ‘flea’ is related to Ottoman *pire*. *murč* ‘pepper’ ultimately comes from Skt. *marica* ‘pepper’; it lost its coda vowel in Middle Indic, its first vowel was then raised to *i* by an Iranian intermediary and finally rounded in Uygur.

In the following examples vowel rounding takes place *before* the labial consonant: *sipir-* ‘to sweep’ (Manichæan) > *süpür-* (DLT etc.) can be compared to Mongolian *ši’ür-*, which shows rounding only in the second syllable. In *sivre* ‘pointed’ (Uygur and Qarakhanid), the rounding took place before our earliest texts; *sivri* is, however, attested in Western Oguz.¹⁶⁸ Cf. further the well-attested *tümä-* with derivatives < *timä-* ‘to prepare’, *čümgän* (BT III and DLT) < *čim+gän* ‘meadow’, *tomur-* ‘to bleed’ < **tam-ur-* and Uygur (also Manichæan) *yumšak* ‘soft’ < Orkhon Turkic *yimšak*. Evidence for the hypothesis that *suv* ‘water’ comes from **siv* is given in OTWF 177. Low vowels are affected in this way in *kövšäk* ‘pliant, limp’ (OTWF 236-7) < *kävšä-*, *kövrü* ‘weak’ in BT XIII 1,7 (convincingly shown to come from **käv-ür-*), *övgä* < *ev-* ‘to hurry’ in *ZiemeSklav I 4* and *tövšä-* < *tävšä-* in the DLT. The vowel of *čom-* ‘to submerge’ may also be secondary in view

¹⁶⁷ This is the only shape of the particle attested in Early Ottoman, whereas Old Turkic /U/ otherwise corresponds to /U/ in Early Ottoman as well. Vowel rounding due to labial consonants is much weaker in Western Oguz than elsewhere.

¹⁶⁸ Sims Williams 2000 proposed an Iranian etymology for this word, linking it to Avestan *suβrā-* and its cognates. This proposal seems to be compatible with the Turkic facts only if the rounding is secondary in the Iranian data as well.

of *čamgak* ‘a big cooking pot’ (BT XIII 5,77 and elsewhere). *töpö* ‘hill’ presumably comes from **täpä*, attested in the whole of Oguz Turkic since early Ottoman. The possibility cannot be wholly dismissed that *täpä*, *bit-*, *mI*, *sivri*, Azeri *birä* or Middle Turkic (Codex Comanicus and Muqaddimatu ʾl-Adab) *beyi-* ‘to dance’, none of which are attested in Old Turkic, could also be the result of an unrounding process; this could come from the fact that /ü ö/ do not exist in the Iranian languages with which the users of these variants were in contact. Such an explanation would not, however, cover instances such as *bulit*, *suv* and *kamuš*, and if /p v m/ caused rounding in back vowels there is no reason why they should not have rounded front vowels as well. There are enough front words, moreover, where the rounding takes place in the course of the development of Old Turkic (e.g. *čümgän*); the above list is by no means complete.¹⁶⁹

The verb ‘to be born’ has the shape *tog-* ten times in the (older) BuddhKat but the shape *tug-* more than a dozen times in the (later) texts in Brāhmī writing. I would take the former to be the older form and the latter to be due to the labial raising influence of /g/.

Palatal consonants can front the vowel following them: We have fronting after the consonant cluster [ñč] in *koñčilärkä* in a runiform ms. (Miran c 5) and in *inančläri* in Brāhmī script, in Maue 1996 Nr.29 B6 (spelled with *ñc*). In Uygur script such phenomena could be detected only if a velar consonant follows further on in the word. The /y/ was probably the reason for the fronting of the vowels in an Uygur variant of the adverb and conjunction *yana* to *yänä*, *yenä*, *ynä* ‘again; moreover’, which comes from Orkhon Turkic *yana*.¹⁷⁰ Among the Brāhmī instances, eight are spelled as *yenä*, *yinä* or *ynä*; the TT VIII instance spelled as *yñā* was by Clauson read with a back vowel, but the ñ may have been meant to indicate that the vowel was front.¹⁷¹ In Semitic writing systems, the question of whether the synharmonism of this word was back or front can be determined if it is followed by the particle *Ok*, as it sometimes is. In Uygur we find *yänä ök* e.g. in TT X 17 and 358 and DKPAMPb 275 but *yana ok* e.g. in BT XIII 4,29 or in

¹⁶⁹ It may happen, inversely, that rounded vowels change /ŋ/ to /m/: *kömlüdürük* ‘breast strap of a saddle’ presumably comes from *köñül*; Turkish has further examples for this phenomenon.

¹⁷⁰ Originally the vowel converb of *yan-* ‘to return’. Clauson (EDPT) ascribed the change to the influence of the particle *ymä*, which does indeed show *some* similarity to *yana* in both shape and meaning.

¹⁷¹ Cf. *sön-ök* spelled as *söñok* in TT VIII M 21.

l.36 of the Śāriputra text.¹⁷² In QB 643, 734, 3896, 3960, 4956, 5011, 6180 and 6343 the mss. fluctuate between *yana ok* and *yänä ök* with some preponderance of the former in the older mss. B and C; in 3889 Arat writes *yana ok* against all three of them. The occurrences in DLT fols. 455 and 519 can be read either as *yana* or *yänä* in spite of the coda *alif*. The Middle Turkic and modern Turkic languages as listed in EDPT show both variants.

The change of *ayin-* ‘to fear’ to *äyin-* documented in OTWF 591 may be due either to the presence of the sound sequence /yï/ or to the existence of *äymän-*, a verb with a meaning similar to *ayin-* but hardly related to it etymologically; or it may have been caused both by the phonetic context and by the analogy. Where no *i* > *i* change is involved, back/front fluctuation is not unheard of in Old Turkic, but is certainly rare. One example is *tiši sadrak* ‘gappy toothed’ in SP 21, whereas ‘gappy’ normally is *sädräk*. This is not a scribe’s error, as we also have *iröksüz sadraksüz tiš* in MaitGeng 5 b 13 and the same phrase with *sädräksüz* in 11 b 18 of that same text section.¹⁷³

In borrowings, the presence of /k/ tends to front surrounding vowels. This phenomenon (dealt with in Erdal 2002: 8-13) is relevant not only for comparing shapes which the lexemes have in the different languages but also for their shape within Uygur, as such words tend to fluctuate between front and back variants and sometimes to show a harmony discrepancy between the different syllables of the stem and between stems and suffixes. Such a case is the term probably pronounced as *šlok* or *šlök* (or *šulok*, *šülök* etc.), which signifies ‘stanza, verse’. Other such cases are *užik* / *üžik* / *užik* ‘letter, character’ and *čadik* / *čadik* ‘story about a previous life of Buddha’ with coda /k/, *kümut* / *kumut* ‘lotus’ with onset /k/, *šaki* / *šakī* ‘name of an Indian family’ with medial /k/. That front spelling of /k/ does not necessarily determine the harmony class is proven by n¹g¹ws¹k²l¹r¹ *nagošaklar* ‘lay believers’ in the runiform ms. TM 332 (KöktüTurf p.1047), which has front k² but back-harmony letters for the plural suffix. When the last stem syllable was front, harmony fluctuation in suffixes was still possible, as some scribes might treat the stem as foreign by consistently giving it back-harmony suffixation while some might adapt harmony to the stem.

¹⁷² Edited by P. Zieme in the volume *Bahşı Ögdisi* (eds. J.P. Laut & M. Ölmez, 1998).

¹⁷³ *op-* ‘to gulp down’ and *öp-* ‘to kiss, to sip a liquid’ also look like variants and may even have been confused by speakers, but their similarity must be due to sound symbolism.

2.403. Syncopation and stress

Medial vowels of stems outside the first syllable are often syncopated; here are a few among the innumerable examples: *agz+aŋiz+da* < *agiz+* (Wettkampf 8 and 21), *älg+in* (accusative, 3rd pers. possessive) < *älig* ‘hand’ (Wettkampf 87), *ogul+um* > *ogl+um*, *bogz+i*, *agz+i* and *köŋl+i* (TT VIII I 1, 2 and 4 respectively), *orn+inta* (TT X 335), *adır-* > *adr-ül-* and *adr-üp* (M III nr.33, 45,2₄), *tamit-ül-* > *tamdul-*, *äšidil-* and *äšid-ür-* > *eštil-*, *eštür-*, *kat-ül-iš-* > *katliš-*, **igid-iš* > *igdiš* or **ävir-iš* > *ävriš*. *kikira alkira* < *alakir-a* (MaitH XXV 2v12) ‘shouting’ is an instance of /a/, a low vowel, getting syncopated. Outside the second syllable we have e.g. *yöläšr-üg* < *yöläšür-*. As shown by the petrified converb *yagru* (not *yaguru*, which would, in Orkhon Turkic spelling, have to be spelled with explicit vowel in the second syllable) < **yagu-r-u* of Orkhon Turkic, the coda vowel of stems could also get dropped if it got into medial position; the Orkhon inscriptions also have *yetrü* < **yet-ür-ü*. This should mean that the first and the last syllable of a word had some prominence over the others, or that medial vowels were not stressed. The unsyncopated forms often exist beside the syncopated ones, but this does not necessarily mean that usage fluctuated: It could also be that full forms persist for the consistent spelling of lexical and morphological units without consideration of the actual phonetic realization. The deletion of suffix-onset vowels not only after vowels but also after /r l/ is discussed in the next section. We just mentioned *yöläšr-üg* < *yöläšür-*; derivational suffixes are syncopated also in *tuytrum* < *tuy-tur-*, *basrok* < *bas-ur-ok*, *äštrügli* (BT V 11,204) and *eštrüš-* (TT II,1 56) < *äšid-Ur-* and *iš küdg+üŋ* (TT I 119) < *iš küdüg* ‘business’. *tark-* (Buddhist MaitH XV 10v22, Manichæan BT V 494) < *tar-ik-*, *kork-* < *kor-i-k-* and *balk-* < *balik-* are all formed with the formative *-(X)k-*. Compound voice suffixes such as *-tXz-*, *-lXn-*, *-tXl-* or *+gAr-* came about through syncopation of the vowel of their first elements, *-(X)t-*, *-(X)l-* and *+(X)k-*.

-tUr-U° becomes *-trU°* in *bertrürlär* < *ber-tür-ür-lär* (TT VI, main ms. against the edition) and *kayintrup* < *kayin-tur-* (TT VIII M 30, Brāhmī) and in fact already in Orkhon Turkic in the petrified converb *yantru* < *yan-tur-u* (KT N11). These are evidence for the tendency of the phoneme sequence /turu/ to get pronounced as [tru]. *äštrügli*, *eštrüš-* and *tuytrum*, which we just quoted, also show /tr/ starting a syllable. In an identical process, the suffix *+dUrXk* gets pronounced as *+drUk* or *+trUk* in *sakaldruk* ‘throat strap on a headstall’ and *kö müldrüx* ‘breast strap’ in Khot 21 and *boyontrok* in TT VIII A. I do not recall having seen any clusters of three consonants beside instances of °*Ctr*° just

quoted; in all other cases syncopation takes place only when clusters of two consonants result from them.

The fact that syncopation is outright rare in inflectional suffixes does not necessarily mean that all inflectional suffixes must have been stressed; This could merely reflect the greater need for active morphemes to stay visibly recognizable in writing and audibly so in pronunciation than for what was or had become a syllable in a lexeme. Syncopation does take place under lexicalisation, as happened with *tolp* ‘completely’, which comes from the converb form *tol-up* (in M III nr.4 r11 still attested in this shape although already lexicalised). One would, on the other hand, assume that Old Turkic stress was not much different from that of modern languages: default stress on the word’s last syllable, first syllable stress with the expressive adjective reduplication and with the pronominal stem *ka+*, pre-stressed verbal negation suffix *-mA-* and so forth. Adverbs could also have had first syllable stress; under this heading, the instrumental and equative suffixes, which were mainly in adverbial use, could have been unstressed. In BuddhKat 5 we find that the instrumental form of (*kü*) *kälig* ‘magical appearance by metamorphosis’ syncopates the second vowel to give *kälgin*; this could mean that instrumental forms stressed the first syllable (cf. Turkish *ân+sızın* ‘suddenly’).

The *+lA-* derivate from *ogrī* is generally spelled as *ogurla-* in Uyğur; in BuddhKat 11, which is written in Tibetan script, it is spelled as *ogrla-*, however, and Kāšgārī (fols. 152 and 159) states that the “common people” use this pronunciation (which he doesn’t approve of). It appears that the coda vowel of the base was first syncopated, and that the cluster was then broken apart under the influence of rounding. As a rule, however, rounding assimilation appears as descriptively preceding syncopation: The rounded second vowel of *akruš* (documented in the UW entry), e.g., comes from the dropped second vowel of **akur-*, the base of *ak(u)ru* etc.; *šišrun-* in BT XIII 12 comes from *šiš-ur-un-*, with the syncopated syllable contributing the rounding. The DLT’s *savr-uk-* has its rounded vowel from the second, syncopated syllable of *savur-*. This practice changed in some cases: **ögir-inč* > *ögr-inč* only in M II 10,7, taken to be an early text for independent reasons; all other texts have *ögrünč*. In *ötlüm*, shown to come from *ötäl-* in OTWF 293, syncopation must also have preceded the rounding effect. *ör-it-* ‘to arouse’ sometimes appears as *ört-*; when it does, we find *örtdüüm* in U II 85,26 and *örtüüp* in ETŞ 10,33 but the plural imperative *örtiñ* in BT III 1105 (all three texts are late).

Coda /X/ appears to have gotten dropped prehistorically (as stated several times by Gerhard Doerfer), also with a number of verb stems.¹⁷⁴ There are, e.g., no suffixes ending with /X/ though there are many suffixes ending with /A/, /I/ or /U/. The noun *bod* ‘tribe’ may have dropped a coda /U/, if *bodun* ‘people’ is formed with the collective suffix *+(A)n*. The vowel could have been retained in the Mongolian cognate *boda*, Mongolian /A/ corresponding to Turkic /U/ (whereas Mongolian /U/ corresponds to Turkic /X/).

2.404. Consonant distribution

Old Turkic had no limitation at all on phonemes which could appear at the end of syllables and words (as against Mandarin Chinese, e.g., which allows only vowels, *n*, *r* and *ŋ*). Nor is there any indication that consonants were devoiced in coda position, the only exception being *-mAs*, the Qarakhanid variant of *-mAz*. We also have *yanmas yer* ‘the place of no return’ in M III nr.16 v 3.¹⁷⁵ *-mAs* may therefore have been a dialect variant of the negative aorist suffix.

The only voiced consonant phonemes regularly appearing in the word onset in genuine Turkic words are /b/ and /y/. In addition, there are two or three words starting with nasals: /n/ in *nä* ‘what’ together with its numerous case forms which sometimes deserve their own dictionary entries, and in *näŋ* ,thing; (not) at all‘ (possibly also coming from *nä*); /m/ in *mU* (the clitic particle for yes/no questions). Furthermore, *b* consistently becomes *m* in post-inscriptional Old Turkic (including runiform mss., where we find *mončuk* ‘bead’) when the following consonant is a nasal, e.g. in *biŋ* > *miŋ* ‘thousand’. The process leading to this sound change is just at its beginning in the language of the runiform inscriptions, where *bän* ‘I’ > *män* when placed after verb forms. In this position one could argue, however, that the pronoun was on its way to becoming a suffix or at least a clitic; that *b* / *m* was not, in other

¹⁷⁴ *bar-* ‘to go’ (because its preterite form is spelled with D and not T in the inscriptions and because of its aorist vowel), *kör-* ‘to see’ (aorist vowel /ü/ and because of the /r/ in spite of the relationship with *köz* ‘eye’), *kil-* ‘to do’ (because of *kili-k* ‘character, behaviour’ instead of the expected ‘*kil-ok*’ and the aorist *kilir* in the early M I 8,9, normally replaced by *kilur*), *siŋ-* ‘to get imbibed etc.’ (because of the causative *siŋir-* ‘to swallow, digest’ instead of the expected ‘*siŋ-ür-*’), *yay-* ‘to shake, upset, put into disarray’ (because of an attested variant *yayi-* and a derivate *yayi-k*) and *ay-* ‘to say’ (because of the aorist form *ayur* < **ayü-yur*). *küy-* ‘to hew, fell’ and **sezi-* ‘to have a suspicion or hunch’ also become *küy-* and *sez-* starting with Qarakhanid, and note *küy-k* ‘something cut obliquely’ and *sezi-k* ‘doubt’ with the suffix *-(O)k*.

¹⁷⁵ This is not an instance of voice confusion, as this is an archaic text lacking this phenomenon; nor does Qarakhanid have voice confusion.

words, in truly onset position.¹⁷⁶ Although #m° < #b° is attested only in Uygur, the process clearly took place when /ñ/ had not yet become /y/: Otherwise words with /ñ/ in the second syllable, such as *meyi* ‘brain’ < **bäñi*, would not have been involved (see the end of section 2.33).

Since there was no phonemic voice opposition in the onset, the actual pronunciation of onset stops may actually have varied freely; i.e. onset /t/ may, on occasion have been pronounced quite softly or onset /b/ may have lost its voice, making them sound more like /d/ and /p/ respectively.¹⁷⁷ When we find that Castren in the middle of the 19th century noted a number of Karagass (= Tofa) words with /d/ in the onset¹⁷⁸ which all have onset /d/ in Turkmen as well, we can well conclude that Proto-Turkic too allowed these sound to appear in these words. They could *possibly* have had a voiced (or *lenis* etc.) onset also in some variants of Old Turkic, e.g. in Orkhon Turkic. Copies from foreign sources such as *darni* ‘dhāraṇī’, *dyan* ‘meditation’ or *dentar* ‘elect’ were spelled with onset D, presumably pronounced as [d]. The spelling *tarni* which we find in AlttüSogd 251 no doubt reflects this same pronunciation, the T here aiming to exclude the pronunciation [ð].

The only voiceless consonant phonemes which did not appear in onset position in Turkic words are /p/ and /š/. This is the situation in runiform sources and in the Uygur-Khotanese word list (where Khotanese terms do appear with onset *p*). Nothing can actually be said concerning onset /p/ in texts in Uygur and Sogdian writing, as *b* and *p* are there expressed by the same letter. In sources in Manichæan writing the onset /p/ of borrowed elements is retained: Zieme 1969: 59 has them listed.¹⁷⁹ A fluctuation *bušī* (4 times in M III Nrs. 11 and 12) vs. *pušī* (5 times in Xw) for Chinese *pu shi* ‘alms’ may either be a sign of adaptation to the Uygur distribution of labials (seeing that this was a term in common use among all Uygur societies) or reflect uncertainty concerning the pronunciation of Chinese /p/ (now spelled as *b* in pinyin and distinct

¹⁷⁶ Another possibility is that onset *#m° prehistorically became #b° except where it was protected by a following nasal. It is, at present, difficult to choose between these logically equivalent possibilities.

¹⁷⁷ *de-* ‘to say’ is widespread even among Turkic languages which otherwise do not have onset /d/, including Old Turkic texts not showing voice confusion (e.g. twice in the fragments in Sogdian script); the reason may have been clitic-like distribution, this verb being exclusively used after quoted strings.

¹⁷⁸ *dag* ‘mountain’, *dara-* ‘to comb’, *dayak* ‘staff’, *demer* ‘iron’, *der* ‘sweat’, *dəl* ‘tongue’, *dirig* ‘alive’, *dīr* ‘he says’, *dīš* ‘tooth’, *dolo* ‘full’, *döiš* ‘breast’, *dūn* ‘yesterday’ or *dūp* ‘ground’.

¹⁷⁹ *baškok* (no doubt to be interpreted as *bašgok*; the text has numerous confusions among velars) has nothing to do with *pašik* ‘hymn’, as stated there; see OTWF 158-9.

from *p*, the latter spelled as *p*‘ in the Wade-Giles system). It is worth mentioning that sources in Manichæan writing show a small number of onset *ps* also in original Turkic words: The Pothi Book (which is relatively late as Manichæan texts go) has the greatest number, with *pat-il-* ‘to get submerged’, *pišr-un-* ‘to assimilate’, *pük-ün-* ‘to recognize’, *püt-ür-* (thrice) ‘to finish’, *pag* ‘bond’ and *pakir* ‘copper’. We also have *par-* ‘to go’ in Xw, *p(ä)k* ‘strong(ly)’ in M III Nr.5 r 8, *pärkä* ‘whip’ and the problematic *perkäsä-* in M II 13₉. No lexically significant opposition *b* : *p* becomes apparent here; these rather seem to be accidental fluctuations. Sources in Tibetan writing excerpted in Clauson, 1962: 98 spell the words *bars* (which could be a borrowing), *baglig* and *bašlagini* with *p*, but in (the early) BuddhKat there is no onset *p* in Turkic words (though there are numerous instances of *paramid* < *pāramitā* ‘excellence’ and *burxan* spelled with *p*). In Brāhmī sources there is a clear preference for *p* in the word onset.¹⁸⁰ Borrowings are generally spelled in the way which is the correct one from the point of view of the source language; there are hardly any exceptions, even with such a much used term as *bodisatv* / *bodisavt* / *bodisavīt*.¹⁸¹ The prevalence of *p* in the onset of Turkic words in later texts as against its great rarity in early texts might be due to the influence of the Uygur script on the spelling: The Uygur letter transcribed as *b* is in fact a Semitic *pē*. That any phonetic significance should be ascribed to this spelling is not very likely; runiform writing exclusively uses *b* in this position.¹⁸² The absence of Proto-Turkic onset **p/* has been accounted for by the hypothesis that it changed to **h-* (which was then also dropped from most of the Turkic languages but

¹⁸⁰ *ba-*, *bag*, *balik*, *bark*, *basa*, *basutči*, *bat-*, *bäg*, *bäkiz*, *bäliñlä-*, *bä(r)k*, *bäzä-*, *bečin*, *bel*, *bī*, *biti-*, *biz*, *bodol-*, *boyun*, *bödigči*, *bört-*, *böz*, *bugday*, *buka*, *bulit*, *buk*, *burčak*, *burki*, *burnač*, *busan-*, *buš-*, *buyruk*, *buz*, *buz-*, *buzagu*, *bürünčük* and their derivatives are consistently spelled with *p*, while *bar*, *bar-*, *baš*, *bälgü*, *bäri*, *ber-*, *beš*, *biš-*, *bil-*, *bir*, *bo*, *bol-*, *bošgut*, *böl-*, *budik*, *bul-*, *bulgan-*, *buluñ*, *burxan* (in one instance merely *bur*, which is the form of the term *buddha* as borrowed or reborrowed from Chinese; *xan* is a Turkic addition) *büt-* and their derivatives fluctuate between *b* or *bh* and *p*. Only *buz* (‘passion’) is spelled exclusively with *b*, while *bars*, *bayagut*, *baz*, *bägni*, *bogz+i*, *bor*, *bošo-*, *boyn+i*, *bukač* and *bukagu* are spelled with *bh*, there being only one example of each (two of *bayagut*).

¹⁸¹ I think editors should spell borrowed words with onset *p* and not *b* if they have *p* in the source language, as e.g. *pañir* ‘bowl’, which I have not found in any text in an Indic script; it comes from Skt. *pātra* and lacks the final vowel also in the Khotanese word spelled as *pāttarā*.

¹⁸² The fact that Qarakhanid sources also always have *bā* does not, of course, mean anything, as the original Arabic writing system (used by Qarakhanid authors) did not have any *p* (and did not need any, as Arabic does not have this sound).

not, e.g., Khaladj). This idea, propounded by Poppe, Doerfer and perhaps others, is based on evidence from other Altaic languages (in particular the correspondence with Tunguz *f*). At any rate it explains why **h* is found only at the beginning of words.¹⁸³ One voiced consonant phone which *is* used in the word onset is [b]; for the sake of rule simplicity, one could consider assigning this to the phoneme /p/ as far as Old Turkic is concerned: It is spelled with *p* in the Uygur – though not in the Manichæan and runiform – scripts and sometimes also in Brāhmī. /β/ does not appear as [b] even after /r l n/, so that there would be no overlapping of allophones. Each row in the table of consonants would, in onset position, be represented by the column most to the left, then, if occupied at all. Through the influx of foreign words, there also emerged a stop : fricative opposition in the onset, when words such as *vačir* ‘diamond’, *vinay* ‘the rules of discipline’ or *višay* ‘the scope or reach of the sense organs’ were introduced.

The original absence of /š/ in onset position can be explained through the hypothesis that it comes either from a Proto-Turkic palatal lateral (**lʃ*) or from the cluster **lč*;¹⁸⁴ /l/ did not appear in the word onset either. Regressive assimilation is a secondary source for š°: Words such as *säš-* ‘to disentangle’, *sış* ‘skewer’ and *saš-* ‘to be perplexed, confused’ sometimes alter their /s/ to /š/ under influence of the second sibilant; we have *šaš-ok*, *šašurmadin* and *šašutsuz* attested. The sibilants of *šašmaksiz* (BT XIII 12,38) and *šašimsiz* (ETŞ 11,146) on the one hand and *sašimsiz* (BT XIII 60,1 and ETŞ 9,31) on the other are all supported by rote-rhyme (which has quite strict rules), showing that the speaker could freely choose between the variant with /s/ and the one with /š/ under poetic license. The appearance of *šišrun-* < *sışrun-* discussed in OTWF 614 is also related to rote-rhyme. *šičgan* in Maue 1996 Nr.3,36 (Brāhmī script; meaning supported by a Tibetan parallel) < *sičgan* ‘mouse’ is a similar case of assimilation. Regressive assimilation of /s/ to /š/ is not limited to onset position, as shown by *küšüş* < *küsüş* ‘wish’ in TT IX 116 (in Manichæan script, where the two letters have a quite different shape).

¹⁸³ This distribution does not really need an explanation, seeing that it is relatively common among the world’s languages. Practically all of the instances of Tunguz *f* adduced for such comparisons appear before a labial vowel, so that /h/ may actually have been the original sound and its labialisation in Tunguz secondary.

¹⁸⁴ Cf. Volga Bulgarian *balč* for Common Turkic *baš* ‘head’ (Erdal 1993: 107-9 and 122 and T.Tekin 1997), Mongolian *eljigen* for Common Turkic *äšgäk* ‘donkey’ (Khaladj *äšgä*) and so forth. Classical Mongolian [š] is an allophone of /s/; it had no phoneme /š/ and all Mongolic cognates of Turkic /š/ involve an /l/.

There seems to have been no problem to introduce onset /š/ with borrowings, in view of the appearance of the title *šad* already in the runiform inscriptions and the widespread use of *šimnu* / *šamnu* to refer to the ‚devil‘ (also among Buddhists; there = *māra*). Cf. also the term *šik* for a measure of capacity, borrowed from Chinese. Note, though, that *šad* appears as *čad* in Taryat N4 (twice) and Tes W6, two runiform inscriptions of the Uygur steppe empire. *šato* ‚ladder‘ is also a borrowing and was, in any case, adapted to Turkic in the form of *č(a)to* in an early text (M I Nr.1 III v 8); the Turkic-Khotanese hippological glossary has it with this meaning and *o* in the second syllable. If we do find *šato* itself well attested in classical and later texts (including Qarakhanid), the reason may be that the Turks subsequently got used to having *š* in onset position. The replacement of an onset foreign sibilant by /č/ appears to have been an areal phenomenon: *čixšaput* / *čaxšapat* (etc.) ‚commandment‘ is not a direct loan from Skt. *śikṣāpada* but comes over Sogdian *čγš’pδ*. The history of *ši*: ‚moist(ure)‘ (found e.g. in BuddhKat 4) may have been a bit more complicated.¹⁸⁵

Onset *č* and *š* can alternate also in onomatopoeics: *čogurt* (ETS 8,13) alternates with *šogirt* (BT III 233-4, read as *sogirt* by the editor), *čagila-* appears as *jagila-* and *šagila-* in the DLT. The opposite process takes place after consonants: The DLT replaces *š* by *č* when they get into syllable onset position after consonants, in *kik-š-ür-* > *kikčür-*, *yap-š-ur-* > *yapčur-* and *tap-š-ur-* > *tapčur-*; *kökšin* ‚greenish, bluish‘ becomes *kökčün* in the QB (six examples). The DLT’s *kirča-* ‚to scrape‘ (with *kirčal-* ‚to get wounded‘) comes from **kir-iš+a-* (cf. Uygur *kiršal-*). After /t/ this happens even in Uygur: *tutši* ‚continuous‘, syncopated from **tut-uš-i*, often becomes *tutči* (examples in OTWF 343), in the QB even spelled as *tuči* when demanded by the metre. Cf. also *katčigsizün* ‚without any admixture‘ (Bhadrācāryā ap. Stabreimtexte 145), from *kat-iš-* ‚to mix‘, again with the vowel of the formative syncopated.

mür ‚honey‘, *men* ‚flour‘, *maṇal* ‚luck etc.‘, *mahabut* ‚element‘, *madar* ‚monster‘ and *murut* ‚pear‘ are examples for loan words starting with /m/; in Turkic words in Uygur texts, onset /m/ appears also when the following consonant is a nasal (e.g. *māñiz* ‚complexion‘) or when it was a nasal prehistorically (e.g. *meyi* ‚brain‘ < **bāñi*). *nom* ‚ethics; treatise, text‘, *nirvan* ‚nirvāṇa‘, *noš* ‚elixir‘, *nipur* ‚foot jewellery‘ or *nizvanī* =

¹⁸⁵ The modern Chinese word of this shape and meaning originally had a final consonant which should have been borrowed into Old Turkic; what we have appears to have resulted from contamination between that word and Turkic *či*: ‚dew‘ etc., attested (together with verbal derivatives) in the DLT and in many modern languages.

Skt. *kleśa* show onset /n/. *nayrag* ‘characteristic mark of Buddha’ may be an early loan from Mongolic, which also has a related verb *naira-*; this noun is attested already in the Mait. *inaru* ‘forward, onward’ lost its onset vowel in Qarakhanid, appearing as *naru* both in the DLT and the QB; by that time, onset /n/ appears to have become acceptable for common pronunciation. At least some variants of Old Turkic may have had (free or conditioned) alternation between the pronunciations of // and /n/ in onset position, seeing that they are considered equivalent for the rote rhyme in stanza 18 of the alphabetical verse starting in ETŞ p. 106. The BuddhKat text in Tibetan script writes thrice *lom* for *nom* ‘teaching’; the editor’s note thereto mentions that the old name of *Lop* in *Lop noor* in Xinjiang was *Nop*. Old Turkic *lačīn* ‘falcon’ appears in Mongolian as *načīn*; the latter may be the source of the word, since onset /n/ was normal for originally Mongolic stems. *lom* and *lačīn* could both have resulted from nasal dissimilation, as found in (Mongolic) *Dagur*, which also has *lom* (and also e.g. in Spanish *alma* < Latin *anima*). *Lop* cannot be explained in this way, however, nor can Mongol *naγaču* > *laggač* ‘male relative on mother’s side’ on l.96 of a recently published text.¹⁸⁶ The common Turkic plural suffix +*lAr* is no doubt related to its Mongol synonym +*nAr*; it also shows // where the latter has /n/.

A word starting with // and retaining it in onset position is attested already in Orkhon Turkic: In BQ S10 we find *lagzīn* ‘pork’. *lu* ‘dragon’, *lenxwa* ‘lotus’, *lim* ‘pillar, beam’, *labay* ‘a shell; a pumpkin; a musical instrument’ *lurzī* ‘stick, club’ or *lačīn* ‘falcon’ are terms found in Uygur not linked to any religious system; the terms starting with // borrowed in religious contexts are, of course, much more numerous. *la+la-* ‘to slash, cut in stripes’ is derived from a Chinese term using the formative +*lA-*.

/r/ is hardly ever attested in onset position; one example is *ražav(i)rt* ‘lapis lazuli’, which comes from Sanskrit *rājāvarta*.

The main strategy for getting rid of unusual onset consonants of borrowings was to put a vowel before them, usually the same as the one following them. Thus commonly with borrowings with /r/ in the onset, e.g. in *aram ay*, the name of the first month in the Indian year, << Skt. *rāma*, *orohit(a)k* << Skt. *rohita(ka)*, the name of a devout fish (U IV D 119 and a fragment in the note thereto), *ärdini* ‘jewel’ << Skt. *ratna* (still attested as *rtni* / *rdni* / *rddni* 12 times in Manichæan texts),

¹⁸⁶ A.v.Gabain, ‘Ein uigurischer Maitreya-Text aus der Sammlung Tachibana (aus dem Nachlaß herausgegeben von Peter Zieme)’. Berlin-Brandenburgische Akademie der Wissenschaften. *Berichte und Abhandlungen* 9(2002): 225-246.

orohini, the name of a constellation, << *rohiṇī*, *arsayin* and *arsiyān* (BT III 74 etc.) as variant of *rasayan* << *rasāyana*, or *arži* ,a holy man' << Skt. *ṛṣi*. See the UW for the shape of this latter (spelled with onset R at least in two instances in Uygur Brāhmī and not given an onset *alef* in Sogdian). Cf. *araxu* 'the planet Rāhu' in BT III 162, *urum* 'Byzantium, i.e. Eastern Rome' in BT III 1036 and elsewhere. Note, though, that, which shows that, at least in the dialect of the Uygur steppe empire the same happened with onset /l/: *lu* 'dragon' appears as *ulu* in Tariat W 2. The common binome *öl šī* 'moisture, wetness' appears as *öl išī* (or perhaps with secondary fronting as *öl iši*) in U 2381 r10 edited by Peter Zieme in *AOH* 55(2002): 281-295.¹⁸⁷ Foreign words with an onset /z/ or /ž/ also receive a vowel before that: *z(ä)rwa* is still attested in a ms. in Sogdian script but appears as *äzrwa* everywhere else; the astrological term *žim* is attested in TT VIII as *äžim*.

Another way to get rid of unusual onset consonants was to drop them, as with /r/ in *akšazlar* 'the *rākṣasas*' (DhāSū 15), *awrap* << Skt. *raurava* (Mait 83r22 and 23) and *ačagarh* 'Rājagrha' in ETŞ 19,4; the pronunciation of the latter is secured by its alliterating with several words all starting with /a/. /r/ could get dropped in the same way: Two examples of *ala-* < *la+la-* 'to slash' (see above) are mentioned in OTWF 441.

2.405. Consonant clusters and their resolution

Old Turkic originally had no consonant clusters at the beginnings of words, affixes or even syllables. In Uygur we find onset consonant clusters in borrowed words such as *frišti* ,angel', *pra* ,canopy', *kšan* ,a moment', *trižul* 'trident', *dyan* 'meditation', *tsun* 'inch', *psak* 'wreath, garland', *stup* 'Buddhist sanctuary' or *tsuy* 'sin'. Clusters in the onset of syllables, as in the second syllable of *lenxwa* 'lotus', are against the rules of native Turkic but are never spelled in any other way.¹⁸⁸ We may not be sure exactly how these were actually pronounced, as their spelling must have been traditional; it usually followed that of the giver language, but this statement makes no sense when one thinks of Chinese, the source of *lenxwa*. Note, on the other hand, spellings such as *piret* 'preta, a demon' e.g. in MaitH XV 4r5 or 5r18, *kišan* in DKPAMPb 1053 or *girant* (Abhi A 3095), ultimately from Sanskrit

¹⁸⁷ The binome (and not just *iši* / *iši* by itself, as translated by the editor) here appears to be a euphemism for 'urine'. To connect this *iši* to Turkish *işe-* 'to urinate' does not imply disconnecting it from *šī*; I take the Turkish verb to be secondary.

¹⁸⁸ The second part of the Mongol (Secret History) female proper name *Alan Goo* no doubt represents the same source.

grantha ‘a treatise, section’.¹⁸⁹ For *šlok* ‘verse’ we have variants like *šulok* and *šülök* (first vowel possibly to be pronounced as [ö]), which are assimilated to Turkic pronunciation. Clusters in the syllable onset of foreign words are often broken apart by high vowels, especially in late texts; e.g. *may tri* → *may ti ri*. We even find such phenomena in Turkic words, e.g. *titirä-* for *titrä-* ‘to tremble’ (Candrasūtra IIe5); dividing that into the syllables *tit* and *rä* would place /t/ into syllable onset, which is, in Old Turkic, also avoided where possible. Occasionally there is a low vowel, as in *taržul* ‘trident’ (Scripture of the ten kings, the 2nd court).

dyan ‘meditation’ is, however, spelled as a monosyllable 14 times in Brāhmī texts, presumably reflecting the real pronunciation of the scribes. We should also remember that *dyan* has survived unchanged to this day (in Altay Turkic).

Chinese onset [ts] (and perhaps [dz]) are often simplified to [s] (and [z]), e.g. in the forms *suy* ‘sin’ and *saŋ* ‘barn’ which appear beside the more common *tsuy* and *tsaŋ*. *tsuy* ‘sin’ became *suy* in Xw 218, 219 and 221, an early text, showing a different strategy. See Shōgaito 1986 (1987): 128 ff. and the note to HTs VIII 389 for further examples.

Another process was for the cluster to get preceded by a vowel, as in *astup* ‘stūpa’ (Suv 627,20) or *ästiramati* ~ *isdiramati* (frequently in Abhi) < Skt. *sthiramati*.

In words of Turkic origin onset clusters came up secondarily: In section 2.403 we discussed the cluster *tr*^o, which comes either from a syncopation of the sequence /turu/ or from the introduction of an intrusive /t/ to break up clusters like /r/. The diminutive suffix *+kIyA*, < *+kIñA* (still appearing as *+kinyä* in an early Uygur text, M I 23,32) is practically always spelled as *+kyA* in Uygur, with an onset cluster. This includes some but not all Brāhmī instances; *azkiya* is spelled in three syllables in Maue 1996 4,75 and 95, *oglankiya* in four syllables in Maue 21 Nr. 109. Moreover, as pointed out in UW 155b under *antaki(y)a ok*, a bisyllabic pronunciation of the suffix is called for also

¹⁸⁹ Auxiliary vowels as in *anantiriš* ‘one of a set of grave sins’, *ardir* ‘a moon station’, *šastir* ‘doctrinal text’, *patir* ‘leaf’, *vačir* ‘thunderbolt; diamond’ or *apiramanī* ‘quality which a bodhisattva has incommensurately’ should in principle be transcribed to accord with vowel harmony, since they get introduced in Turkic and not in the source language; some of them alternate with *alef* more than they would do if they had a front pronunciation. Cf. Erdal 2002: 19-20.

in the Prajñāpāramitāstotra published in the ETŞ because of the very regular verse.¹⁹⁰

Note, further, the particle spelled as *ymä* in all Uygur scripts, also in the dozens of examples in Brāhmī (where spellings of Turkic words seem to be especially close to pronunciation). The absence of an explicit vowel in the instances of this particle appearing in runiform script cannot, however, mean that there was no vowel in the inscriptions in this position, and T. Tekin 1968: 170 (and elsewhere) might well be right in spelling the word as *yämä*; he considers it to have originally been a converb and provides it with an Altaic etymology. In Qarakhanid (examples quoted in the EDPT) the word is spelled as a bisyllable (though the occasional spelling with *e* is likely to be due to the secondary influence of the /y/). For Uygur, however, the possibility of pronunciation with an onset cluster appears to have been a fact; this cluster proved to be unstable in the long run, *ymä* turning into clitic *mA* with synharmonism.

The sound change witnessed in *ymä* is not limited to that particle but appears to have been responsible for a number of variants which we find in Brāhmī sources: It can be formulated as #yVCV° > #yCV°, and apparently consists in the /y/ (often) becoming syllabic. One example for it is *yge* in *ršīlarda yge* ‘the best among the wise’ in TT VIII D 6. We have dozens of Brāhmī examples of *yeg* ‘better, best’ spelled *with* a vowel, but when the 3rd person possessive suffix (here with the assimilation [i > e] because of the /e/ in the first syllable) gets added, this stem vowel gets syncopated. We find that all vowels can sporadically get dropped, in words such as *yaŋi* ‘first decade of the month’, *yara-gay*, *yaral-miš*, *yaraši*, *yaratig*, *yaratil-*, *yaratin-*, *yegirmi*, *yeti* (‘seven’ > *yete*) and *yeti+nč*, *yig-ip*, *yigil-*, *yigin-*, *yigač*, *yilan*, *yil-ip*, *yevig*, *yenä* ‘again’, *yürüŋ* ‘light coloured, white’. *yegirmi* ‘twenty’ is spelled without its first vowel in all 8 of its Brāhmī instances; we know that it was /e/ firstly because of the fluctuation *i* ~ Ø appearing in this word in the Orkhon sources, and secondly because assimilation makes its second vowel turn up as *e* in most of the Brāhmī instances (and its third turn up as *e* in nearly half of them).¹⁹¹ Cf. also spellings like YGRMYH in Manichaean script in M III Nr.22 r 1 or YGRMYNC

¹⁹⁰ Röhrborn thinks the fact that the final *alef* is written separately would also speak for a bisyllabic pronunciation; this spelling (found also in *aya* ‘palm of the hand’) probably intends to preclude a reading as *+kIn*.

¹⁹¹ The DLT has *yegirmä* as main entry and *yegirmi* as ‘variant’. Three among its four instances are not vocalised in the first syllable; in the fourth a *fatha* was crossed out by a second hand and replaced by a *kasra*.

in Uygur writing in M I 15,16, or YRT- for *yarat-* in M I 14-15,5, 8, 10, 13,17 and the like.¹⁹² The fact that *yimšak* ‘soft’ in KT S 5 and 6 and BQ twice N 4, *yinčü* ‘pearl’ in KT S 3 and BQ N 3, *yir* ‘north’ in KT E 34 and BQ N 3 and *yipar* ‘scent’ in BQ S 11 are all spelled without vowel in the first syllable (and with y^2 instead of y^1) is, I am convinced, an indication that this vowel was dropped in Orkhon Turkic: These are the only instances in these two inscriptions where a non-expressed first-syllable vowel is not /a/ or /ä/ (whereas the relevant rule appears to have been applied slightly more laxly in the other Orkhon inscriptions). If we find a spelling like YFYLM’Q in TT IX 117, we are entitled to assume that the vowel of the first syllable of *yigil-* was reduced if not dropped; the ms. otherwise shows only the usual spellings without vowel, which are merely graphic.

Section 2.34 describes an alternation $\#yV^\circ \sim \#V^\circ$, stated to be a reflex of $*h$, a phoneme appearing in Proto-Turkic at the beginning of words. In a few unclear cases¹⁹³ an unstable $\#yV^\circ$ may not be the reflex of such an $*h$, the vowel following it being different in the alternants: BQ E31 writes *yilpagut* where the parallel text in KT N7 can be read as *alpagut* ‘warrior’. Cf. also the variants *imrak* (TT X 346), *yamrak* (KP 16,3)¹⁹⁴ and *y(i)mrak* (HandschrReste II 75 and M III text 22, 39,2₃) of *amrak* ‘dear’. The relationship between *yaltri-* ‘to gleam, glimmer’ and its variants (OTWF 482) and various forms like *yiltira-*, *yiltir-* and *yiltrik* (‘gleam’, QB) may be either a phonetic or a synesthetic one. There also is a verb *yičan-* ~ *ičan-* ~ *yačan-* discussed in OTWF 600-601. Orkhon Turkic and Uygur *iğaç* ‘tree’ appear as *yığaç* in Qarakhanid.

Phonotactic rules allow no vowel sequences in Old Turkic words of Turkic origin.¹⁹⁵ We do, however, find a sequence spelled *ua* in borrowings such as *lenxwa* ‘lotus’ and *äzrwa*, the name of a Manichæan and of a Buddhist deity; these are exceptions both to this rule and to synharmonism. These words contain an abnormal vowel sequence if they were pronounced as *len-xu-a* and *äz-ru-a*. If *xwa* in the name of the flower consisted of one syllable (as in Chinese, the source

¹⁹² To judge by some spelling statistics, high vowels may have more readily gotten syncopated than low vowels: *yegirmi* appears to get spelled more often without vowel than *yarat-*.

¹⁹³ Unclear also because they are so few compared with the normal spelling.

¹⁹⁴ Thus the UW entry with question mark, while Hamilton simply writes “MRX ; to me it looks like a Y corrected to an *alef*.

¹⁹⁵ In one ms. in Sogdian writing (a fragment from the *Vimalakīrtinirdeśasūtra*), we once find the postposition *eyin* spelled as ‘YYN’, which might have been meant to be read as (bisyllabic) *e’in*. This is not sufficient evidence to assume the existence of a medial glottal stop in Old Turkic; it might be a mere error or a matter of spelling.

language), it would constitute a violation of the Turkic rule which bars consonant clusters in the word onset; but then there are quite a number of borrowings with onset cluster in our sources. One possibility is to read *len-xu-wa*, as a consonant *w* is found also in other loans. See Maue 1996: XXVI-XXVII for how the question was dealt with in texts in Brāhmī writing.

Clusters of three consonants always appear to involve one of the sonants /l n r/. Examples are the stems *yaltri-* and *yultri-* (both spelled with *dāl* – not *dhāl* – in the DLT), *koltgula-*, *adirtla-*, *körünčlä-*, *tančgala-*, *tärklä-*, *amirtgur-*, *körtgür-* and the adverb *tärtrü*.

Originally consonant clusters were permitted only at the end of syllables or across syllable borders. The possibilities for syllable-closing clusters are, in Turkic words, limited to *nt* (e.g. *ant* ‘oath’), *rt* (e.g. *art* ‘mountain pass’), *lt* (e.g. *tölt* ‘pillow’¹⁹⁶), *rp* (e.g. *sarp* ‘steep’), *lp* (e.g. *alp* ‘heroic; difficult’), *rk* (e.g. *ärk* ‘power’), *lk* (e.g. *alk-* ‘to destroy’), *nč* (e.g. *känč* ‘baby’), *rč* (e.g. *yurč* ‘brother-in-law’) and *rs* (e.g. *tärs* ‘awry; misguided’). Note that the first element in all of these clusters is /t/, /l/ or /n/.¹⁹⁷ These are the ‘sonants’, after which /b/ d g/ (when followed by vowels) appear in their stop and not their fricative variant; the second element is always voiceless in the coda of syllables. Before the syllable border /n/ is followed only by /t/ or /č/, with which it shares its point of articulation.¹⁹⁸ Additional clusters found in loans into Uygur may accord only with one of these two limitations, e.g. in *lešp* ‘phlegm’ or *bodisavt*, or with none, as in *bodisatv* ‘*bodhisattva*’; but the last mentioned might have been pronounced as *bodisatf*. The DLT quotes *leš* ‘phlegm’ from the Čigil dialect, which means that that dialect, at any rate, assimilated it to Turkic phonotactics; *lešip* in the Suv and elsewhere shows another way of coming to terms with the irregularity. Concerning the term for ‘*bodhisattva*’ (which had already lost its coda vowel before it reached Turkic), the variant *bodisavt* already represents movement toward Turkic rules, as it is the second and not the first consonant that is voiceless; eventually the word got fully assimilated either by dropping the alveolar or by introducing a

¹⁹⁶ See OTWF 425 for the shape of this noun. I know of no Old Turkic examples for final /č/.

¹⁹⁷ Words like *üst* or *ast*, which appear in the EDPT, are nonexistent in Old Turkic; these two are misrepresentations of *üstün* and *astın*, formed with the orientational formative +tXn.

¹⁹⁸ In Uygur (and Middle Turkic) *üsk* ‘presence’ the first element is not a sonant, but this word is always used with possessive suffix; i.e. /sk/ never appears in phonetically final position. In late texts, *üskintä* often undergoes metathesis to give *üksintä*.

vowel between the two final consonants. Such vowels sometimes appear even in ‘normal’ Old Turkic clusters, leading to fluctuations such as *elt-* ~ *elit-* ‘to lead’ or, in late texts, *bürit-* beside *bürt-* ‘to touch’.¹⁹⁹ The limitation that the second consonant of Turkic coda clusters had to be voiceless meant that the formative *-(O)k* could drop its onset vowel after stems ending in /r/ in words such as *kör-k* ‘shape’, *ör-k* and *tur-k* ‘length, height’ whereas *-(X)g* couldn’t: Cf. *sor-ug*, *sür-üg*, *tur-ug*, *ur-ug* and *yör-üg*. The formative *-(X)nč* appears to come from the morpheme sequence *-(X)n-(X)š* after the second formative lost its vowel and would have given the impossible cluster **nš*; cf. OTWF 275-277.

The word for ‘sheep’, originally *koñ*, is in Uygur generally spelled as *koyn*. In MaitH XX 13r29 the editors write ‘*koy(u)n*’, presumably thinking that the word had two syllables; that is unlikely because no second vowel appears in any of the rather numerous instances. For a similar reason it is also unlikely that (as Doerfer 1993: 139 thinks) it was an archaic spelling for what had already become /y/. Nor is it very likely that there should have been a coda cluster consisting of the consonants /y/ and /n/ as there is a voiceless consonant as second element in all such clusters. The spelling YN could have been meant to indicate retained [ñ] or nasalised y, but then the question is why this sound should have been retained throughout Uygur in this word and not in others which also had /ñ/ in the coda.

Across syllable borders there are very much more possibilities for having consonant sequences, though not everything is possible; evidence is listed in Clauson 1962: 169. Even in this position, clusters occasionally get simplified; *tisilär* for *titsi+lär* ‘students’ in BT V 13 or *taysi* for *taytsi* in HTs VII 967 must be phonetic spellings;²⁰⁰ BT V 13 also shows *tt* > *t* and *kk* > *k* even across morpheme boundaries. /ŋ/ was quite possible in the beginning of syllables, e.g. in *orŋut* ‘flag; general’ and *orŋut* ‘general’, *közŋü* ‘mirror’ or *yalŋuk* ‘human being’ (< *yalŋ+u-* with syncopation). Scholars have generally not trusted the mss. in this matter, emending to *or(u)ŋut* (very often), *yal(a)ŋuk* (e.g. in MaitH XX 13r16) or *köz(ü)ŋü* (e.g. in DreiPrinz 57). Later Uygur did introduce helping vowels here (see next paragraph), but there is no reason to assume that all speakers did so or that this was an early phenomenon.

¹⁹⁹ Alternately, *elt-* could have been syncopated from *elit-*, and *bürit-* could have come about because the verb was re-interpreted as an *-Xt-* causative (which had the shape *-It-* in late texts.)

²⁰⁰ The latter is called “falsch” by the editor, who apparently expected Uygur and Chinese phonetics to be identical.

The shorter forms are actually attested more often and are highly likely to be the original ones.

In relatively late texts medial clusters, especially ones involving /r/, secondarily get broken up by ‘helping’ vowels; e.g. *ödräk* ‘duck’ > *ödiräk*, *sädiräk* (ETŞ 12,8, UigTot 918) < *sädräk* ‘sparse’, *otiraki* (Abhi A 109a9) < *otra+ki* (< *orto* ‘middle’), *sačrayu ün-* ‘to leap out’ (Suv 315,5, BT XIII 19,76) < *sačra-*, *yaltürüyu* (BT III 997) < *yaltri-* ‘to glimmer’, *amiran-* (UigTot 116) < *amran-* ‘to love’, *amuru*, *amüru* < *amru* ‘continuously’, *basurok* (ShōAv 317) and *basuroklug* (BT XIII 39,22) < *basrok*, *oruŋu(t)* < *orŋu(t)* ‘general’ (examples in OTWF 79-80), *käŋiräg* (BT III 972) < *käŋräg*, *müŋürä-* (BT III 270) < *müŋrä-*, *maŋiran-* ‘to call out’ (ShōAv 274, Shō XII b 12) < *maŋra-n-*, *öŋirä* < *öŋ+rä* (U III 889), *tägärä* < *tägrä* (TT VII 29), *soŋira* < *soŋ+ra* (BT III 891). When, in late Uygur texts (ETŞ 13,162, BT II 960) *uturu* ‘facing’ replaces normal *utru*, this is likelier to come from such a process than to be a case of retention of the original stem vowel. The additional vowel in the word spelled *sädiräk* (< *sädräk*) in ETŞ 12,8 does not count as a syllable in verse; this could mean that a scribe introduced it and not the author.

Equally in late texts auxiliary vowels occasionally appear also when no /r/ is around: with /ŋ/ we have, e.g., *taŋusok* ‘wondrous’ (Ernte 62, BT XIII 46,35), from *taŋ+sok*, *äŋimiš* < *äŋ-miš* (BT III 381 as discussed in UW 381), *öŋülüg* < *öŋ+lüg* (BT III 1010) and *öŋidün* < *öŋ+diün* (BT III 229); with /l/ e.g. *tägülök* (KPZieme 1) < *tägl-ök* ‘blind’. Another stem involving the difficult cluster /rŋ/ may have occurred in **irŋa-* ‘to shake (tr.)’, which was either broken up by an anaptyctic vowel as in *irŋag* (BT XIII 25,8), or underwent metathesis as in *iŋrag* (BT VIII B 88; Kinkashō A,d) or gave up its nasality as in *irgag* (many examples; see OTWF 188).

/r/ is prone to get dropped. This sometimes happens even in permitted coda clusters: *bärk* ‘tough’ normally appears as *bäk*, *tärtrü* ‘inverted, crosswise, in the wrong direction’ often as *tättrü* (documented in OTWF 729) and *kurtgar-* ‘to save’ often as *kutgar-* (OTWF 735-6). +lAr+kA becomes +lAkA in *ulug išlaka* ‘to great affairs’, *ašlaka* ‘for feasts’ and *kışlaka* ‘during the winters’ (DLT fol. 294) and *bilgäläkä* ‘to the wise ones’ (fol. 112). The /r/ of the formative -dUrXk is dropped in *burun+duruk* > *burunduk* ‘nose ring’, where the base also has an /r/; see OTWF 104-5. The postposition *birlä* gets simplified to *bilä* in later

Uyğur. *ketmän* ‘hoe, mattock’ may come from *kärt-* ‘to notch’.²⁰¹ The conditional suffix *-sAr* consistently appears as *-sA* not only in Qarakhanid and such late lay texts as the ones collected in Heilk but also in BuddhKat (though very rarely in the numerous examples for the conditional found in Brāhmī texts); /r/ is occasionally dropped in the aorist suffix as well. The Brāhmī ms. TT VIII L has a number of instances of the loss of /r/ as a type of haplology (section 2.412).

Double consonants often get simplified, double /l/ e.g. in *könülüg* < *könül+lüg* (U III 39,25, UigOn II A 1, TT X 276), *bäčällig* < *bäčällig* (BT V 21,456), *kuluk* < *kul+luk* (KP 23,3), *talan-* (Heilk II p. 4, colophon) < **talu+la-n-*, *elän-* < *el+lä-n-*, *yeläyü* ‘ostensible, apparent’ < *yel+lä-yü* etc.; *tükälig* < *tükäl+lig* is especially common. Thence, *elig* ‘king’ no doubt comes from *el+lig* ‘having a realm’, *olar* ‘they’ < **ol+lar*²⁰² and *ulug* ‘great’ possibly < *ul+lug* ‘having a sole or base’.

Simplification is most common with velars, e.g. *korku* < *kork-gu* (DKPAMPb 81). We also have simplified dative forms: *kičikä tägi* < *kičig+kä tägi* (Xw ms. R r 16), *suvsamaka ... katiglanmaka* (for *-mAk+kA*) in TT II,1 37-38, *oruka* < *oruk* ‘path’ +*kA* (M III 7 III r 3), *adaka* < *adak+ka* (M I 5,13) *konaka* < *konak+ka* in BT V 13 etc.;²⁰³ the dative spelled as *irinḡä* in Manichæan writing in M I 5,14²⁰⁴ can explain the shape of the pronominal dative. Velar simplification is usual in word formation, e.g. *yarlika-* ‘to pity’ < *yarligka-* and *agrikan-* ‘to feel pain’ < **agrig+ka-n-*; *talgok* ~ *talkok* ‘fastening peg’ < *talk-gok*, *sukak* ‘male gazelle’ (DLT et c.) presumably < **suk-gak*, from *suk-* ‘to thrust (with the horns)’ and *yulkak* (or *yulgak*) *iš* ‘swindling’ < *yulk-* ‘to get some use or profit from something’ (Mait 62 v 14) with the same simplification. We have the evidence of DLT fol. 202 that *tikän* ‘thorn’ comes from *tik-gän*, i.e. ‘the stinging one’. *kömür* ‘coal’ is derived with the formative *-mXr* (OTWF 390), either from *köñ-* ‘to burn’, or from *köm-* ‘to bury’; cf. *kömäč* ‘a round loaf which is buried in hot ashes’ with the formative *-mAč*, which forms names for dishes (OTWF 319).

²⁰¹ *kärki* / *kärgi* ‘adze’ may come from the same stem but in the latter two lexemes the /t/ and not the /r/ is dropped. The simplification *ärklig* > *ärlig* is discussed in the UW entry for *ärklig*.

²⁰² Unless *ol*, whose /l/ has no parallel anywhere in the language, came about through metanalysis of *olar*.

²⁰³ Note that all the sources quoted here are Manichæan; this need not be a phonetic characteristic of a Manichæan dialect, however, but could also be due to laxer (or perhaps more phonetic) spelling conventions.

²⁰⁴ Same passage as the previous instance. *irinḡ+kä* would have been normal. For the *n* before the *ḡ* cf. *irinḡ* for *irinḡ* four lines before and also further on in the text; such spellings are typical for pre-classical texts.

Alveolars are simplified mainly in late texts, e.g. *ardaš* < *art+daš* (eight times in the QB), *kutadur-* < *kutad-dur-* and *örlätür-* < *örlät-dür-* (both ETŞ 10) and *kotur-* < *kod-dur-* (twice Suv). However, cf. also *aytilar* < *ayt-tilar* in BT V 13, a Manichaean source.²⁰⁵ We do not know whether such simplification took place in the language of the runiform inscriptions, as double consonants are there usually spelled as simple ones (cf. T.Tekin 1968: 47-48).

The simplification *tč* > *č*, at any rate, is already attested in Orkhon Turkic: I agree with the reading *očok* ‘stove’ in Tuñ 8. *očok* < **ot+čok* is attested also in three among six mss. in TT VI 86; the rest of them and some late texts write *otčok* (see OTWF 108), but there probably was not much phonetic difference: Phonetically speaking, it all amounts to [VtʃV] vs. [VtʃV]. We also find *edärči* (TT IV A 57) < *edär-t+či* (QB) ‘tracker’, *okiči* (QB) < *oki-t+či* and *köčök* (DLT) < *köt+čök* ‘buttocks’. If *otači* ‘medical doctor’ comes from **ot+ač+či* ‘*a person busy with small herbs’, it would show the simplification of double *č*.²⁰⁶ On the other hand, the form *katčigsizün* (= *kač-ig+siz+ün*) quoted in Zieme 1991: 145 shows that [č] could be spelled as TC. *ištin* < *ič+tin* in Lo9,5 and Mi17,11 in SammlUigKontr 2 is again different: Phonetically speaking, this is VtʃtV > VʃtV. With this word, the simplification could have been helped by parallelism with *taštün*: We find *ištin nom taštün el* ‘(may) religion in the spiritual domain and the state in the physical domain (prevail)’ already in M III Nr.27 v16.

2.406. Metathesis

In late texts there are metatheses of clusters with */r/*, e.g. *ördäk* > *ödräk*, *bušri* ‘wrinkle’ < **bur(u)š-* (cf. OTWF 344), *sarya-* (BuddhUig I 335) < *sayra-* ‘to twitter’, *särki-* (Hochzeit 32) < *sekri-* ‘to leap’, *orpak* < *opra-k* ‘shabby’, *buryuk* < *buyruk* ‘minister’, *äñräk* < *ärñäk* ‘finger’, *irgag* ~ *iñrag*, *orto* ‘middle’ > *otra* (and further *otira*) and so forth. *ädräm* < *ärdäm* ‘virtue’ appears in MaitH, which is not a very late text. Among the variants *kutrul-* ‘to be saved’ and *kurtul-* the former is

²⁰⁵ OTWF 870 (index under „geminate simplification“) refers to further examples of the phenomenon.

²⁰⁶ In HTs VII 1174, Arlotto had read a word to be analysed as *kör-ünč+či+lär* as *körünčälär* and Röhrborn 1994:108 had explained this as just such a simplification. In his edition of the text, Röhrborn now sees two Čs, and in a note to the passage states that a helping vowel is sometimes introduced in such cases, “um einer Vereinfachung der Geminaten vorzubeugen, ... wie im Falle von *sakinčuči* und *y(a)rlıkančuči* (vgl. Abitst 103)“. The matter (and the passage referred to) are commented on in OTWF 114-115; it is, however, related to the alternation between *-(X)nč* (OTWF section 3.104) and *-(X)nčU* (OTWF section 3.105), which is a more complex phenomenon.

probably the original, but both are rather common from quite early sources on; see OTWF 667-8 for some of the examples.²⁰⁷ *yaltür-* (ETŞ 20,64) < *yaltri-* ‘to gleam’ and *ogurla-* ‘to steal’ < **ogri+la-* (discussed in OTWF 441-2) show /r/ exchanging places with an adjacent vowel; see OTWF 313 for *yogurt* ‘yoghurt’ ~ *yogrut* ~ *yorgut*. In other cases /r/ gets dropped by dissimilation, as in *ämirkäš-* < **ämri-rkä-š-* (BT III 990) or *bakir-* ‘to shout’ < **bar+kir-* (cf. Mo. *barkira-* etc. and Turkish *bar bar bağır-* ‘to shout loudly’). Connections such as *kükiürt / kükrä-* ‘to thunder’, *tigirt / tigrä-* ‘to clatter’, *mañirt / mañra-* ‘to bellow’, *täpi(r)t+siz / täprä-* ‘to move’ and in fact the relationship between the formative *+klr-* and verbs ending in velar + ^orA- show how wide-spread sound change around /r/ was in onomatopoeias.

In OTWF 569 we took *täšgürüš-* to come from *tägš-ür-üš-* by the change /gš/ > /šg/; the process making *täzgin-* in the QB from the common *tägzin-* ‘to revolve’ and *üksintä* ‘in his presence’ < *üsk+in+tä* is similar, all involving velars and sibilants. OTWF 358-359 shows *-kUč* and *-čUk* to be metathesis variants, the latter appearing after bases ending in /r/ or /n/. Metathesis took place also with *yalvak* < *yavlak* in AlttüSogd 89, with *yamgur* < *yagmur* ‘rain’ in Totenbuch. Qarakhanid Turkic *küzäd-* ‘to guard etc.’ > *küdäz-* (together with derivatives) may have taken place under the influence of synonymous *küd-*.

2.407. Parasitical consonants

There sometimes appears a parasitical alveolar between /l/, /r/ or /n/ and a following velar or /r/, e.g. in *koltgučī* ‘beggar’ < *kol-gu+čī*, probably also in the causatives *amirtgur-* ‘to pacify’ < **amir-gur-*, *körtgür-* ‘to show’ / *körtkür-* < **kör-gür-* and *köndgär-* < **kön(i)+gär-* (DLT fol. 365). The alveolars in the DLT verbs *čaldra-*, *kaldra-* and *küldrä-* (OTWF 471) are secondary. Another example is the form *oltrup* in M II 11,13, the converb of *olor-* ‘to sit’: When the second vowel of the stem is syncopated and the /l/ and /r/ get into adjacency, a /t/ intervenes. This cluster appears to have been preferred to having a syllable start with /r/ while the previous one ended in /l/; this eventually led to the replacement of Old Turkic *olor-* ‘to sit’ by Qarakhanid and later *oltur-*: The /t/ was subsequently kept also in forms whose suffix did not start with a vowel. To make that adapt to Old Turkic phonotactics, a vowel had, in a second step, to be introduced between the /t/ and the /r/. For

²⁰⁷ *kutul-*, another early and widespread variant, could have come from contamination with *kut* ‘good spirit’.

the same reason Uygur *olr-ug* was replaced by Qarakhanid *oldr-ug*.²⁰⁸ The passage *š* > *č* after /r n/, which presumably takes place in *kirča-* < *kiriš+a-* and *-(X)nč* < *-(X)n-(X)š*, can be seen as a related phenomenon, [č] being equivalent to [tš]: Here, that is, we also witness the introduction of an alveolar between two syllables, one ending with /r/ or /n/ and the other starting with a consonant.

2.408. Consonant assimilation

Assimilation between consonants can concern a number of features. We will first deal with the voice feature, then with that of nasality, next with the mode of obstruction and finally with place of articulation. Consonants can also be influenced by vowels, dealt with last in this section.

Assimilation of voicelessness between adjacent consonants is the rule in Qarakhanid but not in any other variety of Old Turkic. Still, it can be shown to have taken place in a few cases in Uygur as well. In Ht X 796, e.g., *yilig+kya* is spelled with two dots on the *g*, indicating that the word was pronounced as *yilikk[̣]ya*; /g/ appears to become voiceless also before /t/, in the verb stems *agtar-*, *agtin-* and *agtur-* discussed in section 2.34. This is backward assimilation between consonants. In other – exceedingly rare – cases, voicelessness spreads forwards, e.g. in *eštür-* < *ešid-ür-* ‘to proclaim’ and *köm-üş-täči* ‘burying each other’ in completely destroyed context (M III 32,2₂, Wilkens 48). *ič-gü* appears as *ičkü* in Xw 82 in the London ms., which is in Manichaean script (in which front G and K are quite distinct letters).²⁰⁹ *tütz-ük* ‘incense (stick)’ comes from *tüt-üz-* ‘to fumigate’, but the form with /z/ is attested only once (Windg 36): This common lexeme is otherwise (even in early texts such as the Mait) always spelled as *tütsük*. Similarly *säkiz on* ‘80’ and *tokuz on* ‘90’ become *säksön* and *tokson* in the DLT. In

²⁰⁸ The existence of ‘*oturmiš*’, made up in Johanson 2000: 62 as Old Turkic, is highly unlikely in that language. The EDPT considers *yartim* to be a secondary form of *yarim* ‘half’, “with an intrusive -t-“. however, an intrusive *t* never appears before a vowel.

²⁰⁹ The use of K might have been meant to show stop (as opposed to fricative) pronunciation at syllable onset; . *elt-käy* ‘(they) will convey (him)’ in M III nr.12 r7 does not mean too much as the text in several cases confuses voiced and unvoiced consonants (*yäg* for *yäk* ‘demon’ etc.). The value of *ičkü* should not be overrated either, as the ms. may have had a source text in Uygur script. We can make the same assumption for the Mahrnāmag (= Müller, Doppelblatt), whose first part is dated to the year 762, because the Uygur ruler is called *ay täñridä xut bulmiš alp bilgä uyğur xnyān* and not *xayān* (confusion of *alef* and *nūn*) and because ‘prince’ is, in that text (in Manichaean writing) indiscriminately spelled as TGYN, TKYN and TQYN (Manichaean Q not being characteristic of back-vowel context).

section 2.410 we have a different explanation for why the formative *-sXk-*, < *-(X)z-(X)k-*, has /s/ in its onset.

On the other hand, what at first sight looks like a backward dissimilation in voice has been noted for the instances of suffixes starting with an alveolar (e.g. the causative suffix *-tUr-*) when they appear after /t/: As observed in OTWF 830-831, the result is *td* whether the stem ends in /t/ or /d/, in fact also when the suffix (e.g. the preterite morpheme) starts with /d/. Spellings like *kotdum* < *kod-*, *yatdilar* < *yaddilar* (HTs VIII 73), *ütdä* < *üid* ‘time’, *unüt-dur-* or *yokatdur-* < *yokad-* are common in texts which otherwise do not confuse alveolars. This rather consistent habit can be understood to indicate that the first alveolar was pronounced strongly (as a stop?) and the second softly (as a fricative?).

Johanson 2001: 1726b is of the opinion that the relative absence of progressive devoicing in Old Turkic (the phenomenon being the rule in subsequent stages of the language) is due to the presence of short unwritten vowels at the end of stems. This is an *ad hoc* hypothesis set forth in great detail in Johanson 1979: 68 ff., whose material base is narrow indeed: Firstly, some Mongolic cognates of Turkic elements often have an additional vowel but the explanation of this discrepancy may in many cases not lie within Turkic but within Mongolic. When such vowels were dropped at the end of verb stems, they reappear within the aorist suffix, as pointed out by various scholars including Johanson, I myself and T. Tekin; there is no reason to take them to have been retained if they are not spelled out. Secondly, the Turkic-Khotanese word list (Emmerick & Rona-Tas 1992) has the *shwa* character transcribed as *ä* which signals the lack of any vowel at the end of words. When it is used within words, it appears not only before suffixes and not especially after /p t s/ etc., as Johanson 1979: 73 says, but a number of times also after /r/ and /l/, e.g. in *kirpik* ‘eyelash’ or *sakaldruk* ‘throat strap for headstall’.²¹⁰ This disqualifies the point he is trying to make, as do the numerous voice assimilations taking place with consonants having the same place of articulation, which he himself discusses subsequently. No invisible vowels can therefore be made responsible for the fact that voice assimilation is marginal in Old Turkic; voice assimilation is not a universal phenomenon, and Old Turkic differs from modern languages also in other significant ways.

²¹⁰ A word spelled *bašä-sīysa* said in Johanson 1979: 73 to represent *baš+siz* seems not to appear in that text and I wonder where (if at all) it *could* have existed. If the author created it to illustrate his point (which would in itself be legitimate), he does not actually say so.

The forms *ämñän-* (twice) and *ämñäk* (twice) in BuddhKat come from *ämğän-* and *ämğäk* and thus show progressive assimilation in nasality. *öñrän-* < *ögrän-* in HTs VIII 43 is (if the N should not be interpreted as a superfluous *alef*) similar but regressive. A better known form of non-contact regressive nasal assimilation takes place when onset /b/ is followed by a vowel and then a nasal; we then have /b/ > /m/, e.g. in *bän* ‘I’ > *män*. *um-du+čī* ‘beggar’ from *um-* ‘to hope’ is spelled as *untučī* in ShōAv 21; this is no doubt a case of regressive assimilation in the point of articulation, since both /n/ and /d/ are alveolars.

A phonotactic phenomenon involving consonants and attested only in back-vowel environment is that stops become fricatives before /š/. In this position, /k/ appears as [x] e.g. DLT *čaxša-* and Uygur *čaxšaš-* < **čak-iš+a-*; *yaxšingu* ‘sleeve cuffs’ is attested in HTs VII 1292.²¹¹ /p/ appears as [f], e.g. in *yafšin-* ‘to adhere, be attached to’ < *yapiš-*, spelled with *f* in Pothi 127, which is in Manichæan writing. This is a case of assimilation, as spirants like *š* are, of course, also fricatives. Uygur probably distinguished between *oxša-* ‘to caress’ and *ogša-* ‘to resemble’ (/g/ realised as a fricative); the latter is six times spelled with *h* in Brāhmī, but Brāhmī rendered [ɣ] with *h* as well. In the DLT, however, where there was voice assimilation, both appear as *oxša-*.

In TT X 459 and 481, *čīn+gar-u kör-* becomes *čīngaru* (spelled CYNGXRW) *kör-*, i.e. an alveolar nasal turns into a velar nasal.²¹² The place of articulation has shifted backwards under influence of the following velar.

In some words in some varieties of Old Turkic, /n ɳ/ become /m/ beside rounded vowels: Hamilton 1977 discusses a.o. *kömiül* < *köñül* ‘heart’. OTWF 99 and 104 document the lexemes *boymul* < *boyun+* and *kömiüldürük* < *köñül+* (which is also the source of Turkish *gömlek* ‘shirt’). Another instance is *yürüm karak* < *yürüñ karak* ‘the white of the eye’ in the Turkic-Khotanese hippological glossary (Wordlist 40).

2.409. The appearance of voiced stop allophones

Some scholars had thought that consonants in runiform inscriptions undergo progressive voice dissimilation such that voiced coda

²¹¹ Mark Kirchner has found exactly the same phenomenon in Kazakh.

²¹² The text writes *čīngaru* but Peter Zieme has confirmed for me the reading presented here. This does not appear to happen elsewhere in published parts of the DKPAM, to which the TT X text belongs. DKPAM instances in U III 36,17 and 53,4₂ are misquoted in the footn. to TT X 459: In both places the edition has *čīngaru kör-* but should have had *čīngaru kör-*, as visible on the facs.. This is also what appears in three other U III instances.

consonants were said to be followed by variants of suffixes starting with unvoiced consonants, whereas unvoiced coda consonants were said to be followed by variants of suffixes starting with voiced consonants. This view appears to have first been expressed in 1961 concerning the Tuñoqoq inscription by René Giraud, who edited this inscription. Tekin 1968: 100 speaks of “contact dissimilation” in the Orkhon inscriptions in general, all his examples being cases where the letters *d* and *g* were replaced by *t* and *k* after /r l n/; the only ‘g > k’ examples he supplied were the words spelled *ärkli* ‘being’ and *kulkak* ‘ear’. *kulkak* is opaque and may never have had a /g/, leaving us with *ärkli*.²¹³ For alveolar contact Tekin (also Tekin 2000) has the suffixes of the constative preterite as well as +*dA*, -*dOk* and -*dAčI*. whose *D* is replaced by *T*.

Johanson 1979 argued against this view and has shown this not to have been the case at least as far as the alveolars are concerned. He states that the phenomenon is limited to the *t* runes which follow /r l n/ and sometimes /z/ where the suffix is otherwise spelled with a *d* rune; he makes it likely that this variation in spelling was sub-phonemic, *t* standing for the [d] allophone of /d/ whereas *d* is likely to have stood for the [δ] variant of this phoneme, which must have been the main allophone. His view in that domain has been adopted in section 2.32 above. Johanson’s hypothesis seems to be made likelier also by the existence of ligatures for /n/ + alveolar and /l/ + alveolar: These apparently reflected the fact that this alveolar was neither [t] nor [δ], the sound [d] in fact turning up only after /n l r/ (and partly /z/). Why there then was a ligature for /n/ + /č/ and why the ligature /n/ + alveolar appears mostly in back-vowel words²¹⁴ remains, however, unclear. The absence of a ligature for /r/ + alveolar can be explained by the fact that /d/ seems to have surfaced as [d] after /r/ only when it appeared at the

²¹³ Clauson repeats Giraud’s statement on p. ix of the EDPT. T.Tekin 2000: 76-78 retains this description, with numerous examples from Orkhon and Yenisey Turkic and the IrqB ms. for stems ending in /l n r z m/. For velar contact he now gives, beside *kulkak* and *ärkli*, also ‘*tamkalig*’ from the Ačura (= E26 Yenisey) inscription. The word in question is interpreted as ^a*č*+*m*+*ka* ‘to my father’ by Kurt Wulff, which makes it regular since the dative suffix has a voiceless velar. We are thus left with *är-kli* as the only real example for velars.

²¹⁴ The Orkhon inscriptions have more than 80 examples of the *nt/d* ligature in back-vowel words, more than 25 sequences of *n* and *t* in front-vowel words and only 11 cases of the /n/ + alveolar sequence being spelled with the ligature in front-vowel words; there is not a single example of the sound sequence /n/ + alveolar spelled without ligature in back-vowel words anywhere in that whole corpus. The existence of the *nč* ligature cannot be explained along the lines proposed by Johanson (possibly *ant* and *anč* or *änč* were ideograms).

beginning of verbal suffixes, the constative preterite, *-dOk* and *-dAĕI*, but hardly ever at the beginning of *+dA*, *+dAn* / *+dIn* and the formative *+dAm*; nominal suffixes generally do not replace d^1 / d^2 of their onset with t^1 / t^2 .²¹⁵ /r/ thus appears to have had an intermediary status. The realization of /d/ as [δ] when appearing after vowels is further made likely by the spelling *tos(u)k* for what is clearly a form of the verb *tod-* ‘to be satiated’ in KT S8 and BQ N6: This is no doubt to be understood as *tos+suk* < **toδ+suk*. It is doubtful whether [ds] would have been assimilated in this way. What further emerges from the distribution of /d/ allophones after /r/ in the suffix onset is that nominal juncture differs from verbal juncture, the sequence [rδ] being enabled with the former but not with the latter.

A similar phenomenon may have existed in the labial domain: The voiced fricative /v/ appears sometimes to have been realised as the stop [b] (spelled with *pe* in Uygur writing) beside /l/ and rarely /r/: e.g. in *yublunmaklġg* (HTs VII 1994; cf. OTWF 641) < *yuvlun-* ‘to roll about’, *kübrġg* (BT III 947) < *küvrġg* ‘drum’ and *yalbarġnĕġg* ‘inducing begging’ (BT XIII 29,8) < *yalvar-*; *yalbar-* is (beside *yalvar-*) common also in Suv (and survives as variant of *yalvar-* in Middle Turkic). Indirect evidence is Mongolian *jilbi* ~ Old Turkic *yelvi* ‘magic’ (cf. OTWF n.383). In Manichæan writing, which has a B distinct from P, we find e.g. *yablak* in TT II,2 22, *nirban* in Pothi 167. In that writing system, however, V is distinguished from B only by two diacritical dots above; since we have instances such as *kġb* ‘fate’ (BT V 134) for what appears as *kġv* everywhere else (e.g. three lines further on in the same text) or *nizbanġ* in TT II,2 73 and 82 versus *nizvanġ* in l.20, it is highly likely that these dots were simply omitted.²¹⁶ It might be that *yablak* (same text!) and *nirban* are similar cases of omission.

Johanson 1979: 7 does not deal with the two instances of the letter K after sonants which Tekin 1968: 100 mentions, stating that they are, as derivatives, isolated and opaque. This is true of *kulkak*²¹⁷ but not of the

²¹⁵ The only such examples I have found in Orkhon Turkic are three instances spelled *yertä* (vs. four of *yerdä*) in KT and BQ.

²¹⁶ Thus already Zieme 1969: 35. Cf. also *sabĕi* for *savĕi* in Mahrnāmag 33.

²¹⁷ Tekin’s etymology for *kulkak* (deriving it from a Finno-Ugric verb) is unacceptable, and the one proposed in OTWF 75 is problematic as it involves a rare derivational suffix. The /k/ must be real, as it is also attested in the Brāhmī, Tibetan and Manichæan writing systems; a further Brāhmī example can be added from Maue 1996 text 3, l.113. ‘**kulgak*’ could have been taken to be the ultimate source if Oguz had been the only dialect group with the variant *kulak*. *kulak* is, however, the general modern and Middle Turkic form, found also in languages which do not drop /g/ after consonants. *kulak* is, moreover, the general DLT and QB form, *kulġak* appearing in the latter when

word spelled *ärkli*.²¹⁸ Johanson has consistently followed Schulz 1978 in reading this inscriptional word as ‘*ärkäli*’; still, e.g., in Johanson 2000, where he writes ‘*ärk[ä]li*’. I have, in section 3.282 below, tried to show that this view is groundless. Another suffix relevant for the discussion is *-gXn*. This suffix appears as *-kXn* explicitly in two Brāhmī instances, *kälkin* (TT VIII) and *turkun* (Maue 1996 21a 75; spelled with HK, which that text uses also for *kil-* or *kuš*), and in two Qarakhanid lexemes, where it is spelled with *qāf*: *barkin* (‘a determined traveller’ thrice in the QB) and, again, *turkun suv* ‘quiet waters’ in the DLT. *yadgun*, *todgun* and *tutgun* are, on the other hand, Qarakhanid instances spelled with *ghain*, and the *g* did not appear in any other instance. The Qarakhanid examples are not conclusive by themselves, as Arabic *ghain* represents a fricative; *qāf* could well have been used for noting [ǧ], a realisation of /q/ which exists in modern Arabic dialects and may well have existed already in Kāšgarī’s days. Taken together with the Brāhmī instances, however, the distribution seems significant: [k] after /l r/, [ɣ] after other consonants. The formative *-gOk / -gUk*, dealt with in OTWF § 3.22, is spelled with K in *tol-kok* ‘inflatable skin container’ (*qāf* in the DLT) and *yun-kuk* ‘soap’ twice in Brāhmī writing, whereas instances where the suffix follows other consonants are spelled with G. *-gI* (OTWF § 3.110), finally, also appears as *-kI* with sonants: *bur-kī* ‘frowning; wrinkled (of face)’ has instances spelled with /k/ both in Arabic and Brāhmī writing, and *yan-kī* ‘recompense’ is in U II 77,24 spelled with double dotted X. After vowels and other consonants the suffix is well-established as *-gI*. In OTWF 321 I proposed to derive the particle *ärki* with this same suffix, while Röhrborn has proposed the form *är-gäy* as source (see section 3.34 below). The /k/ of *ärki* is documented in sources in Indic scripts; both etymologies would take this /k/ to be the realisation of a suffix normally appearing with /g/. The reason why *-gAy* itself does not show forms with K after bases ending in /l n r/ can be that inflectional affixes in agglutinative languages tend to avoid irregular variations in shape;²¹⁹ this might also be the reason

demanding by the metre. Kāšgarī knows of *kulkak* and *kulxak* as dialect forms. In view of all this there is no way to link the variants *kulkak* and *kulak* by any known synchronic or diachronic sound laws.

²¹⁸ See section 3.282 for the participle suffix *-(X)gII*, with which the Orkhon Turkic conjunction spelled as *ärkli* is no doubt formed. While the productive forms of *-(X)gII* do not lose their onset vowel even when added to stems ending in /r/, such loss is found in other suffixes (e.g. the *-Xt-* causative) and is probably an archaic feature.

²¹⁹ Cf. the spellings *bulyay* (twice) and *adrilyay* in Xw 137-8 in Manichaean writing. *bošunyalī* is also spelled with Γ in Xw. 187. Instances like *kilkali* with two dots over the

why, e.g., *+dA* does not become ‘+yA’ after vowels or voiced consonants in those modern languages which changed /δ/ to /y/. Spellings of *d°* or *g°* suffixes with *t* and *k* respectively after bases ending in /r l n/ *can* generally be read as having [d, g] as against [δ, γ] for the unmarked sound contexts, and the spellings *ärkli* and *kulkak* need not necessarily be counter-examples to Johanson’s theory: The *k* may represent a voiced stop as distinct from a fricative. Crucially, however, this interpretation is not obligatory, and a reading as [k] *cannot be excluded*: Especially in view of evidence from the Brāhmī writing system (where G does *not* imply fricativity) the replacement of /g/ by /k/ after /r l n/ appears really to have taken place: The reassignment to /k/ may well be historical fact, hinging on the possibility of assigning [g] to /g/ as well as to /k/ at some stage in the language’s history. Above I explained *ärkli* through the syllabification *ärkli*.

2.410. Onset devoicing

The formative *-sXk-* (discussed in section 3.212) is highly likely to have come from the formative sequence *-(X)z-(X)k-*; this would therefore be an instance of the sound change /z/ > /s/. One possible reason for the change may be that /z/ is not stable at the beginnings of suffixes (*-zUn* became *-sUn* from Qarakhanid on), or at the beginning of syllables in general (*kavzat-* is often spelled with *s* in Uygur, and cf. *kabsa*²²⁰ attested at least thrice in the DLT), in view of its absence at the beginning of words. An early Manichaean text in fact has the shape *ut-zux-*, with *z*. Excluding Qarakhanid and looking at the Uygur instances of the suffix (listed in OTWF 700-704) we find that the bases of six of them, *al-sik-*, *kun-suk-*, *ar-sik-*, *bil-sik-*, *čal-sik-* and *ur-suk-*, end with the sonants /r l n/, three, *tut-suk-*, *ut-suk-* and *yint-sik-*, with /t/ and one, *kuy-suk-*, with /y/. It may also be this preponderance of the sonants, which exists at least in the documentation, which let /z/ be replaced by its voiceless counterpart /s/, as we find D replaced in these circumstances by T. *ut-suk-* is, after all, attested also with the earlier form with /z/. Concerning the other pairs of voiced and voiceless consonant letters discussed above, the rather convincing hypothesis was that what lies behind this opposition is in fact subphonemic [δ] vs. [d], an opposition not in voice but of continuant vs. stop. Such an opposition cannot have been relevant for /z s/, however, as both are continuants. Assuming the correctness of the Johanson / Sims Williams / Doerfer hypothesis on

Q in ms. TM 42b (U 4795) of Suv 34k 14 are meaningless, as we find *agir* in the same line and *ogli* in v13 also spelled with dots over the Q.

²²⁰ Possibly to be read as *kapsa-*, where the [p] could have evolved from [f].

continuants vs. stops, we are therefore for these forms left with the explanation that /z/ was to be avoided at syllable onset.

2.411. Changes affecting /g/

In section 2.34 we saw that /g/ was pronounced as a fricative not only in back but also in front synharmonism. Fricative pronunciation explains the early loss of this velar in the variant *äšäk* of *äšgäk* ‘donkey’. The dropping of the velar took place earlier and much more massively in *kärgäk* ‘necessity’, as this is also a near-grammatical predicate signifying ‘it is necessary’: BuddhKat 37 (Tibetan writing) writes GA.RAG, although a *g* is spelled out in this position in a number of other words occurring in that text. In Brāhmī writing, *käräk* occurs in three medical texts, but other Brāhmī sources use *kärgäk*: TT VIII I has about eight instances and there are further ones in TT VIII M 18 and on 1.8 of text 23 in Maue 1996. Another instance of *käräk* occurs in a popular text about omens which also has four instances of *kärgäk*, in TT VII 28,54. Qarakhanid sources have hundreds of instances of *käräk* and not a single one of *kärgäk*, although the DLT mentions the base verb as *kärgä-*: This latter fact shows that the reasons for this early loss of the velar were not only phonetic but also had to do with the function and frequency of *kärgäk*.²²¹

Another indication that intervocalic /g/ tended to get pronounced like a glide in late texts can be found in the spelling *igä* of the word signifying ‘master’, which was also spelled *i-ä* (with graphic space between the two vowels). It seems likely that this comes from *idi*, which has the same meaning, although *idi* and *igä* occur together as binome in the 14th century inscription of CYK. *igä* would then be a hypercorrect spelling of *iyä*, which would be the result of a late change of intervocalic /d/ to /y/. The repeated appearance of *üyür* ‘(millet) seed’ as *ügür* in the DLT is a similar case of hypercorrect spelling: The documents of SammlUigKontr have the spellings *üyür*, *üür*, *ür*, *ü’r* and *yür*. This is apparently also what happens when Kāšgarī (fol. 504) says that *bög* is “more correct” than *böy* for ‘poisonous spider’.

I have noted two early cases /g/ where is dropped from the sequence °*üg+l*’, in *ütülä-* (Mait 84 v 24 = BT IX 209,24) from *ütüg* ‘flatiron’ and *tütsülüg* (TT V B 130 and 135) from *tütsüg* ‘incense’. These two instances, which could just be errors, are not an adequate base for generalization concerning coda position. In the DLT the desiderative

²²¹ Presumably in order to explain the early appearance of *käräk*, Doerfer 1993: 30 takes *käräk* and *kärgäk* to be different derivatives from one source; this is impossible, as there is no source in sight for *käräk* other than *kärgäk*, which comes from *kärgä-*.

suffix *-(X)gsA-* becomes *-(I)sA-*; see OTWF 527 for details. This drop appears to have taken place in late Uyğur as well: There is no doubt that *arvišig ... äšidisärläri tñlamışlari kargäk* (BT III 731) signifies ‘They need to wish to hear and to listen to the *mantra*’, that the first verb is the aorist participle of an *-(X)sA-* stem.²²² Note also *äkün* in ChrManMsFr ManFr v 9 (an early Manichæan text), which may come from **äki+gü+n* ‘two together’ if it is not an error but an elision of intervocalic /g/.²²³ In the very common *nälük* ‘to what purpose’, /AgU/ appears to have given /A/, assuming that this comes from the equally common *nägülik*.²²⁴ I take *kerü* ‘back(wards)’ and *bäriü* ‘hither’ to come from **ke+gerü* and **bä+gerü* respectively, i.e. to have been contracted from original directives in *+gArU*.²²⁵

The spelling of *kovuş* ‘groove’ as *koguş* (see OTWF 421) is also ‘hypercorrect’, but is evidence of a process /g/ > /v/ beside rounded vowels. This process can be seen when *kagrul-* ‘to undergo mental torture’ alternates with *kavrul-*, the latter apparently turning up even several times in Mait; see OTWF 661. The verb *kögädtür-* ‘to praise, to embellish in words’ is, similarly, spelled as *kövädürüp* in Suv 135,12. On the other hand the repeated appearance of *äşgäk* ‘donkey’ as *äşyäk* in the DLT shows a process /g/ > /y/ in fronted surroundings in that text.

2.412. Haplology

Haplology is found e.g. in *orton* < *orto+dun*, both ‘being in the middle’ (discussed among the *+dXn* nominals) and in *kamagu* < **kamag+agu*, a collective expansion of *kamag* ‘all’. *tiksiz* < *tik-ig+siz* ‘unstung, unpricked’ in Suv 529,20 may not be an error in the strict sense, in that

²²² It is thus (against the editor’s statement in the footnote) of identical form as the Ottoman future. The Insadī (or better Avasadī) sūtra is, after all, later than the DLT.

²²³ *biz äkün*, which can be read also as *bizäkün* as Z is never joined to the next letter, appears in HamTouHou 15,3, TugFrühText 10 (spelled with S), perhaps in BT V 675 and in l.22 of the Manichæan hymn edited in UAJb 16:221-2. Concerning HamTouHou it had been thought that this is another instance of *äkün*; the context makes it likelier that *bizäkün* was a place name, however, as proposed by Wilkens, the editor of the last mentioned source, following an oral suggestion of Röhrborn.

²²⁴ Examples in the EDPT and OTWF 122. A sound change *AgU > A* apparently took place also in the collective form *bägät* found in several 13th-14th century texts, as documented in OTWF 82, and in equally late but Western *bayat* ‘God’, probably < *bayagut* ‘well-to-do gentleman’. Other interrogative phrases which were reduced to two syllables are *näčök* < *näčä ök*, *nägük* < *nägü ök* and the DLT’s *näräk* < *nä käräk* (and cf. Turkish *niçin* ‘why; what for’ < *ne için* and *nasıl* ‘how’ < *ne aşı*).

²²⁵ The first is related to (instrumental) *ken* and to *kedin*, the latter in some way to *bän* ‘I’ and *bo* ‘this’.

it was presumably pronounced that way: Cf. *yiglig* apparently for **yig-iglig* in Abhi B 1404. In an instance like *bo yarlig ešidip* (KP 18,8) ‘having heard this order’ *yarlig* could have been simplified from accusative *yarlig+ig*.

/VrVr/ is quite susceptible to syncopation: In aorist forms of stems ending in °*ur-* in BuddhKat, *alḡaddurlar* comes from *alḡad-dur-ur+lar* and *olur* comes from *olor-ur*. Similarly *öḡätür* in Heilk I 14, which signifies ‘it cures’ and must come from **öḡ+äd-tür-ür*. The Brāhmī ms. TT VIII L has forms such as *tükärmäsär* < **tükä-r är-mä-sär* (12-13 and 21) and *tersär* < **te-r är-sär* (33). *ärkän*, which is used as a temporal conjunction, may possibly be the result of syncopation from **ärür kän*, with a particle described in section 4.633 as being added to temporal adverbs (and cf. the temporal suffix *-mAzkAn*).

The DLT distinguishes between *kisi* ‘wife’ and *kiši* ‘person’; this distinction has by the EDPT and by Zieme in *TDAYB* 1987:306-7 been taken to hold for Uygur as well. Since such a distinction is found neither in runiform sources nor in any modern language and is at least not explicit in Uygur,²²⁶ I take *kisi* to come from *kiši+si*: ‘wife’ is an inalienable term, from the group with which the possessive suffix often becomes part of the stem. Concerning Uygur, then, *kiši* could have signified both ‘person’ and ‘wife’, or the meaning ‘wife’ could have been borne by *kisi*. Verb / noun homophones ending in /š/ may all have been caused by haplology, as no example of the formation in *-Xš* derived from such verb stems appears to have survived: Qarakhanid *tüš* ‘place or time of a halt’ (hence sometimes ‘midday’) ought to come from **tüš-üš*, from the verb signifying ‘get down (from a horse)’, *tuš* in the phrase *tuš tulum bol-* ‘to meet’ from *tuš-*, same meaning, over *tuš-uš*,²²⁷ *toš* ‘water reservoir, pool’, partly documented in the EDPT, < **toš-uš*, from *to-š-* ‘to fill up’, *siš* ‘a swelling’ from **siš-iš* (both noun and verb listed in the EDPT), *koš* ‘a pair’ from *koš-* ‘to conjoin’. *bagdaš* ‘sitting with legs crossed’ is likelier to have come from **bagda-š-iš* than from **bagda-š*, as *bagda-* (found only in Qarakhanid) signifies

²²⁶ Cf. the n. to BuddhKat l. 4. In Uygur script /š/ is practically always spelled as *s*.

²²⁷ *tušuš* is, I think, attested in *alaču tušušinta* (U III 6,2₃ and DPAMPb 741, the same passage in two mss.) ‘in front of (or opposite) the tent’ and in *aniḡ tušušinta* ‘in front of (or opposite) that (i.e. an orchard)’ in l.12 of the Udayana fragments of the same text published by Wilkens in *SIAL* 18(2003): 155. I don’t think the instances should be emended away to *tušinta* as proposed in EDPT 129b and UW 91a; nor do I think it possible to analyse the word as *tuš+i+sin+ta* with double use of the possessive suffix, as proposed by the editors of DKPAMPb, although the word is spelled with Y in the second syllable in that ms.: The other two mss. have W, and their proposal would entail too much of an exception.

‘to trip somebody’.²²⁸ Haplology can always take place when consonants and vowels in two adjacent syllables share most phonetic features; *orto+dun* could actually also have been pronounced as *ortodon* and *olor-ur* as *oloror*.

2.413. Word fusion

In several different situations, word sequences become single prosodic units. Some noun phrases becoming lexical units are discussed in the beginning of section 4.12. Binomes, dealt with in part VI, are a special type of fixed collocations. Such close juncture can have phonetical results: *ini eči(lär)* ‘younger and elder brothers’ becomes *in’eči(lär)*, e.g. in ManBuchFr 1,1 r 4, in M III Nr.8 VII v 10 and in Yenisey inscriptions. In this case, adjacent vowels of the two lexemes are involved, resulting in elision or crasis. Even occasional extensive contractions, such as *biltur* ‘last year’ (HTs VII 1912) < *bir yıl turur* ‘it is one year’ cannot be wholly ruled out. We sometimes get linked spelling as in *ät’öz* also with the particle *Ok*, which usually, but not always, drops its vowel if the word it is added to has a vowel coda: For instance with *ölürtäči-k* in Tuñ 11. This clitic can be repeated, *(O)k Ok* then giving *kOk* in Orkhon Turkic. The variant *kOk* lives on in South Siberian Turkic to this day. Beside *anta ok* and *antak* we get ”NT”WX, where the two words are just spelled without space in between, but with an *alef* before the *o*. Cf. also, e.g., *yerintä’ök* in MaitH X 6a12, wrongly read as ‘yirintänök’.

ol becomes a clitic and loses its onset vowel in a few set phrases in which it is used as copula: We find *kayul* ‘which one is it?’ < *kayu ol* a number of times in the catechism in Tibetan script. *nägül* < *nä+gü ol* ‘what (collective) is?’ appears e.g. HTs VIII 388 and 398 in the phrases *nägül öñisi* and *adırtü nägül* ‘What is the difference?’, there are a number of examples elsewhere in Hts; also in Tattvārthā, mainly in the phrase *iši nägül* ‘what is its business?’. The same phonetic process happens in *-gUl* < *-gU ol*, which, in late texts, becomes a suffix of impersonal mood meaning ‘one should ...’ (see section 5.2).

Cf. further the crasis of *nä ärgäy* to *närgäy* ‘what will become of ...’ twice in a runiform inscription (YE 41,8; cf. OTWF 301), involving fusion between the interrogative pronoun and the copula; similarly *näzä* ‘thing’ < *nä ärsär* ‘whatever’ four times in a late contract (Mi19 in SammsUigKontr). Kāśgarī (fol. 197) states that *näräk* ‘Why is it necessary?’ (spelled without *alif* – or indeed any explicit vowel – in the

²²⁸ Additional possible examples for haplology in connection with this formation are mentioned in OTWF 265.

first syllable, showing that the vowel was short) comes from *nä käräk*; the strong stress on ‘Why?’ here even led to the dropping of /k/.

Further inscriptional fusions with pronoun vowels occur in *bödkä* (KT S11, BQ N1 and 8 and E2) ‘at this time’ < *bo üdkä*, attested in K S 1 and *bučägü* < *bo üčägü* ‘these three’ in Tuñ 12: Note that the second (front) vowel prevails in *bödkä*, the first, back one in *bučägü*. Backward fronting, again involving *bo* (though without syllable loss), takes place also in *bökün* ‘today’ < *bo kün* ‘this day’. It appears in *bökün bar yaran yok* ‘here today and gone tomorrow’ (Mait Taf.118r12 = MaitH Y 12b27, colophon reedited by Laut in Ölmez & Raschmann 2002: 133) and in *bögünkätägi* ‘till today’ in ManTüFr 7 and BT V 148. This word is spelled thus with G in Manichæan script in both mss.; this could be a case of voice confusion in the BT V text, which has another two instances for this phenomenon, but not in ManTüFr, which does not, and on the other hand has *kanyu* as a sign of archaicity. Since Old Turkic consonants do not get voiced between vowels, this should mean that an original **gün* (with *g°* in all Oguz languages) was here retained because it was not in onset position: This fusion would have come about before **g° > *k°*.

kim+kä näη (pronoun and negative particle) is contracted to *kimkäη* in DreiPrinz 71 (and, damaged, in 86); there is a similar contraction in Orkhon Turkic. The postposition *täg* fused with the demonstrative pronouns *bun+* and *an+* by adapting to back harmony, giving *montag* and *antag*. *sizintäg* (instead of *sizni täg*) ‘like you’ in ChrManMsFr ManFr r 10 and *bintägi* ‘someone like me’ in Tuñ 57 (before Alyılmaz 2000: 110-111 erroneously read as ‘*büntägi*’ and since T. Tekin 1963 interpreted as a case of backward assimilation) are additional instances showing that *täg* was on the way to becoming a case suffix. The process appears not to have been quite complete in Orkhon Turkic, however, as we also find an instance of *antäg* (Tuñ 29), where the postposition still retains its vowel.

In the verbal domain we get fusion between the vowel of the vowel converb and the onset vowels of auxiliaries following them. This happens in Orkhon Turkic with the verb *üd-* (described in section 3.251), in *xaganin ičginī idmiš* ‘quite lost their ruler’ in Ongin F 2 and *anča (a)y(i) idmiš* ‘sent the following message’ in Tuñ 34: Had there been no factual fusion, the converbs would have had the shapes *ičginu* and *ayu*.²²⁹ In Uyghur the phenomenon is widespread with the verb *u-* ‘to

²²⁹ Tekin 1968: 101 (§2.259, 2°) read this as ‘*anča yidmis*’ and took it to be an instance of external hiatus filled by a helping consonant; this was argued against in

be able to' (described in section 3.253). The examples I have come across all involve the negative form *uma-*; the fusion therefore appears to have moved towards the creation of an impossibility form, which is a reality at least since Qarakhanid Turkic. In Manichaean sources we have e.g. *baru uma-* (Xw 75), *tutu uma-* (Xw 216), *uku uma-* (ms. U 232 quoted in Zieme 1969: 20), *sürü uma-* (M I 16,20), *särü uma-* (M III Nr.18, 36,8₅); in Buddhist sources *ädikü uma-* (TT V B 118), *tutu uma-* (U III 66,15); *tidu uma-* (KP 27,3), *särü uma-* a number of times in the DKPAM. The vowels of these converbs would have the shapes *-I* or *-A* if they were not being employed in this construction. This assimilation does not yet take place in runiform sources, which have *artati u-* (BQ E19) and *uça uma-* (IrqB LXI). Practically all of Uygur has it but it is prevented by the parallelism of biverbs, e.g. *iya basa umadin* (TT II,2 74), *ara yuva umadilar* (Mait Taf 202r12) or *JtIdA uka ugaylar* (Mait Taf 26v8). *tida um[a]d[in]* has been read in Mait Taf 72v22.²³⁰

2.5. Morphophonology

2.51. Native stems

The phonotactic compatibility of stems and suffixes demands suffix allomorphs, one set starting with a consonant, another with a vowel, to suit bases ending in vowel or consonant respectively. Thus there is a present participle suffix with the variants *-igmä*, *-igma*, *-ügmä*, *-ugma* after consonants, *-gmä*, *-gma* after vowels, for which we have the morphophonemic notation *-(X)gmA*; the *X* symbolises a whole set of vowels: /i i u ü/, also /o ö/ and perhaps others (see below). It is incorrect to give '-gmA' as morphophonemic notation (as most recently done by Tekin 2000: 17), and write *käl-i-gmä* 'gelen' etc. as if there were a helping vowel *-i-* between the stem and the suffix, because the identity of this vowel cannot be predicted from the phonetic surroundings: The unstable vowel is e.g. /a ä/ in the formative *+(A)r-* or the collective suffix *+(A)gU* or the volitional suffix *-(A)llm*, /o ö/ in the suffix *-(O)k* forming deverbal nouns. The choice between /X/, /A/ (standing for a or ä) or /O/ (standing for o or ö) depends on the suffix, which means that these vowels (whose appearance is steered by phonotactics) are part of the suffix.

Erdal 1979b: 224 (n.30). Hiatus-bridging /y/ is a phenomenon peculiar to the Oguz branch and is unknown in Old Turkic.

²³⁰ The editor states the remaining letters of the second word to be unclear but nothing else would probably suit the context.

Rarely, suffixes starting with a vowel retain this vowel in all positions, in which case bases ending in a vowel elide theirs: $+(U)t$, which expresses plurality with titles, appears e.g. in *tarkat*, *säñiüt* and *tegit*, the plurals of the titles *tarkan*, *säñün* and *tegin*; it may have been borrowed together with these bases, possibly from a Mongolic language. Suffixes which thus replace a part of their base are called dominant. Dominance (first described for Turkic in Erdal 1979a) never applies to single-syllable vowel bases, as it would change them beyond recognition. It is also found with the suffixes $-Xš$ and $-Xn$ and one or two others.

A few of the suffixes starting with consonants drop these when added to stems ending with consonants: The 3rd person possessive suffix $+(s)I(n)$ drops its $/s/$ when the stem has a consonant at its end, the ordinal suffix $+(r)Ar$ drops its $/r/$, the genitive suffix of the runiform sources and a few Manichæan mss. $+(n)Xη$ its $/n/$. Morpheme juncture is dealt with in greater detail in Erdal 1979a.

Synharmonism has been presented above in terms of phonemes alternating in an archphoneme framework as far as vowels are concerned but (seemingly inconsistently) as a matter of allophones in the consonantal domain; this has to do with the fact that the distinctions are, in practically all Turkic languages, salient for all vowels but only for a few of the consonants. Strictly speaking, syllables are affected by fronting and, in principle, even by rounding as wholes: Note that the runiform script has quite different front and back characters for most consonants (but not for all vowels); for the voiceless stops it even uses special characters depending on whether vowels before or after them are rounded or not. We have substantial evidence that Old Turkic $/k/$ was pronounced rather differently in front and in back surroundings.

We here give a classification of suffixes by archphoneme vowels. Vowels in brackets are dropped if the phoneme stretch preceding the suffix ends in a vowel (or in $/r/$ when the resulting cluster is admitted).

Suffixes containing the archphoneme $/A/$ are: $+čA$, $+dA$, $+kA$, $+gArU$, $+rA/yA$, $+lAr$, $+dAm$, $+AgUt$, $+(A)gU$, $+kIñA$, $+(A)n$; the postposition yAn ; $+(A)d-$, $+(A)r-$, $+A-$, $+lA-$, $+(X)rKA-$, $+sIrA-$; $-(A)yIn$, $-(A)lIm$, $-Ar$ (durative aspect suffix), $-mAz$, $-mA$, $-(X)gMA$, $-mAk$, $-gA$, $-A$ (converb), $-gAll$, $-mAtI(n)$, $-gAn$, $-gAk$, $-mAn$, $-(X)pAn$, $-sAr$, $-gAysOk$ / $-gAšOk$; $-Ar-$, $-mA-$.

Suffixes with $/U/$: $+gArU$, $+dUrXk$, $+lXgU$, $+AgUt$, $+(A)gU$; $+U-$; $-yU$, $-U$ (converb suffixes), $-(X)nčU$, $-Ur$, $-yUr$ (aorist suffixes), $-gU$ and $-gUlXk$, $-zUn$; $-tUr-$, $-Ur-$ (and cf. enclitic mU). The second and third syllable of *altun* ‘gold’ and *küädägü* ‘bridegroom’ could be said to embody the archphoneme $/U/$ in that $/U/$ would be realised as $/u/$ in one

case, as /ü/ in the other. The distinction between high and low rounded vowels is directly documented in texts written in Indic scripts.

Suffixes with /o, ö/: +sOk; -(O)k; -gOk, -yOk, -dOk and -gAysOk / -gAšOk; similarly the enclitic particle (O)k. Evidence for the vowel in the different suffixes will be given in the next chapter, where we deal with their morphology. All the suffixes mentioned end with /k/; since the archphoneme /U/ is in no suffix followed by coda /k/,²³¹ we get complementary distribution: /U/ → /O/ before /k/. Thence, /o ö/ must in these instances come from underlying /u ü/. If, on the other hand, the syllable preceding this process contains the vowels /u/ or /ü/, the suffix vowel can appear either with /o ö/ or with /u ü/; cf. *üzüksüz* (BuddhKat 31, Tibetan script) and *buyruk* (Khotanese Brāhmī) with explicit /u ü/ in the second syllable. In examples mentioned in section 2.401, /o/ and /ö/ in non-first syllables of stems are likely to be replacements for /a ä/ or /u ü/ when the preceding syllable has /o ö/; /X/ is also likely to have given [o ö] when preceded by /o ö/. These are instances of strict vowel attraction; what influence /k/ may have had on the vowels is not, however, evident in any way. High rounded vowels before coda /k/ could be lowered in stems as well, if the Harezmi-Turkic appearance of *sünäk* for ‘bone’ (Ata 2002: 50) is any indication; in Old Turkic the second syllable of this lexeme is always rounded, and this form would signify that the Old Turkic lexeme is to be read as *sünök*.

Suffixes with /X/: +Xz, +(X)g, +(X)n, +sXz,²³² +lXg, +lXgU, +lXk, +(X)m, +(X)ŋ, +(n)Xŋ, +dXn, +(X)t, +dUrXk; +(X)k-, +(X)rKA-; -gUlXk, -Xš, -(X)nč, -(X)nčIg, -(X)nčU, -(X)m, -gXn, -(X)z, -(X)ŋ, -(X)l, -sXk, -(X)gmA, -(X)gll, -(X)p, -(X)pAn, -(X)yXn; -(X)t-, -(X)k-, -(X)z-, -(X)l-, -sXk-.

Suffixes with /I/: +čI, +sIg, +kI, +kIñA, +II, +dI; +I-, +sIrA-; -(A)llm, -I (converb), -I (deverbal noun), -Ir (aorist suffix with -(X)t- etc.), -(X)gll, gll (imperative particle), -gAll, -(X)nčIg and -vI. The suffixes +(s)I(n+), -mIš, -mAtI(n) and -(A)yIn are, in the Orkhon inscriptions, usually spelled with s² and n²; the instances are mentioned in T. Tekin

²³¹ /u/ and /ü/ are, however, followed by /k/ without their vowels getting realised as /o ö/ if they belong to the archphoneme /X/.

²³² This suffix may originally have had /I/: A denominal verb formative derived from it (documented in the OTWF) has the shape +sIrA-, the Tuñ inscription spells the suffix once as s²z and once as s²zn² (in the instrumental case) in two instances following rounded back vowels, and the Yenisey inscription E26 twice writes b¹wj²s²Iz ‘without shortage’. These are exceptions (IrqB 45 has explicit *otsuz suvsuz* ‘without grass or water’, e.g.) but they are early. Bang 1925: 40 thought that the suffix could originally have been an -(X)z derivative from *sī-* ‘to break’, which would fit with these facts; but the transition from /I/ to /X/ would still have to be explained.

1968: 59. cf. also *katig+di* with d^2 in KT N 2. The inscriptions of the Uyğur kaganate, on the other hand, show a different picture: $-(A)yIn$ is spelled with n^1 in both of its ŞU exs., and the spelling of $-mlš$ in Tariat appears to fluctuate between s^1 and s^2 . The Orkhon Turkic spelling of *suv+iñar* with r^1 and w (not $w̃$) in BQ E40²³³ or consistent Uyğur spelling of $-miš+ka$ with the letter X in Uyğur writing, with double dotted K or Q in Manichæan writing all together add up to show that the fronting was subphonemic. Note also that KT S9 and BQ N7 spell *almatın* with t^1 and not t^2 . The instrumental suffix $+(X)n$ could, in Uyğur runiform inscriptions, be spelled with n^2 which, on the other hand, always write $+(s)In$ with n^1 (e.g. in *atimin* in Tariat E4, *kanin* S1), sometimes with explicit I.

Johanson 2001: 1726a makes the following surprising statement: ‘Suffixe sind am Anfang ihrer Entwicklung unharmonisch, invariabel. Im Ost-Altürkischen²³⁴ war z.B. das Dativsuffix *+qa* ein hinteres Suffix, während das Possessivsuffix $-(s)i$ ein vorderes Suffix war. Das erste uns bekannte Türkisch weist also viele disharmonische Wortformen auf.’ The dative suffix (see below in section 3.124) *always* follows synharmonism,²³⁵ however, and the unharmonic realisations of $+(s)I(n+)$ as consistently front are clearly subphonemic. In section 3.122 we discuss the possibility that $+si(n+)$ and $+i(n+)$ were originally independent pronouns (with back vowels): They may possibly have become suffixes secondarily; this is not something one can (or should) say about any other Old Turkic suffix. Johanson’s last quoted sentence is quite misguided as far as Turkic words are concerned; we will see in section 2.52 below that he is right concerning lexemes copied from Indo-European languages – but those are unlikely to have been on his mind. The passage gives the impression that synharmonism is something which developed gradually during the history of Old Turkic – this is misguided.

It is an entirely different (and marginal) matter that the consonant cluster $/ñč/$ appears to front the stretch of the word following it. We find that in *koñčilärkä* in a runiform ms. (Miran c 5)²³⁶ and in *inančläri* in

²³³ See section 3.122 below.

²³⁴ I.e. the language described here.

²³⁵ The only possible (though by Johanson unmentioned) reason for this view of the dative suffix is the dative *baŋa* and *saŋa* of the personal pronouns *bän* ‘I’ and *sän* ‘you’.

²³⁶ This instance from Dunhuang does not justify the reading of all Orkhon Turkic instances of $+čI$ as $+či$, as done in Tekin 1968: 62-63. There is a punctuation mark between *koñčī* or *koñčij* and $I^2r^2k^2A$; either this mark is an error, or what comes after it should be emended to r^2k^2A or *är+kä*: The text says that one set of armour is allotted to this/these person(s). $r^1mk^1čIs^2n^2 = armakčisin$ in KT E6 and $y^1g^1wčs^2I = aygučisi$ in

Brāhmī script, in Maue 1996 Nr.29 B6; in this second instance the cluster is also actually spelled *ñč*. This is not at all the situation described above, where the syllables in question appear to be fronted (or at least neutral) sub-phonemically, without influencing subsequent syllables.

The texts are not free from irregularities in synharmonism as far as rounding in Turkic words is concerned, but these are not common. Examples are *kut+iñiz+garu* ‘to your honour’ (M III Nr.9 VII r1), *ädgü+lig* (MaitH X 1r16) or *öt+im+in* ‘my advice (acc.)’ (U IV D 42). There is a list of such irregularities in Manichæan sources in Zieme 1969: 57, with examples from Buddhist texts added in the note 309 thereto. With binomes such as *ögrünčü+lig+in sävinč+lig+in* (MaitH XX 1r7) or *mün+süz kadag+suz* (M III Nr.22 v1) the irregularity is caused by parallelism, apparently visual parallelism in the second case. In a few instances, /I/ is replaced by /X/ within stems, as *toyunlar* < *toyınlar* (Saddh 36) ‘monks’, *üşüt-* ‘to chill’ < *üşi-t-* (Ernte 24 and Ernte II 2) or *kuru-* < *kuri-* ‘to dry’ (Ernte 119).

Doerfer 1981: 55 has noted that there are no suffixes with coda /X/, whereas /A I U/ are well attested in this position; nor is there any coda /O/ in suffixes, but this follows from the fact that the choice for /O/ over /U/ in non-first syllables is directly related to the vowel’s being followed by /k/. This special situation of /X/ demands an explanation, and the two possible ones have already been suggested.

Note also that we have found no suffixes in which onset /I/ or /U/ get dropped after vowels; this appears to happen only to onset /O/, /X/ and /A/. The vowel of the aorist suffix,²³⁷ which has various allomorphs, is lexically determined: We find *-Ar* with most simple stems, most denominal ones and some derived ones, ~ *-Ur* with most derived stems and a few simple ones, ~ *-Ir* with causative stems ending in *-(X)t-*. With (derived and simple) stems ending in vowels the most common variant is *-yUr*. *-yUr* alternates with *-r* (e.g. the numerous instances of *te-r*, it says ‘in the IrqB), which could, in principle, come both from *-Ar* and from *-Ur* by the dropping of the vowel: *-Ur* might seem to be the likelier source if one thinks of *-yUr* as letting the hiatus-bridging /y/ precede the allomorph *-Ur* – but there is no hiatus-bridging /y/ in Old Turkic;²³⁸ *-Ar* seems a likelier source since practically all verb stems

Tuñ 49 do not speak for Tekin’s view on *+čI* either, as *+(s)I(n)*, the suffix spelled with *s*², does so also when not preceded by *+čI*.

²³⁷ Discussed in section 3.233 below.

²³⁸ Tekin 2000: 79 makes this phenomenon responsible for the /y/ in the suffix *+yA*. That, however, should be an allomorph of the directive/locative case suffix *+rA*; cf.

ending in vowels are either simple or denominal. One could then write this particular realisation of the suffix as *-(A)r*. For this same reason, *-yUr* does not come from *-Ur* through the addition of /y/, but is an allomorph by itself. *+(I)čAk*, an element expressing endearment, may possibly be the only suffix which does drop an onset /l/; see section 3.111. It was probably borrowed from Iranian, however, and evidence for it is quite tenuous.

-(O)k drops its onset vowel also in *kör-k* ‘beauty’ < *kör-* ‘to see’, *ör-k* ‘prominent’ < *ör-* ‘to rise’ and *tur-k* ‘length, height’ (discussed in OTWF 224-225), since the cluster /rk/ is admitted. This clearly does not happen to *-(X)g*, since we have *sor-ug*, *sür-üg*, *tur-ug*, *ur-ug* and *yör-üg*. *-(U)t* behaves in the same way, with *adür-t* and its synonym and binome-mate *üdür-t* (both under *adürt* in the UW), *ägür-t* ‘siege’, *ur-t* ‘eye of a needle’ < *ur-* ‘put, place’ and also *yurt* ‘encampment’ < Khaladj *yuor-* ‘to sit or stay at some place’. *ör-t*, *ber-t* and *kürt* are formed in a similar way. The causative suffix *-(X)t-* / *-(I)t-* equally drops its vowel after /r/, in *adart-*, *agart-*, *bäkürt-*, *bälgürt-*, *bışurt-* and so forth; the examples are quite numerous. The formative *+(X)k-*, on the other hand, retains its vowel after /l/ and /r/, as can be seen, a.o., from *yol+uk-* ‘to come across’ and the very common *bir+ik-* ‘to come together’. The much less common *-(X)k-* fluctuates: Beside the many examples of *tar-ik-* ‘to disperse (intr.)’ we find in two pre-classical texts (BT V 494 and Mait 165v28) the form *tark-*. The single Uygur counterpart of Qarakhanid *balik-* ‘to get wounded’ (related to *baš* ‘wound’ and *balig* ‘wounded’) attested in Xw 74 is *balk-*. We cannot say that these vowels were dropped because they belong to an affix; they could also have disappeared due to the (more general) process of the loss of the medial vowels: Note *elit-* ‘to lead’ and its common variant *elt-*. *-(X)p* does not lose its onset vowel even after /r/, although /rp/ is an admitted coda cluster: Dropping the vowel would contradict the tendency of having at least one syllable for each inflectional affix. This may originally have been different, taking *tolp* ‘all’ to be a petrified *-(X)p* converb from *tol-* ‘to get full’; but the syncopation could also have developed secondarily, when the word was no longer felt to be a converb. As far as inflectional morphology is concerned, stem-final /r/ behaves like a consonant with respect to the dropping of vowels in morpheme juncture; with stem-final /l/ and /n/ this is true also of word formation.

section 3.124 below. ‘*yu-y-ul-*’ in 1.1 of the text edited on p.300 of Laut & Ölmez 1998 should better be read as *yuv-ul-*, mentioned as a possible reading in the note thereto.

The emphatic clitic *Ok*, the interrogative particle *mU* and the rhetorical particle *gU* of the Orkhon inscriptions follow synharmonism. In Orkhon Turkic, the postpositions *yan* ‘in the direction of’ (originally a noun signifying ‘side’) and *täg* ‘like’ turn into *yAn* and *tAg*, thus assimilating to case status; the former with nouns, the latter in *montag* and *antag*, *bintägi* and *sizintäg*, from the oblique stems of *bo* ‘this’ and *ol* ‘that’, *bän* ‘I’ and *siz* ‘you (pl.)’ respectively. This process, which results in morphologization, is limited to Orkhon Turkic as far as *yan* is concerned, but is, with *täg*, carried on in Uygur. The phrase *nä täg* ‘like what’, also often spelled without space between the two syllables, must have undergone the same process: In *nätäg+lä+ti* (Suv) the phrase is expanded with two suffixes of adverb formation.

2.52. Borrowed stems

The morphophonology of borrowed elements has recently been dealt with in Erdal 2002. Borrowed stems normally get suffixes in back variants also when they have front vowels, in violation of synharmonism rules. This fact, first pointed out in Zieme 1969: 37-8 and elaborated upon by Röhrborn 1988 and 1996, is best observed in texts written in Brāhmī script, which has special spellings for all front vowels; e.g., *asanke+larta* (Maue 1996, 19 Nr.11), *šarmire+larī* and *šarmire+larka* (Maue 1996, 3 Nrs.78 and 84) or *tetse+larīniṅ* (ĀṭSū 1 v4). /i/, the only vowel for which Brāhmī mss. do not have a special character, is generally spelled like /i/.²³⁹ Where most Brāhmī mss. write *i* in the pre-suffix syllable, this can be read as [i] as well. Instances such as *ništani+larī* (in Maue 1996 Nr. 44b B2), *raši+ta* (TT VIII L32), *jñatiputri+liḡlar* (TT VIII G13), *kumbandi+lar* (ĀṭSū 1 v6) or *gandarvi+lar* (in ĀṭSū 3 r2 and v1) and even *indri+lar* (in ĀṭSū 1 r3) are no corroboration of the rule, as their *i* could in fact be *ī*. The pronunciation hidden behind *rṣi+larda* in TT VIII D6 and *arži+ka* ‘to the rṣi’ in BT VIII A 87 was probably *arži* with °ī, because it is twice spelled with *e* in the second syllable in BuddhKat.²⁴⁰ *nizvani+liḡ* (TT VIII E47; also often in Mait etc.) is likely to have been pronounced with /i/ for the same reason: We find *nizvani* (of Sogdian origin) 4

²³⁹ Only the ms. TT VIII I differs here in writing /i/ (as well as /e/) as E whereas the letter E in other Brāhmī mss. exclusively represents the vowel /e/ both in Turkic and borrowed words. In this it shows exactly the same practice as BuddhKat, which is in Tibetan writing.

²⁴⁰ See the previous footnote. /e/ is not to be expected in this word, as the Skt. source has /i/ and not /a/. See Erdal 2002: 20 for its first vowel.

times spelled with *e* in the third syllable in BuddhKat. For texts written in Semitic scripts we can know of the harmony class of a suffix only when it contains the letter X.²⁴¹ Consistent back suffix harmony in foreign elements can then be proven either when a stem shows explicit front spelling or when it is otherwise attested in an Indian writing system. A very clear such instance is *čürni+ka* (HeilkII 1,48), whose first vowel is spelled as WY. The reading of *asanke+līg* (Mait 90v9 and 192v3, Suv 163,17, TT X 2 etc.) and *asanke+dakī* (DKPAMPb 263, 403) would also be undisputed, as we have this stem also in Brāhmī. Similarly with *den+ka* ‘to the religion’ (TT II,1 46), whose base is attested with front vowels in Tibetan script in BuddhKat 26, 29 and 30. In other cases with back harmony in the suffix it is not sure that the base has front vowels even if the word in the source language does. Counter-examples to the rule are rare; such are *šarir+kä* ‘to the relic’ (MaitH Y 118) and *frišti+lär+kä* (M III Nr.1 I v3 and elsewhere); in the case of *frišti* ‘angel’ back-harmony suffixation is attested as well (M II 10,4, TT IX 94 and elsewhere).

In a case like *darni+g* ‘the spell (acc.)’ (Suv 484,17) the second vowel may actually have been transferred into the back class by the X of the accusative suffix (with which it shares the syllable) and become */i/*.

The second vowel in *v(a)žir+līg* (< Skt. *vajra*; TT V A41, suffix spelled with X) was introduced secondarily, and there is no reason to think that it did not follow synharmonism. Similarly *čakir* < Skt. *cakra* ‘wheel’, *bavagir* < *bhavāgra* (discussed in OTWF 16) or *čankirmit* in TT X 513 (though spelled with K and not X) alternating with *čankramit* in l. 518, whose Sanskrit original did not have any vowel before the */r/* either. The third vowel of this word *could* also, of course, have been */i/*, though we have no way of knowing. The fact that the last three words are spelled with K and not X is irrelevant for the vowel; as pointed out in section 2.34, velar stops in borrowings are not spelled with X even when appearing in back-harmony syllables.

Hence the base of a form like *šaki+līg+lar* (ShōAgon 3,22; < Skt. *śākya*) could also, influenced by its first vowel, have ended in */i/* in spite of the spelling with front K. Similarly *čadiklīg* (e.g. TT X 4) also spelled with K, originally from Skt. *jātaka*; the raising of the second vowel would indicate Sogdian origin. *užik* ‘letter’ is likely to have had an */i/* and not an */i/* as second vowel in spite of the spelling with K

²⁴¹ The difference between the so-called ‘signal letters’ is not reflected in our transcription; we write front or back vowels instead, though this cannot be seen in the ms. if it does not use an Indic writing system.

because a common variant is, in Semitic script, spelled with *alef* instead of *yōd* in the second syllable.

It also happened, on the other hand, that borrowed stems were fronted through the presence of K, possibly by spelling pronunciation. Such cases are *kūžäl* ‚nice‘ ≪ Skt. *kuśala*, *sāṅrām* ‚monastery‘ ≪ Skt. *saṅghārāma* ‚monastery‘ and *Gödäm* ≪ *Gautama*. *g(ä)rx+kä* ‚at (the ascendance of) the planet‘ (Sanskrit *grāha*) has been read in a Berlin fragment of Suv by Le Coq (the fragment itself is now lost); the onset K apparently caused the fronting.

Bases with back synharmonism practically never get front suffixes: Note runiform $n^1g^1ws^1k^2l^1r^1 = nagošaklar$ ‚lay believers‘ in ms. TM 332 (KöktüTurf p.1047): The word is spelled with a front k^2 but the plural suffix is *+lar* and not *+lär*.²⁴² When the base ends with a *caph* (in Turkic units used only beside front vowels), suffix velars adjacent to it can also be spelled with *caph* e.g. in *m(a)xistak+(k)a* (with velar simplification) or *možag+ka* (M I 33,18; ManBuchFr 1v6). This spelling practice does not imply reading *možag+kä*, as Zieme 1969: 57 did: The runiform spelling of *nagošaklar* shows that the vowels were not fronted. There are counter-examples to this spelling rule as well, e.g. *saṅik+ka* (BT XIII 13,81 in two mss.) and *abišik+lig* with X in the suffix. There is actually quite a lot of fluctuation after coda Ks of the stem; the Uygur counterpart of Skt. *śloka* ‚verse‘ is often spelled with front suffixes but we also have the accusative *šlok+ug* with X in Ht VIII 1924.

Counter-examples where foreign back-vowel words not ending in K are followed by front-vowel suffixes are exceedingly rare. If they are errors, as Röhrborn 1996: 178 (who mentions one of the examples) thinks, they undermine the trustworthiness of Brāhmī evidence for the rule Röhrborn was trying to establish in that paper. Two other such instances are *ugur+dä* in Maue 1996: 3 Nrs. 90 and 96, a few lines from the instance *rajaḡr+dä* which Röhrborn is there discussing (3 Nr. 86).²⁴³

²⁴² Mz 386 (TM 333) v1-2 was read as $\check{s}^1k^2l^2r^2:t^1w[g^1]r^1:r^2t^1$ by P.Zieme in ‚A Manichæan-Turkic dispute in runic script‘ (2001), interpreted as *[nigo]šaklar tu[g]ar ärti* and translated as ‚[audi]tors were born‘. This would mean that *nigošak* here gets the front variant of the plural suffix. The first character does not at all look like s^1 , however, but rather like k^1 , and the verb phrase *tugar ärti* would imply durative aspect or a continuous or iterative event, which seems unlikely; besides, babies are not born as auditors. Another possible reading is *Jka k(ä)l(i)r tu[š]ar (ä)rti* ‚They were coming to meet (+ dative)‘.

²⁴³ Maue transcribes *rajaḡirdä* while Röhrborn would like to read *rajaḡirdä*, the source being Skt. *rājaḡrha*. Since this is a secondary helping vowel, it might as well be following the harmony of the vowels preceding it; the exception for the suffix would not be all that much of a surprise in view of the double *ugurdä* in the same passage.

There appears to have been general uncertainty concerning the spelling of learned foreign words, especially those which were probably transmitted in written form by clergy. The rule that they should generally be followed by suffixes of back harmony stands, and exceptions are relatively few.

CHAPTER THREE

MORPHOLOGY

Morphology deals with bound morphemes, their use, their functioning and meaning and the way they alternate in order to express grammatical categories. The description of most grammatical categories is included in this chapter, since these are in Old Turkic generally (though not always) expressed by morphological means. Morphology also comprises word formation in so far as the products of this part of grammar are by no means all to be found in the lexicon; many derived lexemes (e.g. such as are formed with adjectivising *+lXg* or with the suffix *+kIñA* used for endearment or with the suffix *-(X)š-* expressing cooperation or vying) are clearly ad hoc products, not meant to be remembered by the speaker / writer or by the hearer / reader.

Old Turkic bound morphemes are practically always suffixes; the only exception is the expressive reduplication of adjectives, where the first one or two phonemes are repeated with the addition of a further consonant (section 3.112 below and OTWF section 2.23). Old Turkic suffixes generally adhere to synharmonism (see section 2.51 above), which serves as an important boundary marker for the word. Particles like *(O)k* or *mU* are, however, taken to be outside the word (i.e. not to be suffixes) even though they also adhere to synharmonism. The reason for this is that a class of word stems (lexical as e.g. verbs or grammatical as e.g. personal pronouns) is defined by the set of suffix paradigms that it allows,²⁴⁴ and suffix paradigms are, in turn, defined among other things by the classes of stems to which they get appended. *(O)k* or *mU*, however, can get appended to all classes of words or word groups (and never to stems as such); moreover, they are not followed by bound morphemes (as e.g. the plural suffix *+lAr*, which in Uyğur is used both with nouns and verbs). When postpositions or other elements get synharmonic, they are nevertheless considered to have become suffixes (as happens with *täg* ‘like’ or, in Orkhon Turkic, with the noun *yan* ‘side’): They acquire characteristics of case endings applying to a limited set of lexeme classes.

²⁴⁴ Exceptions to this are very rare. One example is the expression *bir ikintiškä* ‘one another’; the second word of this common phrase clearly consists of *ikinti*, the ordinal of *iki* ‘two’, of the dative suffix *+kA* and, between the two, of what at least looks like the verbal cooperative-reciprocal suffix *-(X)š-*.

Old Turkic suffixes generally appear in neat chains and each of them is expressed by a neat chain of phonemes (often alternating within archphonemes); this is what is meant when stating that this is an agglutinative language. Morpheme juncture procedures are described in section 2.51 above; see also Erdal 1979a.

A morphological class of lexemes (generally corresponding to a part of speech) opens a chain of morphological slots, which can be filled by suffixes or left empty. A slot left empty may have a specific meaning ('zero'); this generally happens with verb stems, in that, e.g., the absence of verbal suffixes indicates that the form is to be understood as 2nd person singular imperative. Or it may have no meaning at all, as e.g. with the slot of possessive suffixes on nouns: The absence of possessive suffixes does not mean that the entity belongs to nobody, or that it belongs to the (unmarked) 3rd person. Here is an example for what I mean, from verbal morphology, where possessive suffixes can refer to the subject of the verb: *bunča esig küčüg bertökgärü sakinmatı türk bodun ölüiräyin urugsıratayın ter ärmiş* (KT E10). This sentence can be translated as follows: 'They (i.e. the Chinese) used to say "Let us kill and exterminate the Turk nation", not taking into consideration that (we) gave (them) so much service'. The context tells us that the subject of *esig küčüg ber-* is the Turks; since these are the Turk ruler's words, 'we' and not 'they' is appropriate although not indicated by the morphology of *bertökgärü* or anywhere else in the sentence. Nor is the indirect object of *ber-* 'to give' explicit; we know it from the context, which the addressee's understanding is made to rely a lot upon by Turkic economy.

3.01 Suffix ordering

The suffixes closer to the stem are, in general, derivational, while those further away are flexional. This is so with verbs, where everything preceding the slot for the negative suffix *-mA-* is derivational (though not necessarily lexicalized). With other parts of speech, it can happen that suffixes here considered to be derivational follow inflectional suffixes, suffix juncture being in general weaker in non-verbal stems.²⁴⁵ In the rest of this section we will give examples for cases in which

²⁴⁵ Affixes dealt with under 3.28 below transpose verbal stems (including the affixes preceding them) into a non-verbal class; from the morphological point of view, the product then behaves as any nominal, as a morphological island, as it were. This is not what is below referred to as a morphologically un-normal phenomenon.

certain relatively loose derivational suffixes (all dealt with in section 3.111 below) follow inflectional ones.

In *ikinti+siz* (Mait 48v7) ‘peerless’, literally ‘which has no second’, e.g., the privative suffix is added unto the ordinal form *ikinti* ‘second’. In a case like *beš paramit+lar+siz* ‘without the five *pāramitās*’, (BuddhUig II 641-2), *+sXz* governs the whole nominal phrase consisting of two words, the number (and hence the plurality expressed by *+lAr*) of the *pāramitās* being characteristic for these. It is much more common in relatively late texts (as BuddhUig II is) for *+lXg* to be added to nominals with the plural suffix; here just one example: *amrilmiš turulmiš arxant tīsilarliḡ ayagka tāgimliḡ bursañ kuvrag* (Shō VII a1) ‘the venerable community consisting of *arhats* and pupils, who have attained peace’. *kIñA / +k(I)yA* is also very often added to whole phrases and is, in this, close to being a pragmatic particle;²⁴⁶ in *bir kšān+ta+kya* ‘in a mere fraction of a second’ (BuyKäl 32 and 35) it thus comes to stand after the locative suffix. The equative and instrumental suffixes often precede derivational suffixes: e.g. *änätkäk+čä+sig* ‘similar to the Indian ones’ (HTs V 4b11) with *+sIḡ*, *az+rak+ča+kya* ‘just a tiny little bit more’ with the diminutive suffix.²⁴⁷ We find *tärk+in+räk käl-* ‘to come rather fast’ (DreiPrinz 26) with the instrumental followed by the elative suffix, and *bir üd+iün+kyä* ‘for a very short moment’ (U II 75,8₂) with the instrumental followed by the diminutive suffix. *+lXg* often appears after the 3rd person possessive suffix, and even after the 1st person: *atī kötrülmiš kaḡ+iüz+liḡ m(a)hasamudar ulug taloy ögüz* (BT III 122) ‘our eminent father (i.e. Buddha), the great ocean’. Comparing the morphological involvement of *+lXg* with that of *+kIñA* we find great differences, linked to the fact that, though both are juncturally quite independent, they differ in every other respect; the two are in complementary distribution: *+kIñA* is attested after case suffixes, *+lXg* not; we do, on the other hand, find *+lXg* after number and possessive suffixes, where we have no *+kIñA*. This must be connected with the fact that the tasks of *+kIñA* are endocentric, those of *+lXg* exocentric: *+kIñA* has an extremely strong speaker significance, *+lXg* an exceedingly pale one; *+kIñA* does not, on the other hand, interact with syntactic behaviour while *+lXg* interacts with syntax very strongly.

²⁴⁶ As *+lXg* can be considered to be a syntactic particle in relatively late Uyghur sources. See details on the use of *+kIñA* in OTWF section 2.1.

²⁴⁷ Other such instances are *tap+iün+ča+kya*, *täḡ+iün+čä+kyä*, *uz+iün+ča+kya*, *u-miš+ča+kya* ‘just as much as one is able to’, *an+ča+kya* ‘that little’ and *mun+ča+kya* ‘this little’.

3.02 Bracketing

Inflectional or derivational suffixes are frequently appended to phrases or other syntagms. A few examples for this were quoted in the previous paragraph: (*bir üd*)+*ün*+*kyä* ‘for a very short moment’, (*bir kšan*)+*ta*+*kya* ‘in a mere fraction of a second’, some complex instances with +*lXg*²⁴⁸ and (*beš paramit+lar*)+*siz* ‘without the five *pāramitās*’; here is an even more involved instance with the privative suffix: In *ančakya münägülük münsüz ärip* ... (ETŞ 15,30) ‘You are free from even the smallest fault to be blamed for’ *mün* (by itself) is qualified by the ‘small clause’ *münä-gülük* ‘to be blamed’ and by expressive *ančakya*, and the whole serves as base for +*sXz*.

3.03 Group inflexion

In a way related to the above but still to be considered as a distinct phenomenon is the situation where affixes added only to the last element in a series are understood to apply also to the previous parallel members, as the first plural suffix in the following: *känč uri känč kizlar körkin körü kurtulgu tñlğlar* (Kuan 139) are ‘beings who are to be saved by seeing the figures of young boys and young girls’. The vision to be seen by each being may here consist of a single boy or girl or of more than one, but is unlikely to consist of a single little boy but a number of little girls; i.e. the suffix +*lAr* must apply both to *kiz* and to

²⁴⁸ Here are some additional ones: *bir yintäm* ‘exclusively’ (see OTWF 69) must come from *yin* ‘member’, but the etymology makes semantic sense only if one considers the formative +*dAm* (dealt with in OTWF section 2.31) to have here been added to the phrase *bir yin* ‘one member’. *bir yañlig* ‘uniform’ similarly comes from adding the formative +*lXg* to the phrase *bir yañ* ‘one type’, *bir işdäš* ‘having a common cause’ (especially common in the Kšanti Kılğuluk nom, edited in separate parts by Röhrborn and Warnke) from adding the formative +*dAš* to *bir iş* ‘one *karma*’. +*sIg* (OTWF section 2.32) is also added to bracketed nominal phrases in (*öñi yer*)+*sig ak-* ‘flowing as if at different places (of a river)’ (HTsPek as quoted in UW 78) and (*tümän mññ tü*)+*sig* ‘as if in thousands of myriads of shapes’ (QB 829). In *akar suvluk* ‘an area, a place with flowing water’ (ETŞ 8,4), +*lXk* is added to a participle + head. The second phrase of *körümčei ulatı tärs tätrü töröči* (TT VI 331) ‘diviners and other followers of wrong teachings’ is to be analysed as (*tärs tätrü törö*)+*či*; +*čI* would not make sense when added to *törö* ‘teaching’ by itself. Similarly *nomlarnññ (čñ kertü töz)*+*süz+in* ... *bilirlär* (Suv 386,7) ‘They know that the dharmas are without any real root’. The phrase *bir ägsüksüz* is used in contracts (e.g. UjgRuk 19, FenTen II 5) as a synonym of *tükäl* ‘complete(ly)’: It has +*sXz* added to the predicate of the clause *bir ägsük* ‘one is missing’, giving ‘not one missing’.

urī.²⁴⁹ In *bii*²⁵⁰ *bīçgu kilīçin bīçšurlar* (Mait 171v2 = MaitH XX 1r21) ‘They cut each other with awls, knives and swords’ the shared element is the instrumental suffix. With the locative case suffix we can quote *ol yāknīḡ üstün tāḡri altin yalḡukta kim ārsār kūçin tīdtaçī yok* (TT X 104-106) ‘There is nobody either among the gods above or among the human beings below who restrains the power of that demon’. As in the previous example, the elements *üstün tāḡri* ‘gods above’ and *altin yalḡuk* ‘men below’ are not bracketed; they do, however, constitute a natural antithetical pair and not merely coordinated elements of a sentence. This is not the case in the instances in the following passage: *kişig ... yinik körtäçī, nomug uçuzladaçılar üçün, anin burxanlar anta tugmaz; köḡülläri tar, kirläri tāriḡ üçün kut bulmiş tüzünlär bo tiltaḡin anta barmaz* (HTs V 100-106) ‘Because they humiliate people and disparage teaching, that is why Buddhas are not born there; because their mind are narrow and their filth deep, for that reason *āryas* who have found blessing do not go there’: Both pairs have the postposition *üçün* in common but in the first pair the plural suffix is also shared. In *iki kutlug el[fiç]lär kamag tegitlärin kunçuy[arī]n tüzünlärlinlugun* (DreiPrinz 119) ‘the two blessed kings together with all their princes, wives and retinue’ the case suffix is shared but the oblique or accusative form of the possessive suffix is not; this and the fact that it does not, for some reason, adhere to synharmonism make it similar in behaviour to a postposition.²⁵¹ The accusative form of the possessive suffix is shared by a binome in *bäksiz mäḡüsüzin ukup* (MaitH XV 5r27) ‘he understands (their) transience and ...’. The plural suffix can be shared also by finite verbs, as in *alku ayiḡ öḡürdi sävintilär* (Saddh 39) ‘They all rejoiced greatly’; *öḡir- sävin-* is a biverb. It would have been unthinkable for the verbs to share a verbal suffix such as *-dl*.

3.04 Parts of speech

There is a sharp distinction between verbs on the one hand and the other parts of speech on the other: While unbound elements are often found

²⁴⁹ One ms. among four writes *urīlar* here, but leaves *urī* in line 140, where a similar expression appears.

²⁵⁰ Spelled thus? The editors of this chapter of the Hami ms. write *biri*, which gives no meaning. No facs. of the page where this word appears reached Europe; the text of this passage is based solely on the transcription of Prof. Geng, who may have made a mistake. *büz* ‘awl’, another possible interpretation of what Geng may have seen, is less likely because *bi bīçgu* is a common binome.

²⁵¹ The possibility that *tegitlärin* and *kunçuy[arī]n* are not accusative but instrumental forms seems less likely to me.

to belong to two, often even three among the other parts of speech (noun, adjective, adverb, postposition, conjunction etc.) and borders between noun and adjective, adjective and adverb, adverb and postposition, pronoun and conjunction etc. are rather fuzzy, verb stems very rarely serve as anything else. This is the position, among others, of Grönbech 1936: 18-19, who points out that there may be coincidence between verbs and nominals in some cases, derivation through homophonous suffixes (e.g. $-(X)\check{s}$ - and $-X\check{s}$, $-(X)n$ - and $-(X)n$) in others, but that verbs and all other lexeme classes are in principle clearly distinct. One might add that convergence may also have had some influence, verbal and nominal stems which happen to be similar in meaning and shape having drawn even closer as they got associated with each other by speakers. Doerfer 1982 gives a long list of entities he considers to be ‘Nomenverba’; one obvious Old Turkic example is *kari* ‘old’ and *kari-* ‘to get old’. There are a number of such clear instances, though a part of Doerfer’s list must certainly be rejected as the actual meanings are in fact not all too close. In any case, the phenomenon is of etymological though not of grammatical relevance (unlike English or Chinese).

Morphology has here been divided into four groups: the nominals (also comprising adjectives, pronouns and numerals), verbs (comprising verb forms transposed into other classes, i.e. participles, converbs etc.), adjuncts (comprising adverbs, postpositions, conjunctions and particles) and interjections.

3.1. *Nominals*

Nominals are lexemes which can serve as heads of noun phrases and are thus capable of reference. As a morphological feature, all nominals can receive case suffixes. The term covers nouns (including proper names), adjectives, pronouns and numerals. We speak of ‘adjectives’ as a special sub-class because there is an (admittedly fuzzy) semantic distinction between the two classes: Adjectives tend to denote qualities and are used for referring less frequently than nouns. They also have a lot in common with adverbs. Furthermore, the stem of gradable adjectives can be reduplicated or they can get expanded by $+rAk$,²⁵² none of which is possible with nouns. There also are formatives such as $+sIg$ specifically forming adjective-type lexemes, and $+lXg$ more often

²⁵² See section 3.112 for procedures of intensification.

forms adjectives than nouns. Colour adjectives, finally, have special formatives.

The following typologically important characteristic is, however, a challenge to the distinction between nouns and adjectives: Lexemes denoting semantical predicates serve as abstract nouns as well, i.e. they not only qualify entities identified by bearing the predicate but also refer to the abstract quality denoted by this predicate. In the latter case they usually get a possessive suffix referring to the bearer of the quality in question, as *ädgü+si* ‘her goodness’, or *keñ+in täriñ+in* (poss. 3. sg. accusative) *tüpkärgäli* (BT I A₂ 12) ‘to fathom its breadth or its depth’. Thus *ädgü* is attested both as ‘good’ and ‘goodness’, *bil-gä* both as ‘wise’ and ‘the quality of being wise, one’s wisdom’ while *yer suv ärtimlig+i* is ‘the transience of the material world’ from *ärt-implig* ‘transient’. The agentively derived *armak+çï* can signify both ‘deceitful (person)’ and ‘(somebody’s) deceit’; Orkhon Turkic *armakçï+sin ücün* (KT E 6) is not ‘for his deceiver’ but ‘because of its (i.e. the Chinese nation’s) deceitfulness’. *yavlak* is both ‘bad’ and ‘badness, wickedness’; in the inscriptional sentence *karluk yavlak sakinip täzä bardï*, it may, moreover, also have been used in adverbial function (unless it signifies ‘bad thoughts’). *körgäli umazlar anïñ täriñ+in* (HTs VIII 42) signifies ‘They are unable to perceive its depth’, *täriñ* ‘deep’ having been used as abstract noun; alternately one could translate ‘They are unable to see how deep it is’. In *tükäl bilgä täñri burxan yarlikamiş köni kertü nomnuñ ünliglar bo montag yegin adrokin bilzünlär* (TT X 558) one can translate *yeg+i adrok+i* as ‘its superiority and excellence’ or as ‘that it is superior and excellent’. *kiçig+im+tä* (BT VIII A 163) from *kiçig* ‘small’ is ‘in my childhood’, *kiçig+kyä+m+tä* (HTs) ‘in my earliest childhood’. The following DLT proverb shows *ägri* both as ‘bentness’ and as ‘bent’: *yılan kändü ägrisin bilmäz, teve boynin ägri ter* ‘The snake does not know its own bentness (i.e. how bent it itself is) and calls the camel’s neck ‘bent’.’ All this explains how *+sXz* ‘without’ denotes lack when added to lexemes normally used nominally, but antonymy when added to adjectives: Examples for abstract *+sXz* forms (not necessarily with any possessive suffix to refer to the bearer of the quality) are mentioned in OTWF 133. Further, it explains why *-mIš* or *-gAn* form participles (i.e. verbal adjectives) in some modern Turkic languages but action nouns (i.e. verbal abstracts) in others; why some languages can have one and the same infinite verb form in both of these uses; how the *-(X)p* converb could come to form the head of analytical finite verb phrases (in Azeri). In *tirig+dä+ki+çä*, which signifies ‘as in one’s lifetime’, *tirig* ‘alive’ is not just ‘life’ but rather ‘somebody’s

being alive’; hence a syntactic expansion like *atararı ölmış+tä+ki+čä* (ms. T III 228 1029) can signify ‘as when their fathers had died’: *ölmış* does not refer to those being compared but to their fathers. What here becomes an abstract nominal is the whole phrase *atararı ölmış*. To return to adjectives as lexemes: It can be stated that their three-fold versatility, the ability of describing qualities on the one hand, of denoting, on the other hand, these qualities themselves *or* their bearers, is what defines them as a word class (cf. Johanson 2003).

Another way to create abstracts was by prop words like *köñül* or *bilig*: *sımtag* is both ‘careless, neglectful’ and ‘neglect, carelessness’. ‘care’ or ‘carefulness’, its opposite is *sımtagsız köñül* (see OTWF 203). *küvänč köñül* is ‘pride, arrogance’ (while ‘a proud and arrogant state of mind’ is *küvänčəñ köñül*). Similarly *öfkä bilig* ‘anger’ or *yarlıkančuči bilig* ‘commiseration’ from *yarlıkančuči* ‘compassionate’.²⁵³

Pronouns are also nominals; elements such as *öz* form a bridge between nouns and (referring or adnominal) pronouns in serving as both. Old Turkic numerals can also be assigned to the general category of nominals, although they have special morphological categories; their syntactic characteristics are shared by quantitative adjectives.

The Old Turks derived proper names both from verb and from noun forms: Lexemes denoting animals, often birds, were commonly used as proper names, as were adjectives of positive content. Imperative verb forms often serve as proper names.²⁵⁴ Male and female proper nouns often get an element *+A* added to such imperatives or to simple nouns or adjectives, as *Togana* from *togan* ‘falcon’, *Tükälä* from *tükäl* ‘perfect’ or *Kutada* from *kut+ad* ‘Be happy, blessed!’. Diminutive / caritative forms also serve as proper names. Phrasal names such as *Tirigältmişä* (Wpo2,11 in SammlUigKontr 2) < *tirig ält-mış +ä* ‘brought forth alive’ are not rare.

This chapter starts with the formation of nouns and adjectives: Nominal stems can be derived from other nominal stems or from verbal stems. The former are discussed in section 3.111, the latter in section 3.112; see OTWF vol. 1 for more details on nominal derivation. We

²⁵³ *+IXk* is used for forming abstracts in Qarakhanid only, Uygur examples being rare and late; in OTWF 126 this is explained by the fact that Uygur was a contact language with Chinese, which Qarakhanid wasn’t. Here, nevertheless, is one instance from a letter, a text type notorious for introducing progressive forms: *ävdäkilärtin enčlik äsänlik ayıdu idur biz* ‘We inquire about the well-being of those at home’; see OTWF 126 for a few additional examples. The matter is discussed in Röhrborn 1995.

²⁵⁴ E.g. *Üdrät* ‘Increase (tr.)!’, *Asıl* ‘Multiply (intr.)!’, *Üklit* ‘Make numerous!’, *Kantur* ‘Make glad!’ or *Tusul* ‘Be beneficial!’.

subsequently turn to the inflectional morphology of these lexical classes.

3.111. Denominal derivation of nominals

Nominals are formed from other nominals for certain specific purposes: Derived nominals can express smallness, endearment or pity (OTWF section 2.1); nominals (especially adjectives) can be intensified (OTWF section 2.2); nominals can be formed which express similarity of some sort with the base nominal (OTWF section 2.3); nominals can be marked for a class to which they are said to belong (OTWF section 2.4); derived nominals can express collectivity (OTWF section 2.5); they can also express certain functions related to the base noun (OTWF section 2.7) or characterisation by the base noun (OTWF section 2.9). Denominal derivation can express presence or absence of the entity denoted by the base (OTWF section 2.8) or, finally, serve syntactic purposes (as with the suffix *+lXg*).

There are two productive diminutive suffixes: *+(X)č*, added for endearment to terms for family members, and *+klñA / +klyA* used e.g. for pitying or affectionate reference to children and other beloved or cherished creatures. *+(X)č* is, in the great majority of cases, used with 1st person possessive suffixes, e.g. *ög+üč+üm* or *ög+üč+ümüz* ,my / our dear mother‘ (six times BT XIII 12, BT IX 219,2₃), *yäñä+č+im(iz)* ,my / our dear sister in law‘ (FamArch 126 and HamTouen 20,2). *kañ+ič+iñ+ka* ,to your dear father‘ (MaitH XI 12r13) is a rare instance with the 2nd person possessive. *ata+č+im* ‘my dear father’ and *ana+č+im* ,my dear mother‘ with the colloquial words for ‘father’ and ‘mother’ are especially common, the first of these since the runiform inscriptions; see the *UW* for Uygur examples of these two.

A rare suffix of endearment of the shape *+(I)čAk* may be attested in *kol+ičak* and *boto+čak*: *iki količakın atasın boyn[in] kučup ...* (U III 64,13) ‘(the poor child) hugged his father’s neck with his two little arms and ...’; *botočaklarımın karni ačmiš* (BT XIII 2,39) ‘It seems that my little camel colts (said in endearment about children) are hungry’. See OTWF 46-47 for several words which may be formed with similar suffixes.

While *+(X)č*, *+(I)čAk* and the suffix *+klñA*, to which we turn straightway, are of pragmatic use in the sense that they express the speaker’s feelings towards the entity he is referring to, the suffixes *+Ak* and *+Ik* do not go beyond the lexicon: They denote entities which are, as it were, a smaller version of what is denoted by the base. *kapak* and *čanak*, e.g., are vessels which are smaller than *kap* and *čan*; from *yul*

,spring‘ we have *yul+ak* (Mait 139r12 and v20), defined by Kāšġarī as ‚a spring with little water‘. *öz* and *özök* appear to be ‚water ways‘ related in a similar manner. With animal names the relationship between base and derivate seems to be more imaginative: *kamičak* ‚tadpole‘ < *kamič* ‚ladle‘ because of its shape, *oglak* ‚kid‘ < *ogul* ‚son‘, *adġirak* ‚white-footed antelope‘ < *adġir* ‚stallion‘ and the like. *topik* ‚ankle bone‘ < *top* ‚ball‘, *čöp+ik* ‚impurity‘ < *čöp* ‚little stick‘, *kas+ik* ‚piece of bark‘, *but+ik* ‚branch‘ < *but* ‚leg‘ appear to be formed with a different formative, *+Ik*.

+kIñA, the most productive diminutive / caritative suffix,²⁵⁵ becomes *+kIyA* in Uygur or, less commonly, *+kInA* (e.g. *azkīna* ‚very little‘ in KP 7,6 and a few other examples; see section 2.33). With terms referring to the speaker/writer, *+kIñA/+kIyA* expresses modesty and self-depreciation. It sometimes also appears with adjectives and adverbs denoting smallness, shortness of time and the like by themselves (as *azkīna* just mentioned). *+kIyA* / *+kyA* is added to inflectional forms or to whole phrases; e.g. *bir kšān+ta+kya ymā* ‚even in just one moment (*kšān*)‘ (BuyKāl 32) or *bizni tġg yüz yaš+lġg+kya+lar*, which its context shows to signify ‚people like us, who just get to be a hundred years (*yaš*) old‘ (BT II 936). It is in some ways similar to a particle (note also that Kāšġarī does not quote any words formed with it, presumably because its products are not distinct lexemes); this double nature of being a formative preceding all inflection on the one hand, of being like a particle both formally and semantically on the other hand, is retained in some modern languages where it lives on, like Uzbek and Bashkir.

+sIġ forms adjectives signifying ‚similar to (or trying to be like) the base nominal‘, as in *öñi+sġg* and *adīn+sġg* ‚distinct‘, *bar+sġg* ‚as if existing‘, *ulug+sġg* ‚vain‘. The formative *+dAm* (as in *tġñri+dām* ‚divine‘) appears to have a similar meaning.

+AgUt forms status designations, as the very common *bayagut* ‚merchant, notable‘ and *alpagut* ‚warrior‘. The form also appears in binomes with underlying nominals, as *bay bayagut*, *baš bašagut* ‚foremost (pupil)‘ (Mait 160v2) or *uz uzagut* ‚specialist‘ (ManMon 30).

Colour names have special derivates, formed with suffixes such as *+gXl*, *+sIl* and *+Xš*; see OTWF section 2.6. *+(l)dUrXk* forms names of implements spatially connected with human or animal body parts, such as *boyunduruk* ‚yoke‘, *beldürük* ‚belt‘, *sakalduruk* ‚cap strap under the chin‘. *+(l)dUrXk* appears to have had a variant *+(l)dArXk* now attested

²⁵⁵ It also seems to be the only originally Turkic one: All the suffixes mentioned hitherto apparently come from Indo-European (though this is not the place to go into details on etymology).

in *kari+ltarak* ‘upper arm bracelet’ in DKPAMPb 1138 (r and v confused in the facs.).

+IXk forms derivatives with a variety of meanings and functions (as also nowadays in many Turkic languages), which get lexicalised to different degrees; however, all of them have the general relational content of ‘purpose, assignment’ in common. +IXk is also part of the inflectional suffix -gUIXk, which forms modal action nouns and projection participles and is dealt with in section 3.284. Firstly, +IXk forms adjectives and adverbs pointing to the future, which are derived from bases denoting stretches of time: *biñ yil+lik tümän kün+lük bitigimin bälgümin ... yassı taška yaratıttım* (ŠU E9 and Tariat W2) ‘I had my written words and my mark, intended for thousand years and ten thousand days, affixed onto a flat stone’. Similarly *apamu+luk b(ä)lgü tamga* ‘a mark and seal for eternity’ (HTsPar 232,14), *tümän kalplik adrilurlar* ‘They get separated for a myriad of kalpas’ (Warnke 484), *oglumni Čıntsu Šilaka üç yil+lik tutgok bertim* ‘I gave my son as a slave to Č.Š. for three years’ (UjgRuk I 4) and so forth. Secondly, +IXk forms adjectives denoting a status, use or function assigned, or to be assigned to a human or any other entity: *bäg+lik urı ogluñ kul boltı, esi+lik kiz ogluñ küñ boltı* (KT E34) ‘Your sons, meant to be lords, became slaves, your daughters, meant to be ladies, became concubines’. A Manichæan example is *anvamig yutuzluk al(i)niñ* ‘Take yourself A. as wife!’ (M III 14,4₁); further *bäglük är* ‘a man to be lord and master’ (U II 21, 14), *teginä kulluk barir biz* ‘We are going to the prince to serve him’ (KP 23,3), *bušilik ärdinilär* ‘jewels to serve as alms’ (U III 12,15), *tapiglik tavar* ‘object to serve as a token of respect’ (HTs VII 2051). Thirdly, +IXk nouns denote places intended for entities as denoted by the base noun, or where such entities are found in abundance, as *borluk* ‘vinyard’, *čäčäklik* ‘flower garden’, *kalvalik* ‘vegetable garden’, *agilik* or *xömsölük* ‘treasury’,²⁵⁶ *yagışlik* ‘a place for sacrifices’ or *täñrilik* ‘a temple’.

+dAš lexemes denote persons (exceptions are quite rare) who are companions to the entity denoted by the base noun or have that entity in common. Uyğur instances are *nom+daš* ‘a person adhering to the same faith (*nom* << Greek *vóμος* ‘law’) as one’s own’ or *körk+däš* ‘a person’s shape-fellow’ or ‘shadow soul’, which becomes visible in a mirror or a drawing (*körk* ‘shape’ < *kör-* ‘to see’).

²⁵⁶ Etymologically speaking, the suffix of the last-mentioned is unnecessary, as *xömsö* already signified ‘granary’ in Chinese; the DLT also gives *kömčö* as ‘treasure’. In copying between languages, categorial transparency is commonly revived through additional affixes; e.g. Turkish *evlat+lar* ‘children’ < Arabic *awlād* ‘children’.

The denotees of *+ĉI* nominals are persons who are habitually or professionally engaged in an activity in some way involving the denotee of the base. This formation will here be dealt more in detail than the other formations, as it became very active in the participle domain (see section 3.282 below). The implied activities in which the base is involved can be quite diverse. *suv+ĉi* is a ‘sea pilot’ in KP 22,4-5 but a ‘water superintendent’ in USp 88,46, *ok+ĉi* clearly an ‘archer’ in QB 2370 but an ‘arrow maker’ in QB 4458, *sav+ĉi* is a glorious title in PrièreMan A 9 but has a clearly negative meaning in TT IV B 21; *yagi+ĉi*, finally, is just ‘a quarrelsome person’ in Mait 82r26 but ‘a soldier’ in all its eight QB instances. Such examples might suggest that *suvĉi*, *okĉi*, *savĉi* or *yagiĉi* are not entries in the mental lexicon but created each time according to the context’s needs.

yagiĉi just mentioned, *küniĉi* ‘a jealous person’, *övkäĉi* ‘bad tempered’ and *buyanĉi* ‘meritorious’ label people by their qualities rather than their profession.²⁵⁷ There is a wide variety of implied verbs: *tamgaĉi* (earliest in KT N 13) is the person who *bears* the royal seal and *uses* it. A *titigĉi* is a man who *makes* mud (*titig*) walls and an *ašči* *prepares* food. An *altunĉi*, *sasiĉi* or *tämirĉi* *use* the denotees of the bases (gold, clay and iron) as material to *make* objects; thus also *igaĉĉi*, as we understand from the context. In other contexts, *igaĉĉi* could be a tree cutter; a *targakĉi* *makes* or *sells* combs. A *tuzĉi* *collects* and/or *sells* the object (salt) while a *bözĉi* *makes* or *sells* it (cotton cloth). A *kalanĉi* is somebody who *does agricultural work* for the state *instead of paying* the *kalan* tax. The *ävĉi* ‘housewife’ and the *borlukĉi* ‘wine grower, wine cultivator’ (not the owner of a vinyard) *work in* the place denoted by the base. A *yultuzĉi* *looks* at his object (stars) to *predict* the future while the *yuntĉi*, *koñĉi*, *udĉi* and *yañaĉi* have terrestrial objects (horses, sheep, bovines and elephants) to *watch* and *tend*.

+ĉI nouns practically always denote humans²⁵⁸ who are initiators of events or activities: *kämiĉi* and *kaŋlaĉi* are people who sail and drive ships and carts respectively, not passengers on these vehicles. The *tijĉi* (U II 8,37 and TT IV A 21) is not a listener (as one might think in view of the derivate *tijla-* ‘to listen’), but the person who communicates things to be listened to; *kapagĉi* is a ‘doorkeeper’, not somebody who is

²⁵⁷ So do the very common *yarlikanĉuĉi* ‘compassionate’ and its rare near-synonyms *irinĉkänĉüĉi* and *sakinĉuĉi* (see OTWF 114-5), which can be considered to be deverbal as no corresponding *-(X)nĉU* forms are attested. Thus also *armakĉi* ‘deceitful person’ (already KT E6), which comes from *ar-mak* ‘deceit’ and not from the verb.

²⁵⁸ I have met only one instance where the referent is an animal: *kan+ĉi kurt* ‘a leech’ in a Brähmī text, from *kan* ‘blood’.

locked in or out by a door. +čI often forms derivatives from names of activities; thus *avčī* ‘hunter’ < *av* ‘hunt’, *oyunčī* ‘player’ < *oyun* ‘game’, *sīgüčī* ‘wailer’ < *sīgüt* ‘lamentation’ or *yelvičī* ‘sorcerer’ < *yelvi* ‘sorcery’. This makes derivatives from denominal verbs, e.g. **oynagučī* or **sīgtagučī*, superfluous. Agentivity was a central characteristic of this formative already prehistorically: This is what made it part of the highly productive agentive formatives -(X)gčI and -gUčI dealt with in the section 3.113, and presumably also of the subject participle -dAčI (section 3.282), which serves as future form in Orkhon Turkic (section 3.234).

Not all combinations of deverbal formatives with +čI fused into deverbal formations. Two such formative sequences are mentioned above; another two are -(X)m+čI (e.g. exceptionally not all too agentive *ölümčī* ‘creature doomed to death’) and -(X)š+čI (e.g. *tütüşčī* ‘quarreler’, *öčäščī* ‘contender’ or *turuščī* ‘opponent’). *közütčī* ‘guardian’, one of the products of the -(U)t+čI sequence, governs objects, just as -(X)gčI and -gUčI do; e.g. in the common expression *yertinčü küzütčī*, a loan translation from Skt. *lokapālā* ‘guardian of the world’.

+sXz denotes lack when added to nouns. When it is added to adjectives it signals their non-applicability, e.g. *bäksiz* ‘infirm’, *mäjüsüz* ‘transient, not eternal’, *činsiz* ‘untrue’, *adinsügsiz* ‘immutable’. *bägläri bodunī tüz+süz üčün* ‘since the lords and the people were in discord’, *bir ägsüksüz tükäl* ‘without (even) one missing (i.e.) complete’, *ät’öz ürlüksüzün ukitu* ‘explaining the body’s transience’ (< *ür+lük* ‘everlasting’) or ‘teaching that the body is transient’. In the Tuñokok inscription, (but not e.g. in the KT and BQ inscriptions) +sXz could have had the shape +sIz, as it is written with s² in Tuñ 48, and in the instrumental form in Tuñ 35 as s²zn². This accords with the first vowel of the suffix +sIrA- ‘to be or become without (the base noun)’, which is derived from the privative suffix using the formative +A-.

+IXg was, in the Orkhon inscriptions, a formative signifying ‘Possessing the denotee of the base’, as in *küčlüg* ‘powerful’, *künlüg* ‘having female slave(s)’, *xaganlīg* ‘having a *xagan*’. In Uygur it has a wide variety of uses, indicating, e.g., origin (*Solmīlīg Alp Totok Ögrünčü*), material (*kümüšlüg tirgüklär* ‘silver-plated pillars’), apposition (*täñri kizlarilīg terin kuvrag* ‘the assembly of god-maidens’) or metaphor (*nizvanilīg kir* ‘the dirt of passions’), and governs some very involved constructions partly described in section 4.122 below (see OTWF section 2.91 for a full treatment). +IXg is sometimes

preceded by *+lAr* or by possessive suffixes; examples are given in section 3.01. Interestingly, it is preceded by the 3rd person possessive suffix in the shape which we find before postpositions; e.g. in *burxan kut+in+lig kölök* (Pfahl I 8), where a ‘vehicle’ (Skt. *yana*) is presented as a metaphor for Buddhahood. *+(s)In+* might then be the shape which the possessive suffix has also when it precedes derivational elements and not only postpositions (the only one attested in this position being *+lXg*). In another appositional instance of *+lXg*, a personal pronoun also appears in the shape it has before postpositions, which is (as with the possessive suffix) identical with the accusative: *biznilig erinč tünliglar* (UigOn III B r3) ‘us poor creatures’. Another possibility is that *+lXg* was really felt to be a postposition, since it has such loose juncture in Uygur (cf. OTWF p.151). In other cases, however, we have the possessive suffix appearing without */n/* before *+lXg*; for this there might again be two reasons: Along with other changes in Uygur, this */n/* was dropped also before postpositions (section 3.124), and the instances without */n/* might be part of that historical development. As a different possibility, *+lXg* may have come to be felt to be a concatenating particle, and particles never demand this oblique form of what precedes them.

3.112. Intensification of adjectives and adverbs

Intensification applies to adjectives and adverbs but not to nouns, except the use of the clitic particle *(O)k* (which can, in fact, modify any textual entity). *+rAk* forms elatives and comparatives. It might be a particle rather than a formative as it practically never forms lexemes, as its products do not differ from their bases in lexical content, as it hardly ever is followed by formatives but sometimes appears even after inflectional morphology. *+rAk* is added to adjectives (e.g. *yarprak sav* ‘quite difficult phrases’) and adverbs (e.g. *ašnurak* ‘before, earlier’) but not to colour terms, which are graded by reduplication. *+rAk* forms govern the case form in *+dA*: e.g. *ay täñri tilgänintä sävigliqräk* ‘lovelier than the moon disc’ (comparative); *barçada içgärüräk barçada üzäräk* (BT V 170-171) ‘more central (*içgärü* ‘inside’) than everything else and highest (*üzä* ‘above’) of all’ (relative). In *yäk içkäklärdä üstünräk yavlak* ‘worse than demons and vampires’ (DKPAMPb 152) comparison is expressed by the adjective *üstün* itself expanded by *+rAk*. Together with *takı* ‘more’ we have *antada takı yegräk* ‘even better than that’ or, adverbially, *ög+in+tä kañ+in+ta takı yegräk ara kirür* ‘he intercedes (*ara kir-*) for them even better than their mother and father’.

Elative content is also expressed by repeating the same adjective as in *yarok+ta yarok* ‘brightest’, *aglakta aglak* (MaitH XI 6r10-11) ‘most unfrequented’, *avingu+ta avingu* ‘most amusing’²⁵⁹ or *artok+ta artok süzök* (Mait 26A r6) ‘exceedingly pure’. Compared adjectives need not have *+rAk* either, as in *mntada ymä muḡadinčig* ‘more wondrous than this’ (Mait 26A r3).

Reduplication is another means of intensification limited to adjectives and adverbs. Here the stem is preceded by a syllable consisting of the first consonant (if it starts with one), followed by the first vowel and *p*: e.g. *kap+kara* ‘quite black’ (and other colour names), *tüp+tiüz* ‘quite level’ (and other shape adjectives), *ap+arig* ‘quite clean’, *äp+äsän* ‘quite healthy’ or *tup+tutči* ‘quite uninterruptedly’.²⁶⁰ This is the only productive morphological process which is not suffixal; the reason must have been iconic (in modern languages the additional syllable bears the word stress). More on Old Turkic reduplication can be found in OTWF § 2.23, on *+rAk* in § 2.22.

Superlatives are formed by preposing the particle *äḡ* to adjectives; Uyğur examples can be found in the UW; *äḡ* is attested also in runiform and Qarakhanid sources. *ulug+i* ‘the big one among them’ and *kičig+i* ‘the small one among them’ are quite often found in adnominal use with superlative meaning both with and without *äḡ*: *äḡ ulugı tegin* (Suv 608,15-17) is ‘the eldest prince’, *šankı atlag ulugı oglınıḡ başı* (MaitH XV 13v4) ‘the head of his eldest son called Šankha’; *ulugı täḡri* and *kičigi täḡri* (ManOuig 1a r1 and 8) signify ‘the greatest’ and ‘the smallest god’ respectively. *ulugı* does not have to be adjacent to its head: *ulugı mahabale tegin* (Suv 609,23) ‘the oldest prince, Mahābala’. In *ol yäklärädä ulugı* (ManUigFr r5) ‘the leader of those demons’ the group out of which the entity referred to is the biggest appears in the locative case form; similarly *kamagta äḡ ken(ki)* ‘the very last’ etc. (UW).

3.113. Deverbal derivation of nominals

This topic will be dealt with rather summarily here; see OTWF part III for details. We distinguish four groups of deverbal nominals by their functions. Firstly, nominals derived from verbs with most formatives denote either the subject when the verb is intransitive and the object when the verb is transitive, or the action; they are called ‘ergative’ in OTWF because this distribution reminds one of the uses of the

²⁵⁹ From *avın-* ‘to divert oneself’; see section 3.284 for the *-gU* formation.

²⁶⁰ DLT fol. 165 says that the Oguz could use /m/ or (in one case) /s/ instead of /p/.

nominative in languages which show ergative sentence structure: It marks the subject of intransitive verbs but the object of transitive ones. Secondly, nominals formed with *-čUk*, *-gUč* and *-gOk* (for which see OTWF section 3.2) denote instruments. A third group, consisting of positive *-(X)nčIg* (probably < *-(X)nč+sIg*) and negative *-gUlXksXz*, denotes adjectives qualifying potential direct and indirect objects. Examples for *-(X)nčIg* are *akla-nčig* ‘hateful’, *amra-nčig* ‘lovely’, *kork-inčig* ‘frightful’, *yüräk yaril-inčig* ‘heart-rending’; using an adjective of this formation, the speaker states that an entity qualified by it is likely to induce in anybody the state of mind described by the verb from which the form is derived. *-gUlXksXz* adjectives (e.g. *adkanguluksuz* ‘what one should not adhere to’, *titgülüksüz* ‘what one is not expected to renounce’, *adirguluksuz* ‘something which should not be separated’) describe entities as connected with an action which should not be carried out. When used predicatively, adjectives formed in this way state about entities that they are such that actions described by the base verb should not be carried out in connection with them. *-gUlXksXz* differs from *-mAgUlXk* (described in section 3.284) in not reflecting the wish of the speaker/writer but rather his opinion concerning prohibitions. A fourth group of deverbal nominals, dealt with below a bit more extensively, is agentive.²⁶¹

The deverbal derivate group showing ergative behaviour is clearly the largest, both by number of formations (18 opaque ones) and by the number of derivates. The formatives (in descending order of importance) are *-(X)g*, *-(O)k*, *-Xš*,²⁶² *-(X)nč*, *-(X)nčU*, *-(X)m*, *-Xn*, *-(U)t*, *-mA*, *-gI*, *-(X)z*, *-gXn* etc.. The common and composite *-(X)glXg* and, in the negative domain, *-(X)nčsXz* form adjectives qualifying nominals which show the same ‘ergative’ behaviour. The formations mentioned differ in the degree to which they are lexicalised to denote the action or the event itself; with *-(X)g*, e.g., event nominals form the greatest group, while they are very much of a minority with *-(O)k*, another common formation. *-(X)nč* and *-(X)nčU* were distinct formatives and not phonetic or morphophonemic alternants of each other (as has often been assumed), although contaminations and some confusion between them took place already in early times. While *-(X)nč* forms are usually associated with verb stems ending in /n/ and may have their source in the formative *-Xš* being added to these (with [nš] > [nč] as subsequent development), such a connection can hardly be detected with *-(X)nčU*.

²⁶¹ The formation in *-gAk* does not quite fit into any of these; cf. OTWF §3.327.

²⁶² This and *-Xn* are dominant formations; see section 2.51 above.

The formation in $-(X)m$ is in the DLT and in a few late Uyghur texts used for denoting measurement units of substances; see the end of section 3.14.

$-(X)g$, which is the most common formative for deverbal nouns (see OTWF § 3.101), was involved in suffix derivations and suffix compounding which sometimes led into inflection: The DLT (fol. 582) deals with $-(X)glXk$ as a ‘participle of necessity’. The converb suffix $-gInčA$ (see section 3.286) probably comes from $-(X)g+(s)l(n)+čA$, i.e. with the possessive suffix in the equative case. The ergative suffix $-(X)glXg$ and agentive $-(X)gčI$ (see below) as well as the desiderative suffix $-(X)gsA-$ (section 3.212) also contain this element. All this means that $-(X)g$ must have been just as common, or even commoner and more productive, in prehistorical times.

Nominals derived with $-(X)gčI$, $-gUčI$, $-(X)mlXg$, $-gA$, $-gAn$, a few minor formatives and $-mAksXz$ always refer to or qualify the subject of the verb they are derived from.²⁶³ This is clearly a secondary group: $-(X)gčI$, $-gUčI$, $-(X)mlXg$ and $-mAksXz$ are composite; $-gA$ and $-gAn$ appear to have been taken over from inflectional morphology (and probably not the other way around): $-gA$ may have been related to $-gAy$ ²⁶⁴ while $-gAn$ is the Common Turkic participle suffix. Deverbal nominals may originally all have been of the ergative type. In the negative domain there is a three-way division of tasks between composite forms: $-mAksXz$ denotes only subjects, $-gUlXksXz$ all other participants but never the subject and $-(X)nčsXz$ the subject if the verb is intransitive but the object if it is transitive.

The $-(X)gčI$ form sometimes has verbal government; here are two instances with the dative: *üč ärdnikä tapigčï tïnliglar az; yäkkä içgäkkä kamka tapigčï tïnliglar üküš täñrim* (TT VI 017-018) ‘Creatures worshipping the three jewels are few; creatures worshipping demons, vampires and magicians are numerous, my lord’; *burxanlarig nom tilgänin ävirtgükä, altï p(a)ramitlarig toşgurtguka ötügčï bolsar, ..., nom tözin ača yada ukitguka ötügčï bolsar* (Suv 181,16-22) ‘if he becomes one who prays for the buddhas to turn the wheel of *dharma* and to fulfill the six *pāramitās*, ... who prays for (staying on earth for innumerable ages and) explaining and dissipating the essence of the law ...’.

²⁶³ In the Suv the form $-gUčI$ is used also for qualifying objects; see section 3.282.

²⁶⁴ The relationship between $-gA$ and $-gAy$ is discussed in section 3.234 below. The deverbal suffix $-gAysOk / -gAsOk$ (OTWF section 2.93) must also have been formed from such nominal $-gAy / -gA$ through the denominal suffix $+sOk$ (dealt with in that same section of OTWF).

Derivates formed with other compound deverbal suffixes containing +*čI* can also govern objects: *-(U)t+čI*, e.g., in *ay ölütcü* in TT VI 92, where the moon is governed by *ölür-*, the base of *ölütčü*.²⁶⁵ Another deverbal form capable of verbal government is *-(X)m+čI*, in *isig öz alimčılar* (several times in Suv) and perhaps another phrase quoted in OTWF 117.²⁶⁶ It is certainly no coincidence that all the deverbal nouns quoted as governing objects are composed of +*čI* as final element, +*čI* being an agentive formative even though it is denominal.²⁶⁷ Note, however, that it was not impossible, in principle, for other formatives to show such government: *Kāšgarī* creates the sentence *ol ävin bāzāt-igsäk* which he translates verbally as ‘He longs for his house to get painted’ the form in question is an *-(O)k* derivate of a desiderative in *-(X)gsA-* from a causative verb.

The functions of *-(X)glXg*, the most active among the ergative suffixes, are documented and discussed in OTWF section 3.119. *közi yüm-üglüg olurur ärti* ‘He used to sit with closed eyes’ (HTs VI 2b9) is similar to *özi atanmüš, ögrünčülüg, atı yet-iglig kälir* (IrqB LV) ‘He comes a famous and joyful man, his horse being led (for him)’ in that both forms are predicative and accompanied by their objects (*köz* ‘eye’ and *at* ‘horse’ respectively). More often, such expressions are adnominal, as *yügrük atlarin koš-uglug kanlı* (Suv 625,5) ‘a chariot harnessed to swift horses’.

Among the *-(X)mlXg* nominals, *tägimlig* ‘worthy of ...’ also governs the dative (examples in OTWF 374); it does so more like a postposition than like a verb, however, as it is no longer transparent. The fact that it can govern gerunds in *-gAll* (e.g. in *AmitIst 58* or *MaitH X 4v9*) does not really make much of a difference here. Other *-(X)mlXg* adjectives like *ärtimlig* ‘transient’, *kanimlig* ‘satisfied, content’ and *särimlig küdümlüg* ‘patient’ have no verbal government. *-gA* lexemes are also

²⁶⁵ OTWF 116 quotes passages in which *küzätčü* ‘guarding, guardian’ governs direct objects such as *yertinčü* ‘the world’ or *ordo kapag* ‘palace and gate’. In *darni arviš tudačılarig kögčü küzätčülär üčün* (Warnke 166) ‘because they guard and defend people who uphold spells’ an *-(X)g+čI* derivate of *kö-* and an *-(U)t+čI* derivate of *küzäd-* have the government of an accusative form in common.

²⁶⁶ Such phrases can, of course, also be understood as complex nominal phrases if the first element is in the stem form and not in the accusative; in section 4.121 below we discuss also nominal phrases whose head has no possessive suffix although the internal relationship is neither appositional nor adjectival, as in *balik kapag* ‘city gate’ or *beš ažuñ ünliğlar* ‘the beings of the five existences’. Instances as these may, however, be set phrases, the heads of the type discussed in the present section do seem to be transparently deverbal and in a few cases the object *is* in the accusative case.

²⁶⁷ Denominal +*čI* forms do not, of course, govern objects.

often transparent (e.g. *bilgä* ‘wise person’) but none show any signs of participle-like behaviour either.

Another adjective formed from a deverbal nominal (the ‘dominant’ $-Xš$) with the help of $+lXg$ is *küsüšlüg* ‘desirous (of)’ from *küsä-* ‘to wish’ over *küsüš* ‘wish’. OTWF 273 quotes examples of *küsüšlüg* governing the objects *nom* ‘dharma’, *munta kutrulmak* ‘to save oneself from this’, *burxan kuti* ‘buddhahood’ and *[b]o kutlug kün+üg* ‘this blessed day (accusative)’. In *bir kün içintä mñj tümän kata körgäli küsüšlüg kulü alp kara* (HamTouen 5,64) ‘his slave Alp Kara, who wishes to see him ten million times a day’ *küsüšlüg* governs a converb form in $-gAll$ and in fact functions as an attributive participle of *küsä-*. Since this lexeme shows some verbal characteristics, one would want to derive it directly from *küsä-* through a composite deverbal formative; other instances of $-Xš$ with $+lXg$ do not, however, show any degree of fusion. Above we quoted an $-(X)mlXg$ form governing a converb in $-gAll$. Derivates in $-(X)nč$ can also govern such converbs, as *sakinč* < *sakin-* ‘to think’ in *kim kayu är kunčuyılarka yarangalı sakinčün yirlap taxšurup bitig bititsär, ...* (U III 75,10) ‘Whichever man sings and writes verses and has letters written with the intention of currying favour with women, ...’. *kunčuyılarka yarangalı sakinč* is the nominalisation of the phrase *kunčuyılarka yarangalı sakin-* ‘to plan to curry favour’. With *kertgünč* < *kertgün-* ‘to believe’ we have *üč ärdnikä kertgünč köñüllüg upasi* (MaitH Y 4) ‘the lay brother with faith in the three jewels’. All this shows the fuzziness of the border between lexeme formation and grammar.

$-gAn$ is a participle and action noun suffix in most of the modern Turkic languages and is likely to have been a part of the inflectional system already in Proto-Turkic. In Old Turkic this use is either archaic, however, or else we find it in late texts, where it may have been reintroduced from other dialects; such use is mentioned in section 3.282 below. Petrified $-gAn$ forms are *tikän*, *yargan* or *bazgan*, all discussed in OTWF section 3.324. Some instances of $-gAn$ do belong into word formation, however, as they are clearly neither participles nor petrified lexemes. Such instances (dealt with in detail in OTWF section 3.324) are *esnägän bars* (Irb X) ‘a yawning tiger (not one yawning during the event recounted in the passage)’, *udigan* (Mait III 3r6) ‘(a snake) prone to sleep’, *tutgan* and *kapgan* (HamTouen 17,4-9 and 1’-6’) ‘(a) rapacious (falcon)’, *savi yarligi yorigan* (Schwitz 17) ‘(somebody) whose words and commands generally prevail’, *kišini tutagan*²⁶⁸ (TT

²⁶⁸ See OTWF 425 for the first vowel of this verb, mentioned in the EDPT as ‘*tota-*’.

VII 25,6) ‘(habitually) disparaging (people)’ and the forms *ugan*, *törütgän*, *igidgän*, *käčürgän* and *yaratgan* which are all epithets for God Eternal in the QB. Such *-gAn* forms clearly denote the habitual subject, a living being characterised by the activity denoted by the base. The explanation for the agentivity of this suffix and for the fact that it governs objects is probably its likely morphological origin; one could even make a case for the view that some late Old Turkic sources use it as a participle.²⁶⁹

Deverbal nouns are distinguished from the whole verbal system by being negated with *+sXz* or analytically, whereas the former have *-mA-* preceding the mood, tense-aspect, participle or converb suffixes.

3.12. Nominal inflectional morphology

This is of three types. There is, first, the inflection of nouns and adjectives, the latter also getting used adverbially. Pronominal and numeral morphology, which differ from this first type, are discussed in sections 3.13 and 3.14 below. The inflectional morphology of nouns and adjectives consists of the markers of four categories, number, possession, antonym marker and case.²⁷⁰ Further, of a converter *+kI* (applied to local and temporal terms of miscellaneous shape; section 3.126) and, for Uygur, of *+lXg* (section 3.111 and 4.122) which, like the genitive suffix, has some converter qualities. As a further (non-inflectional) nominal category we should mention (in)definiteness, since an Old Turkic nominal can be accompanied by the indefinite article *bir* (distinct from the numeral ‘one’ by meaning), mentioned in section 4.1.

Rather than modifying nominals, the categorial markers discussed here in fact modify noun phrases: In *közi kara+m* ‘my black eyed one’ (M II 9,19), for instance, the possessive suffix is added to two words together, without these having become one lexicalised whole. There is,

²⁶⁹ *yügürgäntä bultumuz* in HamTouen 20,11 should be translated as the editor does: *yügürgän* ‘courier’ is documented in the DLT. This is a lexeme and not a *-gAn* form created *ad hoc*, which it was taken to be in OTWF 384.

²⁷⁰ *+(X)m* appears to have become a feminine marker in some words; see the end of section 3.122. The gender of terms formed with the Sogdian feminine suffix *+anč*, e.g. *arxantanč* (examples in the UW entry) ‘female *arhat* (saint in Indian tradition)’, *n(i)gošak n(i)gošakančlarka* (M III Nr.27 r6) ‘to male and female auditors’, *koštiranč* ‘female presbyter’, *šarmiranč* ‘female novice’ or *šamnanč* ‘nun’ was clearly transparent to Uygur readers. The existence of a category of human gender could have been considered even though the suffix is attested only with borrowings, if there had been more examples or if they had shown greater semantic diversity.

further, the group inflection phenomenon, which concerns only nominal, not verbal affixes (but does concern the suffix *+lAr* also when applied to finite verb forms, as shown in section 3.23 below). In *tsuy irinčülärimin* (TT IV B 50) ‘my sins (acc.)’, e.g., the plural, possessive and case suffixes are added to the two synonyms (the first copied from Chinese) together. In *bulganmiš tälgänmišin ukup* ‘noting that they are in confusion and disorder’ (AoF 20(1993): 374 r11), e.g., the nominal ending expressing both 3rd person reference and accusative case is shared by the two *-mlš* forms; it agrees, of course, with the last one in synharmonism. The first word could also have had the shape **bulganmišin*, but the procedure chosen by the author or translator adds cohesion between the two verbal nominals.

The morphemes expressing the four nominal categories (plus indefiniteness as non-morphological category, mentioned on the previous page) are added to their base in the order they are cited above.²⁷¹ Number may originally have been a bit akin to derivation, in that different word classes had different plural forms. The suffixes of case, on the other hand, appear as last element in the morphological chain (unless followed by *+kl* to incorporate the whole morphological structure into a new nominal base). This fact is connected with their similarity, in some ways, to postpositions (with which they also share syntactic tasks). In Uygur the plural suffix can, however, appear after the possessive suffix to denote a plurality of possessors, e.g. in *yetinč uguşuñuzlarni birlä* (U III 55,11) ‘together with your seventh generation’ (i.e. including the seventh generation after you). The sentence is addressed to a number of persons; this is not made clear enough by the plural possessive suffix, which is used for polite address to singular addressees. For the same reason, *+lAr* is added also to the plural imperative. Adding *+lAr* to *uguş* would not, in Uygur, have expressed that the plurality is meant to apply to the possessors and not to the possessed.

²⁷¹ ‘*yer+i+lär+dä*’ with the possessive suffix preceding the plural suffix instead of following it has been read in ‘*üzütüm(ü)n siz kurtganiñ tünäriğ yerilärdä özguruñ*’ (M III Nr.9 II,I v5-7), translated as “meine Seele aus den finstern Ländern der greisen Todesdämonin errette Du!; this is also quoted in Zieme 1969: 114. The third word should, however, probably be read as *kurtgariñ*; in the writing style which Le Coq here qualifies as “nachlässige uigurische Pinselschrift”, N and R are often similar. P. Zieme (personal communication) now reads the word discussed here as *yagilarda* and not ‘*yerilärdä*’. This gives two sentences with parallel verbs: ‘Redeem you my soul and save (me) from murky enemies’.

3.121. Number

This is a binary category, with ‘plural’ as marked member: Plural entities are commonly marked with *+lAr* but the absence of this element does not signify that the reference is to a singular entity.

In the runiform inscriptions, nominal plurality was expressed only with humans, and that only occasionally; the following sentence, e.g., clearly refers to all the sons and daughters of the nation: *bäglük urī oğlu kul bolti, esilik kiz oğlu küñ bolti* (KT E 34) ‘Your sons, meant to be lords, became slaves, your daughters, meant to be ladies, became concubines’. As pointed out in Tekin 2000: 102, the inscriptions apply *+lAr* to the social class of *bäg+lär* ‘the lords’ and to names for family members. According to Johanson 2001: 1728a ‘*ist im Ost-Altürkischen -lAr noch ein Kollektivsuffix*’; this can hardly be the case when Köl Tegin (N9) refers to his own sisters and wives as *äkä+lär+im* and *kunčuy+lar+im* respectively. In the Yenisey inscriptions we also find *kälin+lär+im* ‘my daughters-in-law’, *küdägü+lär+im* ‘my sons-in-law’ or *kadaš+lar+iñiz* ‘your relatives’.

In the Orkhon and Imperial Uygur inscriptions, the Common Turkic *+lAr* competes with the suffixes *+(U)t*, *+An* and *+s*. *+(U)t* (which may have been borrowed together with the bases it is used with) appears e.g. in *tarkat*, *säjüt* and *tegit*, the plurals of the titles *tarkan*, *säjün* and *tegin*. See OTWF 78-79 for documentation and subsequent retention.²⁷² In (post-inscriptional) Uygur, the ‘normal’ plural suffix *+lAr* was added unto these forms, giving the common *tegitlär* ‘princes’ or (in MaitH XVI 11r25) *bägitlär* ‘the lords’. *otuz tegit oğlanı ... birlä* (MaitH, colophon,24) ‘together with his 30 prince(ly) sons’ still has the simple form. *+s* appears only in a term borrowed from Sanskrit, *išvara+s* (ŠU S 2), ‘potentates’. *+s* looks Indo-European while both Mongolic and Sogdian have plural suffixes with ^o*t*.²⁷³ *+An*, the third rare plural suffix, is discussed in OTWF 91-92. It appears mainly in *är+än* ‘men’, *tor+an* ‘system of nets’, *öz+än* ‘the innermost parts’ and *og(u)l+an* ‘sons’, e.g. in IrqB LXV: *amtü, amrak og(u)lanim, anča biliñlär* ‘now, my dear sons, know you thus’; the plural verb form shows that more than one

²⁷² The suffix was mentioned as *+(X)t* in the OTWF but none of the instances attested with common nouns gives unequivocal proof for the identity of the vowel. The Tañut people (this name first mentioned twice in the Orkhon inscriptions) were in Tang China called Dang Xiang. I would propose that *+Ut* was added to this first syllable. If this was done by Turks, the vowel would be fixed as /U/. If the language was Mongolic (the plural suffix *+Ud* being fully productive there), Mongolic /U/ would correspond to Turkic /X/.

²⁷³ It is, I think, most likely for the suffix to have been of Mongolic origin, as only that language group had ^o*n* / ^o*t* as a regular representative of singular vs. plural in nominals.

person was being addressed. Note also *ogulanım inilärim* ‘my sons and younger brothers (M III 9,5) with parallelism between the two suffixes.

The appearance of *+lAr* was in general not a matter of economy but of individuality, the height on the agentivity scale of the entity involved and, no less important, relevance: Take the passage *az inaru barm[iš], bir ögü[r] muygak kör[miš], ymä muygak siġunug uvu[tsuz bi]lig üçün edärür ärmış. bo bälġü körüp ymä ...* (M I 35,7) ‘He went a bit further and saw a herd²⁷⁴ of female maral deer. A female maral deer was pursuing a male maral deer for sex. He saw this sign and ...’. The reference could also be to a number of females pursuing the males; we don’t know, as the author does not appear to have attached any importance to specifying the number. In the simile *kaltı balak (= balik) suv içrä yüzärčä* (M I 17,14) *balik* ‘fish’ could be either singular or plural; the translation could either be ‘as a fish swims in water’ or ‘as fish swim in water’: The difference just does not matter in this particular context. Uygur and Qarakhanid sources have the common Turkic marker *+lAr* appearing with any entities and not just with humans, e.g. *üdlär* ‘periods of time’, *täġri mäñiläri* ‘divine pleasures’, *yultuzlar* ‘stars’. Even there, however, the presence of *+lAr* is indicative of a plurality of individual entities rather than a mass (unless an Uygur translator is translating a foreign source literally).

Forms without *+lAr* could sometimes be understood as plural when no number words were around even in the wider context: *495 bodisavtlar kuvragi* ‘the assembly of the 495 bodhisattvas’ but *adin täġri kuvragi* (in the context) ‘the assembly of the other gods’.

The honorific use of plural forms is normally limited to the pronominal and the verbal domain. Rarely, a nominal plural form can also serve this purpose: The question *tözünlär, bo körünč körüp köñülün yazılt[i] mu* which Upaṭiṣya is asked by Kolita (ms. Mz 708 r 29-30 quoted by Zieme in *UAJb* 16: 295) signifies ‘Oh noble one! Did your heart stray seeing this pageant?’. Similarly in KP 45,3, where *bodis(a)vtlar* is used in clear honorific reference to a single person (alternating with *bodis(a)vt* two lines further on); here the person is not addressed but spoken about.

In ApokrSū 262, 265, 268, 271, 272, 283 and 286 we have *kunčuy+lar* ‘ladies’ referring to a single woman, as completely clear from the context. The note to the passage mentions Mongolic *exe+ner* denoting a (single) woman, refers to a paper by Doerfer on the category of number in Manchu and writes that it is ‘wahrscheinlich als ein

²⁷⁴ The editor writes *bir ökü[š]* (i.e. *üküş*) but *ögür* seems more likely to me. If there is enough space in the lacuna, the text may have had *bir ögü[r siġun] muygak*.

Pluralis modestiae zu betrachten”; the process concerning the Arabic term may rather have involved tabuisation, which made it improper to refer to a person’s wife directly. Deference is, at any rate, certain not to be involved in the ApokrSū passage.²⁷⁵

Collectives are also related to plurality. Nouns and numerals formed collectives with the suffix $+(A)gU$ (discussed in OTWF section 2.52); a common example is *adin+agu* ‘other(s)’, attested e.g. in M III Nr.8 V v 5 and VI r 1. In Orkhon Turkic, this form has an additional /n/ (no doubt akin to the ‘pronominal’ *n*; cf. next section) when further suffixes are added: We have *käliñünüm* (**kälin+(ä)gün+üm*) ‘my daughters-in-law’ in KT N 9, *tay+agun+uñuz* ‘your colts’ (KT SE)²⁷⁶ and *iniy+ägün+üm*²⁷⁷ ‘my younger brothers’ (KT S1 and N11, BQ N1).

3.122. Possession

Here are the ‘possessive’ suffixes, which come second in the morpheme chain:

| | singular | plural |
|------------------------|-----------------------|--|
| 1 st person | $+(X)m$ | $+(X)mXz$ |
| 2 nd person | $+(X)\eta \sim +(X)g$ | $+(X)\eta Xz \sim +(X)gXz, +(X)\eta XzIAr$ |
| 3 rd person | $+(s)I(n+)$ | $+(s)I(n+), +IArI(n+)$ |

The common *t(ä)ñri+m* is an example for the 1st person singular possessive suffix losing its onset vowel with a stem ending in a vowel. These suffixes share the plural element $+Xz$ with the personal pronouns *biz* and *siz*, and the 1st person possessive suffixes have a labial as in

²⁷⁵ The Arabic plural *‘iyāl* ‘family members’, which in many Turkic languages came to signify ‘wife’, may or may not be another example for the same phenomenon: Many Arabic plurals of other semantic domains, e.g. *tujjār* ‘merchants’, also acquired singular meanings in Turkish.

²⁷⁶ These two forms cannot be connected with Mongolian *gü’ün* (Written Mongolian *kümün*), as T.Tekin (1968: 121) thinks, as that is not a suffix but a noun and signifies ‘person, people’; $+(A)gU$ is by no means limited to humans or even to living beings.

²⁷⁷ *iniy* is the archaic form of *ini* ‘younger brother’ which still appears as *inī* in Yakut. It was thought by some that *iniyägün* is a compound of *ini* with ‘nephew’; this latter, however, is *yegän* and not ‘*yägün*’. A passage in E28,8, a Yenisey grave inscription, has been read as *tört (i)n(i)l(i)gü (ä)rt(i)m(i)z; b(i)zni (ä)rkl(i)g (a)d(i)rti*, by T. Tekin 1991: 357 translated as ‘We were four brothers; the god of the Underworld separated us’. This does not suit the meaning of the comitative suffix $+IXgU$: That would have had to be translated as ‘we were with four brothers’, which does not suit the context. I take l^2 in the first word to be a scribe’s error for y^2 : *iniy+ägü* would fit this context (and Tekin’s translation) perfectly. The stone does show l^2 but the two letters are quite similar; he could have misread his handwritten source.

bän. Labials in the 1st person are a universal feature, however, and do not signal any etymological connection. An etymological connection between the 2nd person possessive suffixes and the 2nd person personal pronouns – postulated by some scholars – is also quite unlikely: The former have a nasal or oral lenis velar whereas the latter ends in an alveolar nasal in the singular and has no nasal at all in the plural; nor is the onset /s/ of *sän* likely to have melted away in any accountable variety of Proto-Turkic. In short, pronouns and suffixes can *not* be connected.

In the 2nd person the nasal and the voiced velar fluctuate in the Orkhon inscriptions, without apparent reason and even in the same phrase; e.g. *el+iŋ+in törö+g+iün* (KT IE22) ‘your land and your government (acc.)’. Other examples for /g/ are *buŋ+ug* (KT S8) ‘your worry’, *ädgü+g* (KT E24, BQ E20) ‘your profit’. The /g/ appears also in verbal forms, where it refers to the subject: *bilmä-dök+üg+iün ücün* (BQ E20) ‘because of your ignorance’ (accusative form governed by the postposition), *öl-sük+üg* (KT S7, BQ N5) vs. *öl-sük+iün* (KT S6, BQ N5). With the preterite the oral velar is attested both in the singular and in the plural: The forms *alküntig*, *ariltig*, *bardig*, *artig*, *kiltig*, *kigürtüg*, *körtüg*, *öltüg* and *bardigüz* are all quoted in Tekin 1968:92-93. This fluctuation is found in some modern languages as well, e.g. among the Anatolian dialects.

In some Manichæan mss., e.g. one ms. of Xw, we find that the 1st person plural possessive suffix has the form *+(U)mXz / +(U)mUz* e.g. *tak+umuz* (251) instead of *takimiz* and, with the preterite form which has the same suffixes, *si-dumuz* (256) and *bačama-dumuz* (258).

We have a rare repetition of the possessive suffix in the common *bir+i+si* ‘one of them’; this may possibly have come about through analogy from *iki+si* ‘both of them’, in case *iki / äki* was felt to come (or really was) from **äk+i* ‘its supplement’.

In the 3rd person singular and plural, the suffixes in the table are written with an *n+* at their end; this *n+* appears in brackets because it is absent in the nominative (where the 1st and 2nd person possessive suffixes serve as they are). Cf. the demonstrative pronouns, which show the same element; the personal pronouns have a related phenomenon especially in the plural domain, and cf. Orkhon Turkic *+(A)gU(n)*. In earlier texts, the *n+* of the 3rd person possessive suffixes in fact appears before all suffixes: also the antonymy and parallelism marker *+II* (see section 3.123) and the suffix *+lXg* (e.g. in *burxan kutin+līg* ‘related to

Buddhahood'). independent pronouns.²⁷⁸ The pronominal *+n+* of this suffix, lost in South Eastern Turkic from the Middle Turkic period on, gets dropped already in the dialect of the fragments in Sogdian script (*san+i+ča*, *kut+i+ga*). Note, further, that *+I(n)+* and *+sI(n)+* do not function in complementary distribution in Chuvash, but that rather the cognate of *+I(n)+* contracts with any stem coda vowel. What clearly is the Chuvash cognate of *+sI(n)+* gets used in cases of inalienable possession,²⁷⁹ suggesting some such original set of functions also for Proto-Turkic. A single instance of the absence of /s/ after vowel in a relatively late text (*süü+iñä čäriñä* in Suv 409,11, St. Petersburg ms.) might be considered an error (or was possibly meant to be read as *süwiñä*) and not an archaism (thus also Zieme 1969: 67 against Ramstedt). *+sI(n)+* is normally spelled with front *n*² and *s*² in Orkhon Turkic also when appended to back-vowel words. This suggests that it may not have been synharmonic,²⁸⁰ which, in turn, accords with the theory that it originally was an independent pronoun. The Chuvash 3rd person possessive suffix also always consists of a front vowel, which has by Benzing 1940: 251n. been linked to the Orkhon Turkic facts. It may, however, also be that the Chuvash situation is secondary, as Common Turkic *+kl* became *+ki* in Turkish, and the Orkhon Turkic fronting appears to be subphonemic: The form *suv+iñaru* (in BQ E40 in a binome together with *yer+iñäriü*, 'towards their country') with the directive ending following the suffix is spelled with *r*¹ and *w* (not *ü*).²⁸¹ We even find *tözünlär+in+lugin* (spelled with X in the case suffix) in an early Manichæan text, DreiPrinz 119. See section 3.132 for forms of the pronoun **i(n+)*.

In the 1st and 2nd persons of the possessive paradigm, plurality is marked by an element *+(X)z*, as in the personal pronouns referring to these persons.²⁸² There are numerous examples in which 2nd person

²⁷⁸ The 3rd person possessive suffix may possibly originally have been identical with the obsolete pronoun *in+* discussed in section 3.132 below.

²⁷⁹ This is what appears from examples quoted in Benzing 1940: 253, 255 and in other publications.

²⁸⁰ This was first proposed by Radloff, later by Räsänen; see Tekin 1968: 18 for references.

²⁸¹ Orkhon Turkic *orto+sījaru* is also spelled four times with *r*¹ and *w*, but Heschke 2001 makes a case for the view that these are instances of *kün orto* 'south' and *tün orto* 'north' governed by a postposition *sījaru*. There are no other relevant case suffixes: The dative has no oral velar but *ŋ*, for which there is only one sign in the Orkhon inscriptions. The ligature with which the locative is always spelled and the *č* of the equative are also used both in front and back contexts.

²⁸² Bang, Gabain (e.g. 1974 § 71) and others took this to be an old dual suffix, stating

plural possessive endings serve polite reference to single entities, e.g. *ymä anvam yutzuŋuz bolzun* (M III Nr.7 I v 5) ‘Moreover, may Anvam become your (sg.) wife’. Such plurality of politeness is not always consistent; examples like the following are not rare: *s(ä)niŋ idlig yiparlig yemišlikniŋzkä kigürüŋ* (M III Nr.9 II v 10-12) ‘Introduce me into your fragrant orchard’.

‘Possessive’ suffixes normally express either possession or general appurtenance and assignment. In these functions, their meaning is practically identical to that of the personal or demonstrative pronouns in the genitive; see section 4.121 for examples.

Added to adjectives, the 3rd person possessive suffix can refer to the bearer of the quality in question. With verbal nominals the possessive morpheme refers to the subject of the verb, e.g. in *y(a)rlikamış+i üčün* ‘because he graciously (dived)’ (M III Nr.15 r 2; Wilkens Nr. 352). Thus also e.g. in *k(a)mug s(ä)vüglärim - ä* ‘Oh all my beloved ones!’ (ms. U 140 v3 quoted in Zieme 1969: 98), where the 1st person possessive suffix refers to the loving person. This is also what we have with perfect or projection participles such as the ones ending in *-dOk* and *-sXk* respectively, as described in sections 3.283 and 3.284, and in fact in the paradigm of the constative preterite (section 3.232 below), which has been said to consist of a participle suffix involving an alveolar consonant plus the ‘possessive’ suffixes.

In *üküş+i* ‘many of them’ (e.g. in BT II 238) there is a partitive relationship. Such expressions are used adnominally as well, e.g. in *amarilari tünliglar* (TT X 39) ‘some of the creatures’. Similarly with the possessive suffix of *ulug+i* in e.g. *äŋ ulugı tegin iki iniläriŋä inča tep tedi* (Suv 608, 15-17) ‘the eldest prince said to his two younger brothers’: It refers to the group of the three brothers. This is the phenomenon Grønbech 1936: 92ff. mostly had in mind when calling the 3rd person possessive suffix an article. Three examples, with *ulugı*,

that words as *köz* ‘eye’, *köküz* ‘breast’, *tiz* ‘knee’ or *müyüz* (**buñuz*) ‘horn’, representing body parts of which men or animals have a pair, are formed with it. *agız* ‘mouth’ was assigned to this group because there are two jaws. *+(X)z* was taken to appear also in *biz* ‘we’ and *siz* ‘you (pl.)’, in *ikiz* ‘twin’ and in the 1st and 2nd person plural possessive suffixes. However, a number of body parts which come in pairs, such as *älig* ‘hand’, *kulkak* ‘ear’, *ägin* ‘shoulder’ or *adak* ‘foot’, do not end in */z/*; *mäjiz* ‘complexion’ ends in */z/* but is not a pair and does not consist of two parts. *köz* is probably derived from *kör-* ‘to see’. In (Qarakhanid etc.) *ikiz* ‘twin’ duality is denoted by the base and not the suffix. It seems unlikely that Proto-Turkic should have had a dual, as there is none in any Turkic language or in Mongolian. Róna-Tas 1998: 73 writes: ‘Contrary to the opinion of Erdal and others -z has never been a dual suffix or denoted pairs of body parts’; I never expressed a view different from the one formulated above.

äŋ ulugï and *äŋ'ilki ulugï* respectively, are quoted in Gabain 1974: 158 (§ 360) and 398 (suppl. 56). The 3rd person possessive suffix creates contrast within a group, e.g. *ulugï täŋri tep tedi* and *kiçigi täŋri tep tedi* ‘The greater one among the gods said the following’ and ‘The smaller one among the gods said the following’ in the Araŋemi-Jātaka (ManOuig 1 a r1 and 8). Cf. further *siŋar+i bodun içikdi*, *siŋar+i bodun kirti* ‘Half / Part of the people submitted, the other half / part retreated’ (ŠU E6-7), with the possessive suffix referring to the ‘whole’. The expression *anta kalmış+i bodun* ‘that part of the people which stayed behind’ is from the same inscription (N3); note that the contrastive possessive suffix is here added to a participle representing the head as subject.

The possessive suffix also has referential tasks within text structure: Take the sentence *Amga korugun kişlap yazıŋa oguzgaru sü taşikdimiz* (KT N 8), which signifies ‘We spent the winter at the Goat reserve and, that summer, drew out with our army against the Oguz’. The possessive suffix in **yaz+in+ga* refers back to the winter preceding the summer of the Oguz raid. The use of the possessive suffix in *keniŋä* ‘in the end’ (Pfahl I 8) referring the the preceding narrative is similar. In *yol+i*, which forms adverbial multiplicatives (section 3.14), finally, such reference has become rather fuzzy.

Old Turkic (like e.g. Modern Turkish) shows switch reference, where a preceding and a following element refer to each other by possessive suffixes; e.g. *titsi+si baxşı+siŋa* (TT X 18) ‘the pupil (spoke) to his teacher’, *ata+sı ogl+i tapa kälmiş täg* (TT X 71) ‘as when a father comes to his son’: English uses possessive marking only for the entities mentioned second, thus referring only backwards and not forwards.

täŋrim, literally ‘my god’, is a deferential way of address, like *my lord*, French *ma-dame*, Arabic *sayyid+i* (> *sīdi*) etc.

The 3rd person singular possessive suffix is often used for the plural as well, e.g. inscriptional *üç küräg kişi²⁸³ kälti*, *sav+i bir* ‘There came three enemy deserters all submitting the same report’; *süsin anta sančdim*, *ävi on kün öŋrä ürküp barmış* ‘There I routed their (the Karluk’s) army; their households had, it turned out, gotten alarmed and fled ten days earlier’. This was no doubt the Proto-Turkic situation, still found e.g. in Chuvash. In Uygur we find e.g. *kaŋi xan ögi katun ...*

²⁸³ This word is based on an emendation by Radlov accepted by most scholars. The stone has something which apparently looks most like y^2Iy^2I , by Aalto in his edition translated as ‘hacheinander’. This idea, taken up by Alyılmaz 2000: 107 with ‘art arda’, is impossible: Alyılmaz links the reading with *yigi* ‘close, compact, dense’, but /g/ is never dropped in (early) Old Turkic. We are left with Radlov’s proposal, then.

ogl+iña näčä aytsar ... ‘in whatever way his father the king and his mother the queen asked *their* son ...’; *tört maxarač täñrilär ... oñtun tizin söküp ... ayasın kavşurup ...* ‘the four *maharāja* gods knelt on their right knees and joined their palms (*aya+sin*)’: The praying gesture obviously involves the palms of a person’s both hands. Also in an instance with *+lAr* like *yigi kilinčlarin* in Pothi 20, which should be translated as ‘their close-set deeds (acc.)’, there is no need to think that *+lAr* actually denotes the plurality of subjects (which must be clear from the context) beside denoting the plurality of actions. The 3rd person plural possessive suffix *+lArI* does not ever appear to get added to the plural suffix *+lAr*; the instance in BT II 744 (*yarlikančuči köñüllüg küčlärläri* ‘their faculties of commiseration’) is isolated and should be an error. What we do have is the addition of *+lAr* after the 2nd person plural possessive suffix, presumably to make clear that a plurality of possessors (and not mere polite address or a plurality of possessed entities) is meant; *+(X)ñ(X)zlAr* is a composite plural possessive marker: *üskünjüzlärtä* (Pothi 366) ‘in your (pl.) presence’, *äviñizlärkä tägiñlär* (Pothi 382) ‘reach (pl.) your (pl.) homes!’, *[ögr]ünčün m(ä)ñin ärmäkän(i)zl[är] bolzun* (M III Nr.27 r 14) ‘May a life in joy and happiness materialize for you!’; *sizlärniñ ogl+an+iñiz+lar+nü* (DKPAMPb 172) ‘your (pl., polite) children (accusative)’. The Suv, a Buddhist text, has quite a number of instances of this suffix sequence, among them *birök el xan bäg işi bodun kara nomča töröčä yorisarlar, ötrö sizlärniñ t(ä)ñridäm čoguñuzlar yaliniñizlar teriniñizlär kuvrağiñizlar asilur üstälür* (Suv 194,16) ‘If, however, king, lord and lady and the simple folk were to live by manners and tradition, then your (pl.) divine glory and community would thrive’ and *köñülünjüzlärtä antag sakinčñizlar tursar* (Suv 2,14) ‘if such thoughts come up in your (pl.) hearts’. *kilinčlarñiz* ‘your (pl.) deeds’ in Suv 660,1, on the other hand, refers to the deeds of a single person addressed to as *täñrim* ‘my lord’, as *kollarñiz* ‘your (pl.) arms’ in Suv 349,3 refers to the two arms of somebody addressed as *kopda kötrülmiš t(ä)ñrim* ‘my elated lord’. Similarly the sentence *alku tetse[lig] terin kuvraglarıñizni yana nomlug yagmurin barčani toşgurur tükätür siz* ‘You fulfill and perfect all, all your (pl.) communities of pupils, by the rain of *dharma*’ (Suv 334,10) is addressed to a single *täñrim*, who had ‘all’ communities listening to him.

There is no evident way for a plurality of speakers to refer each to his own ‘possessed’ entity; we have the problem in Uyghur colophons of manuscripts, where the religious merit of having sponsored the copying is by the sponsors deflected to their relatives. When such copying is

sponsored by more than one person, the formulation of the colophon is in the 1st person plural, but in the further text the reference to relatives of each one of the co-sponsors has to be in the singular. Thus e.g. the first text of DvaKol, which has the subjects of the deflection speaking in the plural (with *tägindimiz* ‘we have ventured to ...’), but then has reference to their respective mothers as *anam üsdäk täñrim*, *anam ana katun täñrim*, *anam arığ kunčuy täñrim*, *anam tüz küñ täñrim* and *anam buyančog täñrim*, each time with *ana+m* ‘my mother’ and then their proper name and the honorific *täñri+m*. In another colophon of collective sponsorship (ms. TM 36 quoted by Zieme in his discussion of *kisi* in *TDAYB* 1987: 306), reference to *kisilärim* ‘my wives’ is not to be understood as evidence for polygamy but as each sponsor referring to his own wife.

In the example quoted, *täñrim* marks real female persons, but it appears, in late texts, also to have referred specifically to goddesses as such: There is a minimal pair *täñri* ‘god’ vs. *täñrim* ‘goddess’ in WP 2,18 (SammlUigKontr 2): *tanuk tört maxarač täñrilär*, *tanuk yeti äkä baltiz täñrimlär*, *yügäruki tanuk ekiči*, *tanuk är toña* ‘Witnesses (for this contract) are the four *mahārāja* gods, witnesses the seven sister goddesses, visible witnesses Ekiči and Är Toña’. In this function, *+(X)m* precedes the plural suffix and does not follow it. The titles Turkish *han+im* and Central Asian *bäg+üm* are also specifically feminine. Note that *äkä* is ‘elder sister’ while *äkäm* is honorific (e.g. in Sa12,27, SammlUigKontr). *xanim* appears to be attested already in a late Uygur graffito (PetInscr), where it follows the lady’s proper name.

Possessive suffixes can be followed by the antonym marker or, more commonly, directly by the case suffix.

3.123. Antonymy and parallelism

After the slot for a possessive suffix but before case suffixes there was a slot for *+II*, which marks antonyms or synonyms, elements presented as opposed or parallel in the particular context. Entities without some such connection are rare (a possible example for this is *süli ašli kertgünčli üčägü* ‘army, provisions and faith’ in TT V B 105). *+II* nominals are mostly pairs but sometimes triplets; the latter are then followed by *üč+ägü* (the collective derivate from ‘three’), the former sometimes by *iki+gü* (as generally done with lists in Mongolic and late Uygur). Each word receives *+II* but they share the case ending: *inili äčili* (KT E 6) ‘younger and elder brothers’, *torok bukalı sämiz bukalı* (Tuñ 5) ‘lean bulls and fat bulls’ (plurality follows from the context); *tärsli oñli kıltači* ‘he who does wrong or right’ and the accusatives *igidli kertüli+g*

... *körüp* ‘perceiving lie and truth’ and *öñli köñülli+g* ‘appearance and essence’ are direct objects. Cf. further *täñrili yerli+dä* ‘in the sky and on earth’ and the near -synonyms *üzülmäkli öçmäkliniñ ... taplagi* (BT I D 250) ‘the acceptance of ending and extinction’.

3rd person possessive suffixes preceding *+II* normally have the ‘pronominal’ *n+*; e.g. *başinli adakinli iki yılda* (Ht VII 16 b 5-6) ‘within two years, from beginning to end’ with cataphoric *+(s)I(n+)*, *tiltaginli nom tözinli ikigüni* ‘both their cause and their dharma root’²⁸⁴ (Myöhö B r 6), *tüşinli tiltaginli* (BT I D 279) ‘their effect and their cause’, *isig özinli ...* (DKPAMPb 380) ‘his life and ...’. The instances in the following sentence lack pronominal *+n*: *şakimuni burxannıñ säkiz ulug çaytilarili, grtirakut tagda ulati adin öñi on buluñ yığaklartakili, adin öñilärtä ymä y(a)rlikadaçi nomlug ätözlärkä ymä äñitip öçmiş amrilmışlarka ... yükünür m(ä)n* (Suv 32,19-21) ‘I bow to the *dharmakāyas* and to those who have found peace in the eight great *caityas* (*+II*) of Buddha Śākyamuni, in the other ten corners and directions (*+II*) of the earth of which the foremost is mount Gṛdhrakūṭa, or elsewhere’.²⁸⁵ *māniñ tüşämiş tül+üm+li* ‘the dream I dreamt and ...’ (MaitH XIII 5r14) is an instance with a 1st person possessive suffix.

In *ädgüli ayıgli kilinçlarnıñ tüşläri täggüdä* (BT II 925-928) ‘when the retribution for good and bad deeds arrive’ the suffix gets added to a pair of adjectives in adnominal use.

In some instances one member of a couple lacks *+II*, e.g. *täñrilärli kinarılar üzä sävitilmiş* ‘loved by gods and *kiñnaras*’ (ATBVP 37).

Double *+II* lives on in Middle Turkic, e.g. in the *Qışaşı* ‘l-Anbiyā (Ata 2002: 68) and in modern languages.

3.124. Case

When case morphemes followed directly upon possessive morphemes, there was some fusion. There are three case paradigms, then: One for bare nominal stems and nominal stems ending with the plural suffix or *+II*, a second, fused one for stems with a possessive suffix and a third

²⁸⁴ Accusative suffix *+nI* ‘pronominal’ (as in *bizni*) in view of the shape *+(A)gU(n)+* which this suffix has in Orkhon Turkic or the late Uygur extension of *+nI* at the expense of *+(X)g* (or both).

²⁸⁵ There is here a tripartite classification of places; however, the third member of the series (*adin öñilär*) does not get the element *+II*, perhaps because it is merely a residual and non-specific category, though it does get the locative suffix intended for all three. In Taryat E3, a runiform inscription of the Uygur kaganate, one could, in principle, read *ötükän+li tägrä+si+li äkin ara* ‘between Ö. and its surroundings’, but *ötükän eli tägräsi eli äkin ara* could be spelled in the same way and would give a very similar meaning. T. Tekin reads *Tägräs eli*, taking ‘*tägräs*’ to be a place name.

one for pronouns and pronoun-like nominals. As a historical development within Old Turkic, pronoun declension was extended to more and more nominal domains, presumably because a pronoun has a higher textual frequency than most nouns.

There are approximately twelve case morphemes in the pure nominal declension; examples for case forms are given in section 4.11 and its subsections. Some case forms, e.g. the ablative or the instrumental, have different shapes in different text groups; there was no point in illustrating this with different tables in this work, however, as the spelling of some sources (e.g. the runiform ones) is equivocal, and as text grouping is all but clear. Suffixes with variable shapes are the genitive, the ablative and the instrumental; the directive is not very common in Buddhist and lay texts, and the comitative is outright rare there. The *+rA* suffix has two different historical developments in different semantic and functional domains. The Old Turkic case system is thus a very rich one, even in those texts which lack one or two of its members.

The nominative case form consists of a nominal with no case marking.

The genitive suffix has two main variants: *+(n)Xŋ*, with /n/ dropped after consonants, is used in the runiform inscriptions (e.g. *čor+uŋ* in KT E32, *bäg+iŋ* in E33) and a few other early texts, notably runiform mss. (e.g. Blatt 2, 3 and 26 and the IrqB) and Manichæan sources (*kišilär(i)ŋ* in M III Nr. 8 VII r7 (22,7₁)).²⁸⁶ There seem to be no genitives in the inscriptions of the Uygur steppe empire. An /n/ appearing in this way only with stems ending in vowels is not attested with any other Old Turkic suffix: This suffix may possibly prehistorically have been transferred from the pronominal declension, where there is the so-called pronominal /n/, by metanalysis.²⁸⁷

²⁸⁶ Numerous instances read as *+n(a)ng*, *+n(ä)ng* by Le Coq in Manichæan texts, e.g. in M I 14 title, 16, 11-12 and 17, 20 can be read as *+Aŋ* instead, and vice versa. The latter reading would imply a lowering of the suffix vowel, which in fact does not happen very often in front harmony words even in Manichæan texts.

²⁸⁷ Róna-Tas 1998: 73 thinks ‘Proto-Turkic nouns probably had an oblique stem in *-n*, just as pronouns still have in Old Turkic’. As evidence for this he gives, beside the genitive suffix, an accusative suffix which he reconstructs as **-nVG*, a dative suffix **-nKA* and an instrumental suffix **-nVn*. There is, however, no way to reduce the nominal and the pronominal accusative suffixes to any common source by any sound laws known to have held for that stage of the language, and there is no evidence whatsoever that the dative and the instrumental suffixes ever started with an /n/. So the genitive suffix remains by itself, and ‘oblique *-n*’ remains a purely pronominal feature

The vast majority of Uygur texts, however, show the suffix only with /n/ also after consonants, e.g. *maytri bodisavt+nñj*. Exceptions, such as *äv+iñ yutuziña yazınmak* ‘to sin with a married woman’, the title of the third chapter of the DKPAM, need an explanation: In this case I take *äv+iñ yutuzi*, literally ‘a woman of the house’, to be a lexicalised phrase created before the generalization of *+nXñj*.

Qarakhanid has a dissimilative variant *+nXg*,²⁸⁸ Orkhon Turkic a different dissimilative variant *+Xn* appearing after /ñ/. We find *+nUñj* in two Manichæan hymn titles, *vam vayinuñ baş* ‘the hymn of the god Vam’ and *b(a)γ roš(a)n zaw(a)r žiriftnuñ başta* ‘the hymn to god, light, power, wisdom’ (M II 9 and 10).²⁸⁹ Conversely, *+nIñj* appears, e.g., in *bayagutniñj* in HTs III 507. Sometimes the vowel is implicit, or is spelled as a low vowel, e.g. *bägnäñj* in U IV A152, *kišinäñj* in M I 8,15. The vast majority of instances do, however, have /X/.

In the pronominal domain, the genitive form can be expanded by other case suffixes, e.g. *öz+in+iñ+čä* ‘like his own’ (M III 22, 14₁); it gets the plural suffix in *män+iñ+lär ol* ‘they are mine’ (U III 27,16) and has the derivate *män+iñ+siz* (in the common Buddhist phrase *mänsiz mäniñsiz* ‘selfless’, put into the accusative in Suv 210,21). *biziñ+tä+ki+čä* ‘as in the one belonging to us’ is attested in Suv. Cf. possessive adjectives like Danish *min*, pl. *mine* ‘mine’, *sin*, pl. *sine* ‘his own’.

In Buddhist Uygur, genitives of nouns can get their head deleted and be put into the locative case form; this is either used with comparative meaning or governed by postpositions. In what follows, these postpositions are *ulatı*, *öñi* and *artok* respectively; in the second instance the possessive suffix inherited from the original head is retained. *kulgakniñta ulatı adın biliglär* ‘the other senses, (i.e.) the sense (*bilig*) of hearing (lit. ‘the one of the ear’) etc.’ (Abhi A 3704, referring to the senses other than the sense of sight); *ädgü ayög nomlarniñj činžu tözi ädgün barmışlarniñjında öñi ärmäz* (BuddhUig II 447) ‘The *tathatā* (= Chin. *činžu* for this Sanskrit term) nature of good

(found, however, also with the collective suffix *+(A)gU* in Orkhon Turkic, and also the possessive suffixes) as far as Turkic is concerned (though the situation is different in Mongolic).

²⁸⁸ Tekin 1968: 127 mentions a single instance for a variant *+Xg* of this suffix from KT E25, the form *bodun+ug*; while this variant *may* be the result of dissimilation after /n/, the context makes it more likely for it to be a regular accusative in the accusative + finite verb construction (discussed in section 4.622 below).

²⁸⁹ This is the shape of the genitive suffix also in Early Anatolian Turkish. Cf. the rounding in flexional suffixes presumably caused by labial consonants in some Manichæan mss. and mss. in Sogdian script (section 2.402).

and bad principles is not different from the one of the *sugatas* (*ädgün*, adverbial instrumental, *bar-miš+lar* ‘the ones who walked’). In the first case one instance of *bilig* (which could have served as head of *kulgak+niñ*) is deleted; in the second one *barmišlar+niñ+in+da* is equivalent to *barmišlarniñ činžu tözinda*. Similarly *burxanlarniñ tinliqlariğ ... ömäki ögnüñtä kañniñta takı artok üçün* (Warnke 195) ‘because the Buddhas are considerate ... of the creatures even more than mothers and fathers’, where the phrase *tinliqlariğ ... ömäki* is deleted. Another such instance from Warnke 211 is quoted in UW 211b. Cf. further *kalavink+niñ+dä* (Suv 646,6) from the name of a bird, with *ün* ‘voice’ to be understood from out of the context. In *yarumış ol öñräkilärniñdä, ärtmiş ol amtikilärniñda* (HTs VII 199-201) the word understood from the context is *swö başlag* ‘preface’: ‘It turns out that it overshadows those of the previous ones (i.e. the previous authors) and surpasses those of the present ones’. Instances such as *baxşı+niñ+ta+kı+ča* (Abhi A 3537) are comparable to Turkish adding *+kl* to the genitive suffix in the sequence *+nl+n+ki(n+)* to integrate the genitive form as noun phrase without its head. Old Turkic does not, however, add *+kl*: In this is similar to the phenomenon which has, in connection with Romani and Hurrian, been called ‘Suffixaufnahme’, although the genitive in those languages gets the head’s suffixes also when attributive (which would be impossible in any Turkic language).

The accusative has the suffix *+(X)g*; as stated in Erdal 1979, this is replaced by the pronominal accusative suffix *+nl* in the latest Uyghur sources. This happens mostly when stems end in a vowel, e.g. *yanturdači+ni* in U II 58,3, *ayalar+ni* in U II 46,70, *yerni mä karı kişini*²⁹⁰ in Brieffr C12, again *kişi+ni* in TT VII 25,6; occasionally, this suffix appears in early texts as well, e.g. *savl(i)g ätözni arta(t)dimiz* in Mait 177r7.²⁹¹ In loans *+nl* appears more often and turns up at an earlier stage of the language than in native Turkic words; e.g. *darni+ni* ‘the incantation formula’ (< Skt. *dhāraṇī*) in U II 38,69. Nouns such as *barča* and *tüzü* ‘all’, whose use is not far from that of pronouns, have the *+nl* ending also in classical Uyghur (e.g. in HTs VIII 21, Pothi 68).

²⁹⁰ This particular instance may possibly have been contracted from **yeriñni mä karı kişini* (*unütmış bolgay sän*) ‘you will have forgotten your home and your old wife’ (or ,relatives’). But, on the other hand, this text uses a very late language, with VdV > VyV and *özgä* ‘other (than)’; the use of the particle *mA* after nouns (and not just after pronouns) is also particularly late.

²⁹¹ The content of this sentence is not very clear; cf. UW 209b in section 5) of the entry for *artat-*.

Zieme 1991: 24-25 gives some statistics on the relative appearance of $+(X)g$ vs. $+nI$ in Uygur verse.

The dative suffix for substantives is $+kA$ in all varieties and stages of Old Turkic. Irregularities occur when it follows the 1st and 2nd person singular possessive suffixes, which show pronominal behaviour; these are dealt with below. $+kA$ is today found only in Khaladj. According to DLT fol. 537-8, the Argu used this same form; Kāšgarī appears not to have been aware of any other Turkic group of his time using it beside them. Evidence for $+gA$, which can be assumed to have existed in early Turkic beside $+kA$ because of Oguz and Bolgar-Chuvash $+A$, is exceedingly weak in Old Turkic. Based on Kāšgarī's statement and on what he takes to be evidence from Old Turkic texts in runiform script, Doerfer 1987 set up the theory that the Old Turkic dative was pronounced as $+gA$, and that it did not use the characters for $/g/$ because those were pronounced as fricatives and not stops. For that purpose he refers to both the simple dative forms and the ones appearing after possessive suffixes as we find them in the Yenisey inscriptions. We will separate the two sets of forms, to deal with the possessive forms further on. Runiform evidence is such that we practically always find $+k\ddot{a}$ / $+qa$. This evidence is overriding also for the Yenisey inscriptions, with two exceptions: $+gA$ appears in E11 D1, in the sentence *beš yegirmi yašimda tavgač kanga bardim* 'When I was fourteen years old I went to the Chinese king', and in E45 5 in the sentence *kök täñridä küngä azdim* '(When I was sixty years old) I lost the sun in the sky'.²⁹² The other runiform text in which we find a $+gA$ dative is ms. IV in the Stein collection published by Thomsen, a short administrative (or perhaps military) letter. The dating of this text in irregular cursive characters (perhaps the only runiform ms. not written with a pen) reads *bešinč ay säkiz yegirmigä* 'in the 5th month, on the 18th'. The Manichæan script

²⁹² The fact that both bases end in $/n/$ may or may not be a coincidence. Doerfer thought there were $+gA$ datives also in E40 (the Tašeba inscription) and E22. In E40, Radloff and Vasil'ev were apparently wrong in reading *elgä*: Kormušin 1997: 128 reads the word as *el(i)m*. Kurt Wulff, in his unpublished edition of the Yenisey inscriptions, writes about the space after I^2 : 'svage spor, der snarest kan tyde på g^2 , muligvis m' (he actually supplies drawings of all these characters), i.e. 'weak traces, which most likely indicate g^2 , possibly m'. He adds: 'Mellem dette og t^1 , hvor Radloff, Atlas har A, synes der ikke at have stået noget bogstav', i.e. 'Between this and t^1 , where Radloff, Atlas has A, there appears not to have stood any letter'. Vasil'ev does not actually give any photograph of this inscription, and the letter which does not exist according to Wulff and Kormušin is in his hand-drawing drawn like a miniature I and not an A. In E22, where Vasil'ev writes *(ä)lgä*, the text actually reads *üč (ä)l(i)g y(a)š(i)m da* (thus, with an erroneous : before the locative suffix), i.e. 'when I was 42 years old'.

distinguished between /k/ and /g/ when appearing both in front and in back syllables. Again the overriding majority of examples shows *caph* or *coph*, but the texts occasionally write G / Γ: We find *üdgä* in M III Nr.12 v 3, e.g., and *ätkä kanga* ‘concerning meat and blood’ in Wilkens 2000 Nr.65 r 1. In *bastan* (thus) *adaka tägi kanka iriṅä örgänip* ‘besmirched in blood and pus from head to foot’ (M I 5,14) we find the two velars simplified in *adak+ka* and the suffix velar assimilated to the nasal of *iriṅ* in what is spelled as ‘YRYNNG’. In TT VIII (Brāhmī) there are 63 instances of *k* as against 3 spelled with *g* (which is well within the limits of normal error found in Uygur Brāhmī mss.). The (original version of) the Arabic script as used for writing Qarakhanid does not distinguish between /k/ and /g/ in front syllables, but back syllable words consistently use *qāf* and not *ghain* for spelling the dative both in the DLT and the QB. *Ghain* was, of course, a fricative, while *qāf* may have been pronounced as a voiced and not an unvoiced uvular stop in Arabic dialects even in Kāšgarī’s time. So Qarakhanid evidence does not contradict Doerfer’s theory that the dative suffix was pronounced with a voiced and not an unvoiced uvular or velar stop; but he *may* possibly be right even as far as Old Turkic is concerned: The so-called voiced characters may not generally have been used as they in fact indicated voiced fricatives and not stops. Just possibly (but by no means necessarily), a stop [g] (as against a fricative) could also be meant when using K. Doerfer’s theory would also explain the Proto-Oguz, Bolgar-Chuvash and general Middle Turkic²⁹³ emergence of +gA as the dative suffix and, of course, Kāšgarī’s statement on Argu pronunciation: The voiced stop, which the phonemes /k/ and /g/ could be sharing in that it might have existed as variant in the word (or syllable) onset for the latter and in all other positions for the former, might have served as pivot, getting at first (at the Old Turkic stage) generalised from the post-vocalic position to all positions, and then receiving (after Qarakhanid as far as Eastern Turkic is concerned) the fricative variant beside it. But there is very little in the Old Turkic documentation to speak *for* this view. Another possibility is that +kA was primary and that the emergence of +gA is due to the influence of the directive suffix (which always had /g/ and was not related to the dative).

Old Turkic has no +A or +yA dative, as maintained again and again by Gabain 1974: 87 and others, especially T.Tekin 1996a, who intend these to be linked with one of the Mongolic suffixes serving as

²⁹³ A form ‘*čaqlarya*’ which is in Doerfer 1993: 49 said to appear in Džumagulov 1971: 111 is in that work found neither on that page nor in the index nor in the section devoted to the dative.

dative.²⁹⁴ It cannot be excluded, however, that Mongol copied an +A dative from a Turkic language of the Bolgar group.

Doerfer 1977 had tried to explain the fact that the dative forms of the 1st and 2nd person singular personal pronouns are back vocalic (see section 3.131) by assuming that the dative suffix was originally a noun *ka, which later became a suffix. When Johanson 2001: 1726a makes the unwarranted statement “Im Ost-Altürkischen²⁹⁵ war ... das Dativsuffix +qa ein hinteres Suffix” he is presumably following this quite hypothetical proposal concerning Proto-Turkic.

The locative suffix +dA serves also in ablative use in the earlier part of our corpus; see the ablative below. The distribution of the two sets of alveolar characters in the Orkhon inscriptions is documented in T.Tekin 1968: 133: It turns out that d¹ and d² are here more general than with the constative preterite: t¹ and t² are here the rule only when the stem ends in /l n/, with /r/ generally followed by the D runes like the other consonants. We also find *köl+tä* ‘at the lake’ with t² in ŠU S6. The rule holds also for pronominal forms spelled as *bunta*, *anta* and *bizintä*. r²(I)g²y²r²t²A (KT S13 twice) is an exception if correctly understood as *äriḡ yertä*;²⁹⁶ a number of other instances of *yer* get /d/ in the locative suffix. k²čn²d²A in *Küli Čor* may be another exception, or this place name may have had a vowel after the /n/. Twice *öliümtä oz-* in IrqB 49 and *ayakimta idišimtä* in IrqB 42 are also against this rule.²⁹⁷ In Manichæan sources (as documented in Zieme 1969: 112-114) we find the spelling with T in *čaydanta*, *eltä*, *xanta*, *oronta*, *yolta*, *ažunta*, *köñültä*, *tultonta* and often after the possessive suffix +(s)In+ and in pronouns, i.e. again after /l n/. Here the exceptions are *yerindä* in M III 8 I v1 on the one hand and *yertä* (as in Orkhon Turkic) in TT II,2 10. In

²⁹⁴ The datives *adaka* and *suvsamaka* mentioned by Gabain show the very common simplification of velars, and the +yA forms mentioned there appear to belong to the directive-locative case as described below. The first word in inscriptional *bīḡa bašī* refers to some military unit which may (or may not) be related to *bīḡ* ‘thousand’, but Old Turkic does not, in any case, use adnominal datives. *ača* in TT IIA 37 is the converb form, as correctly noted in UW 37b.

²⁹⁵ This is Johanson’s name for what we have called Old Turkic (which *is*, of course, documented best from the eastern part of the Turkic world).

²⁹⁶ Here, in T.Tekin 2000: 77, 115 and in glossaries of all the reeditions of the Orkhon inscriptions by T.Tekin, he mentions an instance of *yertä* also in BQ N15; no such word occurs in this line in any of the editions I have looked at, and I have not come across it anywhere else in that inscription. It may, however, appear in Tuñ 47 according to some readings.

²⁹⁷ Erdal 1997a: 69 mentions IrqB irregularities also for the constative preterite.

the Pothi book, which is a late text, the rule is not observed; nor is there any rule in Brāhmī sources. In Qarakhanid mss. we generally find voice assimilation, i.e. +*tA* after voiceless consonants and +*dA* otherwise; but cf. *iš+da* in DLT fol. 402.

The ablative suffix appears as +*dIn* in most Uygur sources, where +*dA* serves as locative only, as well as in Qarakhanid. The variant +*dAn*, today found everywhere except modern Uygur, is attested in preclassical and/or Manichæan texts, e.g. as *ögüzdän* or *sütdän*. In these sources, the alveolar is generally spelled as D except after /n/. There are examples also twice in BT V 172 and in 501 (*täñrilärdän*), DreiPrinz 96 (*Jiglärdän*), M I 5,13 (*baštan*, an exception in the spelling of the alveolar), 7,2 (*ığaçdan*), 17,19 (*töpödän*) 22,4₁ and 7₂ (*täñridän* and *yerdän*) and M III 28,8₅ (*yerindän*) and 42,17 (*täñrilärdän*). The DLT ms. has both +*dIn* and +*dAn*, e.g. *suv ariktin kardī* (fol. 525) ‘The water overflowed from the canal’ vs. *kul täñridän* (with *dāl*, not *dhāl*) *korkti* (fol. 627) ‘The worshipper feared God’; both the I and the A of the suffixes are by the first hand.²⁹⁸ The vowel of +*dAn* may have been taken over from the locative suffix +*dA* by analogy, or, conversely, the most common variant +*dIn* may have come about secondarily, through influence by the orientational suffix which has a similar shape when not rounded. These appear to be morphological variants, but in Manichæan texts +*dAn* could also be part of the (phonological, phonetical or merely graphic) lowering of vowels also found in this group of sources. Zieme 1969: 177-8 brought together the evidence for ablative meaning in Manichæan texts. It turns out that most of them do not have any ablative suffix and use the +*dA* suffix for ablative content. Some have +*dAn* as quoted above, but +*dIn* is rare in Manichæan sources: The only ones which have it (and no +*dAn*) are the Pothi book and the passage M I 29-30 (which is a very late reader’s addition to a text). In the runiform inscriptions, e.g. in *kand(a)n* ‘from where’ in KT E23, the vowel of the suffix is never explicit.²⁹⁹ However, in *Oguzdundan* (Tuñ 8) ‘from the direction of the Oguz’, where it is added to the orientational suffix +*dXn*, both suffixes are spelled without explicit vowel: This means that the inscriptional ablative suffix has to be read with A, because its vowel

²⁹⁸ In their grammatical sketch, Dankoff & Kelly 1985: 323 tacitly change this last instance to *täñridin*. In fol. 574 the ms. (first hand) has *buzdun* ‘from the ice’ with ablative meaning, by the editors again changed to ‘*buzdän*’.

²⁹⁹ In this and in all the runiform examples of the ablative to be mentioned here, it follows an /n/ and is spelled with the ligature, so that its alveolar must be [d], to be assigned to the /d/ phoneme.

would (after a rounded vowel) have had to be explicitly spelled as *I* if the inscription had had the ablative suffix as *+dIn*; whence I prefer the reading *+dAn*. Following this logic I read *tašdindan* ‘from the outside’ in a runiform inscription of the Uygur kaganate, ŠU S4 (twice), although the last vowel is again implicit.³⁰⁰ The same sequence of suffixes is found also in *üstüntän kalikdan* and *üstüntän kudī* in M III Nr.8, VIII r 4 and v 10 respectively and in *üzütüntän enip* ‘coming down from above’ (l.10 in a Manichaean hymn edited by Wilkens in *UAJb* N.F. 16). In those early texts, where the locative form also has ablative meaning, the ablative form itself appears to be used mainly after *+dXn*. Among Buddhist texts we find *+dAn* in the Säkiz Yükmäk Yarok edited in TT VI; the London scroll (as documented in Laut 1986: 87) has it as *täñri yerintän* 8 times in 406-416, as *kün ay täñridän* (404) and *taloy ögüzdän* (44). Similar to Manichaean texts the London scroll of TT VI has no instances of *+dIn* and ablatival meaning is normally covered by the suffix *+dA*. The Mait, an extensive pre-classical text, has no *+dAn* but only *+dIn* (e.g. *tamudīn* in MaitH XX 14v1). Laut 1986: 70, 77 notes that the Hami ms. of this text has only *+dIn* in ablative meaning whereas the Sängim ms. shows *+dA* in ablative meaning beside *+dIn*.

The shape of the instrumental suffix changed from fourfold to twofold harmony in the course of the development of Old Turkic: We find *+(X)n* in the runiform inscriptions and in most Manichaean instances, but other sources have *+(I)n*. This alternation can also be seen as related to a dialect difference, but that is less likely in view of the fact that petrified *+(X)n* forms are found in Buddhist sources as well: There are, e.g., dozens of examples of *üed+ün* from *üed* ‘time’ in the Suv. The difference is, of course, visible only when the base has a rounded vowel. We have *ok+un* (KT E36) ‘with an arrow’, *bo yol+un* (Tuñ 23) ‘by this way’, *küz+ün* (ŠU E8) ‘in autumn’, *korug+un* (KT N8 & BQ E31) ‘at the reserve’, *biltökümüün ödökümüün* (KČ S3) ‘with what I know and remember’ and so forth.³⁰¹ In Manichaean sources we find *üdüün* (often) ‘at a (particular) time’, *sözün* (Xw 102 in ms. A; *sözün* in B and J) ‘with words’, *özün* (Xw 111 and 112; in Xw 149 ms. B against *özün* in A and C) ‘with a (particular) identity’, *könülün* (Xw 149 and 157, M

³⁰⁰ What has by the editors been read as *taštī[r]tīn kälip* ‘coming from outside’ in MaitH Y 164 could as well have been *taštī[n]tīn kälip*; the suffix *+dIrtIn* has till now appeared only in pronouns.

³⁰¹ The instance in *anta ötrö oguz kopin kälti* (Tuñ I S9) could possibly be translated as ‘thereupon the Oguz came in their entirety’, with the possessive suffix *+(s)I(n+)* before the instrumental ending.

III Nr.15 r 17) ‘by the heart’, *közin kulkakin tilin älgin adakin* (Xw 207 both ms.) ‘by the eyes, the ears, the tongue, the hand, the foot’, *äsrökiin* (M I 6,16) ‘by drunkenness’, *körkiin* (M III Nr.7 III v 12, BT V Nr.25 v 11-12, ms. U 128a in BT V n. 574 = ZiemeSermon v 5) ‘by shape’³⁰² or *ögrünčün* (TT II,1 66) ‘with joy’. Here and in many additional examples, Manichæan texts generally have $+(X)n$ unless there is parallelism with stems in unrounded vowels (as in Xw 207 just quoted); Zieme 1969: 177 has brought together the (limited) Manichæan evidence for $+In$: Only the Pothi book, the Yosipas fragment and one of Afrin Čor’s poems (M II 7-9) have $+(In)$ (and no $+(X)n$).³⁰³ In the DLT we find fourfold-harmony instrumentals such as *köz+iün* ‘with the eye’ and *kögl+iün* ‘with the heart’. Buddhist texts (where the instrumental is also exceedingly common), on the other hand, consistently have $+(In)$; *otin suvin* (MaitH XX 13r10) ‘with fire and water’ or *ötüglügin* (HTs VIII 68) ‘by having requests’. *baltun* ‘with an axe (*baltu* or *balto*)’ (MaitH XV Nachtr 3r26) is an example of the suffixes being added to a stem ending in a vowel.³⁰⁴

alkugun and *kamagun* ‘altogether’ are instrumental forms put to adverbial use.³⁰⁵ The instrumental suffix was also added to the postpositions *bi(r)lä* and *öñi*: Originally it probably applied to the postpositional phrase as a whole, putting it to adverbial use; in late Uyghur, however, *bi(r)län* becomes a variant of *bi(r)lä*. *birökin* ‘however’ (MaitH XV 3v4) shows the particle *birök* with the instrumental suffix. It appears, further, to have been added to the comitative case suffix $+lXgU / +lUgU$ and to the converb ending $-mAtI$. The etymology of the converb endings $-(X)pAnXn$ and $-(X)pAn$ may possibly be linked to a demonstrative instrumental as may the imperative form $-zUnIn$ (as explained in sections 3.231 and 3.286). The sequences $+sXzXn$ and $-(X)nčsXzXn$ are also common: The instrumental

³⁰² The noun in *körgün* (thus, with G, in Manichæan script) *tägšürüp* of U 128a v5 is not an error for accusative *körk+in* (facs. clear): *körkiin tägšil-* in BT V 574 shows that the instrumental is appropriate.

³⁰³ *ulug ünin üntädi mañradī* (M III Nr.3 v 12) could possibly be understood as ‘He shouted and bellowed with his loud voice’ with the possessive suffix before the instrumental.

³⁰⁴ The statement in Johanson 1988: 142 that ‘It is a well-known fact that the Old Turkic instrumental in $\{(X)n\}$ already ceases to be productive in Uighur’ is certainly misguided; cf. also section 4.1110 below.

³⁰⁵ Not instances of a suffix $+kiin$, $+giin$ etc., as proposed in Gabain 1974 § 50. The other forms mentioned in that paragraph belong to the collective suffix $+(A)gU$ which is used in runiform inscriptions with the pronominal n ; but pronominal n appears only before case suffixes (and is not attested with this suffix outside those inscriptions).

suffix is often added to the privative suffix $+sXz$ (and to $-(X)nčsXz$) as well as to its opposite $+lXg$ when they are put to adverbial use. The suffix $-(X)pAn$ clearly related to $-(X)p$ and front low forms in early texts as *ärklig+än* and *siziks(i)z+än* in TT VI 90 and 305 respectively make it possible that there was an early variant of the shape $+An$ as well.

The equative suffix is $+čA$.³⁰⁶ It is unstressed in modern languages and presumably was so in Old Turkic as well. The element $+čI+$ / $+čU+$ found in some personal and demonstrative pronouns and in *bulitčilayu* / *bulitčulayu yig-* (HTs III 637 and V 320) appears to come from $+čA+lAyU$ through a process of vowel raising; see section 2.401.

The directive in $+gArU$, signifying ‘towards’ is very much alive for both nominals and pronouns both in Orkhon Turkic and in Manichaean texts but is not too common in the rest of Uygur (which is generally later); cf. *tavgačgaru* (BQ E35) ‘towards China’ or *küngärü* ‘southwards’ (TT V A71). *ilgärü* ‘eastwards’, e.g. in KT E 2, ŠU E8 and often elsewhere, and *apa tarkangaru* (Tuñ I N10) ‘to A.T.’ show that runiform inscriptions did not spell the velar of this suffix as K after /l n/ (I am not aware of any example with /r/). The scarcity of $+gArU$ in Buddhist Uygur and Qarakhanid Turkic can be explained as a reduction of the case system in the course of historical development, but another explanation is possible as well: The shape of the directive is identical with the vowel converb of denominal $+gAr-$ verbs (OTWF section 7.53), and *may* well come from it. With $+lAyU$ we have another example of a secondary case form which we find to be already well established in Orkhon Turkic. There is no doubt about the relationship between *taš+ik-* ‘to go out’ and *taš+gar-* ‘to get out’, *ič+ik-* ‘to go in’ and *ič+gär-* ‘to get in’ and we know that petrified converbs of causatives lose the causative meaning of their source (OTWF passim). *bir+ik-* ‘to gather at a place’ and *birgärt-* (OTWF 767) are highly likely to be related to *birgärü* ‘into one place’, which has directive meaning. This latter, *ičgärü* and *tašgaru* are among the most common of directive forms in the whole of Old Turkic. So it might just be that the absence of a living directive in Buddhist Uygur should not be explained by loss but by limited involvement in a particular dialect. A third possibility is that the directive came from contamination between such petrified converbs

³⁰⁶ There is no diminutive or intensive suffix of this shape in Old Turkic, as professed in Gabain 1941: 59; the only two examples in her § 45 which do have this meaning among the ones mentioned do so by virtue of the base or some other suffix. The Ottoman diminutive suffix $+čA$ was borrowed from Modern Persian.

and the pronominal dative in *+gAr*; note that Tuvan has (or had in the last century) such directives as *puruŋŋar* ‘forwards; to the east’, *soŋŋar* ‘back; to the west’ and *küŋgär* ‘towards the sun’. Deictic directives such as *ičgärü*, *tašgaru*, *öŋärü* and *artgaru* (‘in, out, forwards, backwards’) survive into Middle Turkic.

Some scholars thought they could identify the first syllable of *+gArU* with the dative suffix and the second syllable of the suffix with the suffix *+rA* dealt with straightway; others have even treated *+gArU* and *+rA* as one suffix. However, the velar of the dative suffix is shown to belong to the phoneme /k/ wherever the script used is explicit enough for this purpose, with quite few exceptions; the velar of the directive, on the other hand, consistently belongs to the phoneme /g/ in runiform, Arabic and other writing systems.³⁰⁷ The vowel of the second syllable of *+gArU* is different from that of the well-attested case suffix *+rA*. The only things the two suffixes share are the general local content on the semantic side and the sound /r/ as to phonic shape; they are quite distinct also in their historical development. Still other scholars (among them Gabain 1974, Clauson in the EDPT and now Heschke 2001: 53) believe in the existence of a directive suffix *+rU*: It is supposed to have appeared in *kerü* ‘back’, *bärü* ‘hither’, *+(X)mArU* (1st person sg. possessive directive), *tapa+ru* ‘towards’ (adverb and postposition in DLT fol.473, QB 521 and 5830 in all three mss. and in two other instances only in the late A ms. and in Middle Turkic as documented in Heschke 2001: 54) and, as proposed by Heschke 2001, in a postposition *siŋaru* which he derives from *siŋar* ‘direction’. I would take both of these words to come from the putative pronoun which became one of the two allophone clusters of the 3rd person possessive suffix *+(s)In+*, *siŋar* being similar to the datives *aŋar* and *muŋar*. *taparu*, apparently created secondarily out of a need to make the directive content of the postposition *tap-a* ‘towards’ explicit, is not, however, attested in Old Turkic proper. The suffix *+(X)mArU* being formed in similar manner as dative *+(X)mA* and *bärü* not having an obvious base, we would be left with *kerü* as the only word in which *+rU* would be early. I take that as well to come from **ke+gärü*.

There are two different functions of *+rA* in Old Turkic, and they differ in their historical development: The directive-locative in *+rA* is attested

³⁰⁷ What has been read as *yagïkaru* in DLT fol.310 and translated as ‘towards the enemy’ in fact contains a verb *kar-* ‘to oppose’, the base of the verb for which the DLT gives the example *iki bäglär karišti* ‘The two *begs* quarelled and fought’; this, in turn, is the base for *karši* ‘adversary etc.’. The ms. spells *yagï* and *qaru* separately.

only with a limited set of nominals: We find it e.g. in *öŋrā* ‘to the front (or east)’, *kesrā*³⁰⁸ ‘to the back (or west)’, *tašra* ‘outside’, *ičrā* ‘inside’, *asra* ‘below’ (see the UW for the latter).

Then we have the use with body parts, e.g. in *töpörä* ‘on the head’ (e.g. in Suv 7,22, 620,18, 627,3), here called partitive-locative. Examples for this in section 4.1107 show that, as partitive-locative, *+rA* did clearly stay alive in Uyğur. *+rA* appears to have been incompatible with possessive suffixes in either use, though both uses were bivalent: The directive-locative, being deictic, was inherently linked to the place and time of speaking, while the partitive-locative applied only to inalienable parts of a creature’s body.

Directive-locative *+rA* was dissimilated to *+yA* when the stem had an /r/: *beriyä* ‘in/to the south’, *yiryä* ‘in/to the north’, *kuriya* ‘in/to the west’ < **berira*, **yirra*, **kurira*; cf. Orkhon-Turkic *kurigaru*, *b^erigⁱrü* of the Uyğur Steppe Empire Taryat inscription (W5) and the like. *üzä* ‘above’ could possibly also have been formed in this way, as one source of Old Turkic /z/ is Proto-Turkic **ry*; its base could have survived in Chuvash *vir* ‘upper’.³⁰⁹ The variant *+yA* cannot be connected with the dative suffix, as has been thought by some,³¹⁰ both because of the different meanings of the forms and because *+kA* often appears in the same phonotactic surroundings as *+yA*. All the instances of *+yA* are, like directive-locative *+rA*, petrified and lexicalised. Most important, the meanings and functions of *+yA* and the directive-locative fit together perfectly.

The simulative suffix *+lAyU* no doubt comes from the vowel converb of denominal verbs ending in *+lA-*. However, it is a full-fledged case already in the Orkhon inscriptions (meaning that there needn’t have been a *+lA-* verb to have served as base for every *+lAyU* form attested); we there find it in the expression *op+layu täg-* ‘to attack like a threshing ox’. Cf. OTWF 408-409, where much of the documentation is quoted; *+lAyU* does not seem to appear in any Manichæan source. Clauson 1962: 146 is wrong in thinking that it is ‘usually, perhaps always, attached to the name of an animal’, although there is such a group of instances.

³⁰⁸ Possibly from **ke+sin+rä*, from a stem attested in *ke+n*, *ke+din*, *ke+č*, *ke+čä* and *kerü* (< **ke+gerü*).

³⁰⁹ All directive-locative items turn out to appear in opposite pairs and *üzä* would be the counterpart of *asra*. Another cognate is *üstün*, discussed in this section.

³¹⁰ E.g. Tekin 2000: 79. That *+yA* may have been a secondary form of *+rA* was assumed already in the EDPT (p.XL) and is argued against by T.Tekin 1996a: 330-31.

In +čUlayU in *yaḡalig süö bulitčulayu yiggay män* (HTs V 320) ‘I will amass an army of elephants like a cloud’ and, again as *bulitčilayu* (thus!) *yig-*, in HTs III 637 +lAyU appears to have joined a variant of the equative suffix. Another instance should probably read in *kapil(a)vas[tudin] kür[ä]gčüläyü ünüp* (MaitH I 2v21) ‘leaving Kapilavastu like a fugitive’. The personal and the demonstrative pronouns also have forms with this extended suffix +člAyU / +čUlayU (sections 3.131 and 3.132).

The comitative +lXgU is rare and early; it has not turned up with pronouns. We find it in *ini+ligü* and *(eki üč kiši)+ligü*³¹¹ in the Orkhon inscriptions. This form has been linked to the Yakut comitative and to Mongolian +lUgA in Gabain 1974: §424³¹² and Zieme 1969: 254 (n. 682), later also by Tekin 1991 (who lists all known instances) and Stachowski 1995, the last three arguing against other etymologies.

In Manichæan sources the comitative has the shape +lUgUn; examples with unrounded bases are given in section 4.1111. Another instance with unrounded base is *iki kutlug el[ig]lär kamag tegitlärin kunčuy[ari]n tözünlärlugun* (DreiPrinz 119) ‘the two blessed kings together with all their princes, wives and retinue’; not (for some reason) adhering to palatal harmony makes it similar to a postposition. Furthermore, the case suffix is here shared by three nouns. The form of the suffix in the instance *š(i)mnulugun* ‘with the devil’ (Xw 4) is therefore no doubt also to be interpreted as +lUgUn, although its first vowel could here also have been taken to be /X/ (since the base ends in a rounded vowel). The Manichæan variant shows comitative +lUgU followed by the instrumental suffix +(X)n: The use of the comitative appears to have been getting forgotten, demanding an expansion with a well-known case suffix of similar meaning. The Yakut comitative +lX:n clearly comes from the same expansion. Mongolian +lUgA is better linked with +lXgU than with +lUgU(n), as Mongolian /U/ corresponds to Turkic /X/. Whether *ortok+lugu* in M I 12,10 (translated as ‘teilhabend’ in Zieme 1969: 120) is an instance of this suffix is not certain: The context *ol ädgü mänikä ortoklugu bolayan* ‘May I participate in that good happiness’ makes it possible that this is a variant of the suffix +lXg. Scholars like Ramstedt and Poppe linked Mongolian +lUgA to the Turkic formative +lXg, which is possible as

³¹¹ The brackets indicate the scope of the suffix.

³¹² She does not list the form among the case forms, because she takes the forms with +n to be instrumentals from +lXg. She also mentions an alternant ‘+lji’ (which she may have thought to contain the possessive suffix) not known to exist.

well. But then, it cannot be excluded either that *+lXg* and *+lXgU* have a common origin, their meanings not being all too different: A split could possibly have taken place through the specialization of *+lXg* in word formation. If this is indeed so, then *ortoklugu* in M I could be the missing link between them.

An orientational formative *+dXn* appears e.g. in *üstün köktä altin yagızda* (MaitH XX 1r5) ‘in the blue (sky) on high and on the brown (earth) below’. It should be distinguished from the ablative case ending, although the distinction can be difficult to make in practice: They look identical when added to unrounded stems. *+dXn* is added only to the pure stem (i.e. never after plural and possessive suffixes) and is itself capable of bearing these two suffix classes; e.g. *öñdün* ‘its eastern side’ (Tariat W5) or *sugčew taštıninta* ‘outside Suchou’ (ManBuchFr II 2v5) with possessive suffix.³¹³ In *ičtinsiz* (TT VIII A 4) it precedes a formative. It is therefore not a case suffix in the strict sense. One reason for mentioning it here (and not among the formatives of section 3.111) is semantic; another one is that it is often difficult to tell apart from the ablative. Appearing in all Old Turkic texts, *+dXn* is in Uygur applied to a limited number of deictic nouns such as ‘north’, ‘east’, ‘inside’, ‘left’ or ‘behind’. It has fourfold vowel alternation in all runiform sources and in Manichaean texts, except the late Pothi book, which writes *koptin* ‘everywhere’. Pañc 192 also has *+dXn* in pronominal *kanyudun* ‘in which direction’, which is clearly archaic also as *ñ* is still unchanged here.³¹⁴ In Buddhist Uygur this suffix can appear as *+dIn* even in early texts, making it identical with the ablative in shape; e.g. *yaguk+tin+ki kop kamag tinliglar* ‘all creatures which are near’ (MaitH XV 2v6), *kün togsukdinki* (MaitH XV 1r2) or *törtün yığak* (MaitH XX 1r11, 17, Pfahl III 9 etc.) ‘in all 4 directions’. Cf. on the other hand *öñdün küntün buluğda* TT I 142) ‘in the south-east (or ‘in the east and in the south’) or *kira suvdun yerlärim* (Sa12,3 in SammlUigKontr 2) ‘my land, both fallow and beside water’.

Some opaque *+dXn* forms were metanalysed in later varieties of Turkic. Such is *üstün* ‘above’ < *üz related to (or coming from) *üzä*

³¹³ Cf. also *öñdünindä* ‘in its east’ in Sa9,2 and Mi20,6 in SammlUigKontr 2. The glossary to this work appears to consider *kündün+i* / *kündin+i* and *öñdün+i* attested there in Sa10, 13 and 16 to be abbreviations of *kündün* / *öñdün yığak* ‘its southern / eastern side’. There is no need to make this assumption, although the two types of expressions can clearly alternate: Possessive suffixes are often used relationally.

³¹⁴ We spell the word with *ny* and not *ñ* as we reserve the use of *ñ* to the runiform and Indic scripts, which have such a letter.

‘above’, wrongly given a stem “*üst*” in the EDPT; it is still spelled as *üztiün* in the early Manichæan hymn edited in *UAJb* 16: 221-2 (I.10).³¹⁵ Qarakhanid *astin* ‘beneath’ is related to *asra* and wrongly given a stem “*ast*” in the EDPT and *altin* ‘lower’ *al* < ‘place beneath’ (attested in M III 37,4₂), wrongly given a stem “*alt*” in the EDPT.³¹⁶ *orton*, e.g. in *iki orton ärñäk* < ‘the two middle fingers’ (TT V 8,55) or *orton änätkäk elindä* ‘in the realm of central India’ (HTs VII 1791 & 1891) comes by haplology from *orto+dun*, attested in M III 10,12-13₁ (an early text); the meaning makes it highly unlikely that it should be an instrumental form. Cf. also *orton+kī* (e.g. Suv 134,1-2, BT VIII A 377 and 382, Maue 1996 24 Nr.9) ‘the one in the middle’; *+kī* is not added to the instrumental. Some of the *+dXn* nominals have *+dXrtI* forms (discussed in section 3.31) related to them, which have ablatival meaning.

To sum all this up, Old Turkic nominals had the following 11 active and productive case suffixes: nominative, genitive, accusative, dative, locative, ablative, instrumental, equative, directive (fully productive only in runiform and Manichæan Old Turkic), partitive-locative and similative. The comitative, a 12th case, is neither active nor productive and absent from pronoun paradigms. The demonstrative pronouns also lack the partitive-locative, the personal and the interrogative pronouns both this and the instrumental. The interrogatives further lack the similative and the personal pronouns fuse the equative with the similative. The demonstratives thus have 10 case forms, the other pronouns 8; this is different from Indo-European languages, where pronouns generally have more cases than nouns. The appearance of pronouns in the directive case is limited to early texts, as with nouns.

3.125. Possession + case

Examples for case suffixes getting added onto possessive suffixes are *köñl+üñ+čä* ‘according to your wish’ (Tuñ 32), *sözinlüg(ü)n* (Xw 2) ‘with their words’ and *oglan+iñiz+da* ‘among your (pl.) children’ (KT SE). In the Sudži inscription (I.9) we have the stretch

³¹⁵ An etymology for *üzä* is proposed earlier in this section in connection with the suffix *+rA*.

³¹⁶ Clauson received this view from Gabain 1950a, who took ‘*alt*, *art*, *ast*’ etc. and even *köt* ‘buttocks’ to be instances of a (nonexistent) “*-t-Kasus*”. Cf. also *aldirtī* and *alčak*. The UW (entries *al* III (?) and *al(a)ñ*) does not trust the reading *kum aliya [i]lin-* in M III which is said to be “zerstört” and would like to assign the word to the lexeme *alañ*. However, the present loss of the word’s fourth character may not have taken place when Le Coq read it (as he does not mark it), and one would rather expect *kumlug alañ* if the word were not to have a possessive suffix.

wg¹l¹n¹m:r²d²Amr¹mn¹čA:b¹wl¹’, no doubt correctly understood as *oglanim, ärdä mar+imün+ča bol* ‘My sons, be among men like (or ‘in accordance with the precepts of’³¹⁷) my teacher!’. If this interpretation is correct, the equative suffix was here added to the accusative form of the possessive suffix, as happens with pronouns.

In the nominative, the final /n/ of the 3rd person possessive suffix is subtracted (as also happens with the nominative of the demonstrative pronoun *bo/bun-* and, in Orkhon Turkic, with the collective suffix *+(A)gUn*).

The same appears to happen in the instrumental, e.g. in *anta ötrö oguz kop+i+n kälti* (Tuñ 16) ‘thereupon the Oguz came in their entirety’: Thus upon the assumption that this inscription, like all other early texts, has the *+(X)n* and not the *+(I)n* variant of the instrumental suffix.³¹⁸ *kün t(ä)ñri ... k(ä)ntü y(a)r’ok’in k(a)magka y(a)r’otir* (M III 7 I r 9) ‘The sun ...shines on everything with its own light’, could also have the possessive followed by the instrumental suffix, but *yarokin* could, in this context, just as well be an accusative form. Also in *yarlikančuči köñlin ... yarlikayur* ‘he decrees with his compassionate mind’ (Mait 26A r8), assuming that this is to be analysed as *köñl+i+n*. Gabain 1974: 98 mentions “*ködügi+n*” (she means *küdüg+i+n*) as an example for the possessive-instrumental sequence. In *muntakī yörügčä bišrunsar yorisarlar adaklarin irklämätin ärdinilig vajir tagka axdingali uyur* (BT I A₂ 16) ‘If they live by this doctrine, they will be able to climb the jewel-vajra mountain without treading (on it) with their feet’ one might want to assume the presence of a possessive suffix after *lar* but this is not certain. The instances in *pr(a)tikabut körkin kurtulgu tinliglar ärsär* (U II 17,28) ‘If they are creatures to be saved through the appearance of a *pratyeka-buddha*, ...’ and *kunčuyarlarniñ isiz yavaz sakinčin ... braxmadate eligkä yalganturur ärdi* (U III 54,11) ‘with women’s bad and vile thoughts’ can only be instrumentals. In the Manichæan (and presumably early) fragment U 139 r3 edited in the note to BT V 175, on the other hand, we find the instrumental ending

³¹⁷ This is the editor’s proposal. The Aramaic word *mar* ‘master’ appears also in l.7 of the same inscription, where it can hardly be understood in any other way. The term was in Central Asia used both by Nestorians and Manichæans, and the royal Uygur dynasty of (present-day) Mongolia had adopted Manichæism. *Buyla Kutlug Yargan*, who speaks in the 1st person in this epitaph, says that his father was a Kirghiz, but he probably served the Uygur Yaglakir dynasty and not its Kirghiz vanquishers.

³¹⁸ We understand the front N in the spelling ^wkpn² to indicate the presence of the 3rd person singular possessive suffix. This n² may, however, also be a simple error (of which this inscription is not free) for n¹, in which case the word would simply be *kop+un*.

added to the full form of the possessive suffix: *yaro]k täñri küčinin etmiš [ö]rgin üzä olortı* ‘He sat on the throne which the Light God had created with his might’.³¹⁹

With the genitive marking, the *n* is a simple one also in that variety of Old Turkic which keeps the initial *n* of this suffix after consonants: The shape of the sequence is *+(s)InIη*, never ‘*+(s)InnIη*’. Before the equative, the locative-ablative, the ablative and the comitative case endings (and, in early sources, also before postpositions) the 3rd person singular possessive suffix appears as *+(s)In* and not *+(s)I*; e.g. in *täñrilär söz+in+lüg(ü)n* (Xuast 2) ‘with the word of the gods’.

In the dative form, the 3rd person possessive suffix also has the shape *+(s)In*. In Orkhon Turkic we appear to get fusion of *+(X)η* and *+(s)In* with **+gA*; as a result, the 2nd and 3rd person possessive morphemes with dative ending give *+(X)ηA* and *+(s)IηA* respectively.³²⁰ With nouns this *+gA* is rare before Middle and Modern Turkic, as documented above. In Uygur the 3rd person possessive appears as *+(X)ηA* in the dative, e.g. *tutmišlarıña* (MaitH XI 4v10) or *katıglanmaķıña* (U IV A 265).³²¹ After the Orkhon Turkic 1st person possessive suffix, the dative suffix is *+A*: We get *+(X)mA* (e.g. *kagan+im+a*), presumably in analogy with the 2nd person singular. Quite a number such forms are listed in T.Tekin 1968: 131; they were also in use in the Xoitu Tamir graffiti and in the inscriptions of the Uygur steppe empire (*ogluma* in ŠU E7, *ävimä* S6, *yašıma* N4). Regular (analogically restored or archaic) *+(X)mka* forms are, however, found in BQ E15 (*yaš+im+ka*), e.g. in U III 37,2 (*bolmišimka*), DKPAMPb 906 or 989 (both *išimkä*), and, beside *+(X)mA*, a number of times in Yenisey inscriptions: In E147, e.g., we find, on the one hand, *elimkä* ‘my country’, *oglunka* ‘my sons’ and *atımka* ‘my horse’, on the other hand *kunčuyuma* ‘my wife’, *ulugum kičigimä* ‘my big and small ones’ and *bodunuma bokunuma* ‘my tribe and nation’, all governed by *bükmädım* ‘I have not had enough of’. In *kuydaki kunčuyumga adrıldım* ‘I parted from my wife at home’ in E6,4 the dative form has the intermediate shape with *g*¹; *kunčuyumgaka* in

³¹⁹ I would not be so sure as the editor was that this is an error, but it does admittedly seem to be isolated.

³²⁰ *öz+i+kä* in line a 6 of the military ms. among the Thomsen-Stein documents is unclear; note also that the runiform characters for *k*² and *η* are often quite similar.

³²¹ In the Uygur and Arabic scripts *η* is spelled as NK, in the Manichaean script as NG; in front-harmony words in these script one cannot therefore actually ‘see’ the fusion. It is however evident in the runiform and Indic scripts, which have special characters for this sound, as well as in back-harmony words in the Semitic scripts.

E7,4 probably shows the scribe first writing g^1A and then ‘correcting’ to k^1A .

The directive shows the same process, with $+(X)mArU$ in the 1st person singular (e.g. runiform $\dot{a}v+im\dot{a}r\ddot{u}$),³²² $+(I)\eta ArU$ in the 2nd and $+(s)I\eta ArU$ (e.g. $barm\ddot{s}+i\eta aru$ in DreiPrinz 17) in the 3rd. We do have to remember that this is limited to an inner-morphological development and does not apply to regular juncture; there are many instances such as $xagan+garu$ spelled as $k^1g^1n^1g^1r^1w$ in Tuñ 20, where /n/ and /g/ do not fuse when they are adjacent to each other.

The linking of the possessive and accusative suffixes normally gives $+(X)mIn$, $+(X)\eta In$ and $+(s)In$ respectively in the 1st, 2nd and 3rd persons singular: $+(X)mIn$ appears in some Yenisey inscriptions and in Uygur, including such runiform mss. such as the IrqB; e.g. $nom+um+i\dot{n} i\dot{s}id-$ ‘to listen to my teaching’ (MaitH XV 2v1), $\dot{o}t\ddot{u}g\ddot{u}min b\ddot{u}t\ddot{u}r-$ ‘to carry out my request’ (HTs V 311) or $\dot{o}g\ddot{u}min k\ddot{o}n\ddot{u}l\ddot{u}min$ (TT X 462) ‘my mind and heart’; $+(X)\eta In$ e.g. in $kul+u\eta+i\dot{n}$ (Yos 10) ‘your slave (acc.)’ or $\dot{a}t'\ddot{o}z\ddot{u}n\eta in \dot{i}dalap$ (Suv 566,13) ‘sacrifice your body’. These forms predominate also in Manichæan sources, as listed in Zieme 1969: 106–107. In some early texts, however, the last syllable of the affix combinations had /X/ in the 1st and 2nd persons: $kizl\ddot{a}n\check{e}u+i\eta+i\ddot{u}n$ (M III Nr.6 I r7) and $k\ddot{a}lt\ddot{o}k\ddot{u}m\ddot{u}n kertg\ddot{u}nz\ddot{u}n$ (DreiPrinz 65) appear in very early texts and Gabain 1974: 98 mentions $t\ddot{r}\ddot{o}+i\eta+i\ddot{u}n$.

In the runiform inscriptions there is often no explicit vowel in the last syllable, so that ‘fourfold’ harmony is likely:³²³ In BQ N 11 we should presumably read $bodun(u)m(u)n ter\ddot{u} \dots$ ‘organising my tribe’, in both ŠU E9³²⁴ and Tariat W2 $b(i)t(i)g(i)m(i)n b(\ddot{a})lg\ddot{u}m(\ddot{u})n \dots yass\ddot{i} ta\check{s}ka yarad\ddot{i}m / yarati\ddot{d}im$ ‘I affixed my writing and my mark onto a flat stone’; cf. also $t\ddot{r}\ddot{o}m(\ddot{u})n$ in Tariat W3 and $suv(u)m(u)n$ in Tariat W4. Forms from unrounded stems as in $amt\ddot{i} s\ddot{a}n \dots i\check{s}i\eta in i\check{s}l\ddot{a}gil' tep ted\ddot{i}$ (Suv 600,22) ‘He said ‘Now carry out your job’ are not relevant for establishing the vowel of the accusative suffix since both /I/ and /X/ would give /i/ or /i/. In the Orkhon inscriptions there is a single instance of n^2 after unrounded vowel in back-harmonic context, and in Sudži 1.6,

³²² The /ä/ of the suffix is not explicit. Apparently because of this form and some others, Gabain 1974 §§187, 394 and 429 (as well as some other scholars) thought that Old Turkic had a case suffix of the shape ‘+rU’; the matter is mentioned where I discuss the directive suffix in section 3.124.

³²³ The absence of an explicit vowel in one of the Semitic scripts (as often happens in Manichæan texts) cannot, however, be interpreted in any such direction.

³²⁴ In his transliteration / transcription Ramstedt writes $b^{\ddot{a}}lg\ddot{u}min$, which means that there is an explicit I, but in his reproduction of the runiform text there is no such letter.

a relatively late runiform inscription from the period after the Uygur kaganate, wg¹mn², presumably to be read as *ogl+um+in*.³²⁵

In the 3rd person accusative the suffix is practically never rounded; *körkün*, used in this function in U II 17,29 and 31 (KIP), might therefore be considered errors (*körkin* being used with this meaning even more often in the same passage).

The accusative of the plural possessive forms in the earliest Uygur texts has the same shape +*Xn* as in the singular, e.g. *körk'üñüzün ... yüz'üñüzän* 'your face' in M I 10,7-9, *isänäz(i)n* 'your task' 10,13, *öz'üñüzün* 'your self' 11,17, *ämğäk(ä)mäz'in* 'our suffering' 11,18, all in the same text, *yerimiz(i)n ... özümüzün üzütümüzün* 'our place', 'our self and soul' in M III Nr.1 IV r 9-11 or *bägüdmäkäñiz(i)n* and *ärklänmäkäñiz(i)n* in DreiPrinz 66-67 (which is also Manichaean). In Buddhist texts we get +*nI*, as with the pronouns, already at a quite early stage, e.g. in the Sängim ms. of Mait and in TT VI. This does not exclude +*Xn* instances beside +*nI*, as possibly in HTs III 454. Examples for this and for forms expanded with the plural suffix as *ogulanıñızlarnı* can be found in Doerfer 1993: 150.

Possessive suffix and comitative case appear in *täñrilär söz+in+lügün* (Xw 2) 'with the word of the gods' and *iki kutlug el[ig]lär kamag tegitlärin kunčuy[ari]n tözünlärinlugun* (DreiPrinz 119) 'the two blessed kings together with all their princes, wives and retinue'. This last example from a quite early text is remarkable: The three nouns share the case suffix as they would share a postposition. The comitative suffix can't have come from a postposition (as has been suggested for some of the case suffixes) because it starts with an /l/, which never appears at the beginning of words. It does suggest, however, that the case system originally was a two-tier one, as is proposed below in section 3.131 in connection with the oblique cases of the personal pronouns: The accusative of the possessive form appears originally to have been identical with the oblique base.

3.126. The converter +*kI*

The suffix +*kI* has an Orkhon Turkic variant +*gI* in *tabgač+gı bağlär* in KT E7, BQ E7:³²⁶ +*kI* itself happens in Orkhon Turkic to be attested

³²⁵ 'yogun koragıñı' 'your funeral (acc.)' in Ongin r4 (cf. T.Tekin 1968: 130 and Doerfer 1993: 149, where much of the documentation is brought together) is a misreading, as shown by the unpublished documentation of Thomsen and Wulff: There is no I at the end and the form is to be read as *koragıñın*.

³²⁶ Tekin 1968's reading 'čöl+gı' in Tuñ 23 (upheld in 2000: 84) is problematical for reasons given in EDPT 420.

only after vowels, with either the locative suffix (e.g. *balikdaki* ‘the one in the town’) or the directive-locative suffix *+rA* / *+yA* (e.g. *öñräki* ‘the previous one’) or *bärü* ‘hither’.³²⁷

In Uygur *+kI* converts adverbial phrases, mostly expressing place or time, into attributes; it thus functions like a relativising conjunction. In *täñri yerintäki tokuzunč kay* ‘the ninth stratum in the land of the gods’ or *tört yïñakdaki eliglär* ‘the kings in the four regions of the earth’ (U II 23,20) it is added to noun phrases in the locative. However, we also find *tört yïñakki burxan[lar]* (Suv 25,9) ‘Buddhas in the four directions’ and *kecin yïñakki sukavati atlig yertinčü* (Suv 46,20) ‘the world called Sukhāvātī, which is in the east’ where the same phrase as in the previous example lacks the locative suffix. The reason for this double behaviour is that *yïñak* is both a noun and a postposition (see section 4.21). In *kamagda üstünki arxantlar* (MaitrH Y 502) ‘the highest arhats’ and *soltinki oñtinki* ‘which are on the left and/or on the right’ we find it with forms in the orientational formative *+dXn*. *kün tugsukdunki kapig* (MaitHami 15 1 a 2) ‘the eastern gate’ and *kün tugsukdunki yel* (M III 19,1₂) ‘the eastern wind’ show phrases with this same formative, while in *kuriyaki yiryaki öñräki bodun* (Tuñ 17) ‘the western, northern and eastern nations’ the bases of *+kI* are variants of the directive-locative case suffix *+rA*. *ot(i)raki* ‘the one in the middle’ (Abhi A 109a9 and elsewhere) comes from *orto* ‘middle’ without a locative suffix. The absence of a local suffix or a postposition before *+kI* is characteristic of temporal expressions (see below); the late form *ot(i)ra* (<< *orto*) may possibly have been felt to contain the suffix *+rA*. The ablative also appears as base, in *kišilärdinki toz* (HTs III 897) ‘the dust coming from the (arriving) persons’.

suv üzäki (MaitH XX 1r2) ‘(ships) which are on water’ and *taštün sïñarkï ... içtin sïñarkï* (MaitH XI 3r29-30) ‘external ... internal’ show the element added to postpositional phrases. There are a number of examples for *ara+kï* discussed in the UW entry for it; one instance with slightly aberrant meaning is *tört yegirmi [kolti sanï] yalñuklar araki yi[llar] ärtsär* (MaitH XXV 4v4) ‘when 14 *koṭis* of years (in use) among humans pass’. All the mentioned phrases were local. *šariputr birläki arxant toyunlar* (thus!; Saddh 36) ‘the arhat monks who (were) together with Šāriputra’, however, is not; further examples of *birläki* appear in Abhi. In the following highly involved instance, *+kI* is added

³²⁷ The reading of *b²* in *anta bärüki ašok bašlig sogdak bodun* (Tuñ 46) ‘the Sogdian population led by Ašok which is on the hither side (of those mentioned before)’ is not certain but is likely in view of the context. The context of *bod(un)ki k(a)g(a)ngi* in Taryat W5 is not clear.

to what is a static local expression in the context, although this does not follow from the morphology of the form *kuvraglarka tægikilär: täñridäki yerdäki kök kalik yüzintäkilär, ... beş yñajlardaki luo xanları, täñrilig luolug säkiz bölök kuvraglarka tægikilär üçün* (BT II 1354) ‘(We deflect our *punya*) for the benefit of those who are in the sky and on earth and on the face of heavens, for ..., for the dragon kings in the four directions, up to (i.e. including) the ones among the deities and dragons who are in the eight classes of crowds’. The locative of **kuvrag+lar+ta* is deleted through the addition of the dative suffix (since there is no case recursivity with nouns) demanded by *tägi*: The locative must be understood as if it were there, as this is one element (which happens to be the last one) in a list of types of creatures located in various places.

In general, it is the *+dA* form without *+kI* which appears in existential expressions with *bar*; in the following instance, however, we find *+dAkI*: *yertinčüdäki näčä ulug yañi künlär bar, näñ bo yañi kün birlä az ülüščäkiyä* [(ms. T III MQ 62 = U 5088 quoted in the note to BT V 438) ‘Whatever there are of great New Days in this world, by no means do they [have] even the slightest part [in common] with this New Day’. Added to temporal expressions we have e.g. *baštinki* ‘the one in the beginning’ (BT II 57), *kenki* ‘the later one’ (BT II 117), *kiški* ‘winterly’, *ayki* ‘monthly (i.e. applying to a month; examples in the UW entry)’, *bir künki* ‘pertaining to one day’ (Mait 73v27). In *öñrädin bärüki* ‘the one which exists since an earlier time’ (BT II 178) and *ilkisizdin bärüki* ‘which exist from the beginning of all time (lit. from when there was nothing previous)’ the suffix is added to a temporal postpositional phrase. *bo küntä öñdünki ... berim* ‘debts from before this day’ (Mi5,5 in SammlUigKontr 2) also has a noun phrase as base. In *ärtmiş üdki* ‘the past one (lit. the one pertaining to past time)’ and *ken käligmä üdki* ‘the future one (lit. the one pertaining to time to come later)’ (BT II 72 and 141 respectively) the suffix is added to heads with attributive participles. *söki* (cf. adverbial *sö+n*), *oza+kü* and *aşnu+kü* all signify ‘previous’, the third e.g. in *aşnu+kü tabgač+da+kü oguz türk* (ŞU S9) ‘the Oguz (and??) Turks who were previously in China’;³²⁸ *kiški*, *ayki*, *künki* etc. are presumably possible only because nouns denoting stretches of time can be used adverbally also in the nominative.

³²⁸ Examples for *aşnuki* can be found in the entry of the UW, which also gives a few examples for adnominal *aşnu*. I have here translated adnominal *aşnuki* with the adverb ‘previously’, because the Turkic construction has no verb whereas the synonymous English one does.

In Abhi there are a number of examples in which *+kl* is added to a clause in *ärkän*: *tugum koşulu turur ärkänki üdtä* (270) or *bodisatv ärkänki üdtä* (2158) ‘at a time when (Buddha) was (still) a *bodhisattva*’. The form *täg-mäz+kän+ki* is especially common, e.g. in Abhi B 1620: *sorinčan taş näčä usar ymä kapgali tägmäzkänki tämürüg* ‘as a magnetic stone is able to catch a (piece of) iron which it was not in contact with’. This text being so creative about *+kl* we also find *uzatı+kı* ‘what has existed for a long time’ in Abhi A 1051, coming from a petrified converb.

In *yaşurukı işi üzä kapigöñ üñürsär* (TT I 217) ‘if somebody bores a hole in your door because of a secret matter’, the base is a converb which is neither local nor temporal, if interpreted correctly. The DLT has *yaşru iş*, so that we know that, at least in Qarakhanid, *yaşru* could also be used adnominally without *+kl*. The need for *+kl* may, in this case, have been the bracketing: It might have been needed to show that *yaşuru* was not qualifying the verb or the whole rest of the clause but just *iş*.

+kl forms can lose their head, i.e. get recycled: They can then be pluralised, as in *taştın sığardinkılar* (HTs VIII 189) ‘those who are on the outside’ or *uluş+ta+kı+lar* ‘the ones in the realm’; above we quoted another such instance from BT II 1354.

Headless *+kl* forms also get case suffixes, e.g. *öñ+tün+ki+g* ‘the easternly one (acc.)’ (Maue 1996 Nr.21/34), *kalik+ta+kı+nı* (U II 69,4₂, with the late or pronominal accusative suffix), *kamağ yer üzä+ki+niñ kutı kivi* (Xw 77-8) ‘the blessing of everything on earth’; *törö bitig+dä+ki+čä* (Suv 547,48) ‘as in the book on ethics’, *bökünkičä uzun* (BT V 148) ‘long as on this day’ or *tirigdäkičä* (KT SE) ‘as when one is alive’. *odug+um+da+kı+da yegräk* (Suv 125,13) is ‘better than in my waking state’: The first *+dA* is local while the second is governed by *yegräk* ‘better’.

With both plural and case suffix: *ävdäkilärtin ençlik äsänlik ayıtu idur biz* (UigBrief C3) ‘We are sending (this), inquiring (whether) those at home are well and happy’; *öñräkilärniñdä* ‘than that of the previous ones’ is in HTs VII 199-200 opposed to *amtikilärniñdä* ‘than that of the present ones’.

+kl forms can be governed by postpositions, e.g. *yugant üdtäki täg* (MaitH XX 1r12) ‘as in the *yugänta* age’. *öñräki täg* is in BT XIII 8,10-12 mistakenly translated as “wie das Vorige”; in fact it signifies ‘as before’: Unlike German, English, French or Spanish, Old Turkic postpositions are unable to govern adverbs and therefore need them nominalised; cf. Turkish *önceki gibi* ‘as before’.

In BT III 543-545 the possessive suffix (in the accusative case) appears after *+ki*: “*bar ärsär mäniñ azkya ärsär ymä münüm kadagim, ... eriñlär münäñlär*” *tep*, “*ätöz+dä+ki+m+in ärsär ymä, til+ta+ki+m+in ärsär ymä, köñül+dä+ki+m+in ärsär ymä*” ‘He said “If I have even a bit of sins, ... criticise and chastise them, be they my sins of body, of tongue or of heart.” *köñül+dä+ki+m+in* means ‘the ones I have which are in the heart’; *köñül+üm+dä+ki+ni* would have signified ‘the ones which are in the my heart’.

içräki ‘inner’, which is in form similar to *öñräki*, *tägräki* (e.g. U II 22 v 2) and *asräki*, is found in adnominal use among other places in KT S2 = BK N2, BK N14, M I 17,8 and Xw. *içräki* ‘the internal one’ got lexicalised and was used as a title in a number of early Turkic languages, also in Eastern Europe. *içräki+kä* (ThS I a 21) is an example for this title in nominal use. The earliest examples appear in the Yenisey inscriptions E4, E11,1 and, spelled with G, E37,1.

ilki ‘first’ is also formed with *+ki*. It is related to the directive form *ilgärü* ‘forward; eastwards’, but their base no longer seems to have been alive in Old Turkic. *ilkidä* signifies ‘before’ as well as ‘at first’ (e.g. in MaitH XX 14v13 and XXV 3v25), showing the meaning which *il+ki* must have had originally. Cf. also *ilkidäki* in MaitH XX Endblatt r2, with recursive *+ki*. Starting with the DLT (though not in all modern Turkic languages) *ilki* was metanalysed into *ilk+* 3rd person possessive suffix.³²⁹

It happens that *+ki* phrases are adverbial, e.g. *ol künki biziñ ašda ölürgüçi ud koyn toñuz başlap tinliñlar* (Suv 6,13) ‘creatures, mainly bovines, sheep and pork, which we slaughtered on that day at our meal’. The phenomenon should be recognized before the *+ki* is emended away, as done by Röhrborn for *ürdäbärüki tarimiš tikmiš yeg tiltaglar* (HTs VII 184), although this signifies ‘the good causes planted at an early stage’: This is clearly an attraction, but it may have some linguistic reality behind it.

3.13. Pronouns

These differ from other nominals in allowing double case suffixation with the demonstrative and interrogative pronouns³³⁰ and in generally having only two of the four (or five, if one includes (in)definiteness)

³²⁹ Turkish uses it without the final vowel; this misled the EDPT into positing a base *ilk* for Old Turkic.

³³⁰ Note that a case sequence *+nXy+dA* is possible also with nouns. *+çUlyU*, which – rarely – gets added to nouns as well, probably consists of *+çA* and *+lyU*.

nominal categories, number and case. Possessive suffixes, representing a third category, were in use only with the interrogative *kayu* ‘which’ with the meaning ‘which of them’, and we have found two correlative instances of *kim+i* ‘who among them’; the near-pronominal noun *öz* is regularly found with possessive suffixes. Some pronouns differ from nouns and adjectives also in showing vowel alternations (described below) and in having the pronominal *+n+*³³¹. 1st and 2nd person personal pronouns differ in having a plural suffix *+(X)z* instead of *+lAr*, found also in the possessive suffixes of these persons (though *+lAr* can additionally be appended to the 2nd person plural pronoun).

Old Turkic has personal pronouns of the 1st and 2nd persons, *bän* and *sän*, at least two demonstrative pronouns *bo* ‘this’ and *ol* ‘that’, a reflexive pronoun *käntü* and three interrogative-indefinite pronouns, *käm* ‘who’ (nominative in the runiform inscriptions and mss., e.g. Blatt 27; *kim* elsewhere), *nä* ‘what’ and **ka* ‘which’. A few additional stems are also discussed in the next sections. All pronouns show the category of number and, recursively, the category of case; oblique demonstrative forms can be converted to attributive use by the element *+kI*.

bir ikintiškä ‘each other, one another’ is also, in fact, a pronoun, as it stands for noun phrases: It represents the participant group connected with cooperative-reciprocal verbs as the reflexive pronoun stands for reflexive verbs. Although this element looks as if it contains the dative suffix, it is in fact used also if two parties are each other’s direct objects. *bir ikintikä* (e.g. DKPAM 527), showing the simple dative of the ordinal of ‘two’ is a rare alternant of this: It may possibly have been its source; cf. also *bir ikinti birlä* (Wettkampf 41-43).

The declension of pronouns differs to a smaller or greater extent from that of nouns. One feature which characterises the declension of all pronouns (though not of *öz*, which is a noun in other senses as well) and distinguishes them from nouns and adjectives is the accusative ending *+nI*. From the earliest texts, this ending is found also with a number of quantifiers of miscellaneous origin and collectives ending in *+(A)gU*, in accordance with their pro-nominal use. *alku* ‘all’, e.g., gets the *+nI* allomorph of the accusative suffix in TT II,1 16 and in a number of other examples mentioned in UW 101; cf. *kamïgu+nï* ‘all (acc.)’ (Pothi

³³¹ The stems of demonstrative pronouns and the 3rd person possessive suffix end in the consonant /n/, deleted in the nominative. The /n/ appears also when the 3rd person possessive suffix is followed by the antonymy and parallelism suffix *+lI*. With the personal pronouns an /n/ element appears in all the forms except in the nominative plural. In Orkhon Turkic the stem of the collective suffix *+(A)gU* is also expanded with an /n/ when possessive suffixes follow (cf. OTWF 97).

61), *ikigü+ni* ‘both (acc.)’ (HTs IV 748, BT I A₂ 33), *adinagu+nü* ‘other people’ (U III 4,3₁) and *yumki+nü* ‘all of them (acc.)’ (Pohti 101). In the course of the development of Old Turkic (cf. Erdal 1979) and towards modern Turkic languages, *+nI* then gradually gets applied to noun stems as well, in late Old Turkic mainly to stems ending in vowels and to foreign words.

3.131 Personal pronouns

The personal pronouns for speaker and addressee are the following:

| | 1 st pers. sg. | 1 st pers. pl. | 2 nd pers. sg. | 2 nd pers. pl. |
|--------|---------------------------|----------------------------|---------------------------|------------------------------|
| Nom. | bän / män | biz (bizlär) | sän | siz, sizlär |
| Gen. | bäniḡ/mäniḡ, miniḡ | biziḡ, bizniḡ | säniḡ | siziḡ, sizniḡ, sizläriḡ |
| Dat. | baḡa / maḡa | biziḡä, bizkä | saḡa | siziḡä, sizlärkä |
| Acc. | bini / mini | bizni | sini | sizni, sizläri |
| Loc. | mintä, mindä, minidä | bizintä/biznitä biznidä | sintä, sindä, sinidä | sizintä/siznidä, sizlärdä |
| Abl. | mintin, minidin | biznidin | sinidin | siznidin |
| Dir. | baḡaru / maḡaru | biziḡärü | saḡaru | siziḡärü |
| Simil. | | bizinčüläyü | siničüläyü | |

We here find a consistent alternation between high and low vowels, which we also have with the demonstrative pronouns and possibly with *käm* ‘who’: low front vowels in the nominative³³² and the genitive singular, low back vowels in the dative and the directive singular, high front vowels everywhere else. *mäntä* in a letter in HamTouHou 25,2 is aberrant.³³³ I have no doubt that the vowel in *bini*, *mintä* etc., *sini*, *sintä* etc. is (pre)historically the same as that found in *biz* and *siz*. *bini* and *sini*, both spelled with twice I, are attested already in Tuñ 10. I have come across *miniḡ* only in ms. M 657 v3 (quoted in the note to BT V 521) and KP 80,2 and *miniḡ* in HamTouHou 18 (a letter sent from Khotan) 1.2; in KP 6,4 *mini* is spelled as MNY, but the same text has

³³² Note, though, that the nominative singular personal pronouns are usually spelled without any vowel, as *mn* and *sn* respectively.

³³³ It would have fitted well with the theory of Doerfer 1993: 26, who reads the accusative form as *meni* and not *mini*; he says that the fronting is the result of backward raising of the vowels by assimilation (see that in section 21401) and would presumably take *mintä* to have followed by analogy. However, such raising comes up only after the inscriptions.

MYNY in four other instances.³³⁴ Further we find *barmagay sîn* (KP 19,3) ‘You will not go’ and *igdäyü ”täḡriči min nomči mün” tegmäkä artizip ...* ‘getting foiled by one who falsely says ”I am a man of God and a preacher”’ in the ms. written in Manichæan script of Xw 121; the latter pronouns clearly seem to be intended to be understood as clitic, as they are written close to the words they follow.³³⁵ Their shapes are similar to Turkish *sIn* ‘you’ and Khakas *BIn* ‘I’, which are both used clitically, follow synharmonism and show high vowels. The nominative of this pronoun is, in fact, normally written without any vowel in Uygur script, which makes it impossible to say how it was pronounced in the texts written in that script. Possibly, this defective spelling reflects just the variability posited here, though one instance for it is a rather narrow base for such an hypothesis.³³⁶ See also n.737 in Zieme 1969, where scholarly sources are quoted for *min* in Middle and Modern Turkic languages. These few variants with *i* could be the result of analogy from those forms of this pronoun which do have it: This is what happened in those modern Turkic languages where nominative demonstrative *bo* was replaced by *bu*. In Brāhmī texts we have, e.g. *kilmas sän* (TT VIII D32) or *barmagay sizlär* (TT VIII E49), which show that these pronouns did not follow synharmonism. According to Alyılmaz 2000: 111, who inspected the stone of Tuñ in 1997, 1998 and 1999, Tuñ 57 does not have ‘*büntägi*’ but *bintägi bar ärsär* ‘(if a sovereign nation anywhere) had someone like me, (what trouble could it encounter?)’ with explicit I in the first syllable.³³⁷ *bintäg* (with possessive suffix

³³⁴ *män+ig* in BT I D78 is not the accusative of the pronoun but of a noun denoting the self, i.e. ‘the ego’.

³³⁵ In the other ms., written in Uygur writing, both instances are spelled in the normal form, as *mn*, without any explicit vowel. Hamilton transcribes the pronoun in KP 19,3 as ‘*sen*’ but there is no justification for a change *sän* > ‘*sen*’; *mIn* and *sIn* could come from analogy with the accusative, locative, ablative and similitive forms.

³³⁶ The note a reader who says he came from China added with a brush to the Manichæan ms. edited in M I 23-29 has the phrase *yazukta k(ä)čirmin* ‘I am overcoming sin’ and even *min* ‘I’ starting a sentence. These instances cannot be taken as evidence for Manichæan Uygur as the person also has an imperative with *s* instead of *z*, *y(a)rl(i)k(a)sunlar* (and uses the ablative with *+tIn* and not *+tAn*). What is noteworthy concerning the two instances in the Xw ms. and *k(ä)čirmin* is that in all three cases the syllable preceding the pronoun with a high vowel shows /č/: This consonant may be responsible for the high vowels, as well as for the irregular vowel of the aorist suffix, which should be *-är*.

³³⁷ Tekin 1968 translated ‘*büntägi*’ as “such a man”, assuming backward fronting assimilation, but such assimilation is nowhere attested either with *täg* or in any other way; in *antag* < *an+ täg* and *montag* < *mon+ täg* there is forward assimilation, the normal process for Turkic. Aalto writes “Taugenichtse (?)”, which does not fit any known Old Turkic lexeme.

referring to a nation), is similar to *montag* ‘like this’, *antag* ‘like that’ and *sizintäg* ‘like you’ (ChristManMsFr ManFr r10) in being constructed on the oblique base; had the base been the (syncopated) accusative form, the latter would have had to be ‘*siznitäg*’ (since the accusative of *siz* is *sizni* though the locative is *sizintä* and the dative *sizihä*). Had *montag* (of which we have at least 11 Brähmī examples) been derived from the accusative *muni*, its vowel would have been /u/ and not /o/.

The change to back vowels in the singular dative and the directive, not found in any other paradigm, may be secondarily due to the influence of the velar element in the case suffixes; the idea of Doerfer 1977 that these forms came from the agglutination of a dative element *qa* seems groundless. The only place where the dative of *sän* is found in the runiform inscriptions is in Tuñ 32, and it is there spelled with s^2 .³³⁸ *baṅa* and *baṅaru* (both Tuñ) are both written with b^1 .³³⁹ *sähä* and *saṅa* would be indistinguishable in the Semitic scripts used by the Uygurs. The only instance of the dative of *sän* in an Uygur text written in an Indic writing system is in Maue 1996 20 Nr.22, a source centuries later than the Orkhon inscriptions; there the word is spelled as *saṅa*. Directive forms of *sän* and *bän* appear not to be attested in Indic writing systems. Although the Tuñ instance is isolated, one could have taken it as good evidence since the text may be the oldest extant Turkic source we have. However, we find that this same inscription occasionally uses s^2 also in words absolutely known to belong to back harmony such as *bolsar*, *savın*, *saviḡ* and *sakintim*, the other consonants in these words being spelled with the back harmony letters. The s^2 of the dative of the 2nd person singular pronoun in this inscription is there of no significance in view of the absence of other evidence for a front pronunciation.

The QB has six examples of a dative form *saṅar* ‘to you’ beside *saṅa*, which presumably resulted from analogy with the demonstrative

³³⁸ The other letters in the word, η and A, do not distinguish between back and front harmony in the runiform inscriptions from Mongolia.

³³⁹ Gabain 1974: 91 refers to a place in Radloff’s edition of the Yenisey inscriptions for a putative instance of *bähä*. This is E9,3, for which Orkun instead (referring to the Finnish Atlas) proposes the reading *bähüsü yok ärmiş*; he is followed by Vasiliev in his atlas. Kurt Vulff’s unpublished materials have *bähüsi yok ärmiş*. The inscription is dealt with by Kormušin 1997. mAṅA of the other runiform inscriptions gives no information on this matter, as the character inventory for those inscriptions has the same character for *m* and η in back and front contexts; *maṅaru* in HamTouHou 26,10 in Uygur writing could have been read with front vowels as well (as in fact done by the editor). Cf. further *maṅaru / mähärü kälip* in VimalaZieme 494.

pronouns (which serve for the 3rd person); the recourse to five of these appears to have been metre or rhyme related.

A characteristic of the personal pronouns is the plural morpheme $+(X)z$ (found also in the possessive suffixes), but $+lAr$ is also already present in all varieties of Uygur. There are a number of instances of *sizlär* beside *siz* but hardly any *bizlär* beside *biz*; the former form is found e.g. in U I 6,2 (Magier; *bulsar sizlär*) and 43,7, TT II,1 77 (*ötläsär sizlär*) or MaitH XI 3r2. In oblique cases we have e.g. *sizlärni birlä* (U IV A 81), *sizlärda* in ablative meaning in early *sizlärda almış agu* (MI 19,15) ‘the poison taken from you (pl.)’, *sizlärni(i)ŋ* in Yos 11. I have met *bizlär* only in Mi13,1 (SammlUigKontr 2), a collective receipt, and in a late Uygur inscription (PetInscr). The reason for the difference between the 1st and 2nd persons is that *siz* is mostly used for the polite singular, *sizlär* becoming necessary for referring to the 2nd person plural (polite or not).

The genitive of *biz* appears both as *biziŋ* and as *bizniŋ*: Orkhon Turkic, Manichæan texts, sources in Sogdian script (which have some pre-classical characteristics) all have *biziŋ*, as do Buddhist texts in general (e.g. in BT XIII 12E r4, TT IV A 24 and B 37 and 41); *bizniŋ* crops up here and there, however, mostly in late sources (e.g. TT VII) but also in Manichæan and early Xw 8 (one among three mss.; the other two missing). *sizniŋ* is even rarer than *bizniŋ*:³⁴⁰ The Suv has 13 examples of *biziŋ* and 34 of *siziŋ* as against only one each of *bizniŋ* and *sizniŋ*; *siziŋ* also appears e.g. in DreiPrinz 66, TT II,1 17, 19, 23 and 49 or Pothi 95. The ‘pronominal n’ was clearly originally not part of these genitives; the longer forms must be related to the replacement of $+(n)Xŋ$ by $+nXŋ$ as genitive suffix.

Above we discussed the form *siz+lär*. In very late texts that can be replaced by *sänlär*, and we have *silär* and *silärniŋ* in HamTouHou 21,4 and *silärni* in KP 76,3 and 5. *silär* probably does not result from a phonetic dropping of /z/ but from the replacement of the pronominal plural marker $+(X)z$ by the much more ‘regular’ $+lAr$.

bän, *bini* ‘I; me’ and *biz* ‘we’ share their b° with *bo*, the demonstrative of close deixis (presumably pointing at the domain of the speaker) and *bärü* ‘hither; since’, which signals movement towards the ‘here and now’ of the speaker. The $^{\circ}n$ would then be the ‘pronominal $+n$ ’ absent in *biz* and *siz*, normally characteristic of oblique cases; I take it to have

³⁴⁰ What is read as *sizn(ä)ng* in MI 10,11 and crops up as *sizn(i)ŋ* in Gabain 1974: 92 can just as well be read as *sizäŋ*, with the vowel lowering occasionally found in pre-classical sources.

been introduced into *bän* by analogy.³⁴¹ This element does, however, reappear in the oblique forms of the plural personal pronouns, unlike the plural demonstratives.³⁴²

The ablative, the locative-ablative and the similative are partly constructed on an intercalatory element *+ni+* identical with the pronominal accusative ending; thus e.g. *sinidin* U III 48,11, *minidä* Ad2,11 (SammlUigKontr 2), *sinidä* TT I 126 or U III 83,3, *biznidä* Suv 433,22 and 611,1 or U IV A 267. This element appears also before the suffixes *+lXg* and *+sXz*, which we have assigned to word formation: We have *biznilig erinč ün(i)glar* (UigOn III B r3) ‘us poor creatures’ and, with the demonstrative to be dealt with straightway, *munisiz* (ETŞ 12,47) ‘without this’.³⁴³ However, I assume *mintin* in *mintin adril-* in DKPAMPb 866, coming from the oblique base and not the accusative, to be the original form.³⁴⁴

The directive, dative and partly the locative-ablative and the similative of plural personal pronouns have *+in+* instead; e.g. *siziñä* in M III Nr.6 I r 3, or TT II,1 73, *biz(i)ñärü* in Xw 166 (all three mss.), *siziñärü* twice in the fragment quoted in the note to BT V 175 and six times in M III Nr.9. *+in+* turns up also in the postpositional phrase *sizintäg* ‘like you’ (ChrManMsFr Man Fr r 10). We have *bizintä* in M I 33,20 and *sizintä* in M I 10,5; *biznidä* is quoted above and *siznidä* is the general form. One could, with Doerfer 1992 (and with Nauta 1969 quoted by him) speak of this ^o*n*^o element as forming an oblique stem (in the manner of Tokharian or Romani, which have two-tier case systems). However, an alternation between *+n*, *+Xn* and *+nI* is found also in the accusative ending of the nominal possessive forms (discussed at the end of section 3.124); there it appears after the possessive suffix and can

³⁴¹ The Proto-Turkic nominatives of ‘I’ and ‘you’ might have been **bä* and **sä*; the vowel of Bolgar-Chuvash **bi* and **si* apparently comes from a different analogy with the oblique stems.

³⁴² The dative has been read as *bizkä* just once, in Yenisey E36,2; however, according to Kurt Wulff’s unpublished material the stone shows *b²Izk²I* (perhaps *biz äki* ‘we two’). This inscription is not among those dealt with by Kormušin 1997.

The form *s(i)zä* mentioned as dative in Gabain 1974: 92 and said to appear in Yenisey inscriptions is to be read as *äsiz-ä* ‘oh, alas!’, as pointed out by T. Tekin 1964. (The interjection *(y)a*, dealt with in section 3.4 below, appears to have followed vowel harmony in Yenisey Turkic though not in Uygur.) Besides, the Old Turkic dative suffix is not *+A* but *+kA*. Nor does a form *sizdä*, equally mentioned by Gabain on this page with the mark ‘(Yen)’, appear in the indices of Orkun 1936 -41 or Kormušin 1997 or in the DTS.

³⁴³ Cf. also *mänsiz* in BT VIII B 124 and 151 and several times in BT I.

³⁴⁴ *sintä* in Suv 680,11 is from Buyan Ävirmäk, a passage added to the text at a much later stage.

hardly have anything to do with an ‘oblique stem’. The regular dative of *biz* is *biziñä*; in two economical texts (WP1,8 and Mi30,2 in SammlUigKontr 2) we find *bizkä* (both very clear on the facss.).

In Qarakhanid Turkic, postpositions which govern the nominative of nouns govern either the accusative of pronouns (as happens in other corpuses of Old Turkic) or their genitive (as e.g. in Turkish). We also find there that there is *säniñdä* beside *sinidä*, *säniñdin* beside *sinidin*, and even *säniñsiz*; *anıñda*, *anıñdin* and *anıñsiz*; *biziñdä* beside *bizdä*; *munıñda* and *munıñdin* and so forth. The genitive as base for secondary cases comes into extensive use only in Qarakhanid and is by Ata 2002: 67 documented from Middle Turkic; it does however exist in late Uygur as well: There is *biziñtä ulatı* in Abhi 1224, *biziñtäkičä* Abhi 2297 and *biziñčiläyü* several times in the Petersburg ms. of the Suv. Cf. the hapax *anıñdin ken* ‘thereafter’ in Suv 26,18.³⁴⁵ There is no need for accusative or genitive content here (unlike case doubling among the demonstrative and interrogative pronouns). It therefore really looks as if the base of concrete cases is identical with the base for postpositions; whether this is a secondary phenomenon which came about through analogy or whether it comes from the time when some of these case endings were postpositions is hard to decide.

Additional locative forms are *sintädä* e.g. in *sintädä adin* ‘different from you’ (U IV C87) and *sintädä öñi* (TT X 466), *sintidä* in *sintidä öñrä* ‘before you’ (Suv 626,5); the element *+dX+* presumably comes from a reduction of *+dA* but I have no convincing explanation for why the locative-ablative suffix should appear doubly. *mindidä* has been read in U IV D86 and translated ‘von mir’. However, this form looks identical and needs to be distinguished from *mındida* / *mıntida* / *mıntada*, which is a variant of *muntada*, from *bo* (discussed in section 3.132). The translation ‘(from) here’ cannot be quite excluded for U IV D86; in Mait 187r11-12, however, the meaning seems to be rather certain: *kop kamağ tınlıglarag ... tuta täğintim. ançulayu ymä sän mintidä kamağ tınlıglarag urunčak tutgıl* ‘Here, similarly, please accept from me all the creatures in trust’.

mintirdin ‘from me’ (BT VIII B 49) and *sindirtin* (Suv 428,11) in *sindirtin bo nom ärdinig äsıdtäçilär* ‘those who hear this jewel of a *sūtra* from you’ are built on an element *+dXr+* best attested with the demonstrative pronouns.

biziñčiläyü in Suv 425,15, 431,14 and 434,4 is clearly a late form, reflecting the Middle Turkic replacement of the accusative form by the

³⁴⁵ *mäniñniñ* in Ad3,14 (SammlUigKontr 2) is possibly not an error for *mäniñ*, as assumed by the editors, but related to the late use of the genitive as oblique base.

genitive before postpositions; the parallel Berlin fragment U 580 v16 (which is centuries older than the Petersburg ms.) instead of the instance in 425,15 writes *bizinčüläyü*, which is what we expect. Instead of *sizničiläyü* in Suv 497,13, the Berlin ms. U 752 r3 has *siničüläyü* (with +čU+), which must be the original form. All the simulative forms mentioned above presumably come from +čA+lAyU; we find the similarly formed *ančulayu* and *munčulayu* among the demonstrative pronouns, but there we also have *anilayu* and *munilayu* based on the accusatives. Ottoman has *bencileyin* 'like me' and *bunculayın* 'like this' and the Kača dialect of Hakas has +džilī < +džilayu etc. added to nouns. It is unclear whether +čU+ can be connected with +čA; an 'alternation' A / U would not make sense in the Old Turkic phonological context.

bolar ikigü mäniqlär ol (U III 27,16) signifies 'these two are both mine'; it shows that the plural suffix can follow the genitive form of a personal pronoun for the sake of agreement with the topic.

No instrumental or equative forms of the personal pronouns appear to have turned up in Old Turkic; *sänin* and *mänčä* are, however, attested in Middle Turkic (Ata 2002: 67).

bän, *bini*, *bäniñ*, *baña* and *bañaru* are attested only in a part of the runiform inscriptions, all other Old Turkic sources showing *m°*. The Tuñokok inscription shows *män* instead of *bän* as subject pronoun following upon verb forms; e.g. *b(ä)n (a)nča t(e)r m(ä)n* (37) 'As for me, I say the following'. It has 17 instances of *bän* and 5 instances of *män* (all after *te-r*) used in this way. This is the only certain difference in Old Turkic between personal pronouns in independent and postverbal use; this does not yet foreshadow the personal pronouns' subsequent reduction to suffix status in the latter position. The doubtlessly later Tariat inscription, on the other hand, still writes *köčär bän* (W4). Doerfer 1994: 111 has dealt with the inscriptional evidence for this matter.

This postverbal use of pronouns appears to be obligatory with verb forms not having morphological person, as the aorist or the future forms. We sometimes find such pronouns also with verb forms with morphological person expression, as *biz* in the following: *küčümüz bir ikinti birlä sinalim biz* 'Let us compete with each other in strength' (Wettkampf 41-43).

3.132 Demonstratives

Old Turkic has two active demonstrative pronouns and paradigm fragments of a third one (mentioned below);³⁴⁶ their forms are the following:³⁴⁷

| | ‘this’ | ‘these’ | ‘that’ | ‘those’ |
|--------|---------------|---------------|-------------|--------------|
| Nom. | bo | bolar | ol | olar |
| Gen. | munuŋ/ monuŋ | bolarnıŋ | anıŋ | olarnıŋ |
| Dat. | muŋar / muŋa | bolarka (QB) | aŋar / aŋa | olarka |
| Acc. | bunı / munı | bolarnı | anı | olarnı |
| Loc. | bunta / munta | bolarta | anta | olarta |
| Abl. | muntın | bolardın (QB) | antın | olardın (QB) |
| Instr. | munun | | anın | |
| Equ. | bunča / munča | | anča, anıča | |
| Dir. | (bärü) | | aŋaru | olargaru |
| Simil. | munılayu | | anılayu | |

The singular oblique pronouns have the so-called pronominal /n/ before the suffix.³⁴⁸ There are, then, oblique stems *bun+* and *an+* differing from the nominative stems *bo* and *ol*; *bo* and *bun+* also differ in the vowel, alternating like the personal pronoun. The possessive suffixes of the 3rd person show the oblique pronominal /n/ as the demonstratives do.³⁴⁹ In Uygur, the *b* becomes *m* when a nasal follows; this replacement did not yet take place in the inscriptions of the Uygur steppe empire, as shown e.g. in *bunda* in Tariat W 2. The /r/ in the

³⁴⁶ A demonstrative *šo* ‘dieser dort,’ which is by Gabain 1974: 94 (page top) said to turn up as *šunda* in the Yenisey inscriptions, does not exist. The author found this in Radloff’s ‘Glossar zu den Inschriften am Jenissei’ (Radloff 1987: 373 -4), which refers to E28 VII and E38 I. The first is to be read as *altun soŋa yış käyiki* ‘the game of the Altun Soŋa (or Suŋa) mountain forest’, the second as *alt(u)n soŋa kälip* ‘coming to Altun Soŋa’ (no doubt the same place as the one mentioned in E28). Radloff did not distinguish between the round ɲ¹ and the diamond shaped n[^]d. Turkish *şu* comes from the presentative *oş* coupled with the pronoun *o*; Ottoman also has *şol* < *oş ol*.

³⁴⁷ Forms generated by double case marking are mentioned further on. The Uygur singular oblique forms of *ol* are extensively documented in the UW; no instances will therefore be mentioned here.

³⁴⁸ Munkácsi 1919: 125 has pointed out that the Uralic languages also have a pronominal *+n* which appears only with the singular forms. Cf. the *+n* which is added to Mongolic nouns in the singular but is replaced by *+t* in the plural.

³⁴⁹ The Yakut suffix vowel alternation *bas+a* ‘his head, nominative’, *bas+in* accusative perhaps preserves an original alternation as found in the Old Turkic pronouns between *bo* (low vowel) and *bu+* (high vowel).

dative singular, which reminds one of the directive,³⁵⁰ is limited to the demonstratives: The runiform inscriptions have *aḡar*, not *aḡa*; *aḡar* is also the general form in Manichæan texts, e.g. in DreiPrinz 27. In Buddhist texts there is a fluctuation between the two forms; cf. UW 162a. *muḡar* is attested in M I 23,8, also in HTs and DLT. The forms *aḡar* and *muḡar* are older than the forms without /r/; the latter were no doubt created in analogy to the personal pronouns (especially since the demonstratives were used for the 3rd person). The variants *muḡa* and *aḡa* occur in late Uygur texts (e.g. *muḡa* in BTT I A₂ 24, *aḡa* in Pothi 162, which is Manichæan but late).³⁵¹ *muḡar* and *aḡar* are still to be found in Muslim Middle Turkic texts (Ata 2002: 62); when QB 3475 writes *muḡa*, that is for the sake of rhyme with *maḡa*. The /r/ is attested also in the Codex Comanicus and lives on in Tatar and also appears in the dative of the Yakut possessive suffixes.

The directive *aḡaru* is attested once in the Tu *aḡaru aḡaru* inscription (1.20) but is absent from Qarakhanid and very rare in Uygur; the UW entry mentions only two instances and the reading of one of these is said to be uncertain. Forms like *ḡngaru*, which comes from an alternative but obsolete pronominal stem, are discussed below.

The instrumental of *bo* is *munun* in M III Nr. 30 r 5 but *munin* in the QB. *munun* signifies ‘herewith’ whereas *anin* means ‘therefore’.

The only case form which appears not to be attested in the singular is the directive of *bo*. This may not be a coincidence: *bärü* ‘hither’ may be the half-suppletive missing directive. This word has a long vowel in Turkmen (though not in Khaladj), which would speak for a contraction of the stem with the directive suffix.³⁵² Examples such as *bärü eṣidiḡ siz braxmayu* (MaitH XI 15r23) ‘Listen here, you, Brahmāyu!’ also speak for this interpretation of *bärü*.

The similative is the only case to be regularly based on *munī* and *anī*, the forms identical with the accusative but also found with

³⁵⁰ It would not be correct to call *aḡar* ‘ein alter Dir(ektiv)’, as done in UW 162a, as the directive suffix never drops its final vowel. Even if there really is only a single Old Turkic instance of *aḡaru* attested (as stated in the entry for this form in the 1981 fascicle of the UW) the Tuñ inscription has both *aḡar* and *aḡaru*.

³⁵¹ In the UW entry for *aḡa* (which also documents *aḡar*) we read: “*aḡar* ist auch in späten Texten (z.B. BT III) belegt und taugt nicht zur Charakterisierung eines Textes als früh oder relativ früh (gegen M. Erdal: *Voice and case in Old Turkish*. Diss. phil. Jerusalem 1976. Bd.1. 17m.). Man vergleiche auch die Verwendung von *aḡa* und *aḡar* im gleichen Kont. in Suv ...”: While *aḡar* indeed does not characterise a text as (relatively) early, the presence of *aḡa* does appear to characterise it as rather late.

³⁵² The idea that *bärü* could have come from a contraction with the directive suffix +gArU was already expressed by W. Bang 1919 ff..

postpositions and, in the form *munisiz* (ETŞ 12,47), before the privative formative. Besides, *anča* has a rare variant *ani+ča* (cf. UW). The personal pronoun also appears in the accusative form when serving as base to another common formative, in *biznilig* (quoted above). Concerning the similitive, the use of an accusative as stem might be related to the fact that *+lAyU* comes from a formative, *+lA-*, which forms denominal verbs.

montag ‘like this’ and *antag* ‘like that’ (in the UW documented on five pages) can both also be translated as ‘such’. Their source is the demonstrative oblique stem with the postposition *täg* ‘like’, here assimilated by synharmonism. Both by stem form and harmony, these are in fact case forms. *montag* and *antag* are used nominally and adnominally, whereas similitive *munilayu* ‘thus’ and *anilayu* (always with *ok*, signifying ‘in that same way’) are in adverbial use.

antag antag ‘such and such’ serves for alluding to the content of verbal messages, e.g. in Suv 603,11 and twice in Suv 14,11-12: *ärklig xan anı ačip okıdokta anta antag antag sav ünti: antag antag küntä ... özlüglärig ölmüş üçün ökünüp tıyunup ...* ‘When the ruler of the Underworld opened it and read it, such and such a content emerged from it: On such and such a day he was sorry for and repented for having killed living beings ...’. Another such element is *bo Montag* in *birök ... nä nägü iş işlägäli ugrasar ol ugurda ”bo Montag tül tüşäyök män” tep sözläyür ärdi* (U III 54,15) ‘Whenever she intended to commit something ... she used to say ’I have just had such and such a dream’’: The narrator does not wish to supply the contents of queen Bhadrā’s purported dreams but still wants to paint a vivid picture of her behaviour.

The demonstrative conjunction *ančip* ‘doing that, thereupon’ appears to have come about through the addition of the converb suffix *-(X)p* to *an+č(a)*.³⁵³ It has turned up only in runiform sources, in the inscriptions of the Uyğur steppe empire (ŠU E7 & 8, W1 & 4 and Tes 8 & 14) and in the epilogue to the IrqB. *ančip* disappeared at an early stage; Uyğur (disregarding the IrqB) no longer has it. Uyğur *inčip* (presented further on in this section) would similarly have come from *inča* with the same

³⁵³ The EDPT assumes a contraction from *anča är-ip* as the source of this form. Such far-reaching contractions are not otherwise known from the Old (or Proto-) Turkic stage. Phonic regularity can, admittedly, not to be expected when a conjunction (which tends to be a relatively short element) is to be derived from a pronoun; but neither can word-class regularity: An unusual necessity as the creation of a demonstrative conjunction can also have stretched morphology to an unusual feat.

converb suffix. The uses and meanings of both words are discussed in section 3.33.

ančaginča ‘then, thereupon, in the meantime’ appears to have been formed in similar fashion: It probably comes from *anča* and the temporal converb suffix *-gInčA*, which has the meaning ‘until’ with perfective verbs. The word is spelled with Γ in Manichæan writing, which has no similarity to *heth*; this means that it does not come from *ančak* (< *anča ok*). The three instances quoted in the UW entry for *ančaginča* spell it with double-dotted *heth* in Uygur writing, which would speak for a voiceless velar, but the Manichæan instance is more dependable for etymology; *ančak* might have had a secondary analogical influence. The phrase *ančaginča kan* is discussed in section 3.34.

The presentative interjections *muna* and *ona* or *una* (not attested in any script which would enable a choice between /o/ and /u/) are discussed in section 3.4; see below in this section for a possible instance of a similarly formed *ina*. These elements are not datives, as one might think, as there is no evidence for the dative suffix to have lost its velar in Old Turkic; they may, however, be remnants of some prehistoric case form.

The plural demonstrative pronouns (e.g. *olargaru* in ManUigFr r 11, *olarni* in Pothi 99, *olarka* in Pothi 165 and 227, *olarniŋ* and *olarta* quite a number of times in Abhi, etc.) are not found in the runiform inscriptions, except perhaps a single instance of *olar*. This reminds one of the fact that, in the earliest texts, the singular possessive suffix is used also for pluralic possessors. *olar* is never spelled with two L’s; there is therefore a (slight) possibility that the /l/ in the singular form *ol*, which stands alone in the whole pronominal domain, comes from a back-formation of the plural form. The process /ll/ > /l/ (documented in section 2.405 above) is, however, clearly an early one and *elig* ‘king’ < *el+lig* is also never spelled with LL.

Forms with double case suffixation having +čA as first element are *munčada* (M II 5,8₁) and *ančada* ‘then’ (usually spelled with *t* and correlating with *näčädä* ‘when’), *munčulayu* (see OTWF 410 for examples) and *ančulayu* ‘thus’ with raised middle vowels, *munčan* (HTs V 21,3) and *ančan* ‘a bit; gradually’,³⁵⁴ and *ančaka*, which is

³⁵⁴ The UW states that *ančan* comes from its *anča* II, which it translates as ‘diese Zeit, jene Zeit’. By meaning, however, this word accords with the one mentioned for *anča* under (I) A, b, viz. ‘a little bit’ (the instrumental suffix is added to this merely to signal adverbial use). *ančakya* ‘just a little bit’ (which also has an entry in the UW), also comes from this same *anča* and not from Röhrborn’s *anča* II. He should therefore either

attested only in the common phrase *ančaka tägi* ‘till then’ (always spelled as one word). It remains unclear what relationship there is between *ančulayu* and *ančula*, a rare Manichæan synonym used in correlation with *kaltü*. In *ančada bärü* (DKPAMPb 641) and *ančadin bärü*,³⁵⁵ *munčada bärü* (M II 5,8) ‘since this much time’ or *ančada ken* (Suv 625,21) ‘from then on’, the second suffix is governed by the postposition. Uyghur evidence for the *anča+* and *anta+* forms can be found in the UW. One might expect *ančada bärü* to signify something like ‘after all that time’ whereas *antada bärü* is ‘since then’.

mundirtin (KIP, TT VIII) and *mundiran* (e.g. HTs III 155), *andirtin* ‘from there’ and *andiran* (also *antran* e.g. in MaitH XX 14r7, *antiran*, *antaran* e.g. in MaitH Y 230) ‘from there, away; thereafter’ show an intercalary element *+dIr+* which has no independent existence in Turkic; cf. *+dUr*, the main variant of the dative suffix in Mongolic.³⁵⁶ This element is attested also in *mintirtin* ‘from me’ and *sindirtin* ‘from you’, where it is added to personal pronouns, and in the interrogative *kantiran / kantaran* ‘from where’. Outside the pronominal domain we have a small group of *+dXrIt* forms from orientational bases discussed in section 3.31, *üstürti* ‘from above’, *ičtirti* ‘innerly’, *kedirti* ‘from behind’ and *öndürti* ‘from the front’, and *ičtirtin ünmiš* ‘emerged from inside (the palace’ in HTs VII 1113, with the ablative suffix.³⁵⁷ The suffix in *kün+tüz* ‘during daytime’ seems to be the only case where it appears by itself, with word-final zetacism. The exact semantic or functional difference between the demonstratives with *+dIr/dXr+* and their simple ablative forms remains unclear. It is noteworthy that the dative is the only primary adverbial case form not used as first element in any double-case sequence of demonstrative pronouns; Old Turkic *+dXr+* / *+dIr+* might thus originally have been an allomorph of the dative suffix, which it is in Mongolic.

posit a second autonomous *anča* or review the procedure of assuming autonomy whenever a pronoun appears with double case suffixation.

³⁵⁵ Probably to be read in a document referred to in UW under *anindinbärü*.

³⁵⁶ /U/ is the regular Mongolic cognate of /X/ while the Turkic instances point towards /I/ in their suffix when added to demonstratives (unless the rounding in the second syllable is secondary). Cf. *+dXrIt* below; neither that nor the forms with the personal pronouns, nor *kün+tüz* ‘during the day’ speak for /I/.

³⁵⁷ *tašiti[r]tin kälip* ‘coming from outside’ has been restituted by the editors in MaitH Y 164. This conjecture must remain questionable in view of *tašdindan / tašdindin* with exactly the same meaning in the ŠU inscription.

The accusative is not involved in any case suffix sequence in this sense, but serves as oblique base.³⁵⁸

The most ‘combinable’ case suffix with demonstrative pronouns appears to be *+dA*,³⁵⁹ from which we have *antača* ‘there’ (documented in the UW) and *mundača* ‘here’ (Abhi A 3071 together with *andača*). *antada* is ‘there; then’; but the second *+dA* can also be ablatival, in the comparative construction when followed by an adjective, and in *antada bärü* ‘from then on, since then’. *antadata bärü*, which is a hapax in the Xw, is either an error or it follows the logic of linking the construction of *antada bärü* with the meaning ‘then’ of *antada*. Beside *muntadan* (M III 23,9) and *antadan* or *antadin* (Tes 13, a runiform inscription; third vowel not explicit) we have the much more common *muntada* (*muntuda* in KP 34,8 and 37,4) ‘herefrom’. It is often (Mait) governed by *ken* with the meaning ‘hereafter’, by *öñrä* to give ‘before’, by *üstün* to give ‘above this’, by *inaru* to give ‘beyond this’, by *ulatı* (also in BT II 623 and 1315 and often Suv and Tattvārtha) to give ‘beside this’; in Suv and Tattvārtha we often find *muntada adın* meaning ‘except this’. Some of these expressions are found also with a variant *mıntada*, e.g. *mıntada adın* in one of the two mss. in Suv 9,1, *mıntada ken* in Mait 136r5 and MaitH XIII 4v19, *mıntıda in[a]ru* in Mait 8v27, *mıntada ozmıš kutrulmıš ärmäz sän* ‘you have not (yet) been saved from this situation’ in Mait 116 v9, *bilgä biligin mıntada utduñ yegädtiñ* (U II 21,11) ‘With wisdom you have succeeded in this matter’. In his Mait edition, Ş. Tekin had translated the Mait 136r5 instance as “an meiner Stelle”,³⁶⁰ and the Mait 8v27 instance as “von mir an”, as he read the word I have transcribed as *mıntada* / *mıntıda* as *mintädä* / *mintidä* and thought it was an oblique form of *män* ‘I’; *mindidä* does indeed exist (e.g. in Mait 187r11 quoted in the previous section), and the only thing which makes this reading less likely here is the context.

³⁵⁸ *munılayu* and *anılayu* are here not treated as double-case forms, as we have no *+IAyU* derivatives from the simple bases, as other pronouns use the acusative form as oblique base and as the presence of its morpheme can hardly have been motivated by government or by meaning. Concerning the dative cf. *ändi+gü+čä* in Rabğüzī 171,18 as quoted by Schinkewitsch 1926: 24.

³⁵⁹ Turkish in fact has a similar combinability, with *o+ra+da*, *o+ra+dan* etc. formed from a base signifying ‘there’. The UW uses the term ‘Hypostase’ for the first element; that would imply that the stem + first case suffix are equivalent to a nominative, which is not the case when considered from a content point of view. Rather, the Old Turkic state of affairs has something of the prepositional combinability we see in English *from under the table*.

³⁶⁰ This is also the translation supplied by Geng et al. for MaitH XIII, 4v19.

The hapax *anīḡdīn* in Suv 26,18 appears to be governed by *ken*, the phrase signifying ‘thereafter’.³⁶¹ If this is not a copyist’s error for *ančadīn*, it might follow the late replacement of the accusative of pronouns by their genitive when governed by postpositions.

anta and *munta* are made adnominal with *+kl*, the converter discussed in section 3.126. Examples for *antakī* can be found in the UW; an example for *muntakī* is *muntakī yörüḡ* (BT I A₂ 15) ‘the interpretation to be found in this’. *+kl* can, of course, be added also to plural demonstratives, as in *bo+lar+ta+kī+g* in Abhi A 727; this form also shows that the *+kl* expansion of a pronoun need not get the pronominal variant of the accusative suffix (i.e. *+nl*).

In view of pronominal forms like *mīntada* ‘from here on’ (the variant of *muntada* documented above) and *bo kūnta mīnča* ‘from today on’ (WP2,8 in SammlUigKontr 2 etc. and Murtuḡ 9; some examples of *mīnča* are quoted in the note thereto) alternating with *bo kūntin mīnča* (Sa11,7 and 12,8 and 12 in SammlUigKontr 2) it seems conceivable that the rounding of the first vowel in the oblique forms *mūnī* etc. should be secondary and due to the rounding effect of the onset labial consonant.³⁶² The stems **bīn+* and **bun+* could, however, also have been distinct, as *īn+* differed from *an+*. Cf. also *mīnta ken* ‘in WP1,4 (SammlUigKontr 2): This is a demonstrative if it signifies hereafter’ but a personal pronoun if it signifies ‘after me’.³⁶³ An additional form of the stem *mīn+*, with the orientational formative *+dXn*, is found in the phrase *īntin mīntin ikidinki yer oronlar* (ms. Mz 704 v15) ‘the places on both sides, this side and that side’ and presumably became also part of the petrified phrase *āḡ mīntin* documented in UW 388.³⁶⁴

ol is often used also as 3rd person pronoun to express verbal agency (discussed in section 3.22); in this function its use blends over into being a copula (cf. section 3.29). The phrase *anta munta* (e.g.

³⁶¹ After *anīḡdīn* there is a hole for the cord binding the leaves together, and it has been thought that there is a lacuna between that hole and *ken*. The ablative must, however, have been governed by *ken* (the passage is not otherwise fragmentary, as written in the UW), and it seems possible that nothing was written in that torn stretch. Zieme in his reedition writes *anīḡdīn [aṣu] kin* and translates ‘ḡavor (?) [oder] danach’ but I don’t think it is possible for *anīḡdīn* to signify ‘ḡavor’. If it were certain that a word is missing, Kaya’s *aṣnu* would fit the context better. No Berlin fragments have been discovered for this passage.

³⁶² See section 2.402 for early vowel rounding due to onset labial consonants.

³⁶³ Both are possible in the context but the editors have chosen the first translation.

³⁶⁴ This is also from where I quote the instance in Mz 704 v15 mentioned above. The phrase was misunderstood by the EDPT, which considers it to be the ablative of a noun ‘*aḡmīn*’ but also erroneously proposes to emend it to a converb form ‘*aḡ-matīn*’.

DKPAMPb 1184) signifies ‘in all sorts of places’; it thus lost its demonstrative force and got lexicalised.

Beside the stems *bo / bun+* and *an+* (and possibly **bin+* as mentioned on the previous page) there also was a pronominal stem *in+*. The following case forms are attested: *inča*, which usually means ‘the following, in the following way’ (in general opposed to *anča*, which, in intratextual deixis, is anaphoric);³⁶⁵ *intin* ‘(the one) on the other side’ (opposed to *muntin*, e.g. in a ms. quoted in the note to BT I D 37, or *mīntin* ‘the one on this side’, as mentioned in the previous paragraph); *inaru* ‘forward; from ... on’³⁶⁶ (opposed to *kerü* ‘backward’ < **ke+* ‘back’, or to *bärü* ‘hither’ as in the phrase *inaru bärü* ‘back and forth’ attested e.g. in TT X 513). *ina*, a demonstrative interjection (cf. section 3.4), may be attested in fragmentary context in BT XIII 5,63; as stated by the editor, its relationship to *in+* would be similar to *muna* and *ona* or *una* with respect to *bo / mun+* and *ol / an+*. There is, finally, the proverbial *inčip* or *inčip* ‘that having happened; thus’, attested in Manichæan, Buddhist and Christian sources; see section 3.33 for its function. It appears to come from the hybrid addition of *-(X)p* to *inča*. *ančip* (discussed earlier in this section) is, on the other hand, attested only in inscriptions of the Uygur kaganate and in the equally runiform ms. IrqB. *inaru* is clearly related to *ingarü*, attested (with *g¹*) in ŠU N10 in the phrase *anta ingaru* ‘from then on, thereafter’. The form *ingarü* is unusual in that the dative and directive forms linked to the pronominal *n* otherwise appear with *ŋ*; it may be archaic or, alternately, an analogical restitution. The intermediate stage appears, according to the Thomsen-Wulff materials, to be attested in the Yenisey inscription E29,3 as *ŋ²r¹w*, presumably to be read as *iŋaru*.³⁶⁷ This is a rare bit of evidence, as there are, in the whole runiform corpus, only a few Yenisey inscriptions which distinguish between *ŋ¹* and *ŋ²*. It also shows that this stem vowel, like other instances of first syllable /i/ without adjacent /k/, turned up as [i], phonetically though not phonologically (since the second syllable is shown to have been back-harmonic by the

³⁶⁵ In a Mait passage quoted in UW 134a, *ančama* and *inčama* (see section 3.342 for the particle *mA*) correlate as ‘as ... so’.

³⁶⁶ The EDPT confuses *aŋaru* (the directive of *ol* ‘that’) and *inaru* and lists the instances of both under the former. Another example occurs in Yos 62. From the DLT and the QB on, *inaru* is shortened to *naru*.

³⁶⁷ The Orkhon Turkic rule, whereby the only first-syllable vowels not made explicit were /a/ and /ä/, did not hold in many Yenisey inscriptions. It cannot, on the other hand, be quite excluded that *ŋ²* was, in this case, used for *ŋ¹* (as is always the case in the inscriptions of Mongolia).

second and third runiform characters). This stem reminds one of the Mongolian genitive pronominal form *inu*.³⁶⁸ *inča* must have had a variant *inčä* since, together with the particle (*O*)*k*, we get both *inčäk* (generally) and *inčak* (spelled with double-dotted Q in Manichaean writing in M I 7,17).³⁶⁹ Brāhmī also helps to show that both *inča* and *inčä* existed, since we find the second vowel spelled as *a* in TT VIII H 1 but as *ä* in TT VIII K and O (twice). It further helps in determining (with two instances) the reading of *inaru* as having back and not front vowels. The runiform script is of no use, on the other hand, in distinguishing between the front and back possibilities, as the signs for *I*, *A* and the ligature *nč* are all indifferent to palatal harmony. *inčip* can also very well have existed beside *inčip*; the runiform script would again be of no help, as the sign for *p* is also neutral. The back vocalism of *intin* follows from the form *intinintaki* ‘what is beyond it’ attested in Suv with X. While *inča* can be related to Mongolian *inu* mentioned above, *inčä* reminds one of the 3rd person possessive suffix, which may have had a consistent front vowel in Proto-Turkic, i.e. not to have followed synharmonism:³⁷⁰ There are some reasons for believing that *+I(n)+* and *+sI(n)+* once were two distinct and independent pronouns which subsequently got morphologized into complementary distribution; the former would then be identical with the stem of *inčä*. In Gabain 1974: 92 we find that the list of *in+* / *in+* forms has the title ‘Reste der 3. Person (?)’; the meanings which these forms have does not speak for this hypothesis, but the possible link with the 3rd person possessive suffix does. On the other hand, the source for *inčä* and *inčip* clearly was the fronting of first-syllable */i/*, which altered the harmony class of many one-syllable stems (here especially with the fronting effect of *č*; see section 2.23). In that sense, any consistently fronted *+(s)i(n+)* may also be secondary. Doerfer in a 1964 paper quoted in Zieme 1969: 255 also expressed the view that the pronoun must have had back vowels, citing Tuvan *inča*. In section 3.234 below I propose that the future suffix *-gAy* should come from the *-gA* (discussed as a formative in section 3.113) through the addition of the nominative of **i* / **i* before *ol* replaced it as clitic personal pronoun. In view of the

³⁶⁸ This comes from **i+nu*, as the second vowel is not *ü*; cf. the Manchu 3rd person pronoun *i*, which has *in+* as oblique stem.

³⁶⁹ The word spelled with the N+Č ligature and k² in runiform U 5 (TM 342) v2 is presumably also to be read as *inčäk* although it lacks a vowel sign in the beginning, as no ‘*änčä*’ is otherwise known to exist; *ikinti* in r10 is spelled with an I the beginning.

³⁷⁰ Thus still today in Chuvash, possibly secondarily also in some other Turkic languages and, according to the choice of consonants, in Orkhon Turkic.

opposition of *intin* to *muntin* and of *inaru* to *bäriü*, *in+* appears to have had a ‘there’ deixis. This accords with its link to the 3rd person. The adjective and postposition *sijar* ‘side; one of two; in the direction of’ may originally have been the dative of *+sI(n)+*, the other possessive suffix, while *sijaru* ‘in the direction of’, posited as a postposition in Hesche 2001, may have been its directive.

3.133 Reflexives

käntü ‘own, one’s self’ (in Uyghur practically always spelled as KNTW) is linked to the expression of number, possession and case, expressed e.g. in *bodisatvlar käntüläriniñ enčün mänisin tilämädin ...* ‘the bodhisattvas do not pursue their own peace and happiness but ... (Suv 227,14); its declension differs from nominal declension only in the accusative *käntü+ni* (e.g. in DreiPrinz 14). Other forms are the genitive *käntüniñ*, the dative *käntükä* and the instrumental *käntiün* ‘by itself’. Here are examples of its use to stress the identity of a verb’s subject in whatever person: *ädgü eliñä käntü yañiltig* (KT E 23 & BQ E 19) ‘You yourself erred towards your good country’; *käntü tugmiš kilinmiš mänigü täñri yerin unitu itdi* (Xw 14) ‘He completely forgot the divine land of gods where he himself was born’; *käntü on ädgü kilinč küzätidim* (MaitH XV 13r16) ‘I myself observed the ten good deeds’.³⁷¹ *käntü* can also get governed by postpositions; e.g. in the following example, in which it is used anaphorically: *yana olok yäklär içkäklär yegädürlär tiltag bolurlar käntülärni üzä elänürlär* (TT VI 267 f.) ‘Again those same demons prevail; they (the ignorants) are the cause and they (the demons) rule over *them* (i.e. over the ignorants)’.

käntü is also used attributively, for stressing possessive suffixes (where *öz* is possible as well): inscriptional *käntü bodunum* (KT N 4, ŠU E2) ‘my own people’; Manichaean *kün t(ä)ñri ... k(ä)ntü yarokün kamagka yarotir*³⁷² (M III 7 I r 9) ‘The sun ... shines on everything with its own light’; Buddhist *käntü köñülüm üzä alkuni ökünür män* (Suv 100,23) ‘I repent for everything with my own heart’, or *kšanti kilmaklig arig süzük suv*³⁷³ *üzä käntü agir ayig kilinčlig kirlärin tapčalarin yumış aritmiş kargäk* ‘One needs to wash away and clean the dirt and filth of one’s own grave sins by the pure and limpid water of repentance’ (Suv 142,1).

³⁷¹ This function as well as the attributive use mentioned below are no doubt the reason why Tekin 1968 calls *käntü* and *öz* ‘intensive pronouns’.

³⁷² Spelled YR’WQ ‘YN QM’TQ’ YR’WTYR.

³⁷³ I take *sav* of the Petersburg edition to be an error, since the context demands an extended metaphor of dirt getting washed away by pure water.

With *käntü* in the genitive: *tesilär*³⁷⁴ *käntüniñ xoštisiñä inčä tep sezinč aytilar* (M III 6 II v 10) ‘The disciples expressed doubts towards their teacher with the following words:’; note the singular possessive suffix. *käntü käntü* (runiform ms.; also e.g. Suv 19,15) is distributive ‘each his own’; e.g. KP 2,5: *adrok uzlar käntü käntü uz işin işläyür* ‘Different specialists carry out each his own profession’. *käntü* is further used adverbially, to stress the identity of the subject of the verb; cf. *käntün käntün* (Saddh 39) ‘each for himself’.

öz, primarily a noun signifying ‘innermost (part)’, became the pronoun ‘self’; it is very well attested with this meaning already in Orkhon Turkic. An Uyghur example would be *özlärin saklanu ... täzgürü tutzunl[ar]* (M III text 20, 38,6₁ + ZiemeTexterg II) ‘Let them keep themselves guarded and evasive’. With possessive suffix and dative, *öz* is a mark of the self-beneficiary: *el[ig] bæg ... öziñä olorgu äv etdürti* (HTs III 739), e.g. signifies ‘The ruler ... had a house made for himself to live in’.

öz can be used in a subordinated construction merely for referring to the subject of the main clause; e.g. *birök öziñä kilmagu täg nä nägü iş işlägäli ugrasar ”...” tep sözläyür ärdi* ‘if, however, she intended to do something which she wasn’t supposed to do, she would say ”...”’ (U III 54,15). *öziñä* here refers to the subject of both *işlägäli ugra-* ‘to intend to do’ and *sözlä-* ‘to say’; it is neither reflexive nor focalised.³⁷⁵

The passage quoted at the beginning of this section for *käntü* also shows that clause repeated seven lines further on with *öz*, as *käntü özläriniñ enčin mänisin tilämädin ...* (Suv 227,21-22) ‘without striving for their own ease and happiness’; cf. further *k(ä)ntü öziñ bæglik är taplagil* ‘You yourself chose a man to be (your) husband!’ (U II 21,14). The phrase *käntü özi* is common, e.g. in Suv or TT X 275. *käntü özümüzni küntä ayda öñi biz tedimiz ärsär* (Xw) ‘if we said about ourselves that we are not related to sun and moon’ is an instance of indirect speech in which the speakers are also the subject of the clause which serves as object of *te-* ‘to say’; from this arises the need for *käntü özümüz*. *käntü öz* can also be used adnominally, e.g. in *käntü öz elin ičrä* (M III Nr.8 III v 15) ‘in their own realm’. The order of the two can be reversed: *öz käntüñkä inangil* (TT I 40) ‘Trust yourself!’ shows the phrase in reflexive use, with possessive suffix and dative.

Another use of *öz* quite common in Orkhon Turkic is for *öz+üm* to follow *bän / män* ‘I’ or for *öz+i* to follow subjects for introducing them

³⁷⁴ Thus instead of the expected *tetsilär*.

³⁷⁵ *öz* is used in the expression *öziñä kilmagu täg* which qualifies *iş*, the object of *işlägäli ugra-*. It appears in the dative because the action is unsuitable for the subject.

as topic or for stressing their identity: *bän özüm tavgač eliñä kilintim* ‘I myself was born in China’ (Tuñ 1); *ilitbär³⁷⁶ özi kälti* ‘The governor himself came’ (KČ E9) It can also follow genitives of personal pronouns for rhematization; e.g. *alko tinliglar mäniñ yatim ärmäzlär. ogulta kizta amrak mäniñ öz kişilärim ärürlär* ‘... they are my own people, dearer (to me) than sons and daughters’. Note that *köz* needs no possessive suffix in *m(ä)n kiçigkiämtä ... öz közin ädgü irü bälgülär körmişikmä* (HTs) ‘since I had, in my earliest childhood, seen good omens and signs with my own eyes, ...’.

Further, *öz+üm* refers to speakers, *öz+i* to subjects, especially when they become new topics opposed to the previous ones, serving the verb as subject in apposition to its subject reference. This is very common in Orkhon Turkic, e.g. *xagan uçdokta özüm säkiz yaşda kaltim* (BQ E 14) ‘when the king died I was left behind, seven years old’. In *özüm amti ačınur män* ‘I am now confessing’ (confession quoted from Suv by Bang & Gabain in *Uigurische Studien* 1.35) or *sü yoridi, özümün öñrä biña başı itti* (ŠU) ‘He marched out and sent me forward as captain’ *öz+üm* is object. In *öziniñčä* ‘like his own’ in M III text 8 VII r 14, *öz* receives two case suffixes.³⁷⁷

Finally, *öz öz* signifies ‘each his own’, like *käntü käntü* mentioned above; e.g. in *bo üç teginlär öz öz köñüllärintäki säkinmiş savlarin sözläšip ...* (Suv 609,12) ‘These three princes discussed the matters which each one of them had thought in his heart’ or *eligliär bäglär öz öz uluška bardılar* (U III 54,7) ‘The kings and lords went each to his own realm’.

ät’öz ‘body’ appears sometimes (though rarely) to be used as reflexive pronoun, as pointed out in OTWF 752 discussing the sentence *ät’özün ketäriü tüzgürür bolur* (HTs X 549-50) ‘He becomes reticent’.

3.134. Interrogative-indefinites

The interrogative-indefinite pronouns are *käm/kim* ‘who’, *nä* ‘what’ and the pronouns from the stems *ka+* and *kañu* ‘which’, this latter possibly an expansion of *ka+*.³⁷⁸ The set of pronouns discussed in this section

³⁷⁶ Cf. Sims-Williams 2002: 235 and 2000a for the way I read this title.

³⁷⁷ The matter is discussed towards the end of section 3.124.

³⁷⁸ The table below lists forms of both *kañu* and *kayu*, because the former changed into the latter with the fusion of /ñ/ and /y/ in the course of the history of Old Turkic; the table only mentions those forms of *kañu* which I have found to be attested. Bang 1917: 27-33, dealing with a number of derivations from *ka+* in the Turkic languages, proposes the second syllable of *kayu* to be a different pronoun, but no such pronoun is attested anywhere in Turkic.

unites different functions (as happens with such pronouns in a wide variety of languages): They serve with interrogative content, given in the first line of the table, but also as indefinites, i.e. they can also signify ‘anyone’, ‘anything’, ‘anywhere’ and ‘any’ respectively. Some of these elements are secondarily also used as relative pronouns. The distinction *kim* / *nä* grammaticalizes an ‘animate’ / ‘inanimate’ opposition not relevant elsewhere in the grammar, with the position of animals an interesting middle in view of the Buddhist doctrine to which the authors of most of our texts adhere. All interrogative-indefinite pronouns can, in principle be used either as NPs by themselves or appear attributively, both in interrogative and indefinite use.³⁷⁹

| | ‘who’ | ‘what’ | ‘where’ | ‘which’ |
|------|----------------|--------|---------|-----------------|
| Nom. | käm / kim | nä | | kañu / kayu |
| Gen. | kimiñ / kimniñ | (näñ) | | kayunuñ |
| Dat. | kämkä / kimkä | näkä | kaña | kayuka |
| Acc. | kimni | | | kayunī |
| Loc. | kimtädä | nädä | kanta | kañuda / kayuda |
| Abl. | | | kantan | kayudīn |
| Equ. | | näčä | kanča | |
| Dir. | | | | kañugaru |

These pronouns have a rich case declension; additional irregular case forms not listed in the table are mentioned below. Their number declension is rather weak: We find *kimlär* e.g. in MaitH XXV 2v20 or BT I A₂15 and E11, *kayular* e.g. in TT V B2.

The plural of *nä* appears to have been *nägü*, formed with the collective suffix +(A)gU; see OTWF 95. There are more instances in IrqB XXIV, U IV A42, HTs VII 1995 and Suv 610,11 and 621,4; e.g. *takī nägü kütär sizlär* (U I 43,7) ‘What else are you waiting for?’. *nä nägü iş* (U III 54,13) is ‘any sort of business’. *nägü* inflects for case as, e.g., *nägüdä ötgürü* (U II 5,14) ‘through what things’. *näg(ü)lük* ‘what for; to what purpose; why’ is a derivate from *nägü*, attested e.g. in U IV A26, Suv 612,8, KP 4,9, 30,1 and 66,6 and often elsewhere. *nägük* (twice Suv) apparently comes from *nägü (ö)k* with the emphatic particle.

With possessive suffix we find e.g. *kim+i* ‘who among them’ in *kimi ärür kimi ärmöz* (Abhi B1405) and *kayu+sīña* (KP 6,2) ‘for which of them’; the referents of the possessive suffixes are the groups from

³⁷⁹ This also holds for *kim* which is, in Republican Turkish, not used attributively but replaced by *nä* in this function.

within which the pronouns select their referents. *kim+iñä* (as well as *nägü+siñä* and *nä+siñä* reconstructed there) are in WP6,28-30 (SammlUigKontr 2) used in indefinite meaning, with the possessive suffix referring to a possessor in the strict sense: *bagiña borlukïña nägü[siñä] kimiñä basa ... anïñ ädiñä tavarïña nä[siñä] kimiñä ...* ‘concerning his ... vineyards and anything or anybody belonging to him ... his possessions, anything or anybody he possesses’; the contract covers a transaction both of land and of slaves.

The nominative and the dative of *kim* ‘who’ appear as *käm* and *kämkä* in the Orkhon inscriptions (KT E9 and 22 and BQ E19), no other case forms being attested there. *käm* must also be read in the runiform ms. Blatt 27, as the vowel of this word is implicit and first-syllable [i] is written out explicitly everywhere in that ms.³⁸⁰ Originally there probably was an apophony *käm* (low vowel in the nominative) vs. *kim+* (high vowel in the oblique cases), with the same alternation as found for the demonstrative and personal pronouns. This hypothesis would explain why this pronoun turns up in so many shapes in the Turkic languages (e.g. *kam* < **käm* in Chuvash). In fact, however, *käm* appears as the only stem in the Orkhon dialect, while Uygur sources (including BuddhKat, which is in Tibetan script) have *kim* in all forms. So it may also be the case that the Old Turkic dialects settled for one or the other stem of this pronoun already at this early stage (the 9th century, at the latest).

Like *käntü*, *kim* and *nä* have the nominal case forms, except that *kim* gets the accusative alternant *+ni* (which is itself gradually introduced into the nominal declension in the course of the development of Old Turkic); e.g. in *kimni üčün* (U III 22,5) ‘for whose sake’. The genitive practically always has *+niñ*; *[k]imiñ ol* ‘Whose is it?’ in Yos 52 (an early text) can, however, hardly be reconstructed in any other way (the facts. is clear).³⁸¹ The accusative of *nä* may not have been in use at all. *kimkä*, *näčä* (e.g. Suv 118,4, Xw 80, U III 73,2, M I 7,12 and 15,6), *nädä* (e.g. Xw 135 and 137 and M III Nr.6 II v 13), *näkä* ‘why’ (e.g. Tuñ 40 and KP 5,2) have no ‘pronominal *n*’. Nor does *nä täg* ‘like what’ (e.g. IrqB, M I 23,6), unlike its demonstrative counterparts *antag* and *montag*. The only exception appears to be *nänčä* in fragmentary context in BQ N 9, of which Thomsen says ‘leçon qui me parait sûre’. *kač* (see below) also appears to be a derivate from **ka+* lacking the pronominal *n*. A form *kimtädä* appears in ablative use in *s(ä)n bo*

³⁸⁰ The /ä/ is certain: The 31 line ms. has only one instance of implicit /i/ and that is in a second syllable; the text generally only makes (non-long) /a/ and /ä/ implicit.

³⁸¹ See section 3.341 for a form spelled *kimiñ* which is not a genitive.

užakaḡ kimtäädä bošguntuŋ? (MaitH XI 15v25) ‘From whom did you learn this alphabet?’. A pure locative of *kim* may not be attested because persons (which is what *kim* asks about) are not ‘places’ for things to be ‘at’.

näŋ ‘thing’ is here taken to come from an obsolete genitive of *nä* ‘what’ which, in indefinite use, signifies ‘anything’; Bang 1917: 18 already links *näŋ* with *nä*.³⁸² The same must be the source of the particle *näŋ*, which stresses negation.³⁸³ In Tuñ 56 *näŋ* is used in a way not (I think) attested anywhere else, again with the meaning ‘any’: *näŋ yerdäki xaganliḡ bodunka bintägi bar ärsär nä buŋi bar ärtäči ärmis* ‘If an independent nation anywhere were to have one like like me, what trouble could it ever have?’.

näčä ‘how much, how many; inasmuch as’ becomes a stem for secondary case forms, as *näčädä* ‘at some time, at some stage; whenever’ (U III 43,19, HTs VIII 83, BT I D 291, TT X 539 etc.). It also gets governed by postpositions and then appears in the case forms which they demand; e.g. *näčäkä tägi* ‘insofar as’ (e.g. in M I 16,16) or *näčädä ken* ‘after some time’ (e.g. in Suv 619,18). These forms correlate with *anča*, *ančada*, *ančaka tägi* etc. in complex sentences in which the interrogative form appears in a *-sAr* clause, the demonstrative form in the main clause (see section 4.65). *kim* is also attested with double case suffixation in *bo užakaḡ kimtäädä bošguntuŋ?* (see above).

näčük (spelled with *ü* in the ms. Maue 1996 3 nr.12; from *nä+čä ök?*) ‘how’; also ‘why’ and *nätäg* (*nä* with the postposition *täg*) ‘like what’ (e.g. in M I 23,5) also became secondary bases and function as pronominal stems in their own right: We find the instrumental forms *nätägin* ‘in analogy to what; how’ (TT V B 44, BT II 939, HTs III 633) and *näčükün* ‘how’ (e.g. KP 12,6) and ‘when’ (twice in U I 6, Magier). Kāšgarī (fol.197) says that *näčük* ‘Why?’ was characteristic of the Yabāqu dialect and that all the other Turks used *nälük* (< **nä+(A)gU+lXk*) instead. Another derivate from the extended base *näčük* is *näčükläti* ‘in what manner, in what way’, documented and discussed in OTWF 406. I take this, *nätägläti* (Suv 65,22 and 588,16), *birtämläti* ‘once and for all’ and *kalti* (see below) to be formed with two adverb-forming suffixes, *+lA* and *+lI*.³⁸⁴ *nämän*, an instrumental

³⁸² A number of modern words for ‘thing’, like *nimä* or *närzä*, also come from ‘what’; South Siberian ‘thing’ words like *ču* and *čü* come from Mongolic ‘what’.

³⁸³ See section 3.341. Stressing negation is also one use of English ‘any’, and cf. French *ne ... rien* < Latin *rem* ‘thing (acc.)’.

³⁸⁴ Cf. section 3.31. We are aware of the similarity of *+lA* to *+lA-* and of *+lI* to the second part of the negative converb suffix *-mAI* which presumably was a converb in its

expansion from *nämä* < **nä ymä* attested e.g. in BT I A₁ 14, and HTsBiogr. 27 and 54, appears to be an interjectional interrogative with a meaning like ‘how!’ or ‘what?’.

The nominative of **ka+* is not attested;³⁸⁵ nor do we have its accusative or genitive, the other two cases with abstract meaning. A common case form from this stem is *kanta* ‘where’ (e.g. Wettkampf 28, KP 58,4, BT I A₁1, DKPAMPb 843, several times in Suv all spelled with T). DLT fol. 38 spells the form with *dāl* (not *dhāl*) and TT VIII F 7 (brāhmī) has *kanda*; what is spelled *kanta* was therefore pronounced with the stop [d] (see section 2.409). We also have the ablative *kand(a)n* (Orkhon Turkic: KT E23 twice and the parallel text BQ E19 twice, all spelled with the NT/ND ligature) and *kan+tir+an* (Uygur, e.g. Suv 390,2; *kantaran* in MaitH XV 7r4) ‘from where’. *kanča* can signify ‘how much’ (e.g. U III 36,10) or ‘how far’, ‘where to’, ‘by which way’ (e.g. U II 25,21, DKPAMPb 840 etc. with *bar-*). *kaŋa* ‘to which place’ is attested in Mait 12v21: *ätözümtäki küčümin sän karimak elitü bardıŋ; kaŋa yatzun?* ‘Old age, you have taken away the force in my body; where should it (i.e. my body) lie down?’. *kaŋa* is exceedingly rare; the ‘movement to’ meaning otherwise typical for the dative appears, for this base, to be covered by *kanča*, e.g. in *kanča barir siz* (KP 78,1-2) ‘Where are you going?’.

kani ‘where?’ serves in regular and rhetorical questions (cf. part V); it has accusative shape but serves no direct object function. It is used twice in Orkhon Turkic and appears nearly 70 times in DLT and QB but I have come across only a single Uygur example.

The meaning and use of *kač* ‘how much’ must have been close to that of *näčä*, but *kač* may have been used only adnominally (*kač kata*, *kač kün*, *kač yil*, *kač törlüg*, *kač yaŋlig*, *kač bölük*, *kač igač* etc.) whereas *näčä* was mainly used pro-nominally in the narrow sense of the term, i.e. governed by verbs. *kač* being morphologically more opaque, one would in principle expect it to be older than *näčä*. It may gradually have been replaced by *näčä*, as the Suv, e.g. appears to have had only two examples of *kač* (both *kač törlüg*) but more than 70 examples of

own right prehistorically; the sequence *+lA+tI* may have been analogically influenced by *+lA-tI*.

³⁸⁵ It may have survived in Khalaj, though Doerfer (1988: 108 and elsewhere) does not express himself very clearly on this: What is actually attested may only be *qāyan* ‘whereto’, which seems to consist of *qā* fused with *yan* ‘side’ (cf. *kan+ta yan* in Tuñ and other such forms with vowel harmony, in section 3.32). Khalaj *kā* may also be a contraction of the dative form. Note that standard Republican Turkish does not have *nere* either (though it has *nere+de* ‘where’ etc. and, for the nominative, *nere+si* ‘what place’).

näčä.³⁸⁶ *kač* is probably derived through a short variant of the equative suffix, the full form presumably serving as base to *kačan* ‘when’ (< **ka+ča+n* with the instrumental).

kačan is rarely interrogative (there is such an instance e.g. in AraṇemiZieme 83) but is used as an indefinite element signifying ‘at some point in time’; two examples for that are quoted further on in this section, some additional ones in section 3.31. It often introduces temporal clauses with *-sAr* or with *-dOktA* (section 4.633). *näčädä* is also temporal and might be translated as ‘at some stage’; this is another case of competition between *ka*^o and *nä* stems.

kaltī is attested as interrogative pronoun in IrqB 45, in the sentence *kaltī uyīn* ‘How should I get on?’. It presumably comes from *ka+la+tī*, with the middle vowel syncopated due to strong accent on the first syllable: The *ka+* forms appear to have first syllable stress, as we see from modern forms such as *kanča*, *hangi*, *hani*, *xačan*, *hara* etc.. The sequence *+lA+tI* is earlier in this section documented also from other interrogative bases.³⁸⁷ *qaltī* is attested as an element introducing object clauses of content in *yarokli karali kalti katilmış ... tepän biltimiz* (Xw 135) ‘we know how light and darkness were mixed’ and is also used as a particle signifying ‘for instance’; it is often found in comparative clauses (section 4.632). *kali* appears instead of *kaltī* in Qarakhanid, where it is rather common. In DLT fol.549 we read that it signifies ‘how’ or ‘if only’ or ‘when’ and get examples for two of these meanings; here is the interrogative one: *sän bu işig kali kiltiñ* ‘How did you do this affair?’. No etymological explanation for *kali* is forthcoming; it could also (though attested less early) have actually been the source of *kaltī*.

kañu > *kayu* ‘which’ must also somehow be related to **ka+*, though the exact relationship is, again, obscure. 12 among the Brāhmī and Tibetan script instances spell it with *u*, 7 with *o* and 3 (in BudhKat) have *kayol* < *kay’ ol* ‘which (is) it?’. We have opted for *kayu*, also because this variant appears in 8 different mss. whereas the 7 instances

³⁸⁶ Note that Turkish has only *kaç* ‘how many’ but no *näčä* (though it has *nice* in exclamatory or indefinite use in dialectal, literary or archaic language); it appears to have replaced *näčä* by *ne kadar*. *kač* has to be adnominal also in Turkish, which means that there has to be a count word like *tane* in case the speaker wishes not to use it adnominally.

³⁸⁷ An instance in another runiform ms., TM 342 2v11 in KöktüTurf appears in fragmentary context, as the facs. shows better than the edition; it can hardly be interpreted as in EDPT 618b.

of *kayo* are found only in the mss. TT VIII H and L.³⁸⁸ From *kayu* come *kayunuŋ* and *kayuni* (both attested e.g. in BT XIII 2,91), *kayuka* (BT XIII 38,30 and 21,67, Suv 375,21 and 22, 6 times in Abhi etc.) and *kañu+garu* (twice in ms. T I D 200 = Mz 774 last edited by Zieme in *AoF* VIII 242). *kañu+da* appears in U II 6,13 and 16; *kayuda* is common, e.g. DLT fol. 62 and TT VIII A 36 with *dh*, U II 29,11. The QB syncopates it to *kayda* to suit the metre; we also find e.g. *kayda barsar* ‘wherever he goes’ in Mi33,3 (SammlUigKontr 2), a contract. *kayu+din* ‘from where’ is also common, e.g. in BT I D267; *kayutin siñar* is parallel to *antin siñar* in U II 29,19. *kayu+si* signifies ‘which of them’.

I will deal with *kačaniŋ* in greater detail, because it has not yet been quite pinned down as to form or meaning, although attested a number of times in early texts. The word appears in the mentioned shape in the two Buddhist examples, *ačmak suvsamak ämgäkimiz kačaniŋ näŋ sönmäz* (Mait 110v7) ‘Our suffering through hunger and thirst never ever ends’ and *kačaniŋ bolmazun* (Alex 15) ‘May it never be!’. The three runiform examples in Tuñ have no vowels: *aŋaru sülämäsär k¹čn²ŋ ärsär ol bizni – xaganī alp ärmiš, aygučisi bilgä ärmiš – k¹čn¹ŋ ärsär ölürtäčik ök* (Tuñ 20-21) ‘If (we) do not fight it (i.e. the Türk confederation) it will, at some stage – its ruler is said to be valiant and his advisors are said to be clever – it will definitely kill us at any time’. The Tuñ 29 instance of the term (with a formulation very close to Tuñ 20-21, also with *ärsär*) is spelled with *n²* as in Tuñ 20, which should, I think, be explained by the fronting influence of the /i/ (as happens often in these inscriptions).³⁸⁹ The four Manichæan examples have a single explicit vowel each; the third vowel is explicit in none of them but we can take it to have been /i/ in view of the Mait and Alex instances: *üzüti k(a)čan(i)ŋ [y](a)vlak tö[rt] butlug tünl(i)g öziŋä [ymä] kul küŋ öziŋä*

³⁸⁸ *kaño* may still have been the original form and it cannot be excluded that we would have found that more frequently if there had been earlier Brāhmī sources; Schönig 1995: 180-181 takes this (with unrounding) to have been the source of *kaya* found in some modern languages.

³⁸⁹ Reading Tuñ 20 and 29 as *kač näŋ* and explaining ‘*kačnaŋ*’ in Tuñ 21 with secondary synharmonism would go well with the Manichæan examples but would leave the Mait and Alex instances with *yod* unexplained. Tekin 1994 reads *kačan näŋ* in Tuñ 21 but retains *kač näŋ* in the other two places; this is unlikely in view of perfect parallelism between the passages. Possibly all three Tuñ instances should be read as *kačanäŋ*, especially if this is ultimately fused from *kačan näŋ* (attested e.g. in Mait 11r11); the *n¹ ~ n²* variation would be explained by the /n/ being standing a back and a front vowel: Note that the the only Tuñ instance of *näŋ* by itself (1.56) also appears with a positive, not a negative verb. The high vowel of *kačaniŋ* would be secondary.

*t[u]g[miš] ärsär ... (ZiemeTexterg 2,33) 'If their souls should, at some stage, have been born in the body of an evil four-legged creature or the body of a male or female slave, ...';]LR *barča kač(a)n(i)η kata*³⁹⁰ *bulgantī irinč boltīlar* (M III Nr.1,IV v5) 'The [...]s all so and so many times felt terrible and became wretched'; *k(a)čan(i)η nāη atn(i)η äšgäkn(i)η muyuzi*³⁹¹ *örmāz* (M I 16,11) 'At no stage do horns ever grow on horses or donkeys'; another instance of *kačan(a)η nāη* appears in M I 32,6 in fragmentary context. In the two last-mentioned instances the word is followed by *nāη* to strengthen a negation, as in the Mait instance.*

In *nā törlüg aš ašamišin ... nāčä yaš yašamišin öyür* 'He remembers what sorts of food he ate, ... how many years he lived, ...' (MaitH XV 2r4) *nā* and *nāčä* actually serve as relative pronouns, forming heads for object clauses; cf. also *yüz mīη tüman ulatī nāčä küči yetmišinčä sözlüzün* (TT V A 67) 'Let him say it a hundred, a thousand, ten thousand or as many times as he is able to'. The correlative constructions mentioned below and discussed in section 4.65 also use such pronouns as relative pronouns. *nā törlüg* 'what sort', *nā yanlıg* 'by what manner' and the like also appear, of course, in interrogative sentences and subordinated interrogative clauses.

The indefinite function of these 'interrogative' pronouns turns up in *nā ymä taštīn siṅarki bālgülārig nā ymä ičtin siṅarki [bālgülārig] adruk adruk tüllārig koduru kololasar* (MaitH XI 3r29-30) 'if one meticulously examines whatever external and internal omens there are as well as the different dreams', where, in fact, the two *nā* are used as a correlative pair. In the following two instances *nā* is taken up by *barī* or *alku* 'all', giving a generalizing meaning. In *taglarī i ṅač kaya kum barī kop basar* (M III 8,3-5), the possessive suffix of *taglarī* refers back to *kün tügsukdunkī yer suv* 'the territory in the east'; the sentence should signify '(any of) the mountains (of that territory), shrubs and trees, rocks and sand, all put pressure'. Further, *nā kārgākin alku tükāti*

³⁹⁰ With reference to this passage Gabain 1974: 100 spells the word as 'qačāη' because the second vowel is not explicit and N looks like *alef*; this is, however, the only instance with this spelling.

³⁹¹ Spelled MWY WZY, and the editor assumes that the *alef* is of the superfluous sort; the text does in fact have a few superfluous *alefs*. Reading *müynüz* or *muyunuz* would, however, be just as possible and might be considered in view of the general Turkic account given e.g. in the EDPT. *müñüz* in H I 55, DLT, Chagatay and modern Southeastern Turkic languages cannot be linked to the main Old Turkic variant within Old Turkic sound laws.

berip ... üntürdi (KP 28,4) ‘He fully gave him whatever he needed (= all he needed) and ... sent him off’. *nä* is here attributive to *kärgäk* (note that ‘whatever’ is also derived from ‘what’) and the whole noun phrase is put into the accusative case.

We have indefinite *kim*, ‘whoever’, in *oglanimizni altaçi kim ogri ärsär anı tapalım* (DKPAMPb 164), which signifies ‘Whatever thief there is who robs our children, let us find him’. In HTsBiogr 294 and 301, *kim m(ä)n* and *kim biz* appear to signify ‘somebody like me’ and ‘people like us’ respectively. *näçädä* signifies ‘at some stage’: *näçädä çayasene bayagutnuñ iki oğlanı bädük boltılar, anıñ arasında kántü özi ... adın aźunka bardı* (U III 80,3-7) ‘Eventually the two sons of the merchant Jayasena became grown ups (but) in the meantime he himself died and passed to a different existence’. *kačan* ‘at some point’ is used e.g. in *kačan eçisiniñ [käl]mišin utgurak bilti, anta [ok...] kántkä bartı* (U III 86,18) ‘At some point he got certain news that his elder brother had arrived, (so) he immediately went to the town (of Benares)’; a subordinative interpretation cannot be excluded, giving ‘When he got certain news that his elder brother had arrived, he immediately went to the town (of Benares)’. *kaç* is ‘a few, a number of’ in *kaç bärä yer yorisar* (HTs III 764) ‘if one walks some miles’; *tut[gal]i kaç kün bolmadok* (BT XIII 4,4) ‘It has been impossible to catch him for a number of days’; *kaç kalın toyin egil kabışip* (PetInscr) ‘(we – eight proper names), quite a number of monks and lay people came together to ...’. Indefinite adnominal *kayu* ‘any’ can be found in BT II 257 or Heilk I 180.

Indefinite pronouns can also be used together with the conditional form. In the following example we know that this is the case, as the clause is parallel to a normal conditional clause: *alkiřimiz ötiğümüz täñrikä arıgın tägmädi ärsär, nä yerdä tidindi tutundi ärsär ...* (Xw 161-2) ‘If our praise and prayer did not arrive to heavens in purity, if they got hampered and hindered anywhere ...’. In *birök kayuda kaçan yalañok aźunında tugmakı bolsar ymä, ...* ‘even if, however, he should anywhere at any time get born in a human birth form ...’ (U II 29, 11-12), the pronouns are also obviously indefinite. Otherwise, clauses where indefinite pronouns appear with the *-sAr* form are discussed in section 4.65, which deals with correlative relativisation, and in section 4.633, which is about temporal clauses.

Phrases consisting of interrogative-indefinite pronouns + *ärsär* whose pronominal reference is not taken up in correlative manner are used for stressing the generality of a statement: *ol saña nä ärsär kärgäki yok* (DKPAMPb 352) ‘You don’t have any sort of need for that’. With *kim*:

mini üçün ämgäntäci kim ärsär yok (U IV C 152) ‘There is nobody at all who would go to any trouble for me’; there is a further instance of *kim ärsär yok* in TT X 70. In *burxanta adin kimni ärsär umug inag tiläp bulmaz biz* (TT X 109-110) ‘We have not found anybody except Buddha to serve us as hope and support, though we are searching’ the indefinite pronoun is in the accusative. It seems that this construction can even be used adnominally: Doubled and with topicalising *ärsär* we have e.g. *kayu kayu ärsär tünlaglar* ‘any living beings’ (MaitH XV 1v11). Numerous examples for interrogative-indefinites with *ärsär*, both adjacent and separate, in both adverbial and adnominal function, are quoted in UW 407-408 (part VII of the entry on *är-*).

The same generalising doubling as in the last quoted example is applied – without *ärsär* – also in *kim kim mä čam čarim kilmasunlar* ‘let nobody whatsoever raise any objections’ (Sa10,12 and 11,14 in SammlUigKontr 2, the latter with *bol-up* after the particle *mä*);³⁹² cf. also *käntü käntü* ‘each his own’. We have distributive doubling of nouns in *ažun ažunta* (Saddh 20 and DKPAMPb 282) ‘in every existence’. Doubling in correlation between relative and demonstrative pronouns: *kaltü tünliqlar kayu kayu yer suvda burxanlar yoliña kirgüsi bar ärsär bodisatvlar ymä ol ol yer suvda kirürlär* (VimalaZieme 97-100) ‘If, by chance, creatures in any particular place are to enter the road of the buddhas, the bodhisattvas as well go in at that particular place’.

nä ärsär also comes to signify ‘any’ (discussed in section 3.341); *näzä* ‘thing’, which e.g. appears four times in Mi19 (SammlUigKontr 2), comes from this phrase.

kayu kayu remains interrogative in MaitH XI 14r28: *kayu kayu bitig užak bo[šgun]gali sakinur sän* signifies ‘What alphabets do you think should be learned?’; it is followed by a listing of alphabet names and the speaker clearly expects the addressee to give the names of more than one alphabet.

In section 4.633 we quote temporal clauses starting with *nä* ‘what’ and containing the vowel converb followed by the postposition *birlä* or by *birlä ök*, or containing the *-(X)p* converb (sometimes also followed by *Ok*), or the *-sAr* form; they all convey the meaning that the main action follows immediately upon the subordinated one. The source of this construction is not clear to me. *-sAr* and the vowel converb + *birlä* are also used without *nä* in this meaning, but the *-(X)p* converb is not.

³⁹² This is akin to the doubling of *bir* for distributive meaning, and cf. *öñi öñi* ‘various’ in Pothi 235.

There is also an emphatic use of the interrogative-indefinite pronouns, as in *ögrängücilär*³⁹³ *kač yilta tükäl bilü umazlar munuñ tözin* (HTs VIII 43) ‘Those who learn it are in so many years unable to know its central principle.’ The exclamatory use of *nä* in *bo nä ämgäklig yer ärmis!* ‘What a place of suffering this turns out to be!’ (KP 4,8) is akin to this; there are more examples in chapter V. Pronouns used in this way are neither referential nor indefinite, nor do they signal the request of an answer on the part of the speaker.

3.14. Numerals and quantification

Numerals are a morphological class by themselves, apart from being a lexical and syntactical class: The cardinal numerals serve as base for two forms not found with other word classes, the ordinals in *+(X)nč* and the distributives in *+(r)Ar*. The Old Turkic counting system is decimal; there is a periodicity based on ten (*on*). The digits and decades are opaque up to *älig* ‘fifty’, this latter being identical with the word for ‘hand’. *altmıš* ‘sixty’ and *yetmiš* ‘seventy’ seem derived from *altı* ‘six’ and *yeti*³⁹⁴ ‘seven’, though no appropriate suffix ‘+mİš’ or ‘+mXš’ is attested anywhere else. ‘Eighty’ and ‘ninety’ are ‘eight tens’ (*säkiz on*) and ‘nine tens’ (*tokuz on*); in the DLT these terms are fused to *säksön* and *tokson* respectively. The highest opaque numeral in common use is *tümän* ‘ten thousand’.³⁹⁵ The hundreds, thousands and ten thousands are expressed in multiplicative manner: ‘3700’ is *üč biñ* (or *miñ* in Uygur) *yeti yüz*, ‘37000’ *üč tümän yeti biñ* (or *miñ*).

The runiform inscriptions and the earlier Uygur texts form cardinals between the various decades from the second to the ninth one in anticipating fashion: First stated is the digit as starting the count from the lower decade, then the higher decade is mentioned: *tört kırk*, literally ‘four forty’ (MaitH XV 10r11), e.g., is ‘34’. In E10,5, the defunct topic of the grave inscription is quoted stating his age as *säkiz tokuz on yaşım*, which signifies ‘I am 88 years old’, literally ‘eight nine-ten my age’: *tokuz on* ‘90’ is mentioned above. This strategy may have existed also outside the decimal system: In MaitH XV 14r4-26 we find the terms *iki yeti küntä ...*, *üçünč yeti küntä ...*, *törtünč yeti küntä ...*, *bešinč yeti küntä ...*, *altınč yeti küntä ...* and *yetinč yeti küntä ...* signifying ‘on the second / third / fourth / fifth / sixth and seventh of the

³⁹³ From *ögrän-* with nasal assimilation, unless a simple error.

³⁹⁴ Or *yete*, taking account of the optional vowel assimilation.

³⁹⁵ Buddhist texts have names for much greater numbers, which are of Indian origin. *tümän* may actually also be a borrowed term (from Tokharian).

seven days'³⁹⁶ used similar to *bir otuz küntä ken* (13v23) 'after the 21st day'. In both cases the numeral serving as framework to the counting is placed between the denumerating numeral and the head with no affix or other element to show its function in the construction.

The members of the tenth decade cannot be formed in this manner, as *altı yüz*, literally 'six hundred', would be '600' and not '96': These are constructed with *örki* from *ör-* 'to rise': *säkiz yüz altı örki* '896'. '103' is *yüz üç* (MaitH XV 10v5) but '99' is *tokuz örki* (U 1426 r3 edited in Ehlers 1998). An instance expressing '99' as *yüzkä bir ägsük* i.e. 'one less than a hundred' is quoted in the note to that passage.

Still another means for adding digits to decades or decades to hundreds etc., found in all periods, is to state the higher unit first, then *artok+i* 'its supplement' and then the lower unit, as *yüz artoki kirk tümän* (Xw 12) '1 400 000' (literally 'hundred plus forty myriad(s)'), *otuz artoki bir yaşima* (BQ E28) 'when I was in my 31st year (i.e. when I was 30 years old)' or *tört yüz tokuz on artoki beš* '495' (literally 'four hundred(s) nine ten(s) plus five'. *beš yüz artoki äki otuzunč yılka* (M I 12,15) 'in the year 522' and *iki mñj iki yüz artoki beš kirk* (MaitH XXV 4r23) '2235' combine both methods: *äki otuz* '22' and *beš kirk* '35' have the constructions mentioned above. *on artok yeti yıl* (HTs VII 163) '17 years' (with no possessive suffix on *art-ok*) is yet another possibility; classical and later texts can also leave *artok* away altogether, giving e.g. *älig bir* (DKPAMPb 85) '51'.

In Uygur *yarım* is 'half', *iki yarım* 'two and a half'. In Orkhon Turkic and in inscriptions of the Uygur Steppe Empire, *sñjar* appears to have been 'half' or 'a part': [*sñjar süsi ävig barkig yulgalı bardı, sñjar süsi sñjüsgäli kälti* (BQ E 32) 'Half / Part of their army went to plunder (our) homes, half / a part came to fight (against us)'; *sñjarı bodun içikti, sñjarı b[odun ...* (ŠU E 6-7) 'Half / Part of the people submitted, half / a part ...'.

Throughout Old Turkic from the Orkhon inscriptions till the very latest texts, *äki / iki* '2' has the shape *äkin / ikin* when governed by the postposition *ara* 'between'. Since postpositions govern the accusative form of stems with possessive suffixes, it appears that the second vowel of *äki / iki* was felt to be, or originally was, the possessive suffix (see section 4.21 for the construction). In that case, the first syllable may be **äk* 'addition, joint', a word attested in the Oguz languages (in Turkmen with a long vowel), and *äki* may originally have signified 'its addition'.

³⁹⁶ And not, apparently, 'in the second, third ... week'. Ordinals are discussed further on in this section.

iki ülügi atlüg ärti, bir ülügi yadag ärti (Tuñ 4) is an example of how the early Turks expressed fractions, if (as usually translated) this signifies ‘Two thirds (literally ‘two of its parts’) were mounted, one third (literally ‘one of its parts’) were on foot’.

Distributive numerals are formed with the suffix *+(r)Ar*, as *äkirär / ikirär* ‘2 each’. In compound numerals, only the first element gets the distributive suffix: *altirar y(e)girmi* (Höllén 50) is ‘16 each’, *säkizär tümän* (MaitH XXV 2r7) ‘80,000 each’, *bešär yüz ärin barip* (KP 24,2) signifies ‘He had gone (there) every time with 500 men’ (not ‘*beš yüzär*’). Note that the procedure is the same in the two examples, although ‘500’ is construed by multiplication, ‘16’ by addition. Distributives are normally found in adnominal function, as *onar ärkä* ‘for each 10 men’ (TT II,1 91) or *birär çinratgu* (KP 79,5) ‘(hang on them) a bell each’. *bir+är+kyä* ‘just one each’ (four times in Suv 532,19-21) is not surprising, since *+kyA* has pragmatic functions and is not just a diminutive (see sections 3.111 and 5.3). Doubled distributives are used adverbially, e.g.: *birär birär adakin bap kämišip yünin kırkarlar* (M III Nr. 14 v 3) ‘One by one they bind their (i.e. the sheep’s) feet, throw them down and shear their wool’; *birär birär kölmış* (Yos 41) ‘He hobbled then one by one’. Simple *bir* can also be doubled to stress the fact of distribution: *bir bir aźunlarda* signifies ‘in every single existence’. This is akin to the doubling of *kayu* ‘which’ giving ‘whichever’ and *kim* ‘who’ giving ‘whoever’ (examples in section 3.134).

In two economical texts involving the same persons there is an aberrant phrase involving *ikirär*: *bo yerkä berim [a]lüm kälsä ikirär [ya]rüm bilšip [...] berür biz* and *alüm berim kälsä ik(i)rär t(ä)ñ bilšip t(ä)ñ berür biz* (RH8,8 and RH11,10 in SammlUigKontr 2); this signifies ‘If taxes are demanded (of this land), we each determine half (‘determine what is equal’ in the second contract) and give in equal parts’. What is meant is not ‘two (halves) each’ but ‘half each’.

Ordinals from ‘3’ on have the suffix *+(X)nč*; e.g. *törtünč* ‘4th’, *tokuzunč* ‘9th’. *tümäninč* ‘10000th’ is ‘last, used for self-depreciatory purposes’ (as pointed out by S. Tezcan in a review). However, cf. *törtinč* with *//* in the suffix in ThS I,1, a runiform ms., and *beš yüzinč* in a relatively early text, Saddh 13. *+(X)nč* may have been borrowed from Tokharian, where the ordinal suffix has a similar shape. *bir yegirminč* ‘eleventh’ appears several times in SammlUigKontr.

‘second’ is *äki+nti* / *iki+nti*; this form could be linked to the adverbial suffix *+tI*, found e.g. also in *am+tī* ‘now’ (*am* is attested with this meaning in South Siberian). A lone variant *äkin* is found in ordinal use in BQ E32; this may represent the base of *äkinti* if it is not an error. Adjectival ‘first’ is expressed by nominal derivatives like *bašla-yu+kī* (expanded from the vowel converb of *baš+la-* ‘to begin’), *baš+tīn+kī* ‘which is at the head’,³⁹⁷ *ašnu+kī* (e.g. *äñ ašnukī kūn* ‘the very first day’ in MaitH XV 13v29) < *ašnu* ‘before, earlier’ or *ilki*,³⁹⁸ or (as in Xw 117 or Mait 26A r11) by cardinal *bir*. Compound numerals involving ‘one’ can also use *bir* and not the other terms as ordinal: *bir otuz küntä ken* (MaitH XV 13v23) is ‘after the 21st day’.³⁹⁹

bašlayu itself is twice in Orkhon Turkic (KT E16 and 25 respectively) used for adverbial ‘(at) first’: *kañim xaganka bašlayu baz xaganig balbal tikmiš* ‘He is said to have, for my father the emperor, at first erected Baz kagan’s memorial stone’; *bašlayu kirkiz xaganig balbal tikdim*. ‘First I erected the Kırkız emperor as memorial stone.’ Similarly *äñ bašlayu tugdokda* (Suv 348,6-7) ‘the very first time that he was born’. The Suv also has *bašlayu+ča* with the equative suffix. *iki+läyü* (e.g. in Suv 604,9) is ‘again’, i.e., literally, adverbial ‘for the second time’. This form must be a simulative in *+lAyU*, since a *+lA-* derivative from ‘two’ is not attested; in view of this, *bašlayu* might also be a simulative signifying ‘as head’, although a verb *bašla-* does exist. Note, though, that there also is an adverb *ikilä* ‘again’ (e.g. in MaitH X 1v4 and XV 12r3, Fedakâr 280 etc.). Cf., finally, *ikinti+läyü* in Suv 32,7, formed from the ordinal. The very common *bir ikintiškä* ‘one another’ (cf. sections 3.13 and 4.5) also clearly contains the word for ‘second’, but the *°š°* is hard to explain. It is unlikely to come from *+(s)I(n+)*, the 3rd person possessive suffix, as */si/ > /ši/* is a process well-known from a number of languages including Proto-Mongolic but not attested in Early Turkic; nor could one explain the lack of ‘pronominal’ */n/* at this stage of the language.⁴⁰⁰ It may possibly have been adopted from the verbal cooperative-reciprocal suffix.

³⁹⁷ In Fedakâr 189 (Sogdian script) *sJutar bitig PŠD’YK tægzinč* clearly signifies ‘sūtra text, first scroll’. The merely transliterated word is clearly also a derivative of *baš* but the editor’s transcription as *bašd(i)ñ* is not certain.

³⁹⁸ Formed from the base of *ilgärü* ‘forward’ with the suffix *+kI*; see section 3.126 for a discussion.

³⁹⁹ Cf. German *einundzwanzigster* ‘21st’ vs. *erster* ‘1st’ and similar French *vingt-et-unième* vs. *premier*.

⁴⁰⁰ [*bir ikinti]sikä* in U5 (TM 342) 2r1 (SEddTF 541; edited by Le Coq and recently reedited by Zieme) is a conjecture and even the *s*² is rather damaged.

For reference to individuals in a group one adds the possessive suffix to the ordinal form. To express the content ‘one of them’, e.g., we have *biri* in a very early source: *olarka üç ötmäk [berd]im. ol biri yılan tärkin [ka]pap yedi* (DreiPrinz 46) ‘I gave them (i.e. the 3 snakes) three loaves of bread. One of those snakes quickly snatched (them) and ate (them)’. In Buddhist and Qarakhanid texts the possessive suffix is twice added to the cardinal number, as *birisi* (e.g. in HTs VIII 29, U III 67,6₁, frequently in the QB); ‘the other’ is *ikintisi*. Thus we have e.g. *bo üçägüdä birisin birisin titgülük idalaguluk kızıgi kälsär ...* (TT VB 107) ‘If it is one’s turn to give up these three one by one, ...’. This instance also shows how doubling is used iconically, to symbolise the one-by-one selection. A syncopated variant *birsi* appears as *birsi İsiñä*,⁴⁰¹ signifying ‘one by one’, in BT VII A 234 (a tantric and therefore late text) and is also found in QB.

In DLT fol.602, *birin birin miñ bolur* signifies ‘One by one becomes a thousand’; *bir* ‘one’ is here in the instrumental case. *bir+in bir+in* is used with this meaning also by Rabgūzī.

Adverbial multiplicatives are in Orkhon Turkic formed with *yoli*, e.g. *tört yoli* ‘four times’ in BQ E 30 (further examples in T.Tekin 2000: 134), *üç yoli* ‘thrice’ in M I 34,12 and Suv 131,16. In the Yenisey inscriptions they are formed with *kata*, e.g. *üç kata tæginti* (E31,4) ‘He toured (the area) thrice’; similarly E48,4 and (with the same verb) E53,2. Thus also in Uygur *kač kata* ‘a number of times’ in KP 23-24, *bo ämig iki kata okıyu tægintim* ‘I endeavoured to recite this healant twice’ in M I 29,14, *kaçañ kata* ‘often’ in M III 7,5₂, Nr. 1,IV v5. Similarly *yüz miñ kata* ‘100 000 times’ in QB 3058, *kač kata* ‘how many times’ twice in the DLT. *yol+i* is denominal, *kat-a* a petrified converb. For ‘once’ one generally uses the bare stem *bir*, but the DLT has *bir kata*. In Orkhon Turkic the bare stem of any numeral can be used in this way, e.g. *Elteriš xagan ... tavgačka yeti yegirmi süñüşdi, kitañka yeti süñüşdi, oguzka beš süñüşdi* (Tuñ 49) ‘Elteriš kagan fought China 17 times, the Kitañ 7 times and the Oguz 5 times’. Cf. further *iki kata tamirim tokip üçünč tokıyu umatın tina turur* (U III 37,35) ‘My artery beats twice (but), being unable to beat the 3rd (time), stands still’, with both multiplicative and ordinal. The ordinal can also be combined with *kata*, as in *üçünč kata* ‘for the 3rd time’ (Suv 13,23) or *ikinti kata* ‘for the 2nd time’ (KöktüTurf TM 326 r2-3). *birär kata* and *üçär kata* (HTs III 820 and 825) are ‘once each’ and ‘thrice each’.

⁴⁰¹ There is a numeral in the ms..

Collectives in $+(A)gU$ or $+AgU$ (dealt with in OTWF section 2.52) are also often derived from numerals; e.g. *ikigü* or *ikägü* ‘a pair’⁴⁰² or *beš+ägü* ‘a group of five’. *birägü* is also attested, and signifies ‘a set of one’. In the instrumental case these collectives are adverbial. They appear to have been pronominal (which they in a sense are also by content, since they stand for names of groups): They usually get the pronominal accusative suffix $+nI$ also in relatively early texts, and in Orkhon Turkic they show pronominal n before possessive suffixes (section 3.121).

iki+z (DLT etc.) is ‘twin’; this should be another instance of the plural element $+(X)z$ found in e.g. the possessive suffix $+(X)m+Xz$ ‘our’ or the pronoun *siz* ‘you (plural)’: The very common addition of the collective suffix $+AgU$ to numerals is also, after all, not felt to be a redundancy. Note that $+AgU$ forms denote the whole group, whereas $+(X)z$ derivatives from numerals (others being attested in Middle Turkic) denote a single ‘twin’ etc..

The suffix $+gIl$ forms names for geometrical figures with a certain number of sides, as *törtgil* ‘square’ (Suv 544,8, variant in 477,2; WP3,3 and Mi28,4 in SammlUigKontr 2). The suffix may not be applicable to all numerals, if *üčgil törtgil säkiz kirlig altı yegirmi kirlig* (MaitH XXV 4r17) refers to figures with 3, 4, 8 and 16 sides.

The postposition and adverb *öñi* ‘separate from, separately etc.’ governs nominals in the locative or the ablative but numerals in the nominative; it then has a special meaning as in *kop kamag yalñuklar üč öñi bölär* (MaitH XV 14r17) ‘he divides all humans into three groups’ or *yeti öñi ätözlärin bēčip* (MaitH Y 211) ‘dividing their bodies into seven pieces each’.

Words signifying ‘all’ are *kamag* / *kamig* / *kamug* (this last attested in ManTüFr 161, Saddh 37 or ms. M 657 r1 and 3 quoted in the note to BT V 521),⁴⁰³ *alku*,⁴⁰⁴ *yomki* and *tolp* (all three deverbal), *tüzü*, *kop* (a number of times in the different Orkhon inscriptions), *barča*, *bari* (both < *bar*, i.e. originally ‘as much as there is’ and ‘what there is’⁴⁰⁵) and

⁴⁰² Both forms appear to be attested well; cf. e.g. the index to SammlUigKontr.

⁴⁰³ Borrowed from Iranian and a cognate of Persian *hama*.

⁴⁰⁴ This and *kop* are definitely not postpositions, as stated by Gabain 1974: 135, 142.

⁴⁰⁵ DhāSū 24 has *alku barča* as binome. That *barča* should come from **bar-ir+ča*, as written in Gabain 1941: 59, is, I think, unlikely for semantic reasons.

yapa.⁴⁰⁶ Some of these get the collective suffix, as *kamagu*,⁴⁰⁷ *yomki+gu*, *tüzü+gü* (Pohti 98 and 181) and *alku+gu. köp*, which is rather rare in Old Turkic, and *üküş* signify ‘many, much’. A number of these words and also +(A)gU forms at a quite early stage show +nI (and not +(X)g) as accusative suffix, in accordance with their pronominal content. *amarī* ‘a few, some’ (also ‘the others’) is documented in UW 116-117. It is used both as a noun phrase by itself (both as *amarīlarī*, when referring to a set which is part of a larger set mentioned before, and as *amarī*) and adnominally as part of a noun phrase. In TT X 39 we find *amarīlarī* (and not *amarī*) used adnominally, in *amarīlarī tinliqlar ... adīn aẓunka bardīlar* ‘Some creatures ... went to a different existence’.

Absolute measure words of Uygur are practically always borrowed. For length and distance we find *tsun* ‘an inch’, *čig* ‘a foot’ or ‘a cubit’ (both < Chinese), *čigin* apparently also ‘a foot’ (in DKPAMPb 1345 and Mait 75v8), *kulač* ‘a fathom’ and *berä* ‘a mile’. For time we can mention *kšan* ‘a very short moment’ (<< Sanskrit). For weight there is 1 *yastuk* (the Turkic word for ‘cushion’, that being the weight’s shape; cf. Persian *bāliš*, with the same two meanings. A *yastuk* consists of 50 *sitir* or *satir* (<< Greek); 1 *sitir* consists of 10 *bakir*. *batman* (= Chinese *jin*) is a large unit of weight. The smallest measure of capacity is *kav*, 10 *kav* being 1 *šiq* (< Chinese) and 10 *šiq* 1 *küri*. 10 *küri* ‘bushel’ give one *šig*. *šig* (< Chinese but already borrowed by Bactrian) or *tagar* is a measure of capacity, for grain among other things. Hence it also became a measure of arable land, based on the amount of seed required to sow it. The *tämbin* is a small unit for liquid measure; 3 *tämbin* are 1 *saba*, 10 *saba* 1 *kap* (the largest measure for liquids). Cf. Yamada 1971 and Matsui 2000. Measure words in a series can, of course, be joined; e.g. *keji [tör]t čig bir tsun* (HTs III 976) ‘Its width is four feet one inch’.

As pointed out by Moriyasu in several publications, the means of payment during the reign of the West Uygur kingdom was *quanpu*, an official and standard bale of cloth, replaced in Yuan times by *kümüš*

⁴⁰⁶ Not in DTS or EDPT but used with this meaning eleven times in BT XIII 2, 5, 10, 21, 22, 27, 36, 50 and 54, sometimes in binomes with *kamig*, *tüzü*, *barča* or *yomki*.

⁴⁰⁷ This is not a ‘Nebenform’ of *kamag*, as A. v. Gabain wrote in the n. to TT IX 26, but haplogically simplified from **kamag+agu*. The base is known to have been copied from Iranian; no Iranistic or Turcological justification for such a ‘Nebenform’ is known to me.

‘silver’ or *čao*. During Yuan rule, trade was effected also by *böz* ‘cotton cloth’.

For dates, the twelve animal cycle of years is used from the inscriptions of the Uygur Steppe Empire on, and till the latest texts. Months are numbered (*ekinti ay* etc.), but *čaxšapat ay* is used for the last, *aram ay* for the first month. Days are numbered starting from the new moon (*yaŋi* ‘new’) as, e.g. *üč yaŋika* ‘on the 3rd day of the month’. This reckoning proves that the months were indeed moon months, as warranted also by their name (*ay* ‘moon’); yet not all of them can have been pure moon months, as they did not wander through the seasons (as Islamic months do). Cf. in general Bazin 1991 for Old Turkic dating.

-(X)m is used for forming ad hoc units of measure: *yeti tut-um talkan* (TT VII 25,10) are ‘seven handfuls of parched grain’, *bir aš biš-üm+i üd* (HTs) is ‘the time it takes for food to get cooked’, while *bir tamüz-üm+ča+kya* (InscrOuig V 45) is ‘just as little as a drop’.

3.2. Verbs

Verbs are a class of lexemes showing categories as listed in section 3.22 below; accordingly, elements such as *bar* ‘there is’ and *yok* ‘there isn’t’ or *kärgäk* ‘it is necessary’ are not verbs though mostly used predicatively. The presence of verbs is not obligatory either in sentences or in subordinate clauses, if the predicate is not a content to be found in a verbal lexeme, and if no explicit verbal categories are to be expressed. If verbal categories are to be expressed although the predicate is a nominal, the language uses the verb *är-* ‘to be’ or some other member of the small group of copular verbs (see section 3.29).

3.21 Verb derivation

We distinguish between denominal derivation (which can also have lexemes of adjective-type content as base) and deverbal derivation; it happens only very rarely that one formative is used for both purposes. The derivation of verbs from pronouns, which exists in some Turkic languages, is not productive in Old Turkic. Verb stem formation will not be described here in any detail, as this has already been done in the OTWF (the formation of denominal verbs in part V, the formation of deverbal verbs in parts VI and VII of that work, which deals with derivation as well as with its various functions); moreover, most of word formation takes place in the lexicon and not in the grammar.

3.211. Denominal verb formation

In the denominal derivation of verbs, the most common formatives are +*lA-* and +*A-*, which form both transitive and intransitive verbs. +*U-*, +*(A)d-*, +*(X)k-*, +*(A)r-* and +*lAn-*, on the other hand, only form intransitives. Onomatopoeic and synesthetic intransitives can end in +*kIr-*, *trI-* or *rA-*; the equally intransitive +*sIrA-* verbs are associated with +*sXz* and denote lack or loss. +*(X)rkA-* (+*kA-* with bisyllabic bases ending in consonants) forms transitive verbs expressing feelings, attitudes or opinions towards their object. The possibility that there existed a \emptyset derivation of verbs from nouns cannot be excluded: Cf. *kari-* ‘to grow old’ no doubt related to *kari* ‘old’.

3.212. Deverbal verb formation

Derivation of verbs from verbs usually serves the diathesis category, reported on in the next section. Desideratives and similatives, which describe ‘types of inaction’, can, on the other hand, be mentioned here: Verbs formed with *-(X)gsA-* denote the wish to carry out the action denoted by the base verb, while adding *-(X)msIn-* has the writer describe the subject’s behaviour as mere pretense. The reader is referred to part VI of OTWF for details. An example for the latter formation (not mentioned in OTWF 531f.) appears in *tälgüli topolgalı umsınmıš ol* (HTs VIII 372) ‘He pretended to be able to penetrate it’; it is derived from the verb *u-* ‘to be able to’.

3.22. Verbal categories

The Old Turkic category of voice, which describes the mutual behaviour of the participants in the action and their task in it, has four major and two minor members. The category is expressed by a set of intercombinable suffixes placed after the stem but before the suffix of negation. These suffixes also serve the derivation of verbs from verbs (q.v. in section 3.212): Note that deverbal nominals such as *ävr-il-inč+siz*, *yar-il-inčig*, *yölä-š-ür-üg*, *bälgür-t-mä* (all mentioned in the OTWF) also contain stems formed in this way. Vying and cooperation between two or more participants in the action is expressed by *-(X)š-*, an element which usually comes last in the chain of diathesis suffixes. Passivity is expressed by *-(X)l-*, *-tXl-* or *-tUrXl-*. *-sXk-* verbs have actions taking place to the detriment of subjects, partly governing (in the accusative case) the entity lost by them. *-tXz-* verbs show their subjects to be responsible for activities of which they are the

objects. Verbs formed with $-(X)n-$, $-lXn-$ or the rarer $-(X)d-$ and $-(X)k-$ ⁴⁰⁸ are reflexive, anti-transitive (i.e. intransitive derived from transitive) or middle. Verbs formed with $-Ur-$, $-Ar-$, $-gUr-$, $-tUr-$, $-Xz-$ ⁴⁰⁹ or $-(X)t-$ ($-(I)t-$ in later Old Turkic), finally, are just transitive if their bases are intransitive but causative if the bases are transitive; however, $-(X)t-$ derivatives from transitive bases tend to be reversive, i.e. to get passive meaning. See section 4.5 for more details on the use of these suffixes.

If the base is a nominal clause, the opposition between intransitive and transitive is taken care of by the auxiliaries *är-* ‘to be’, *bol-* ‘to become’ and *kil-* ‘to do’: *balig bašlig kil-* (Mait 78v1) ‘to wound’ is the transitive or causative counterpart of *balig bašlig bol-* (Xuast I 9) ‘to get wounded’, *adak asra kil-* ‘to subdue’ (Mait 5r4) of *adak asra bol-* ‘to be subdued’ (Suv 313,1), *yok yodun kil-* ‘to annihilate’ of *yok yodun bol-* ‘to be destroyed’.

The suffix of verbal negation is $-mA-$, whereas nouns can be negated through *yok* and $+sXz$; the latter denotes not only ‘lack’ but also – with adjectives – negation of the quality in question. We find $-mA-$ in finite and non-finite verb forms but not in deverbal nouns. One exception is $-gUčI$, dealt with in section 3.113 as a formative for forming deverbal nominals although we (rarely) do have $-mA-gUčI$: Even $-mAgUčI$ forms describe people by their permanent qualities.⁴¹⁰

$-mA-$ is generally applied in agglutinative manner, but there are quite a number of exceptions (cf. Grønbech 1955 and see Erdal 1979: 156 for historical development): The aorist and, in Orkhon Turkic, the future tense (discussed in sections 3.233 and 3.234 respectively) have irregular negative forms. The negative counterpart of $-mIš$ is $-mAdOk$, with $-mAmlš$ starting its appearance in not very early texts (rare even in Suv). $-mA-gU$ is not attested in early texts either; it is rare in Suv but we do find it e.g. in U III 54,13 or BT I D 273 and 320; the distribution of $-mAgUlXk$ appears to be similar. Uygur $-(X)p$, $-(X)pAn$ and the vowel

⁴⁰⁸ Gabain 1974 § 160 (and already in the note to l. 1805 of her edition of parts of HTs VII) expressed the view that the meaning of this formative is ‘intensive’, mentioning the verbs *alk-* ‘to use up, destroy etc.’, ‘*ök-*’ ‘to think’ and *könük-* ‘to burn up’. The semantic relationship of the first with *al-* ‘to take’ is dubious, the second, quoted from U II 11,8, is a mistake for $(y)ük-$ ($*hük-$) ‘to heap up’ (what here appears is the lexicalised noun *ükmäk* ‘heap’) and the third (from MI 17,12) should be a scribal error for the very common *küñ-ür-* ‘to burn (tr.)’. OTWF 524-5 argues against the existence of Old Turkic suffixes consisting of vowels bearing ‘intensive’ meaning.

⁴⁰⁹ Can in no way be related to $-Ur-$, as thought by some scholars, as the suffixes differ both in their vowels and their consonants.

⁴¹⁰ Only in the Suv text do we find $-gUčI$ used as action noun (cf. section 3.282).

converb have *-mAtIn* as their negative counterpart; this is presumably the instrumental of *-mAtI*, appearing in this same use in runiform inscriptions and Qarakhanid.

If negation is topicalised, it can be moved to an auxiliary, as in *täpränc̄siz boltum ärmüz mü* (Suv 626,18) ‘Have I not become immovable?’ instead of **bolmatim mu*.

Verb stem compounding, well attested in some modern Turkic languages, is unknown in Old Turkic except for the use of *u(-ma)-* ‘to be (un)able to’ in part of the corpus (cf. section 3.252 below).

Several classes of auxiliaries are compounded with the vowel converb and with the converbs in *-(X)p* and *-gAll* to express such categories as ability, actionality, politeness and the question whether the action is carried out for the benefit of the subject or for some other participants in the action. These categories and the means for expressing them are discussed in section 3.25.

There are five further verbal categories, tense-aspect (for which see section 3.26), status, mood and, together with finite verb phrases and (partly) with the conditional, the subject’s person and number. Status and epistemic mood are the topic of section 3.27 while volitive mood and modality are dealt with in section 5.1; see section 3.231 for the forms of the volitional paradigm.

Most Old Turkic verb forms use pronouns for agentive person and number (at least in the first and second persons), but the constative preterite uses possessive suffixes (and apparently also the *-sXk* form as mentioned in section 3.26).⁴¹¹ The volitional paradigm amalgamates person and number with the volitional marker; *-(A)llm*, the 1st person plural hortative suffix, e.g., is opaque as to plurality. However, personal pronouns are by no means excluded from joining volitional forms: Cf. e.g. *siz* ‘you (pl.)’ added to the 2nd person plural imperative of *t̄ñla-* in *bäriü t̄ñlañ siz* (Arañemi 1a r1) ‘Listen here!’, said in politely addressing a single person.

One can also add *+lAr* to the 2nd and 3rd person plurals, and *+lAr* is also found optionally in the 3rd person plural of other forms (e.g. *öçäšmišlär* ‘they are said to have argued’ in a runiform ms. or *külmišlär*

⁴¹¹ In a contract published in Usp 24 there appears to be an instance of the 2nd person possessive suffix added to the form in *-dAēI*: *bolmasa sän kurug kaltačij*, ‘Otherwise you will lose all’. At some stage in Middle Turkic the conditional also acquired possessive suffixes referring to agents.

‘they are said to have laughed’ in Yos 18). Instances like *alku tñliġlar bo ... kiŝig sävär taplayur ayayur aġirlayurlar* (TT V A 113) ‘all creatures love and honour this person’, where four verb forms share the suffix, or the sentence *yer suvlar suv üzäki kemi osuglug altı törlüg täpräyür kamŝayurlar* ‘The continents shake and rock six ways, like a ship on water’ (MaitH XX 1r2) might suggest that it comes from the plural demonstrative pronoun *olar*. This is a possibility, especially in view of the fact that *ol*, the singular counterpart of *olar*, is often used as a copula, without demonstrative content. The fact that *+lAr* is shared between more than one word does not, however, make this idea more likely, as case suffixes, for instance, can also be shared. Since the quoted forms are participles in predicative use, one might think that what we have here is the participle (which is, after all, a nominal form) in the plural. Note, however, that Uygur also has *-zUnlAr* (e.g. in M I 29,16 and 30,18) and *-dlAr* for the 3rd person plural of the imperative and the preterite respectively (beside *-zUn* and *-dl*, which can also be used with a plural subject), although these are not nominal; these prove that *lAr/* has become a plural marker for the verb as well. Another possible explanation for these forms is that verbal *-lAr* started from the participles and reached the truly finite forms by analogy.

In none of these paradigms does Old Turkic show the distinction inclusive / unmarked, known from some modern Turkic languages.

The expression of person and number is not obligatory in early texts, e.g. with *sülämäsär* in *aġaru sülämäsär kačaniġ ärsär ol bizni – xagani alp ärmış, aygučisi bilgä ärmış – kačaniġ ärsär ölürtäčik ök* (Tuñ 20-21) ‘If (we) do not fight it (i.e. the Türk confederation) it will, at some stage – its ruler is said to be valiant and his advisors are said to be clever – at some stage (it) will definitely kill us’; reference to the confederation involved has also to be supplied from the context, and the writer may have meant that reference to be understood as a plurality: I refer to “the Türk confederation” only in order to adapt my translation to the Old Turkic text. Outside Orkhon Turkic, subject plurality is very often expressed explicitly even when it also follows from the context, but not where a plural subject is adjacent: Cf. *yäklär kälir* ‘The demons come’ and *tanmıŝ üzütlär taŝıkar* ‘The rejected souls come’ (M II 11,10 and 13). This holds also when the subjects are human, e.g. *bolar mini bilmäz* ‘They wouldn’t recognise me’ (TT X 473 -4), referring to Brahmins. In *kamaġ kara bodun yığılıp bir ikintiŝkä inča tep teŝtilär* (DKPAMPb 159) ‘All the common people assembled and told each other the following’ the plurality of the subject is lexical but not morphological, while verbal plurality is expressed both by plural and by

cooperative-reciprocal morphology. The plurality expressed in *tetiglär ... boşgunsarlar tıñlasarlar üküşin bilü umazlar* (HTs VIII 155) ‘(Even) the clever ones cannot understand most of it when they study it or listen to it’ is verbal and not nominal, as the plurality expressed is that of the verbs’ subjects; the plural verb forms do not refer to any plurality of entities as participles would.

There are no plural verb forms in runiform inscriptions, but there does not appear to be any difference between Manichæan and other Uygur texts concerning the use of *+lAr* with verbs. In Manichæan sources we find such examples: *barča kişilär inča tiläyürlär* ‘All people wish this’ (M III 23,30), *ärksinür eläniürlär eliglär xanlar* ‘They govern and rule, the kings and rulers’ (M III Nr.8 II r 8-9); *bo savka ymä kamgan külmışlär, yosipas(i)g ögmışlär, inča temişlär* (M III Nr.14 r 1-2) ‘They all laughed at this matter, praised Aesop and said the following:’; *ol üdkä k(a)mag t(ä)ñrilär m(ä)ñigü ögrünçülüg s(ä)vinçlig bolgaylar* (M I 11,6-8) ‘Then all the gods will forever be happy’; *k(a)lti mani burxan amarı burxanlar vriştilär [...] bo ä[...] kalsärlär* (M I 24,7) ‘When the prophet Mani and the other prophets come (to ...)’; *ölürgäli elitsärlär* (M III Nr.14 v 1) ‘When they lead it to death ...’; *sizlär anı üçün okitmiş boltuñuzlar* (M III Nr.7 III r 5) ‘You have been called⁴¹² for that reason’; *turuñlar kamug bäglär kadaşlar* (M II 9,4) ‘Stand up, all lords and brothers!’. The instance from M III Nr.8 quoted above as well as *ögürdi sävintilär* in SP 39 or *içmäh yemänlär* in Wilkens 2000 Nr. 65 show that the juncture between verb forms and this suffix was a rather loose one, as we have pairs of verb forms (aorist, constative preterite and volitional in the mentioned instances) sharing a single plural suffix.

Grönbech 1936: 72 (quoting Buddhist examples for *+lAr* with the finite verb) states that such plural verb forms are used only when the subject is a living being. This appears to be generally true but there are exceptions; here is a Manichæan and a Buddhist one: *içtin siñar üküş ärürlär küçlüglär köñülär⁴¹³ biliglär sakınçlar kim çokrayurlar kamşayurlar; ançula mänizlig ärürlär kalti ulug taloy samudri* (M III Nr.4 r 14) ‘Inside there are numerous forceful ones, attitudes, impressions and thoughts which are bubbling and stirring; they look like the great ocean’.

⁴¹² *okı-t-mış* refers to the object of the verb, as *-(X)t-* derivates from transitive verbs often do.

⁴¹³ This is not an error, as double *//* is often simplified.

3.23. Finite verb forms

The Old Turkic finite verb differs from infinite verb forms in that it normally expresses the person and the number of its subject(s), in that its typical task is to serve as a sentence predicate; it cannot, on the other hand, be used adnominally or adverbially. The person–number category has six members, three in the singular and three in the plural. The category can be said to be optional with finite verb forms as well, since a verb form in the 3rd person may in fact not be coupled with any reference to a subject; the content then corresponds to English ‘one’ as subject. The verb is in the plural also if there is only a single subject in the nominative, in case there is another one in the instrumental case form; e.g. *xaganim̄in s̄ü eltdimiz* (Tuñ 53) ‘I went on campaigning together with my khan’: There is a similar rule also in some other languages such as Turkish and Russian. Old Turkic has no distinction between an inclusive and a neutral 1st person plural (i.e. sensitivity to whether any third party is included in the reference to the 1st person plural beside the speaker and the addressee) which we find in some Turkic languages.

In Orkhon Turkic only the verb forms of the volitional paradigm have a true person-number conjugation; the mood suffixes are amalgamated with person and number and do not fall into one morphological slot together with the indicative tense-aspect or the participle and converb suffixes. Still, the early Turks did not conceive of indicative verbal content only in nominal terms: There is nothing nominal about the purely predicative future in *-gAy* as documented in the sources, and indirective *-m̄š* cannot (or no longer can) be equated with the verbal noun of the same shape.⁴¹⁴ Imperfective aspect, the one dominating the present-tense domain, is exclusively participial; thus especially the aorist. Note that the participles in *-(X)gmA* and *-(X)gII* (and *-gAn*, wherever it appears) are never found in fully predicative use; nevertheless the participial and the finite uses of the *-Ur* form cannot be considered to be mere homonyms, as they are too similar in content. The Orkhon Turkic *-dAčI* future also originates in a present participle attested as such in Uyghur and living on in Western Turkic; in Orkhon Turkic it moved into the future tense (in fact only into the positive

⁴¹⁴ Prehistorically, *-gAy* may have contained the suffix *-gA* forming deverbal nouns; see sections 3.112 and 3.234. Besides, *-gAy* is not attested in Orkhon Turkic; that may nevertheless be said to be largely nominal in the functioning of its indicative verbal system, as Classical Mongolian was.

future, as the negative future form is different) as a result of ‘present-renewal’.

The forms of the constative preterite *-d+*, the only indicative verb forms to express person by morphological means, use the possessive personal suffixes to refer to the subject. This can be explained as originally expressing the ‘possession of an act’; the paradigm may have survived from an older system in which verbal morphology only characterised aspect, the use of the possessive paradigm serving as a converter for anteriority (as in Yakut; Republican Turkish *(y)dIm* etc. is also a tense converter). In section 3.232 we quote a Mait instance where the form is governed by a postposition, i.e. in fact appears in nominal use. The Orkhon inscriptions also have the *-sXk* form with the possessive suffix *+Xŋ* referring to the addressee as subject. It expresses the speaker’s opinion that a certain event will needs follow automatically from deeds being carried out by the addressee; the message that there will be no escape from the results may have been behind a use of a suffix implying perfective aspect.

Verbal nominals used as perfect or projection participles also use possessive endings to refer to the subject, while person is expressed by pronouns with all other predicative verb forms (including the future form in *-gAy*, which is not a participle). Converbs are not followed by personal suffixes, but converbal phrases consisting of participles governed by postpositions sometimes are. All verb forms used as predicates of main clauses, and the conditional form *-sAr*, can in Uygur get the suffix *+lAr* to show that the subject is in the plural, e.g. in the analytical phrase *kučmazlar mu ärdi* ‘weren’t they want to embrace?’ (DKPAMPb 608). Sentences such as *män öyür män* (Arañemi l a r 2) ‘I remember’ or *bän anča ter män* ‘I say as follows’ already in Tuñ 37 show that previous mention of the subject did not cause its deletion in the verb phrase. In 3rd persons we often find the pronoun *ol*, even when there is an explicit subject. The fact that, in the Tuñ example quoted, the independent pronoun is *bän* but the clitic one *män* and that the 3rd person plural adds *+lAr* directly to the verb form speaks for referring to forms with the clitic paradigm as finite as well. To this we can add the clitic *miz*, which is added in Qarakhanid Turkic to verb forms instead of *biz*: *biz barmas miz* (DLT fol.301); *kilur miz* (QB 4904), *ursa miz* (QB 4016). The explanation for this is not, of course, phonetic but analogy from *män*.

Reference to the subject could usually be gathered from the context when the sentence itself did not supply it; if this was not the case either,

the sentence was understood to hold for any subject, what is sometimes called ‘impersonal’.

3.231. The volitional paradigm

This was the only paradigm clearly finite already in Proto-Turkic: The other predicative forms including the preterite (discussed in the next section) appear to have been built around participles. Here are the volitional⁴¹⁵ forms:

| | singular | plural |
|------------------------|----------|-----------------|
| 1 st person | -(A)yIn | -(A)lIm |
| 2 nd person | Ø, -(X)ŋ | -(X)ŋ, -(X)ŋlAr |
| 3 rd person | -zUn | -zUn, -zUnlAr |

Examples: *tašik-ayin, yori-yin, yaz-ma-yin; buz-ma artat-ma ... ač togil*⁴¹⁶ (MaitH XV 13v11-13), *tur-ma* (DKPAMPb 889); *sin-alim* ‘let us test’ (Wettkampf 42), *kaviš-alim; tašik-iŋ, äšid-iŋlär* (MaitH XXV 3r17) ‘listen (pl.)!’. The 1st person singular suffix is often spelled as *-(A)yn* in Manichæan and other texts, but Zieme (note to BT V 362) doubts that this has any phonetic significance. Variants of the shapes *-AyI* and *-Ay* are used in the QB when needed for the sake of rhyme or metre; see Hacıeminoğlu 1996: 190 for examples of *-AyI*.⁴¹⁷

The 3rd person imperative has several variants. In a runiform letter ms. (UigBrieffr B v) we find the form *berziin* spelled with a diacritical mark over the Z, suggesting a pronunciation *-žUn*. Since such diacritics are known only in the runiform mss., this indication at pronouncing the sibilant may actually be old. It accords with the form *bol-čun* which we find in Orkhon Turkic, in KT E 11 and BQ E10, appearing in opposition to *bolmazun*: [ž] is the voiced counterpart of [č], and d¹/d² are in Orkhon Turkic replaced at the beginning of several suffixes by t¹/t², their voiceless counterparts, when the stem ends in /r l/. The grapheme choice between T and D has been taken to reflect an opposition between a voiced stop and a voiced fricative (see section 2.409); however, such a distinction could not lie behind the alternation č : ž if the diacritic which we find here is taken at face value.

⁴¹⁵ I use this term instead of the more usual ‘imperative’ because the 1st person forms cannot be said to give orders. The other persons are also used for a much wider array of interactional contents than the use of the term ‘imperative’ would suggest.

⁴¹⁶ *gil* is a particle discussed in section 3.344.

⁴¹⁷ Hacıeminoğlu is misleading concerning *-Ay*; it occurs in QB 560 (B against AC), 1033 (BC), 3186 (C against B) and 4172 (BC against A) and thus does seem to be real.

In Qarakhanid sources, the 3rd person imperative always has /s/ instead of /z/, and around half of the Brāhmī instances are not *-zUn* but *-sUn*. Cf. also *mini atayu yarlikasunlar* (M I 30,18) ‘May they graciously evoke my name’ in a late addition to a Manichæan ms.. In the fragments in Sogdian script (Fedakâr) we find a suffix variant *-zUnI* in *artamazunî* (205), *tavranzunî* (350) and *bolzunî* (392), all in fragmentary context. This variant is well attested in the QB as *-sUnI* where demanded by rhyme or metre.⁴¹⁸ The QB also has many examples of a variant *-sU*, which one might want to link with the form *-zU* in *tänri yarlikazu* found in Tuñ 53 and KT E29. QB examples for *-sU* and *-sUnI* are listed in Hacıeminoğlu 1996: 192. It is unclear, however, whether the suffix appearing in these inscriptional passages is a variant of *-zUn*: The KT passage has a parallel in the BQ inscription, which has *yarlikadok ücüm* instead of *yarlikazu*. An imperative would, indeed, not be appropriate in the Tuñ or the KT contexts, as both refer to the past. This makes it likely that *-zU* is an otherwise unattested archaic suffix with converb function. Finally, two parallel instances of a variant *-zUnIn* in a Manichæan passage: *yarok täñrilär yarlikazunin yavašim birlä yakışipan adrilmalim küçlüg prištilär küç berzünin*⁴¹⁹ *közi karam birlä k[ör]üšüp[än] külüšügin oloralim* ‘May the bright gods permit it and let my gentle one and me be united never to get separated (again); may the powerful angels give us strength and may my black-eyed one meet and sit together laughing.’ (M II 8,16-9,18). I take the forms to represent a blend between the imperative suffix and an instrumental form like *anın* ‘thereby’; the same process can be observed with the form *-(X)pAnIn*. What lies behind this is a blend between two constructions: The realisation of the wish expressed by the imperative will make the union possible; in Turkish this could also be expressed by two volitional forms, in a sentence such as *Tanrı izin versin de artık ayrılmıyalım*. The resultative content of *dA* in the Turkish sentence (corresponding to Arabic *fa*) would have been expressed by this addition of an instrumental suffix to imperatives, a wish expressing a condition.

I have spelled the 1st person plural (hortative) suffix as *-(A)llm* with *I* and not *X* in the second syllable as I do not recall ever having seen it with a rounded vowel; the shape of the suffix in *ünit-alam* (M I 11,19)

⁴¹⁸ Another feature shared by the Sogdian script mss. and the QB (as well as Early Ottoman) are the fused inability forms of the form *al-u-ma-di* ‘he was unable to take’.

⁴¹⁹ Transcribed as *bir’ög* by Le Coq, who adds: ‘Lies *birüing*?’ I have accepted the reading proposed by Zieme 1969:119, which the facs. shows to be at least possible. Arat, who reedited the poem as ETS 4, tacitly writes *yarlıkazin* (thus!) and *birzün*.

seems to be quite rare. However, I am unable to adduce instances where it is added to verb stems ending in rounded vowels (of which there are more than thirty). *-(A)lIm* is the only hortative form attested in Old Turkic, but the Middle Turkic *Qısaşu 'l-Anbiyā* has *-All* and *-Allη* (for exclusive vs. inclusive or dual vs. plural meaning respectively). In view of modern evidence for these forms, it seems possible for *-(A)lIm* to have been secondary and Proto-Turkic to have had **-(A)lI*.⁴²⁰

In some texts, *-(X)η* is exclusively used for polite address to the singular, *-(X)ηlAr* for plural addressees, e.g. *barıñlar ... tiläñlar istäñlar* 'go ... search' used by Herodes to address the three Magi in UI 5-6, or *urunlar* used in answer to *uralim* in BT I B 11; in others, *-(X)η* is also used for addressing more than one person. The Orkhon inscriptions have neither *-(X)ηlAr* nor *-zUnlAr* but use *-(X)η* and *-zUn* for the plural as well. DLT fol.289 quotes a verse with the 2nd person plural imperative forms *koymañiz* and *kiymañiz* corresponding to what would in his language be *kodmañlar* and *kidmañlar*, saying that this is how the Oguz and the Kıpçak tribes form this imperative. The forms, in use in Oguz languages to this day, are constructed in analogy with the plural of personal pronouns and possessive suffixes, whereas the *+lAr* of other Turkic languages comes from nominal inflexion.

In MI 9,11-14 (cf. also Zieme 1969: 152) we find a cursing suffix: *bir äkintikä karganurlar alkanurlar takı ... okışurlar* "yok yodun boluñur ... otkä örtänkä töpön tüşünür ..." *tep sögüşürlär* 'They curse each other and shout at each other, abusing each other by saying "Get destroyed! Fall into fire and flames with your head downwards!"'. I found such a suffix to be still in use as *-gUr* in Uzbek, Bashkir and Khalaj, where it can be added to the 2nd person singular; in our examples, *-gUr* appears to have been contracted with the plural imperative suffix *-(X)η* to give *-(X)ηUr*, similar to the contraction of the dative suffix with the 2nd person possessive endings.

The use of all these forms is discussed in section 5.1 of this work; the suffix *-zUn* appears also in final clauses (section 4.636).

3.232. Forms expressing anteriority

There are three verb forms referring to anteriority: The constative preterite, the inferential preterite and (in Buddhist Uyghur sources) the vivid past.

⁴²⁰ In QB 4975 ms. B has *kiräliñ* against *kirälim* of AC, in 5964 *baraliñ* in A against *baralim* in BC, both in dual and not plural use. Cf. also Ata 2002: 79-80 for Harezmi Turkic usage.

The constative preterite:

| | singular | plural |
|------------|-------------|----------------------------|
| 1st person | -dXm | -dXmXz |
| 2nd person | -dXŋ ~ -dXg | -dXŋXz ~ -dXgXz, -dXŋXzlAr |
| 3rd person | -dI | -dI(lAr) |

This paradigm can be described as *-d* (our sources with certain bases in fact spell the suffix with T, a fact to which we come back below) followed by the ‘possessive’ suffixes (here described in section 3.122). These suffixes commonly refer to the verb’s subject when affixed to perfect or projection participles such as the ones in *-mIš*, *-dOk* and *-sXk* (cf. sections 3.283 and 3.284). This has given scholars since Bang 1923: 129 the idea that the alveolar part of the constative preterite suffix might originally have been that of a verbal noun; cf. also the apparently finite (and at any rate predicative) *-sXk+Xŋ* form quoted below from the Orkhon inscriptions. However, while there is a deverbal noun form in *-(U)t* (discussed in OTWF section 3.108) there is none with a /d/.⁴²¹ Still, in MaitH XI 15r4 we find⁴²² the phrase *savlarag (y)arutdumuz tamdurtumuz üčün* by the editors translated as “Weil wir die Worte ... erhellten (Hend.)(?)”. Here, two *-d+XmXz* forms are governed by a postposition and must therefore be nominal (as *yarot-dok-umuz* would be). While, therefore, there appears not to have been any derivate with a /d/, there may have been a participle with this consonant in inflectional morphology, if this single example (giving us two forms) is not an error; see also OTWF 316.

Orkhon Turkic spells the suffix with *-t¹/t²* when the stem ends in /l n r/ (with the exception of *bar-*, which came from **bari-* as shown by its aorist form), and with *-d* otherwise: See examples in Tekin 1968: 189-190. Later texts do not always keep this rule; cf. twice *turdi* (i.e. [turδi]) in IrqB XV, a runiform manuscript. Johanson 1979 has made likely that this spelling reflects the fact that the consonant was a (voiced or lenis)

⁴²¹ Gabain 1974 § 106 assumes such a suffix, for which she gives three examples: *yüd* ‘smell’ which she links with *yipar* ‘perfume’, *tod* ‘full’ which she relates to *tol-* ‘to fill (intr.)’ and *kid* ‘behind’, which is supposed to be related to *kin* with the same meaning. The first is impossible because there is no suffix ‘-par’, the second because there is no such adjective as *tod* ‘full’ but only a verb stem of this shape and the third because there is *ke+din* ‘behind’ (formed with a suffix dealt with above, from **ke*) but no ‘ked / kid’. The note to HtsBriefe 1857 has some further ‘instances’, for which see OTWF note 351 (and Röhborn’s note to HTs VIII 939 for *küzäd*).

⁴²² Cf. the facsimile; the passage is missing in the parallel Sängim ms.

stop after /l n r/ and a (voiced or lenis) fricative in all other cases; see section 2.409.

The 2nd person variants with /g/ are found especially in the Orkhon inscriptions, e.g. *öl-tüg* ‘you died’ in KT S6. In the 2nd person plural Orkhon Turkic may have had only *-dXgXz*, with forms such as *bardigiz* and *ärtigiz* in the KT inscription.⁴²³ While the ending *-dl* is found to be used from the earliest texts on also with plural subjects, we find *-dlAr* at least with human plural subjects, in not very late texts such as HTs, e.g. VIII 56-73, where three teachers, alternatively referred to as *üčägü*, as *bo ačarilar* or as *[bo] üč ačarilar*, are associated with actions referred to as *tutmış ärdilär*, *käd boltilar*, *yörüg kiltilar* and *yaddilar*. The 2nd person plural can also add *+lAr*, e.g. in *küzädmädiñizlär* (MaitH XXI p.33 r6). *-mAdXñXz* itself is used for the polite singular as well; this explains why there is no *+lAr* variant in the 1st person plural.

Verb forms expressing perfect and/or indirective content show the suffix *-mlš*; in the Orkhon inscriptions, this suffix is always spelled with *s*², which makes T.Tekin 1968 believe that it was pronounced with /s/ by the speakers of those texts. This might be a merely graphic matter, as there is no indication in modern or Middle Turkic languages for such a variant; see section 2.35 above for some remarks concerning the sibilants in the runiform script. This is also the impression we get from the instances of *-mls* which we find in the Manichæan corpus: Two, in M I 6,6-8 and 7,14, appear in a text which does not at all use the Manichæan letter š (which bears no similarity to the letter S, unlike the similarity between S and š in normal Uygur writing) thus making no distinction between /s/ and /š/ in numerous words. The same is true for M III 6 II and III where, beside a number of instances of *-mls*, we also find a number of other cases of /š/ written as S. Indirectivity is dealt with in section 3.27.

-mlš and *-dOk* are suppletive as to negation: The negative counterpart of *-mlš* is *-mAdOk* also when used for expressing inferential anteriority; e.g. *amru bušanu saknu olormiš. kañi xan ögi katun ... oğliña näčä aysar näñ kiginč bermädök* ‘He is said to have sat there, worrying all

⁴²³ See section 3.122 for variation in the 2nd person plural possessive suffix in general. In Uygur and Qarakhanid there is the phenomenon that /ŋ/ is sometimes spelled with K and not NK; this is merely a matter of spelling, however, as the front K is used in words with back vowels as well. *bardñiz* is quoted in Doerfer 1993:1 from Ongin (R4) as a feature distinguishing the dialect of that inscription from that of KT, but the last syllable may (according to the Thomsen – Wulff material) not be visible; i.e. this may be a singular form.

the time. However often his parents asked him, he never gave an answer' (ChristManMsFr Man v11); the fused sequence *-mIš+kA* is, however, negated as *-mAyOk+kA*. *-mAmIš* first turns up in the latest Old Turkic sources. The suffix *-dOk* apparently had a low vowel, to judge by the form *ärtmädök* attested in TT VIII G 50 in fragmentary context. On the other hand, however, we find *bar-ma-duk+ug* in TT VIII A 1. There is no real evidence in Old Turkic for positive *-dOk* used otherwise than as a verbal nominal or in participial function, although Kāšgarī fol.298-299 does supply us with such evidence from the dialects of "most of the Oguz and some of the Suvars and Kipchak" (quoted in Tekin 1997: 7). Tekin 1997: 6 quotes "*äbkä tägdöküm* 'I arrived in the camp'" from Ongin R 2 but what can be seen there (and could be seen when the inscription was discovered) is only *tägd[ök]üm*. He also states that Volga Bulgarian and Danube Bulgarian had finite (positive) *-dOk*, but that is disproven in Erdal 1993: 76-80 and 1988 respectively. Since there is nothing else, we have to state that Old Turkic has *-dOk* as finite verb only if negated, although that may have been different in Proto-Turkic.

The suffix *-yOk* expressing the vivid past presumably had a low vowel and not /U/, because it is spelled thus in TT VIII H 50 and L 18 and 21; cf. however *bulganyu[k]* in TT VIII O 9. In this function it appears only in Buddhist texts; in the 3rd person this always gets the pronoun *ol* added to it. There are no runiform examples of *-yOk*; in Manichaean sources it is attested only as participle (section 3.283) and only in six instances (most of them in the late Pothi book). Its function is discussed in section 3.26; D.M. Nasilov (1966) has dealt with this suffix, giving numerous Uygur examples and discussing its survival in modern languages in Siberia; N. Demir recently showed that it survives also in southern Anatolian dialects.

3.233. The aorist

The so-called aorist,⁴²⁴ whose form is used also as participle (section 3.282), usually expresses continuous aspect. The suffix of the positive aorist has the allomorph *-yUr* with stems ending in vowels;⁴²⁵ *-r* is also found with these stems, though less often than *-yUr* in Old Turkic proper. *-yUr* is not necessarily the older form (a view expressed by Johanson 1976: 143-4 and Doerfer 1993: 30), although it did not

⁴²⁴ I use this traditional term because the many variants of the form, *-Ar*, *-Ir*, *-Ur*, *-yUr* and *-r*, make it inconvenient to refer to this morpheme in archphonemic manner.

⁴²⁵ We find *ogša-yir* in Windg (l.50 of the Zieme edition).

survive very well into Middle and Modern Turkic; it could quite well be the newer one: *-r* is more often found in the early attestation of common forms such as *te-r* ‘says’ (the only form in Orkhon Turkic, with 9 instances in Tuñ, 3 in KT, 3 in the Ongin inscription; very common in the IrqB, TT I 44, Mait 51 v10, 4 times in TT VIII E etc.) or *yarlika-r* ‘orders; deigns to’ (M III 35,14, TT X 99, more than 30 times in Mait etc.), *toki-r* ‘hits’ (Mait 110 r10 and 15), *oyna-r* ‘plays, dances’ (Mait 140 r5), *yorı-r* ‘walks’ (Mait 89 r17, 173 r7 and 25), *ogša-r* (HTs III 212) and so forth. The Brāhmī texts of TT VIII alone have *telä-r*, *arı-r*, *kurı-r*, *kogša-r*, *savikla-r*, *akla-r*, *titrä-r*, *udikla-r* and *yarsi-r*.⁴²⁶ The probable direct connection between *-mAz* (discussed below) and *-r* also speaks for the greater antiquity of *-r*. *-yUr* might possibly be the result of syncopation from *-yU är-ür*; see section 3.251 for the joining of vowel converbs with *är-* to express durativity.

After consonants the aorist suffix has the alternants *-Ur*, *-Ir* and *-Ar*, which alternate according to whether the stem is simple or derived and, if the latter, with what formative (cf. also section 2.51 above on this): Most simple stems (both one- and two-syllable ones) have *-Ar* but a few have *-Ur* and some other few (like *täg-*) have *-Ir*. Intransitive derived stems such as the ones formed with *-(X)k-*, *+(X)k-*, (onomatopoeic) *+kIr-* etc. have *-Ar* while passive, reflexive and cooperative-reciprocal stems and stems with the causative suffixes other than *-(X)t-* have *-Ur*. Stems derived with *-(X)t-* have *-Ir* in early texts; in later texts this formative becomes *-(I)t-* while its converb and aorist vowel changes to */U/*. *ögir-* ‘to rejoice’ has */A/* as converb and aorist suffix in Manichaean texts (most of which are older) but usually */U/* in others: The change may have come about in analogy to its synonym *sävin-*, with which *ögir-* is often used in a biverb; such analogy often happened in biverbs. The topic of Old Turkic converb and aorist vowels is discussed in detail in Erdal 1979b; cf. also Erdal 1986.

The negative aorist suffix is *-mAz* which is, like its positive counterpart, followed by pronouns referring to the subject. One might analyse this as *-mA-z*, taking *-z* to be another allomorph of *-yUr* etc.; this seems to be a viable idea, since the conditioning between the other allomorphs is not purely phonological either, but is also based on the morphological profile of the base. One could even make a genetic connection between *-r* and *-z*, since an alternation */t/ ~ /z/* appears also in other domains of the grammar (discussed above in section 2.36). In modern Turkic languages one would prefer not to connect the two

⁴²⁶ The form by Tekin 1968 read as ‘*yasa-r*’ in KT N10 is quite certain to be conditional *ay-sar* ‘since he decrees’.

suffixes, since *-mAz* is stressed whereas other forms negated with *-mA-* place stress on the syllable preceding this suffix; but we know nothing certain about stress in Old Turkic, and stress may have moved forward secondarily (e.g. in analogy to other verb forms, which stress the last syllable).

In Qarakhanid Turkic, *-mAz* appears as *-mAs*, though /z/ is not otherwise devoiced in coda position in that dialect. *-mAs* may have been a dialect variant: We have e.g. *yanmas yer* ‘the place of no return’ in M III nr.16 v 3. There, this is clearly not an instance of the confusion of *s* and *z*, at any rate, as M III nr.16 is an archaic text showing no instances of voice confusion.⁴²⁷

‘*-mA-yUr*’ does not exist: Zieme 1991: 415 (footn.113) explains the two instances where this was thought to appear as the positive aorists *tümä-yür* ‘adorns’ and *tarma-yur* ‘scratches’ respectively.⁴²⁸

3.234. Future⁴²⁹ verb forms

The suffix *-gAy* is used for reference to the future in the whole of Uyghur but not in the Orkhon inscriptions or in most inscriptions of the Uyghur steppe empire. It is, however, attested also in the Qara Balgasun inscription, the latest inscription of the Uyghur steppe empire, and in some South Siberian runiform inscriptions, and found in runiform mss., e.g. *ol tašig özi üzä tutsar kopka utgay* ‘If one keeps that stone on oneself one will prevail over everything’ (Blatt 18). In Erdal 1979: 89 (footn.) I supported the hypothesis (put forward by Gabain 1959: 39) that *-gAy* should be related to *-gA* (discussed in section 3.113 above as a deverbal nominal suffix): The forms alternate for metrical purposes in the QB⁴³⁰ and the Ottoman future and modal suffix *-A* must come from

⁴²⁷ An error cannot be excluded; the ms. is (according to Peter Zieme) now lost. Benzing 1952 is of the opinion that *-r*, *-z* and *-s* are of different origins: He approvingly quotes Bang’s view connecting *-z* with the deverbal nominals in *-(X)z* (dealt with in OTWF § 3.111) and would like to link *-s* to the *-sXk* suffix forming necessitative participles. While the possibility that *-mAz* should come from *-(X)z* cannot be wholly excluded, the latter proposal seems unacceptable to me, as there is no ‘*+Xk*’ suffix in sight. Benzing wanted to link the latter parts of *-sXk* and *-dOk* to the particle *(O)k* and to *+Ik* (dealt with in OTWF § 2.11) but that is excluded because of the vowels. Benzing 1980 then proposes reading *-sXk* as *-(A)sXk*.

⁴²⁸ Doerfer 1993: 51, 47 still quotes the first form from ETŞ 12 as ‘*tuymayur*’ and the second form from M III Nr.11v3 as ‘*yadmayur*’. The first instance is the only evidence which he gives for his statement ‘Negative Konjugation sehr zerstört’.

⁴²⁹ I use this term to cover absolute or relative future meaning, or future tense and future taxis.

⁴³⁰ E.g. *bolu bergä ödläg kälü bergä kut* (6095) ‘Fate will support him and blessing will come upon him’.

-gA, which is retained in inflection in Khorasani Turkic. -gA may, I believe, have been an original participle suffix: The final /y/ of -gAy might have been the nominative form of the archaic demonstrative pronoun *i / *i (found e.g. in *inča* and *intin*; see the end of section 3.132 above), postposed for subject reference. This hypothesis would also explain why -gAy is only used predicatively and not as a participle:⁴³¹ -gA i / i would be syntactically equivalent to a sequence like -mIš ol, which also consists of a participle followed by a demonstrative and is also, as a verb phrase, limited to predicative use; the original 3rd person would have gotten generalised to other persons once (with the disappearance of *i) -gAy got opaque. In Old Turkic, -gA is found practically exclusively as formative of deverbal nouns but appears with the same function as -gAy in KP 75,2 and 76,6 (in a part of the text which shows signs of lateness).

The runiform inscriptions have no -gAy but -dAčI instead, e.g. in *tedäči*, *kaltači*, *ölürtäči*, *kältäči* and *ärtäči*, with -mAčI as negated counterpart; e.g. *ölmäči yetmäči sän* ‘You will not die or perish’ (ŠU E5) or *bo yolun yorisar yaramači* ‘If (we) go this way it will do no good’ (Tuñ 23).⁴³² -mAčI appears to have corresponded to -čI, another (quite rare) future participle suffix: There are a few instances of the positive counterpart of -mAčI as participle qualifying nouns which refer to pregnant living beings: Such are *buzagula-čI kotuz ingäk* (PañcÖlm 8) ‘a yak cow about to give birth’ and *kulna-čI käsrak* (DLT) ‘a pregnant mare’; a further example of *kulnačI* is found in Windg 13 (reedition by Zieme in BT XIX Anhang), of *buzagulačI* in IrqB XLI.⁴³³ Predicative -dAčI forms with future reference are found also in Qarakhanid, e.g. *bodun añar aydačI* ‘The people will say to him ...’ in the DLT and *mini yettäčI* ‘He will lead me’ in the QB. [*kim*]kän (< *kimkä nän*) *bermäčI män* ‘I will not give it to anybody’ appears in DreiPrinz 86, an early Manichæan source; the context is fairly clear. Since this text has the form *bergäy* two lines further on, its language may have shown a suppletive relationship between -gAy and -mAčI.

⁴³¹ Cf. however *tašgaru üngäy täg män* (MaitH XIII 4v7) ‘it looks as if I will go out’.

⁴³² Tekin 1968: 73 thought that -mAčI was contracted from -mA-gA+čI. This is unlikely because no such contractions took place at this early stage, although *AgU > A* may have occurred in *nälük* ‘to what purpose’ (DLT fol. 197 and elsewhere; possibly < *nä+gü+lük*) and in two other very late lexemes. Moreover, the deverbal noun in -gA (never negated in Old Turkic) is always agentive and would not have needed the suffix +čI to make it so.

⁴³³ Another possibility is that -mAčI is a contraction from *-mAdčI < *-mAdAčI, the second vowel then getting syncopated through the movement of the accent to the syllable before -mA-.

Occasionally *-gAy* is used with imperative meaning, as future forms sometimes will; see section 5.1 below for an example. I have not met instances of this form having optative meaning, as happens e.g. in Karaim; Gabain states this to be the case but gives no examples. *yaragay* ‘It will do’ is in KP 48,6 used to show the speaker’s agreement to a request, as ‘All right!’ or ‘O.K.!’; this idiomatic use can have come from future meaning as well and need not point at an early specifically modal meaning for *-gAy*. The elliptic modal use of *bolgay* ‘it will become’ is also discussed in section 5.1.

In Orkhon Turkic there may be traces of another future verb form referring to subjects with possessive suffix and used as main verb of sentences; it only appears twice in one passage in the KT inscription, repeated practically unchanged in the BQ inscription: *üküş türk bodun öltüg; türk bodun ölsükün. beriyä čugay yiš t'w'g²l²(w)n² yazı konayin tesär türk bodun ölsüküg* (KT S 6-7 and BQ N 5) ‘You Turk people were killed in great numbers. O Turk people, you might die! If you intend to settle the Shi-hui mountain forest and the T. plain, o Turk people, you might die.’ The translation of *-sXK+Xŋ* (once with the oral alternant of the 2nd person singular possessive suffix) as epistemic modal form is conjectural: *-sXk* otherwise forms necessitative participles. A possible nominal rendering would be ‘(It means) your inevitable death’.

The imminent future form in *-gAllr* (see section 3.26 for finite, section 3.285 for infinite use) does not seem to have turned up in inscriptional or in Manichæan sources, speaking for relatively late appearance. It might come from **-gAll äriür*, the aorist of the very rare analytical phrase in *-gAll är-* (section 3.251). Instances in *ZiemeTexterg* (Manichæan script) and *QB* (Arabic script) show that the suffix had /g/ and not /k/. Gabain 1974 § 259 with n.41 and Tezcan (BT III 77 with n.) spell it with /k/ because they think it resulted from a contraction with the verb forms *kal-ür* and *käl-ir*. This is, I think, less likely than my hypothesis; cf. the criticism expressed by Arat in ETŞ n. 35₁₁₀ (p. 433).

3.24. The analytical verb

A verb phrase can, beside a fully lexical verbal kernel, include another verb, which can be grammatical to varying degrees. See section 4.23 for complex verb phrases in which none of the verbs is purely grammatical; the ‘other verbs’ in the sections of 3.25 can have partly grammatical,

partly lexical meaning. When only one of the verbs in a verb phrase is lexical to any degree, the construction is called ‘analytical’; e.g. *öñdün sözlädi ärdi* (Abhi B 82b4) ‘He had said before ...’. There are even triple sequencess such as *kälmiš ärdi ärsär* (HtsTug V 79,25) ‘even though ... had come’ or *köz ärklig yinčürdäçi istädäçi ärmäz ärip* (Abhi B 56a10) ‘the sense of sight not being an analysing or searching one’. The second (and third, if any) verbal component of an analytical verb phrase is grammatical: Such complex verb phrases are necessary for expressing categories such as tense, taxis, , actionality, intention, ability, version, status, epistemic and deontic mood or for undergoing subordination in conditional or converb clauses. These contents are discussed in the following sections.

Analytical verb phrases expressing actionality, intention, ability or version (discussed in section 3.25) use a variety of verbs, but other categories are formed by having forms of lexical verbs get followed by forms of *är-* ‘to be’. *bol-* ‘to become’ also appears to express aspect, not actionality, only when added to perfect participles in *-mIš*; (see section 3.26). The lexical element always precedes the grammatical element, although scrambling is otherwise common in all texts. Another optional (possibly clitic) final member of a verb phrase is a subject pronoun.⁴³⁴ Such sequences can be broken apart only by the particles *Ok* (e.g. *ozmiš ok ärür*; *bermäz ök ärsär*) and *mU*. The particle *idi*, which precedes negative words to stress their negativity, can also be part of the verb phrase. When the lexical part of these phrases is one of the forms used as main predicates of sentences, either of the participle type (*-mIš*, *-yOk* etc.) or such that are used only predicatively (*-dl*, *-gAy*), the results generally come to be members of the tense-aspect system discussed in section 3.26. When converbs are used as first elements in analytical constructions, the products always express actionality, intention, ability or version.

Forms of *är-* which appear as non-first element in analytical sequences are the preterite, *ärür* and *ärgäy* to serve the expression of tense and taxis (see section 3.26), *ärmiš* for the status category (section 3.27), *ärdök* with possessive suffix to make object clauses, *ärip* / *ärmätin* to turn sentences into adjuncts und *ärsär* to incorporate them into conditional sentences or correlative relativization (as in *kanyu kiši kim bo yarokun ärmäk[ig] k(ä)ntü köñülin ičrä tarimış ärsär, ol kiši b(ä)lgüsi antag ärür*: (M III nr. 8 VII r2-4) ‘Any person who has

⁴³⁴ *bän* appears as *män* in this position (though not as independent pronoun) already in some runiform inscriptions, showing that the pronoun was indeed part of the verb phrase already at that stage.

planted inside his own heart this existence with light, that person's mark is as follows'). If *ärmiš*, *ärdökin*, *ärip*, *ärmätin* and *ärsär* were to be replaced by *-mIš*, *-dOk+*, *-(X)p*, *-mAtIn* and *-sAr* forms of the lexical verbs, these verb phrases would lose the possibility to express aspect.

When a verb phrase consists of two verbs, categories can be distributed among them in various ways. With the pluperfect consisting of two *-d+* forms, the first is the one inflected for 'person'; this is what we have in the first part of the following sentence: *kayu üdüin män beš törlüg ulug tülüg*⁴³⁵ *kördüm ärti, antada bärü ... olorgali küsüyür ärtim* (MaitH XI 4v18) 'When I had seen the five sorts of great dreams, from that time on was I wishing to sit ...'. In the second analytical phrase of the quoted sentence, it is the preterite form which is marked for person, as that is morphological and does not demand a pronoun. The 'number' category can have it both ways: In *yäk içgäkig kertgünmüz ärtilər* (TT VI 131) 'They were not wont to believe in demons' and in several additional sentences following this one or in *ötgürmiš topolmiš ärdilär* (HTs VIII 55) quoted above it is the auxiliary which has the plural suffix. In *čankramit kilu yorirlar ärti* (MaitH Y 225) 'They were walking about as a spiritual exercise' or in *tägrä tolī tururlar ärti* (KP 71,4), however, the lexical verb has the plural. *ädgü ö[glis]i*⁴³⁶ *bolyoklar ärdi* appears in U IV D 10, e.g., *tavišganka kälyök ärdilär* three lines further on, in U IV D 13: In most of the sentences quoted, the subject is explicitly referred to only in a preceding sentence. In *kertgünč köñüllüg upasi upasančlar bar ärtilər* (TT VI 130) 'There were truly faithful male and female community members' plurality is also expressed by the finite word.⁴³⁷ The TT VI 131 example just quoted is an example of 'negation' getting expressed by the lexical, the first element. Another distribution of negation would, in principle, also be possible, as with the politeness auxiliary *tägin-* in *yazokka tüšä tägin-mä-gäy ärtimiz* (KP 8,1) 'We would not venture to fall to sin'.

3.25. Types of action

The verbal categories for which complex verb phrases are formed can express tense or taxis, mentioned in the previous section, which localize the stretch of time during which the event took place with respect to the

⁴³⁵ Lacunas of the passage are here not marked as such as it is attested also in the parallel Sängim ms. (BT IX p.106).

⁴³⁶ Thus following UW 404a.

⁴³⁷ *ärti* can serve as the past tense of *bar* 'there is'; here, however, the two are combined.

moment of speaking or to other events. Other complex verb phrases – discussed here – serve the categories of actionality, intention, ability or version, which refer to factual features of the event. Actionality describes the *course* and *development* of the event in time and specifies the *stage* of this development in which the point referred to is situated, as actually perceived by the speaker. It contrasts with aspect, expressed not by auxiliaries but by the morphological verb forms, which is about the *presentation* of the event's course, taken by itself, as adapted by the speaker to the needs of his context (and not related to his perception). Another three 'types of action' are described in sections 3.252-3.254: 'Intention' is about the psychological preparedness of the subject for the event; 'ability' expresses the ability of the subject to carry out the action referred to while 'version' expresses its directionality, specifying whether its beneficiary is the subject or those associated with him, or some other party. Physical directionality, as in *ögür kaz ... uçup barir ärdi* (HTs III 777) 'A flock of geese was ... and flying away', where *bar-* signifies 'away', is not discussed here, as we take this to be a lexical and not a grammatical matter.⁴³⁸ The use of the auxiliaries *yarli(g)ka-*, *ötün-* and *tägin-*, which express the social positioning of the subject, in some cases thereby reflecting politeness and related pragmatic matters, is relegated to section 5.3.

Auxiliaries as described in this section and in section 5.3 have also been called 'postverbals'; they follow lexical verbs, forming sequences with them. The lexical verb is mostly in the form of a vowel converb, but the *-(X)p* form (often interchangeably with the vowel converb) and the supine in *-gAll* are also governed by such auxiliaries, as well as (less often) verbal nominals like the one ending in *-mİš* and the aorist. Occasionally, lexical verb and postverbal have the same shape, thus lacking a formal sign of government. This is, apparently, what we have in *yaylag tağima agipan yaylayur turur män* (IrqB 62) 'Climbing the mountain which serves me as summer station I spend the summer there', where the lexical verb *yayla-* and the auxiliary *tur-* both are in the aorist.⁴³⁹

⁴³⁸ Anderson 2002, who deals with the categories described in this section, also posits a category of "orientation" among them, with two members expressing motion away from and towards the speaker: a translocative in *bar-* 'to go', as in *äsri amga yalim kayaka ünüp barmiš* 'A dappled wild goat went up a steep cliff' (IrqB) and a cislocative in *käl-* 'to come', as in *süt akip kälti* 'milk came flowing out' (Suv 621,15). *uç-* 'to fly (off)' and *uça bar-* 'to fly off', both used as euphemisms for 'dying', are another example for the (not purely spatial) content of this opposition.

⁴³⁹ KP 1,5 has been read as *kuš kuzgun sukar yoriyur, sansiz tümän özlüg ölüdür* and translated as 'Birds pick (the ground), killing innumerable creatures'. Birds do, of

In Orkhon Turkic we still only find *ïd-* in the meaning ‘to do something completely’, *bar-* used for signifying ‘to gradually get more intense’ and *kör-* with the meaning ‘to make sure one does something’ as auxiliaries, all three joined to the vowel converb; the first two express actionality, the third intention. The incorporation process of *u-* ‘to be able’, the fourth early auxiliary, started right after the Orkhon Turkic stage; it gradually became part of a fused morpheme sequence expressing impossibility. The three auxiliaries mentioned first remained independent words, as did the subject pronouns.⁴⁴⁰

3.251. Actionality

This category deals with the development and change of the event in the course of time. In Old Turkic, actionality is mostly expressed by partly grammaticalised auxiliary verbs; there are, however, also other means to express it. The content of the passive formative *-sXk-* (see OTWF section 7.41), e.g., differs from that of the more common passive formative *-(X)l-* in actionality, among other things: *tutsuk-* is ‘to get caught’, e.g., whereas *tutul-* is ‘to be held’ or ‘to be caught’; the *-sXk-* form is marked as inchoative. The task of some marginal deverbal verb formatives consisted of expressing actionality; thus the formative *-gIr-* mainly attested in the DLT and documented in OTWF 539-540 is added to both transitive and intransitive verbs and gives the meaning ‘to be about to carry out the action denoted by the base verb’. The aorist can, beside expressing continuous aspect and continuous action, also express repeated action, as *körür* in *balik taštın tarıgčılarag körür ärti* ‘(in his outings from the palace) he used to see the farmers outside the town’ (KP 1,3) or *sözläyür* in the following passage: *birök öziñä kilmagu tög nä nägü iş işlägäli ugrasar ”...” tep sözläyür ärdi* ‘if, however, she intended to do something which she wasn’t supposed to do, she would say ”...” (U III 54,15). Similarly *ölürür* in *yol yoridaçï yaljuklarnıñ ädin tavarin kunup karmalap özlärin ölürür ärtimiz* (MaitH XX 13r18) ‘We used to rob the possessions of travellers and kill them’.

course, have the habit of walking about the freshly cultivated earth when looking for worms and the like but, since the context does not make one expect their walking about to get thematized, *yoriyur* might be transitory towards the auxiliary use of *yori-*. Peter Zieme has, on the other hand, proposed reading *yuliyur* ‘plucks’ instead of this word; this is perfectly possible, as *l-*diacritics are often forgotten by scribes.

⁴⁴⁰ A single Orkhon Turkic instance of the incorporation of a lexical converb with the auxiliary *ïd-* is mentioned below.

In Uygur the auxiliaries *alk-*, *bar-*, *bol-*, *är-*, *id-*, *kal-*, *käl-*, *tur-*, *tut-*, *tükät-* and *yor-* express actionality. This may not be a complete list, as it is often difficult to ascertain whether a verb is fully lexical or an auxiliary; the distinction between these two can be fuzzy to some degree. Take *yavašim birlä yakišipan adrilmalim ... közi karam birlä ... külüšügin*⁴⁴¹ *oloralim* (M II 8,20). This could mean ‘Let’s draw close, me and my gentle one, and never separate; may my black-eyed one and me sit and laugh in company’, taking *olor-* to be lexical; or, if *olor-* is understood as an actionality auxiliary, it could mean ‘may we keep laughing together’. The translation of T.Tekin 1968: 290 for *türk bilgä xagan türk sir bodunug, oguz bodunug igidü olorur* (Tuñ 62) takes *olor-* to signify ‘to rule’ (as it clearly sometimes does): ‘Turkish Bilgä Kagan is (now) ruling, taking care of the Turkish Sir people and the Oguz people’. Anderson 2002 (following Kondrat’ev 1981: 117), on the other hand, takes the verb *olur-* (as he writes it) of this passage to be a durative auxiliary. A similar sentence occurs in KČ E2: *bil]gä Köl İč Čor Tarduš bodunug eti ayu olortı*, by Tekin rendered as ‘... reigned ruling and governing the Tarduš people’. Both interpretations are perfectly possible but we follow Tekin if no unambiguous Old Turkic examples for an auxiliary *olor-* are brought into the discussion.

Verbs which by lexical meaning denote a stage in the development of an event, e.g. *başla-* in *nomlagalı başla-* (HTs III 815) ‘to start to preach’, should not be called auxiliaries: They do not create members in a grammatical category. See section 4.23 for such constructions. The Middle Turkic *Qısaşu 1-anbiyā* uses *-U başla-* to denote the beginning of an action.

The most common construction for expressing actionality is for the auxiliary to govern a converb form of the lexical verb. The most common converb is here the vowel converb; all auxiliaries which can govern *-gAll* forms are found to govern also *-(X)p* forms and vowel converbs, and most auxiliaries governing *-(X)p* forms are found to govern vowel converbs as well. When a particular auxiliary was used in different construction the meaning did not always change, but *tur-* ‘to get up; to stand’ has two quite distinct actional meanings: The meaning of *-gAll tur-*, which describes what is about to take place, emanates from ‘getting up’; on the other hand the meanings of *tur-* with the vowel converb, with the *-(X)p* form and with the *-mlš* and aorist

⁴⁴¹ The facts. shows that a reading *külüšüpän* as converb cannot be excluded; there is no other instances of *külüš-üg* or *külüš-ük* and such a derivate from an *-(X)š-* verb would be very much of a rarity.

participles, which describe continuous or repeated activities or states, come from ‘standing’.⁴⁴²

The sequences *-U är-*, *-U yorï-*, *-U tur-* and *-U tut-* all denote continuing or repeated action. With Qarakhanid *-U bar-* the action intensifies with time and the speaker witnesses its development. *-U käl-* also denotes actions which have been going on for some time, but looks at them from a late stage, when they perhaps have become habitual. *-U kal-* actually says that the action’s last stage is being witnessed. *-U tükät-*, *-U alk-* and *-U id-* all three denote completion; *-U id-* differs from *-U tükät-* and *-U alk-* in implying that the completion is reached easily, with momentum and in one drive.

-(X)p är-, *-(X)p kal-* and *-(X)p alk-* appear to have had the same meanings as *-U är-*, *-U kal-* and *-U alk-* as described above. The rare *-(X)p tur-* was used for referring to states reached after the end of the activity described by the lexical verb; whether it was also with durative meaning, as was *-U tur-*, is not clear. *-(X)p bar-* is, in the Uyğur examples I have encountered, used for describing processes approaching a crisis, as *-U bar-* referred to above; the counterpart with vowel converb, which I have met only in Qarakhanid, also refers to activities getting stronger as time goes by, but is used with positive meaning as well.

-gAll alk- may have had the same meaning as *-U alk-* and *-(X)p alk-*. The common *-gAll tur-* denotes imminent events while the rare *-gAll är-* may denote intended actions. The DLT’s *-gAll kal-* states that something almost happened (but then didn’t, or didn’t as yet), thus being, in a sense, the opposite of *-gAll tur-*. With none of these four auxiliaries used with the *-gAll* converb is there any actual action going on at the moment of speaking, then, be it that the action has been intended, is imminent, almost happened or has already been completed.

Fourthly, there are auxiliaries governing participles with actional content. The aorist followed by *turur* denotes continuing action, the meaning it also has with vowel converbs, and *-Ar barir* has the same meaning as *-(X)p barir*. *-mİš tur-* forms descriptions of states following completed actions. *bol-* is linked to the aorist and to *-dAčI* for referring to transitions into states; states with future perspective in the case of *-dAčI bol-*.

Durative meaning appears most commonly to have been expressed by *tur(-ur)* with the vowel converb. This is also the semantically least

⁴⁴² The use of *tur-* as copula, described in section 3.29, also comes from this stative meaning (note that ‘stative’ comes from Latin *stare* ‘to stand’).

marked way: It denotes continuing or repeated action which is not necessarily agentive; durative *tur-* no doubt evolved from the use of this verb to mean ‘to stand’. There is a Manichaean instance in *kut kolu alkış paşik ayu turur sizlär* (Wilkens 1.6 in Ölmez & Raschmann 2002: 401) ‘You keep praying for grace and intoning blessings and hymns’. In *idu turur* ‘keeps sending (again and again)’ (TT X 341), the meaning is iterative (*id-* ‘to send’ being a final -transformative verb), while it can be durative or iterative in instances such as the following: *busuř kadgu bälgüsi äñirä turur* (TT I 79) ‘The signs of sorrow and trouble keep pursuing (you)’; *tsuy irinčülärimiz asilmadin üklimädin korayu turzun* (TT IVB 45) ‘may our sins continuously diminish, not increase or become more numerous’. *azkya öñrä yoriyu turzunlar; män una basa yetdim* (Suv 615,14) ‘Please walk on a bit; I will have reached you in a moment!’ or *yavlak sav bälgülüg bolti; közünü turur* (DKPAMPb 161) ‘an evil matter has appeared and is in current evidence’ are clearly durative: *yori-* is non-transformative while *közün-* is initial-transformative. Participial *turur* instances: *kariřu turur tört azıglıg* (ms. U 5396 quoted in the n. to BT XIII 25,4) ‘having four canine teeth which keep on gnashing’; *kaxřařu turur etigligin tümägligin ... kälir* (BT III 218) ‘she comes along with clanking ornaments’; *yalinayu turur trižulın alıp ...* (TT X 358) ‘taking up his flaming trident ...’. There is an example with an inchoative verb in the verse *saranlanmak kirig sakındačiniñ / sarıgaru turur közi* (ETŞ 11,37) ‘The eye of a person who thinks filthy miserly thoughts keeps getting yellow (as an effect of this vice)’. The verb phrase *sözläyü turur ärkän* is used in U III 57,2, U IV A 233 and B 18 (all in parts of the same text) in contexts that betray durative aspect rather than actionality.

When *tur-* is used with *-(X)p* forms of the verb it is not clear whether it is meant to describe states or whether these are instances of lexical *tur-* ‘to stand’: *yavlak yağı seni közädip turur, artatgalı sakınur seni* (ChristManMsFr, ChristFr 8) ‘The evil enemy is continuously (or: ‘standing there and’) observing you, plotting to corrupt you’; *keñ yetiz kögüzintä iki ämigi artokrak yarařıp turur ärdi* (U IV B 55) ‘Her two breasts on her wide bosom were standing out very harmoniously’.

With *är-* the vowel converb is more common than the *-(X)p* converb: Examples for *-U är-* are quoted in UW 405b-406a, §25 of the entry on *är-*. This rather common sequence conveys durative meaning; e.g. *kop adadın küyü közädü äriürlär* (MaitH XI 4a9) ‘they are engaged in guarding (her, the future mother of Buddha Maitreya) from all dangers’; *ul[uř ba]llik[larıg] küzädü ärzünlär* ‘May they continuously guard the towns and cities’ (MaitH Y 16); *řastrlarıg ... ađtaru äriür biz* (HTs VII

1023) ‘we are engaged in translating the *śāstras*’. All examples I have come across describe an agentive activity, not a state or a process.⁴⁴³ The sequence *-(X)p är-* appears to convey post-terminal meaning, e.g.: *ol azıñ kim taştan aška içgükä katlap ärür, ymä ätözkä kirür, ol içräki az birlä katalur*. (M I 16,6; Manichaean) ‘That lust of yours, which is mingled with food and drink from outside, enters the body and mingles with internal lust’. Other instances for the sequence *-(X)p är-* are mentioned in §26 of the entry for *är-* in UW 405b-406a; an instance with *-mAtIn*, the negative counterpart of the vowel converb and of *-(X)p*, can be found in §27.⁴⁴⁴

yori- ‘to walk’ denotes ongoing action when used as an auxiliary, e.g.: *kamag on bölök şastr yaratdı; amtı barça keñürü yoriyur* (HTs V 1 b 5) ‘He composed a *śāstra* of all in all ten chapters; at present he is busy elaborating on it all’; *anta ymä sansız tümän suvdaki tınlıglar buza butarlayu yoriyurlar sorarlar tikärlär sančarlar* (Mait 183v24) ‘There, again, innumerable myriads of water creatures are busy destroying them and tearing them to pieces and they suck them out, sting them and pierce them’. The use of *yori-* as auxiliary has to be distinguished not only from the meaning ‘to walk’ but also from the meaning ‘to live’ or ‘to lead a certain way of life’ and from its use as copula (section 3.29). The instance *tamudın kurtulup amtı bo kántü uvut yenlärin äñinlärintä yüdü örtänü yala yoriyurlar* (Mait 75v20), e.g., could have the verb *yori-* either as auxiliary or in the more literal meaning of ‘walking about’ or just ‘existing’. *kayusı muşadu adını oynayu külä yoriyurlar* (Mait 89r17) could also describe the gods’ way of life and not just their current behaviour, although the sentence is an utterance by somebody who just happens to meet them: He might be extrapolating from his observation. The difference between *är-* and *yori-* as auxiliaries with the vowel converb may be that the activity is current with *är-*, a way of life with *yori-*. A further instance governing the aorist of the lexical verb is quoted above in this section. Usually, *yori-* governs the vowel converb, this actional phrase leading to the present form in the Oguz languages.

⁴⁴³ For *-u är-* cf. also Gabain’s n. to l.1870 of her edition of HTs VII and Röhrborn’s n. to l.2035 of his edition of the same HTs book. The durative participle suffix *-AgAn*, which exists in a number of modern Turkic languages, can possibly be the result of a contraction of *-A är-kän*; this would assume the existence of a *-gAn* participle from *är-* beside the petrified conjunction *ärkän*.

⁴⁴⁴ *ärmiş* in *biz[iñä] tapıngu yöküngü ärdini beriüp ärmiş* (U I 8) ‘It turns out that he has given us a jewel to worship’ is, according to UW 392, to be read as *turmiş*. *-gAllr*, mentioned in §27 of the *är-* entry, is not a converb, as stated there, but a participle.

tut- ‘to hold’ is in Manichæan texts used for expressing continuously consistent behaviour: *alkinču ölüm künin öyü tutar* (M III nr.8,VII v6) ‘He keeps his mind on the day of death’; *özlärin saklanu ... täzgürü tutzunl[ar]* (M III nr.20, 38,6₁ + ZiemeTexterg II) ‘Let them be sure always to be on guard and keep behaving evasively’.

käl- ‘to come’ is used as an auxiliary indicating that the action described by the lexical verb has been going on for some time before reaching the state it is at when being narrated; e.g.: *kılmış kazganmış buyan ädgü kilinčlarinñ ešilü birikü kälip tüš bermäki üzä* (DKPAMPb 43) ‘as a result of the good and saintly deeds which he carried out and earned having gradually become a considerable heap and having given fruit’. *kaparu kälmiş ätintäki söl suvi* (U III 41,0-1) is the ‘the lymph liquid (which was) in his flesh which had become quite swollen’. Similarly Qarakhanid *olardın kalu kälidi ädgü törö* (QB 269) ‘From them good laws have been passed down’. *ünä käl-* ‘to come forth’ in Höllen 102-3, on the other hand, shows *käl-* in its cislocative meaning.

kal- is used as auxiliary with vowel and *-(X)p* converbs to express that the action described is the end stage of a process: *amti ärtip kalir ärki sän* (TT II,2 7) can perhaps be freely translated as ‘Now it looks like things will soon be over with you’. Similar in content we find IrqB 17: *özlük at öñ yerdä arip oñup turu kalmış* ‘A royal horse came to a standstill in a desert, exhausted and wilting’. The DLT (fol.16) says that the sequence *-gAll kal-* denotes ‘that the action was about to be performed but has not yet taken place’ and gives the following examples: *ol turgalı kaldı* ‘He was about to stand up’; *ol bargalı kaldı* ‘He was about to go but had not yet gone’. This is an aspectual content, unlike that of the QB’s (and later) *yaz-*, which expresses the observation that somebody missed the carrying out of an intended act.

-U bar- is used with actional meaning in Orkhon Turkic and Qarakhanid but not in Uyğur (which has *-(X)p bar-* instead): *türk bodun ... yokadu barır ärmiş* (KT E 10) signifies ‘The Turk nation was gradually getting destroyed’. In *туру etlü bargay kamug işläriñ / eliñ arta bargay keñügäy yerin* (QB 5915), on the other hand, the *-U bar-* sequence is positive: ‘All your affairs will prosper more and more, your realm will go on growing and your territory increase’.⁴⁴⁵

⁴⁴⁵ In *ketü bardı kündä üzöldi küči* (QB 247) ‘His power waned and was broken in a day’, *bar-* seems to appear in its lexical use and not as auxiliary.

Uyghur *bar-* ‘to go’ governs *-(X)p* forms of final-transformative verbs as auxiliary, which should, of course, be distinguished from the translocative meaning of this verb: *ätözintä ot mahabuti küçlüg bolup örtänip bariş tükäl küç küsün bergäli umaz* (DKPAMPb 536) ‘The fire element in his body comes to dominate, he burns away and is unable to muster energy’ shows a process getting stronger and worse. Then we have *mäniş yüräküm yarılıp böksilip barmadin näçükin turur munü täg* (Suv 626,23) ‘How come my heart doesn’t split and break apart but stays like this?’, *amti čaştanı elig közünmüz bolup bardı* (U IV A 233) ‘Now king Caştana has completely disappeared’; *an bitigdü savı takı adirip barmayok ol; anın isig özi üzülmüz* (Suv 18,14 + a Berlin fr.) ‘In the court register her case has not yet reached a decision; that is why she isn’t dying’ and *inčip igläyü birlä ök sav söz kodup tutar kapar ärkän ölüp bardı* (Suv 4,17-19) ‘The moment he got ill he lost the power of speech and, while trying to regain his powers, he suddenly died away’. The last two and in fact also the second example refer to death, which is a sudden change of state. On l.28-9 of a text mentioned in footn. 186 we have two actionality auxiliaries: *bo nomka kertgünmägüci tünlig yoriyu turur ärkän ök ölüp bargaylar* ‘Creatures who do not believe in this teaching will suddenly die right in the middle of their life’. What is common to all the examples is the finality of deterioration, which is what *-(X)p bar-* appears to have expressed. In *näçä bo ... täñrilär täñri katunları ... üd ärtürürlär ärsär, näçä näçä kšan üdlär ärtsär, anča anča ädgülüg özlari täñri mäñilari ärtär barir* (MaitH X 1r17) ‘In the measure that these ... gods and goddesses spend time ... and ... the moments pass, in that same measure do their goodly existence and their divine pleasures gradually get lost’ *ärtär* and *barir* are used in parallel fashion, but the latter was clearly added to express the same actionality as above.

Action which is *about* to take place is mostly described by the sequence *-gAll tur-*: e.g. in *samtso açarı öz eliğä bargalı turur* ‘The master Tripiṭaka is about to return to his homeland’ (HTs 5,270). Many of the examples describe imminent danger: *muna amti balik içiğä kirgäli turur* ‘(The monster) is, right at this moment, about to enter the town (fragment quoted in the note to TT V A41). *isig özüm üzülgäli turur* (U III 37,28) is ‘I am about to die’, *iki yanım ... oyulup tälingäli turur* (U III 37,3) ‘my two sides are about to ... get hollowed out and pierced’; see U III 37,3 and DKPAMPb 1116 and 1129 for further examples. In *on miñ balıklar ... unakiya ölgäli turu täginürlär* (Suv 603,11) ‘10,000 fish are facing imminent death at any moment’ the construction gets

subordinated to *tägin-*, a verb denoting ‘experience’. This actional use of *tur-* accords with its particular meaning when it signifies ‘to get up, arise’ (and not ‘to stand’).

What *-gAll är-* used in *ädgü kilinči bar ärip adinlarka ävirgäli ärsär* (BT II 1201) signifies is not clear, as most of the main clause is in a big lacuna. I tentatively take it to mean ‘be about to (or: intend to) deflect its benefit to others’, somewhat similar to the meaning of *-gAll tur-*. The sequence **-gAll ärür* might be the source of the suffix *-gAllr*, which (also) refers to the imminent future (discussed in sections 3.26 and 3.285). The formation with *-gIr-* (aorist vowel /A/) attested only in the DLT and discussed in OTWF section 6.3 forms verbs stating that an event is about to take place. In view of its meaning it *may* have resulted from a contraction of *-gAll är-*. What speaks against this is its aorist vowel, which is not /U/ as with *är-*, but /A/; the OTWF proposes a different etymology for the formative.

turur is attested also with participial forms of the verb; e.g. with *-mİš*: *irinč [yar]l(i)g umugsuz inagsız bo tünliqlar montag ämgäklig [ažun]da tüşmiš tururlar* (U II 4,8) ‘these poor hopeless creatures had fallen into such an (existence) of suffering’. This ‘historical present’ clearly describes a resultative state, the situation in which the creatures find themselves after their fall. An early instance with an aorist, *yaylayur turur* ‘spends the summer’, is quoted above; it refers to a continuing state. Similarly *aka enilär mä barip köriip kilm(a)z turur* (UigBrieffr C 10-11) ‘The elder and younger brothers have not been coming to see us either.’

In *täñri kirkınların täñri ogulanların alkamış törütmiş ol, kim ol örginniñ özin tæg ortosın tæg ... bolup tururlar* (BT V 175) ‘He has created⁴⁴⁶ the divine maidens and divine youths, who have become as the heart and center ... of that throne’ the sequence *-(X)p turur* is unlikely to be describing an ongoing process; rather, this must be a present perfect, as in a number of modern languages: *bol-* ‘to become’ is a final-transformative verb in that one *is* the new thing just after one has finished becoming it.⁴⁴⁷

⁴⁴⁶ See the n. to the passage for the unusual use of *alka-*, apparently copied from Iranian.

⁴⁴⁷ Not all instances of the sequence *-(X)p tur-* need have *tur-* as auxiliary: The sentence *keñ yetiz köküzintä iki am[ig]i artokrak yaraşıp turur ärdi* (U IVB 55), e.g., probably signifies ‘On her broad chest her two breasts were standing out exceptionally harmoniously’ with *tur-* in lexical rather than grammatical use. The sequence aorist + *ärdi* is, however, an instance of an analytical verb phrase.

When added to present or future participles, *bol-* ‘to become’ describes transition into new states, presenting the action as the culmination of a process: In *keñrünü aš berür boltılar* (KP 68,3) ‘They began to grumble whenever they were serving him food’, *bol-* expresses the entrance into a situation characterised by repeated actions (of grumbling at every meal), i.e. inchoative meaning. Similarly *käntü käntü ätözlärintä ... yid yipar tozar ünär boltı* in the ms. T III M 168 quoted in the n. to TT VA 117 ‘perfume began emanating from the bodies of each one of them’. In OTWF 386 examples for the construction *-gAn bol-* are quoted from various texts; there, the infinite verb form appears to be used nominally. In *bizni barča utup yegädip biznidä öñrä burxan kutin bultači boltı* (U IV A 265-268) ‘he surpassed all of us and has become destined for buddhahood before us’ the subject is described as just having attained a new future: This is a future inchoative. A complex verb phrase of the shape *-(X)gčI bol-* is found e.g. in *burxanlarka nom tilgänin ävirtgäli ötügči boltum* (Suv 163,18) ‘I beseeched the Buddhas to turn the wheel of dharma’; in verbal content this is similar to the common phrase *ävirtgäli ötüin-* (attested e.g. in BT II 114). Cf. also the different construction in *burxanlarig ... ävirtgükä ... paramitlarig tošgurtguka ötügči bol- ... nom tözin ... ukitguka ötügči bol-* (Suv 181,17-23). ‘to become one who does ...’. *bol-* appears never to be linked with converbs; see section 3.29 for its use with nominal predicates.

We finally turn to the notion that the action referred to by the lexical verb has been completed. This is most commonly expressed by *tükät-* ‘to finish (tr.)’ as auxiliary governing the vowel converb: *bilgülikin ukgulukin ornatu tükätip temin ök buluñ yıñak sayu yaddılar* (HTs VIII 72) ‘They finished determining how they (i.e. the teachings, accusative) were to be understood and then immediately spread them to all four directions’ or *küçüm küsünüm kävilü tükätti* (HTs VII 2097) ‘My powers have waned completely’. Note that *kävil-* is intransitive: The auxiliary is in any case *tükät-*, not *tükä-* ‘to finish (intr.)’. Other examples for the sequence are *ärtürü tükät-* (ETŞ 13,29), *yarlıkayu tükät-* (HTs V 13 b 27), *körü tükätip* (HTs V 1 b 13), *kılu tükät-* (HTs V 7 b 11), *ölürü tükät-* (Suv 22,13) and *yorıtu tükät-* (ShōAv 288).

In some cases there appears to have taken place a semantic shift from ‘completely’ to ‘already’: *kılu tükätmiş ağır ayig kilinčlarım* (SuvSündenbek 75) is ‘the gravely evil deeds which I have already carried out’; similarly *öñrä ölürü tükätmiş tünliglar* elsewhere in Suv

and *öñrä kašmirtä [... v]idiš alu tükätmiš ardi* (HTs III 828) ‘Before, in Kashmir, he had already received instruction’.

alk- ‘to destroy, do away with’ is, as an auxiliary, used with a meaning similar to *tükät-*; e.g. in *sakinč kilu alksar* (TT V A41) ‘when one is through with the meditation’ or *sözläp nomlap alkmaguluk ulug buyan ädgü kilinč* (Suv 671,17) ‘*puṇya* so great that one should not expect to be ever finished describing or preaching it’. Note that the first-mentioned instance uses the vowel converb, the second the one in *-(X)p*. In *kilinč küčin kīra alkīp aritīp ... nīzvanī küčin kīduyu*⁴⁴⁸ *tükätīp* (ETŞ 13,109-110) the two actional verbs *alk-* and *tükät-* are used in parallel manner. Similarly in *kānt tāgrāki bodunug bukunug öliürgāli alkīp muna amtī balik ičīñä kirgāli turur* (TT X 52) ‘He is now through with killing the population in the town’s suburbs and just about to enter inside the city’, which shows two auxiliaries with *-gAll*, one denoting completed action, the other action just about to start. Cf. also UW 95a, entry *alk-*, §3.

The auxiliary *īd-* ‘to send off; set free’ refers to actions carried out completely, as *oplayu tāgīp sanča īdīp topulu ünti* (KČ E7) ‘He attacked head on, routed (*sanč-*, them) in a whirlwind (*īd-*), pierced (their rows) and emerged.’ In *ičgīnī idmiš*⁴⁴⁹ ‘lost (trans.) completely’ (O F2, Orkhon Turkic). the converb suffix (if read correctly) adapted itself to the vowel of the auxiliary: The sequence seems to have already started its way towards morphologization, which we find completed in a number of modern Turkic languages including Turkmen (with the whole verb paradigm) and Khaladj (only in the imperative). Though the auxiliary exists also in Uygur, e.g. *unitu īd-* (Xw 14) ‘to forget completely’, Uygur does not appear to have adapted the converb vowel to this auxiliary’s stem. Nor does this happen in *sanča īdīp tupulu ünti* (KČ E7) ‘He routed them in a whirlwind, pierced (their rows) and emerged (on the other side)’.

A ms. which must be late as it has the Mongol loan *laggač < naṣaču* (see the end of § 2.404) on 1.72 shows the sequence *-(X)p īd-*: *maytri burxanniñ yarligin bitip idtimiz* clearly signifies ‘We have fully written down Buddha Maitreya’s pronouncement’, not ‘we have written and sent off ...’.

⁴⁴⁸ Not *kīduyu* as written in the text.

⁴⁴⁹ Spelled with *d*² and *s*².

3.252. Intention

The verbs *ugra-* and *kör-* are used for expressing that the subject intends to carry out the action denoted by the lexical verb, whereas *kilin-* expresses physical preparation. While *ugra-* just states that there is an intention on the part of the speaker, *kör-* ‘to see, to look’ expresses a conscious intentness towards carrying out the action described in the lexical verb: *katig yanı kura kördüm* (DLT fol.541) ‘I tried to string the rigid bow’. This meaning is attested already in the Orkhon inscriptions: *buñadıp kagan yälü kör temiş* (Tuñ 26) ‘The kagan reportedly got worried and said ‘See to it that you ride fast!’; *saklanu körgil* (TT X 426) ‘Make sure that you take care!’ is an Uygur example. With *ugra-* we have, e.g., *nä nägü iş işlägäli ugrasar* (U III 54,15) ‘if she intended to commit something’; cf. U III 11,15₂. What the meaning of *kil-* in *aka enilär mä barıp körüp kilm(a)z turur* (UigBrieffr C 10-11) ‘The elder and younger brothers have not been coming to see us either’ might be is not clear; by the context one might think that it means ‘to make a small effort towards an aim’.

3.253. Ability

The verb *u-* expresses the subject’s ability to carry out the action denoted by the base verb. In early texts, *u-* is sometimes used as a lexical verb: *otsuz suvsuz kalti uyin* ‘How should I manage without grass or water?’ (IrqB 45); *sinidin ketip näcük ugay män* ‘How will I manage if I leave you?’ (U III 48,11) is rather similar in content. *bo yer üzä näñ andag t(ä)v kür yälvi arviş yok kim ol umasar; š(i)mnu [k]üçinä kopug ugay* (M II 5,10-11) ‘There is no such trick and magic in this world as he would not be capable of; with the devil’s support he will be capable of everything’. Beside that there are two petrified forms, *u-sar* ‘if possible’ (e.g. in Tuñ 11) and *u-yur* ‘capable person’ (e.g. in U III 5,13).

In its auxiliary use, *u-* always accompanies converb forms of verbs. Most commonly, *u-* follows the vowel converb of the main verb; already so in Orkhon Turkic: *eliñin ... käm artati udači ärti* ‘who could have corrupted your realm?’ (BQ 19). The converb vowel of the main verb changes to *-U* in most post-inscriptional texts (unless it has this shape already), being involved in a process of morphologization developing in the course of the history of Old Turkic; see Erdal 1979 and 1979b; see section 2.413 above). The two words (the lexical converb and the finite verb of inability) were not yet fused in most of early Uygur, as the particle *ymä* could get between them; e.g. *öliü ymä umaz biz* (MaitH XX 14r17) ‘Yet we are unable to die’. They are,

however, joined in spelling in Uyghur texts in Sogdian script.⁴⁵⁰ The QB spells them as one word, with one vowel (*U*) at the juncture; clearly, fusion had already taken place in a part of the Old Turkic dialects. Most instances are negative, e.g. *ädgüliüg tatagniñ idişi bolu umazlar* ‘They cannot become the vessel for good taste’. The new suffix *-UmA-* finds its place among the morphemes of inaction, after the voice formatives. Several instances of positive fused forms of possibility are, however, found even in the (Qarakhanid) QB, in couplets 2870, 3055, 3789 and 4838.

The normal positive counterpart of *-u uma-* is, in Uyghur, *-U bol-*, especially when stating not that somebody is unable to do something, but that the action in question cannot be carried out by anybody; Gabain’s note to l.1870 of her edition of HTs VII (§ Ic1) quotes the HTs example *örü bolmaz* ‘one cannot rise’.

The *-gAll* form is also well attested with *u-*; e.g. in *udgurgali sakinti, n(ä)ñ udgurgali umadi* ‘He thought of waking him up but was quite unable to wake him’ (Mait Taf 128 v 25) or *körgäli umazlar anñ tärinjin* (HTs VIII 41) ‘They are unable to see its depth’. Its positive form is less common than the negative: An example for it is *anı näčük utgali yegädgäli ugay sizlär* (U IV A 77) ‘How will you be able to win against him?’; *-gAll ugay* appears also in TT X 81.

-gAll bol- and its negative counterpart are similar in content, but are usually meant to hold for any subject; e.g. *bilgäli bolmadi* ‘it was impossible to recognize (something)’, *tavrak bargali bolmadi* (HTs Tug 13a22) ‘it was impossible to advance speedily’, *näñ olartın ozgali ... bolmaz* (BT II 927) ‘It is quite impossible to escape from them’, *anın bolur bolgali yalñuklarka elig xan* (Suv 562,3-5) ‘therefore they can become people’s rulers’, or *keñin tärinjin tüpkärgäli ... bolmaz* (BT I A₂ 12) ‘One cannot fathom its breadth or its depth’. Cf. also BT XIII 4,4 and HTs VII 26 and 47. In *antaki kişilär bir tæg äšidgäli boltılar ... nomlarig* ‘The people who were there were all equally able to hear ... the *sūtras*’ (HTs VI fol. 26v) the *-gAll bol-* sequence has an explicit subject; we find *tä]ggäli boltum* in HTs III 372.⁴⁵¹ The note to HtsBriefe 1870 (§ Ic) quotes some additional ‘impersonal’ examples but also one in the 3rd person plural.

The DLT apparently replaced *-gAll bol-* with *-sA bol-*: *tälim sözüg ukxa bolmas, yalim kaya yiksa bolmas* (fol.453) ‘One cannot understand blathering words as one cannot tear down a cliff’; *könül kimnig bolsa*

⁴⁵⁰ Assuming that *alkumaz* (325) really signifies ‘He is unable to destroy’ and *alumadi* (86) ‘he was unable to take’; the contexts of both words are completely destroyed.

⁴⁵¹ Cf. *körgäli umazlar anñ tärinjin* ‘They are unable to see its depth’ above.

kalı yok ėigay / kıl̄sa küċün bolmas anı tok bay (fol.550) ‘One cannot make somebody satiated and rich by force if he has a poor man’s heart’. Rabġūzı̄ has the same construction (documented in Schinkewitsch 1926: 79).

The QB, the other great Qarakhanid text, has *-U bil-*: *bāgig kulda adra bilür mü öziñ* (4836) ‘Can you distinguish between lord and servant (after they die)?’; *köndri bilmāz yorik* (2077) ‘He is unable to correct his behaviour’.

The *-(X)p gerund* is much less common with *u-*; we have it e.g. in *tutup ugay* (Mait Taf 129 v21 in fragmentary context) or in *özümniñ başgarıp umayokum ärür* (r63 of a colophon published in AbiShōtan p.76) ‘this is a case of my being unable to succeed’.

-gU tąg ärmāz is another construction expressing impossibility, e.g. in *ögrünċ[ümüz] tükäti sözläġü tąg ärmāz* (TT II,1 55) ‘our joy is quite indescribable’. If the phrase is to express for whom the action referred to is impossible, the subject is referred to by a possessive suffix added to *-gU*: *bo montag tod uçuz savların körüp särgüm tąg ärmāz* ‘I cannot bear to see such vile things (happening to my country)’ (U I 41). See section 3.284 for the construction *-gU tąg*.

-gUIXk är- also appears to express possibility and ability, but the possibility emanates from the object and not from the verb’s subject, e.g.: *alp tüpkärgülük ärür* (BT I D 184) ‘It is difficult to fathom’. In *bütürgülük ärmāz ärti* (Suv 602,12) ‘It was impossible to bring in order’ and *kimkä umug inag tutguluk ärti* (HTs VII 1673) ‘With whom could one have sought refuge?’ the content is transferred into the past. With reference to the subject in a genitive and a possessive suffix added to the *-gUIXk* form we have *adınlarnıñ bilgülüki ärmāzlär* (Suv 377,7) ‘They cannot be known by others’.

The verb *yaz-* ‘to miss’ appears to have become an auxiliary in the language of Kāšġarı̄: He translates *ol anı uru yazdı* (fol.470) as ‘He almost struck him’. This appears beside the sentence *ol käyikni yazdı* ‘He missed his shot at the game’. It is therefore likely that *yaz-* did not, at that stage, denote unintended actions which nearly happened, but only actions which the subject just failed to carry out. Hence the mention of this auxiliary in the section on ability, here rather inability. Cf. however the DLT’s *-gAll kal-* above.

3.254. Version

The Old Turkic category of ‘version’ specifies either the subject itself or another entity as the beneficiary of the action referred to in the sentence. The object version or benefactive is in Old Turkic expressed

by the converb followed by *ber-* ‘to give’ as auxiliary, the subject version or self-benefactive by *al-* ‘to take’ as auxiliary.

al- may signify ‘to do for one’s own sake’, or ‘for the sake of the subject’s own party’; e.g.: *tokuz oguz terä kovratu altim* ‘I gathered and organised my Tokuz Oguz nation’ (ŠU). § 22 of the UW entry for *al-* lists quite a number of verb phrases consisting of vowel or *-(X)p* converb and having the meaning ‘für sich (tun)’, e.g. *tägšürü alti* ‘für sich getauscht / sich eingetauscht’ in Mait.

The benefactive is quite common with the vowel converb, e.g. *ada öcü(r)gü ücün sakinč ayu berälim ... ayaglig bolmak dyan sakinč üdin ayu berälim ... yäk içgäklärig okimak törösin sözläyü berälim* (TT VA 75, 98, 115) ‘Let us inform you of the meditation serving the allaying of dangers ... of the time for the meditation by which one gets honoured ... of the ceremony for the invocation of demons’. *ayu ber-* appears with this meaning also in KP 13,2, M III nr.7III, 15,11₁, MaitH XI 3r16 or in the QB, *sözläyü ber-* in DKPAMPb 57. Similarly in a source from the Mongol period (details mentioned in footn. 186): *tört yınakdın bo nom ärdinig keñürü yada berinlär* (49-51): ‘Be so nice as to spread this doctrine jewel in all four directions’. *körtgürü bergäy ärti kim köni yolça ... yorizunlar ärti* ‘Would he graciously show ..., so that they would take the right road’ is from an early text, TT VI 237. In the Manichæan corpus we have e.g. *inča kalti suv i iğaç kapagin yerdä aça berürçä ançulayu-ma xrostag täñri xormuzta täñrikä beş täñrikä kapagin aça berti* (M I 13,9-12) ‘Just as water is useful in opening the gate of plants in the earth, quite in the same way the god Hroshtag graciously opened the gate of the Fivefold God to the god Ohrmizd’. The sentences *inim äcim ... ücün bänigümin*⁴⁵² *tikä berti* (E28,7) ‘My younger and elder brothers built this memorial for me because of ...’ and *balbal kilu bertim* (BQ S7) ‘I erected a stele for (him)’ are both from runiform inscriptions. Qarakhanid use is identical: *nägü kilmišññi sän adra säcä yora berdiñ* (QB 797) ‘You explained to me your actions clearly and in detail’. *bolu berdi ävrän* (QB 1642) is by Dankoff translated as ‘The firmament smiled upon him’; *bolu ber-* just means ‘to be in somebody’s favour’.

In the sentence *eçimiz Sintar Šalikä bitigäli aydimiz, “başlap beriñ” tep* ‘We asked our brother Sintar Šali to write (it), saying ‘do us a favour and start’ (Mait colophon edited by Laut in Ölmez & Raschmann 2002: 133) *ber-* governs the *-(X)p* converb and not the vowel converb. Laut translates the direct speech as ‘Fang gleich an!’.

⁴⁵² The second vowel is not explicit but is assumed to be there because it is explicit in an instance in the Ongin inscription.

where ‘gleich’ is presumably meant to correspond to *ber-*. His idea would accord with the meaning of *ver-* as auxiliary in Turkish.

Schönig 1996: 211 (footn.) proposes still another meaning for the auxiliary *ber-* as we find it in the sentence *olorupan Türk bodunuñ elin törösın tuta bermiş, eti bermiş* (KT E 1, BQ E 3): He suggests it should be translated as ‘they began to organize and rule (the state and institutions of the Türk people)’, which is how the sequence *-A ber-* would be translated in a number of modern Turkic languages. This seems a less likely possibility in view of all the examples of vowel converb with *ber-* quoted above, or an example as the following (where ‘beginning’ makes no sense): *yarlıkančuči biliglig burxanlag kün täñri kop kamag tınliglarnıñ ämgäklig taloy ögüzlärin suguru berzün* (MaitH XI 9r27) ‘May the compassionate Buddha like the sun graciously dry up the sea of suffering of all creatures.’ Schinkewitsch 1926: 91 quotes a number of examples of the vowel converb + *ber-* from Rabgüzī and thinks that *ber-* gives them the meaning of completion (the converse of Schönig’s idea); I think all of these as well are best understood as having benefactive meaning.

Signifying ‘to favour with doing, to deign to do’, *ber-* is an auxiliary of politeness in Orkhon Turkic and Qarakhanid. Uygur has *yarlı(g)ka-* instead; see section 5.3 for these and other pragmatic of verbs.

3.26. Aspect and tense

This section deals with the temporal structuring given by the speaker either to events within themselves (‘aspect’) or with respect to other events referred to (‘taxis’) or with respect to the speaker or writer’s moment of speaking or writing (‘tense’). All finite indicative verb phrases are, first of all, characterised for aspect and taxis. To express tense and / or taxis, they can be transposed into a (relative) future by the addition of *ärgäy* and into a (relative) past by the addition of the forms of the preterite, *ärtim* etc. Thus e.g. an event referred to by a final-transformative verb (‘to have somebody get mounted’) presented not as internally structured but looked at from its final point, in past taxis and past tense: *ilinčükä atlanturdi ärti* ‘he (the king) had had (him, his son) mounted for recreation’ (KP 1,1). The following passage (Wettkampf 26-31) recounts one and the same (iterative) event in two versions differing in aspect: *ol ödüñ yagı w(o)rm(i)zt tegin bo tört sav agzınta tutdı; kanta barsar kälsär kirsär taşksar olorsar tursar bo tört sav ag(i)zda tutar ärti* ‘Then the valiant prince Wormızt kept repeating

these four terms: wherever he went or came, entered or exited, sat or stood he would repeat these four terms’.

Orkhon Turkic and Uygur differ in the forms they use for expressing the future, *-dAčI* in Orkhon Turkic where the rest of Old Turkic uses *-gAy*. The distribution is a bit different for the negative future: *-mAčI*, the inscriptional form, stays in use in a few early Uygur texts beside positive *-gAy*. A peculiarity of Buddhist Uygur texts are the proximative forms, absent from Orkhon and Qarakhanid Turkic and from Manichæan sources: *-yOk* and *-gAllr*, which express vivid past and imminent future respectively. When using these forms, the speaker stresses the relativity of the temporal reference with respect to the point of the event or, more commonly, to the point of speech.

The means used for the expression of aspect and tense, consisting of synthetic and analytic verb phrases, partly overlap with those used for expressing other contents, e.g. the category of actionality or the expression of irreal wishes or conditions. The contents of *-yOk* and *-gAllr* also have a lot to do with epistemic modality, since speakers and writers using these forms base the degree of ‘reality’ of past or future events on their perception of their personal present, or the present as presenting itself at the moment of the action referred to.

Stylistic modes of particular texts determine the selection of types of verb phrases used in them or the inventory of forms. Verb form sequences within single sentences can often, in themselves, not be assigned any tense or aspect content; not only because this depends on the semantics of the verb, but also because of dependency on the context. The most meaningful form to deal with the matter is to consider sequences of verb phrases in whole passages. This task, however, demands monographic treatment, not the space we can assign to it here. The following account of tense and aspect in indicative and not indirective verb phrases can only be a rough approximation.

-Ur etc. and *-mAz* usually express imperfective aspect. It is to make this aspect explicit that we find e.g. *šala sögüt tsip sögütkä oxšar ärip* ‘the *šala* tree is similar to the oak and ...’ instead of ‘*oxšap*’ in HTs III 212, or *tinliglar anılayu ok turur ärip sansarlıg kök titigdä* (Abhi A 41b5) ‘creatures remaining in that way in the green mud of *samsāra*’ instead of ‘*turup*’. By itself, the aorist often refers to the time of speech or writing; just as often, however, it is timeless, as in inscriptional *yerimin suvumun konar köçär bän* ‘I alternately settle and migrate in my domain’. The aorist – the form *ornanmaz* in the following example – can also describe a state of affairs which started out at some point in the

past and still holds: *İNĉa sakİntİm ... mİnİ ... dendar kİlgay siz tep. İnĉİp amtİKatägi mäniġ köġülüm näġ ornanmaz* (TT II,1 40) ‘I thought you would ... make me into an elect. Till now, however, my heart has not been calming down’.

In some contexts more than others, the temporal scope includes the future. The Maitrisimit, which narrates the future appearance of Buddha Maitreya in great detail, chooses the aorist as main narrative form, e.g. *maytri burxan ... sinxi elig xanka İnĉa tep yarlıkayur* (Mait 26A r9-10) ‘Buddha Maitreya will speak to king Siṃha as follows:’. The reason for the use of the aorist in such prophesy may be the perception of predetermination, or an expression of the experience of the seer.⁴⁵³ In some cases, some of the events related are, of course, intra-terminal: *yer suvlar ... täpräyür kamşayurlar ... täġri yalġuklar ... yġİlurlar ... kuvrag yġİlmİšta ken turum ara ulug tigi ĉogİ ün küġü eštİlür yugant üdtäki täġ ulug bädük ot yalinlar közüniür* (MaitH XX 1r2-13) ‘The worlds ... rock and shake ... gods and humans assemble ... After the multitude is assembled, great roars and sounds are suddenly (= *turum ara*) heard. Great and high flames as in the *yugānta* age are (or: become) visible.’ Nor is there in the quoted example any formal differentiation between imperfective and perfective on the sentence level, between temporal frame and single event, e.g. concerning the great flames which are either a visible background or which become visible as a member in a chain of events. Interrogative reference to predicted events also uses the aorist: *ken kältäci burxanlar burxan kutin kanta bulirlar?* ‘Where will the future Buddhas attain Buddhahood?’. When, in U II 31,49, we read of Indra asking (himself?) the question *bo täġri urİsi kayu yeti ažunlarİġ täġiniür ärki* ‘Which seven existences will this divine boy experience, I wonder?’, he (and the intended readers) know that he has immediate access to the answer. A present reality of the future is implied also by *täġir* in the following instance, an address to a sort of oracle: *yanturu öz ulušum[ka] barİp adasİz äsän täġir ärsär män, bo xwalİġ psak bod[İsatv]nüġ İdok elġintä turzun* (HTs III 919) ‘If I am to return to my own country and arrive there safe and sound, may this wreath cling to the *bodhisattva* (statue)’s holy hand’.

Imperfectivity is transferred into the past by the constative preterite of the copula, e.g. *anĉulayu amrar ärti sizni tüzüġü anasi[n] b[alasi]*

⁴⁵³ The aorist has of course become the normal future tense in many modern Turkic languages, new forms having been created to describe events going on at the moment of speaking or during the point of time being referred to. This process did not, however, as yet take place in Old Turkic, where the *-Ar* form is a real ‘aorist’ not yet seriously challenged by more focussed present forms such as *-yU turur*

oglanı sāvārčä (Pothi 98-99) ‘they all loved you as children love their mother’ or *ymä bir kün bo tagda [öt]mäk aš ašayur ärdim. [ötr]ö üç ävrän yilan [kälti]lär* ‘Well, one day I was eating bread and food on this mountain (and) three dragons came towards (me)’ (DreiPrinz 42). There are many other examples in UW 400b-401a, § 17b of the entry on *är-*. The sequence is common already in Orkhon Turkic, as *köl tegin bir kirk yašayur ärti* ‘K.T. was 31’ (KT), *türk bodun tabgačka körür ärti* ‘The Türk people were subject to China’ (Tuñ), *atig ika bayur ärtimiz* ‘we used to tie the horses to trees’ (Tuñ) and the like.

In *mitri burxan kalgäy tepän küdügli ärtiñizlär* (M II 6,10) ‘You have been waiting for the prophet Mithra to arrive’ we have the participle in *-(X)gli* with the preterite form of the copula; this rare instance is presumably synonymous with the aorist construction.

The constative preterite (i.e. the one not explicitly marked as evidential) is expressed by members of the paradigm *-dXm* etc.; used by itself, this form normally expresses anteriority relative to the moment of speaking or writing. The form is exceedingly common; Zieme 1969: 148 determined that its frequency in his corpus compared to that of *-mlš* is roughly 10 : 1. The simple constative preterite serves the narrative mode, as even processes which obviously took some time can be presented as point events: *otuz yašima beš balik tapa sülädim* (BQ E28) ‘In my 30th year of life I campaigned against *Beš Balik*’. In *türk bodun üçün tün udimadim küntüz olormadim* ‘For (the sake of) the Turk nation I did not sleep at night, nor did I rest in daytime’ (BQ E22) there is (metaphorical) reference even to repeated situations. Zieme 1969: 148-9 lists numerous Manichæan examples for the constative preterite.

When a verbal lexeme denotes a process, its preterite can express the state reached in its culmination. Thus with the verb *ač-* ‘to become hungry’⁴⁵⁴ e.g. in BT XIII 2,36: “*ay baba, yemiš [ber biziñä], ačdimiz ikägü” tep [tedil är* ‘“Oh dear, [give us] food, we are both hungry” they said’. Similarly with indirective status: *botočaklarimniñ karni ačmiš* ‘My dear little camel colts have evidently gotten hungry’ (BT XIII 2,39).

In the following example the *-d+* form refers to the future, presented as something which has ‘practically’ already taken place, to signal a clear intention (in fact a lie; the speaker intends to do something quite different): *azkya öñrä yoriyu turzunlar; män una basa yetdim* (Suv 615,14) ‘Please walk on a bit; I will have reached you in a moment!’.

⁴⁵⁴ It had a long vowel, unlike the verb *ač-* signifying ‘to open’. For the semantics cf. Turkish *acık-*; *acıktım* ‘I am hungry’.

The use of the presentative particle *una* is meant to support this intention. TT I, an oracle book, has some sentences in which a conditional is followed by a *-d+* form: *äd tavar tiläsär bultuñ tapñiñ* (TT I 11); *täprääsär alkintiñ*; *täprämasär yägäd(d)iñ* (TT I 204-5). These can be translated similarly, as ‘If you are in pursuit of possessions you will soon have them’ and ‘If you move it will be your undoing; if you don’t move you will have won’. The use of *-sAr* does also, grammatically speaking, allow these to be references to the past: ‘When you were in pursuit of possessions you got them’ and ‘When you moved you were undone; when you didn’t move you prevailed’.

The preterite in *-dXm* etc. is followed by *ärti* e.g. in *sintu ögüz suvün kääär ärkän bir yük nom suvda kalti ärti. atin bitip idtimiz kim ken kaltäci arkış ...* (HTs VII 2048) ‘While we were crossing the waters of the Indus river, a load of holy books had gotten lost in the water. We have written down and sent their names, so that a messenger coming later (can bring other copies)’. This pre-preterite appears also in *tiši tinlig birlä yazintimiz ärdi; ol ayig kilinç küçintä ulug tamularda [tugdumu]z* (MaitH XX 14v16) ‘We had sinned with female creatures; as a result of that sin we were born in the large hells’. Another instance containing the particle *çak* is quoted from the Hami DKPAM ms. in section 3.341 below.

Finite *-yOk*, in use only in Buddhist Uygur, expresses a vivid view taken of the event after it took place and implies the speaker’s notion and communicative intention that the event is relevant for the moment of speech; we have therefore called the form ‘vivid past’. Hence we find it used exclusively in quotes of direct speech. The event referred to has generally been directly observed by the speaker. The sentence *bašimazdakı kara saçımaz uçı bölöki kergiladyok ol* (U III 55,16) ‘The black hair on our head – its ends and dividing line have become grey’ is uttered by hunters whose hair instantly turns grey upon receiving the order to kill a saintly *bodhisattva* elephant against their conscience, or face the murder of their own families to the 7th generation. A mother who learns of her son’s decision to sacrifice himself says *ikinti azunta bargalı sakınyok sän* ‘you have just decided to go to another existence’ (U III 48,6). The sentence *atañ ... saña yakın kälyök ol* (U III 64,5) ‘Your father ... has approached you’ is said about himself by a father come to murder his son. *’bo montag tül tüšäyök män”tep sözläyür ärdi* (U III 54,15) ‘...’I have had such and such a dream” i s what queen Bhadrā asserts whenever she needs an excuse for the sin she is about to propose to her addressee; the ‘dream’ is meant to serve as a justification

for the proposal. *män ... tilkü ažuñinta tугyok män* (Pañc 47) ‘I have been born a fox’ thinks the fox, going on to reflect on what his nature enables him to do about the situation he is confronted with, as distinct from what other animals can do: The birth evidently did not take place in the immediate past, nor does it need to be asserted, but it *is* relevant for the matter at hand. The sentence “*bulyok mu ärki burxan kutin azu bulmayok mu ärki*” *tep tegülük* (BT I D 195) ‘One should say ‘Has he just attained buddhahood, I wonder, or hasn’t he?’” proposes to see the event as a drama of current significance; it is important for showing that *-yOk* is compatible with the epistemic particle *ärki*. *nom bitiglärin tälim ygyok män* (HTs V 59) ‘I have collected his spiritual writings in great quantity’ says Xuanzang in India when he worries that it will be difficult to have them all transported to China. *amtü sizlär [... ä]mgängülük oronka kälyök [s]izlär* (Bang & Rachmati, Höllen 14-15) ‘Now you have just arrived at the place of suffering’ is what visitors to some part of hell are told in a Divine Comedy-like tour. A passage in TT X 336 further highlights the use of the form by pinning it against the aorist: *körgil amtü yäklär bägi vayšir(a)vani a! ... on küčlüg täñri burxan atavakä yäknij orninta täpränčsiz yarp oloryok ol. ... ančakya ynä korkmatin äymänmatin olorur. yavlak sakinčlig atavakä yäk iki közintin ört yalin [ü]ntürüp täñri burxan üzä idu turur* ‘Look now, Vaiśrāvana, lord of the demons! The divine Buddha ... has seated himself, immobile and firm, at the place of the demon Ātavaka. He is sitting there, without a bit of fear or anxiety (while) the evil-thinking demon Ātavaka keeps emitting fire and flames from his two eyes and sending them at the divine Buddha’. The use of this form is discussed and further documented by D.M. Nasilov 1966.⁴⁵⁵

The vivid past can be transferred into the past: “*ol är nätäg osoglug körklüg mänizlig ärdi?*” *subatra tiši yaña inča tep tedi: “karaža ton kädyök ärdi.”* (U III 57,8₁) “‘How were the looks of that man?’” Subhadrā, the female elephant said as follows: “He had put on a monk’s gown”. The vivid past participle has to be used because *käd-* signifies ‘to put on’ and not ‘to wear’ and because the way the person referred to was dressed is relevant for current action on the part of those involved in the story’s drama. The sentence *sansardin intin yoguč ärtyök ärdi, kilyok ärdi alku kilguluk işlärin, alkyok ärdi az ulatı nizvanilig ayıglarıg* (U III 88,3-4) ‘He (the *arhat* Upasena) had just reached the bank beyond *samsāra*, had just accomplished everything he had to do

⁴⁵⁵ He also points out that it survives in just this function and meaning in Hakas and Tuvan; Elisabetta Ragagnin can document it from Dukha, a variety of Tofa spoken in Mongolia.

and had just done away with lust and with the other evils of passion' has a similar *-yOk ärti* phrase. It does not appear in direct speech but the vivid past content is highly relevant to the point being made: Upasena lies down and then, suddenly, his brother Sena, reborn as a snake, comes and stings him, instilling his deadly poison.

Followed by *är-miš*, the *-yOk* form gets coupled with indirectivity, as in Suv 8,10: *inča tep tedilär: "ay [är]-a! bizni sini algali [id]tokda ašnuča an bitigdä körtilär. an bitig ičintä säniñ öz yaš sanı sakışi takı tükämäyök ärmış. tāk sän munča munča tünliqlarig ölürtmişkä ol säniñ öz alimčılarnıñ uğurınta anın sini [alg]alı idtilar. munı sän bilmiş [kärğäk]" tep tedilär* 'They said the following: 'O man! When they sent us to fetch you they first looked into the judgement register and it turned out that your time to die hadn't come yet. They sent (us) to fetch you only because you have caused the death of so and so many living beings, and for the sake of those to whom you owe lives'. The relevant sentence is marked as a quotation through *ärmış* but, since it emanates from divine prescience, is nevertheless able to refer to the moment of speaking. Note that all the examples have the 1st or 2nd person as topic, even when the subject is the 3rd person.

The perfect participle in *-mİš* usually links with the copula to give verb phrases with perfect, i.e. post-terminal meaning. *-mİš* followed by *ärür* (or *ärmäz*) and personal pronouns expresses the 'normal' post-terminal or present perfect. This type of verb phrase should not be confused with the indirective (for which see section 3.27), which always consists of *-mİš* without the aorist; e.g. *altı yüz tımän yıl ärtmiş ärür* 'six million years have passed'; *toyın bolmak küsüşin maña yakın kälmiş ärürlär* (MaitH XVI 1v3) 'they have approached me with the wish to become monks'; *kün täñri tugmış ärür. ... odunuñlar* 'The sun has risen ... Wake (pl.) up!' (MaitH XV 11v22); *anın ... yeläyü at atamış ärür* (BT I B(128)) 'Therefore there have been given fake names' or *män xwentso öñrä änätkäkkä barmışta alp adalıg yolta ür keč ämgänmiş[kä] iglig kämliq bolmiş ärür män* (HTs VII 1035) 'As I suffered hardship on the hard and dangerous road when I, Xuanzang once went to India, I have become sickly'. In the following question and answer, the question consists of a *-mİš* form while the answer has *-mİš ärür*: *nägüniñ küčintä bo aguluq yılanlar bo montag körksüz azunta tugmışlar? otgurak uktı: övkä nızvanı küčintä munta tugmış ärürlär* (MaitH Y 174-6) 'Due to what causes have these poisonous snakes been born into such an ugly existence? He understood it clearly: They have been born into it due to the vice of anger.' *tugmışlar* in the question appears to expect an

indirective answer: The questioner would be content with second hand information but is offered first-hand post-terminal information. This passage exemplifies the close association of indirectivity with post-terminality.

The content of *-mIš ol* is not indirective either; it is hard to say in what it differs from *-mIš ärür*: *täŋri kirkinlarin täŋri ogulanlarin alkamiš törütmiš ol* (BT V 175) ‘He has created the divine maidens and divine youths’. Several additional examples of this are found in HTs V 126-133, e.g. plural forms in *kök täŋri yaŋin kilmišlar ol ... üd kololar etigin yaratmišlar ol* ‘They have done it according to the manner of the sky ... have created instruments for (measuring) time units’. This is not the indirective as Xuanzang is describing what he saw in a country he visited. We find the phrase in a relative clause in *kisgač kim kántü ol ok tämirän etilmiš ol* ‘tongs, which are themselves made of that same iron’ (M I 7-8). In *tört yïŋak [ye]tirär maŋ turki yer[tä e]diz lanxan tartmiš ol* (HTs III 901) ‘They have erected a high fence in a distance of seven steps on all four sides’ and *ol yarok yašuk važir öŋlüg alkatmiš yer ... beš bölükün bölmiš ol* (BT V 188-191) ‘That bright and shining praised land with a diamond appearance is divided into five parts’ one would expect *tartil-* and *bölül-* if these were normal finite phrases. These two instances and perhaps also the one in the Manichæan (M I) relative clause were perhaps perfect participles in predicative but still nominal use.

There is a periphrastic construction consisting of the perfect participle in *-mIš* with possessive suffix referring to subject followed by *bar*: *mäniŋ ymä burxan kuŋa küčlüg küsünlüg köŋül öritmišim ... bar* (MaitH X 3r7) ‘It has happened that I was strongly aroused towards buddhahood ...’; *sizläрниң түзүн yavaş köŋülünüzläрни artatmišim bar är[sä]r* (DKPAMPb 643) ‘If I happen to have corrupted your noble and mild hearts, ...’. Nominal subjects accompanying the *-mIš* form appear in the nominative; note the 3rd and 1st person possessive suffixes referring to these subjects: *öŋrä ymä bodisavtlar munčulayu ärdini bušika kälmiši bar ärti* (KP 49,1-2) ‘It had happened before as well that bodhisattvas came in this way to ask for jewels for (giving as) alms’; *män xwentso äšidmišim bar* (HTs VII 218) ‘I Xuanzang have heard (the following)’. If the *-mIš* form had been purely nominal and this had not been an analytical form, the subject could have been in the genitive. The contexts do not warrant any interpretation of this construction by which these nominatives would be instances of left dislocation.

The perfect is transferred into the past by the addition of the preterite of the copula, giving a pluperfect; examples are *vipaši atliŋ burxan*

yertinčüdä bälgürmiš ärdi ‘The buddha called V. had appeared on earth’ or *üküşüg ötgürmiš topolmiš ärdilär* (HTs VIII 55) ‘They had penetrated a lot (of texts)’.

The perfect can also be transferred into the future, as e.g. in *bulunčsuz törökä täginmiš ärgäylär* (TT VI 429) ‘They will have realised unattainable *dharmā*’. Elsewhere the sequence *-mlš ärgäy* expresses presumption (discussed in section 3.27).

A speaker using a future form referring to a point in time subsequent to the time of speaking is exercising a judgement on an event which has not yet taken place. Its use therefore implies the choice as marked member of the epistemic mood category. The future tense is expressed by the suffix *-dAčI* in the runiform inscriptions of Mongolia, by *-gAy* in other Old Turkic sources. Finite *-dAčI* is negated as *-mAčI*, e.g. *ölmäči yitmäči sän* ‘you will not die and not disappear’ (ŠU E 9); further examples appear in Tuñ IE6 and Ongin R2. We have *-mAčI* also in early Manichæan and Buddhist Uygur, e.g.: *kačan näñ äzüg sözlämäči män* (Mait 11 r11) ‘I will by no means ever tell lies’; *kök kaligdin kozlug yagmur [yagdokin közin] körgäy sizlär; ät’özin ol ämgäk tolgakig täginmäči sizlär* (MaitH XX 1v3) ‘You will see with (your) eyes how rain of embers falls from the sky (but) with your body you will not feel that pain.’⁴⁵⁶

The inscriptional future taxis is transferred into the past tense by the preterite of the copula, e.g. *Türk bodun adak kamšatti, yavlak boltači ärti* (BQ E31) ‘The Turk people tottered and were about to be routed’; *bunča ymä tirigi küñ boltači ärti, ölügi yurtta yolta yatu kaltači ärtigiz* (KT N9) ‘All these (my mother the queen, my mothers,⁴⁵⁷ elder sisters, daughters in law and princesses) who would survive would become female slaves and the dead among you would be left lying in deserted camps and on the road’. Then there are instances in the main clauses of irreal conditional sentences: *köl tegin yok ärsär kop öltäči ärtigiz* (KT N10) ‘If K.T. did not exist you would all have eventually been killed’. *yok ärtäči ärti* (Tuñ 54-55) appearing in the same construction is quoted in section 4.64 below. Uygur has numerous sequences of *-dAčI ärti* (examples are quoted or mentioned in UW 404b, §22b of the entry *är-*) but in all of them the *-dAčI* form serves as present participle and is not part of an analytical phrase. Verb phrases with the shape *-gAy ärti*

⁴⁵⁶ The editors mistakenly ‘emend’ the *-mAčI* form to ‘*täginmädäči*’.

⁴⁵⁷ I do not think this refers to ‘step mothers’ as Tekin would have it; with the possessive suffixes on mothers, elder sisters etc. the prince probably refers to all females in his tribe.

which I have come across do not, on the other hand, indicate a point in time which is in the speaker's future or a point of time in any relationship at all to the time of narration, but appear in modal constructions (see section 5.1). This may be a coincidence, or the task of inscriptional *-dAČI erti* may in Uygur have been filled by the phrase *-gAllr erti*, of which we quote an instance in the next paragraph.

Uygur and Qarakhanid have an 'imminent future' expressed by the suffix *-gAllr*. E.g. *aglik kurug bolgalir* 'The treasury is about to get empty' (KP 7,7); *alko iřläyü tükädimiz. yenä ymä kün täñri uyakgalir. amtü kántü kántü ärgülük [ä]vkä baralim* 'We have finished all our work. Moreover, the sun is about to set. Now let us each go to the houses we are to stay in' (Mait 12v2); *ya kurup ok atgalir* (TT I 162) 'He is bending his bow and about to shoot an arrow'. In Qara khanid we have the form in two couplets: *sävinč arzu ni 'mät turu kalgalir / sakinč kadgu miñnät maña kalgälir* (QB 1074) 'Joy, desire and happiness are about to stay away; trouble, sorrow and affliction come my way'; *seziksiz ölüm bir kün axir kälir / tirilmış bo canlig canin algalir* (QB 1472) 'There is no doubt that Death will one day come; he will soon take the soul of this living being'. See section 3.285 for infinite uses of this form; the imminent future expressed by *-gAll är-* (see this in section 3.251) may be its source.

Transposed into the past we get, e.g., *utr[u] tidgalir erti; ani ücün tıdmadı*⁴⁵⁸ (ZiemeTexterg r5) 'He was about to oppose and hinder him; that is the reason he didn't do so'.

Uygur uses *bol-* 'to become' (for which see section 3.29) with the perfect participle in *-mİř* for presenting the activity as a transition of the subject into a new state: *nomlayu yarlikamiř bolti* 'he has deigned to preach', *on törlüg ädgü kilinčig kilmış kargäk; ögiñä kañiña utli sävinč täğürmiř bolur* (BT XIII 12,036)⁴⁵⁹ '(They) should carry out the ten types of good deeds; (they) will have given pleasure to their parents' or *dyan at üzä körkitmiř bolti* 'he has thus presented them by the *dhyāna* name' (Buddhist); *yerni mä kari kiřini unıtmış bolgay sän* (Brieffer C11-12, a letter) '(If you do not come to see us but stay where you are), you

⁴⁵⁸ The ms. (Manichæan writing) has *tıdmzdi*, which I take to be an error; it might indicate that the ms. was copied from a source in Uygur script, where Z and ' can be similar.

⁴⁵⁹ The editor pieced this sentence together from mss. B and C; that it should be attributive to *řlok* 'verse' (as he thinks) seems unlikely to me.

will find that you have forgotten your place and your old family'.⁴⁶⁰ In Manichæan texts there appears to be a resultative present perfect with *bol-* in the preterite, where *är-* in the preterite would have given past perfect meaning: *ymä agizlanmiš bolti [ulu]g ögrünčün, ymä bitil[miš] bolti agir sävinčin* 'and it has been pronounced with great joy and written down with overwhelming happiness' (M I 25,3-5); *sizlär anü üçün okitmiš boltuğuzlar* (M III nr.7 III r5) 'You have been called for that reason'.

Let us sum up what we have found to express tense and aspect in finite indicative non-evidential verb phrases. There are five simple forms: The imperfect aorist, the preterite, the perfect base *-mIš / -mAdOk*, the future *-dAčI / -mAčI* or *-gAy* and, in Uygur, the recent past *-yOk* and the imminent future in *-gAIr*. All these are also found transferred into the past by the preterite of the copula. *-mIš* is in a special situation as it needs the pronoun *ol* or the form *ärür* for serving as predicative perfect verb form; without one of these it would be confused with its homophone expressing evidential past. Perfect *-mIš / -mAdOk* is also unique among the simple verb forms in (at least once) getting coupled with *ärgäy* to express taxis, and also with *boltü, bolur* or *bolgay* to form verb phrases: *-miš boltü* was found to express a present perfect while *-mIš bolur* and *-mIš bolgay* give future perfect meaning.

3.27. Status and epistemic mood

Many languages of the world, among them modern and ancient languages of northern Eurasia including all the Turkic ones, possess a category which has been called 'status', expressing whether the information which the speaker / writer supplies to the addressee reached his (the speaker's) consciousness directly or indirectly. The speaker / writer using a marked member of this category indicates the way by which the information reached his or her attention. This category should by no means be confused with epistemic modality, which expresses the speaker's opinion on the reliability of the content of his utterance: The 'status' category does not itself say anything on reliability. There may, however, be some inferences in that direction on the part of the addressee (whether intended by the speaker / writer or not), which is

⁴⁶⁰ Concerning the translation of *kiši* as 'family' cf. *my people* 'my family' in spoken English. *kiši* 'person' with possessive suffix apparently also acquired the meaning 'wife', but that was probably a result of narrowing of the meaning 'family'; Arabic '*ayāl* 'family' also came to mean 'wife' in many Turkic languages

why we are dealing with the two categories in the same section. We will first give a short account of status and then of epistemic modality as we find them realised in Old Turkic sources.

Old Turkic indirective status is normally expressed by the verb form *är-miš* added to nominal or verbal sentences. When referring to past events, however, *ärmiš* is not added to preterite forms; instead, the verbal suffix *-mIš* (also serving the perfect participle, with which indirect status is related both by function and meaning) replaces the preterite element *-d* (+ possessive suffixes). In this, Old Turkic is similar, to Turkish, e.g., and (with some phonetic changes) to Yakut. Status is not an obligatory category in Turkic, which means that the use of a directive form like *-dI* does not guarantee that the addressee has actually witnessed the unfolding event. When the content is negative, *-mA-dOk* is used in most of Old Turkic instead of *-mIš*; the use of *-mA-mIš* sets in only in rather late Old Turkic. The reasons for this suppletion may lie in content: Evidentiality is the perhaps oldest function of the finite *-mIš* form in this language, and an event which did not take place can have produced no evidence.

The contents of a message can be indirective in one of three ways, in Old Turkic as elsewhere: Most prominently in the Old Turkic documentation, a person or persons different from the speaker may be the source of the information being transmitted by the speaker, the so-called 'reportive' function; this may refer to matters placed in the past, the present or the future with respect to the speech act. Secondly, the speaker may have inferred the content of his utterance from some evidence forthcoming either during the occurrence of the event or, more commonly, surviving the event after it was completed. This 'inferential' or 'evidential' function has often been taken to be the central or at least the primary one as far as Turkic languages are concerned, as the *-mIš* form is also the perfect participle,⁴⁶¹ and as the perfect in fact sums up a wrapped-up event from the vantage point of its contribution to the present or to some other state following its completion. It is important to state straightway that Old Turkic *-mIš* cannot by itself be used as a finite perfect (or 'postterminal', to use Johanson's clearer term). Thirdly there is the 'mirative' function of the indirective, where the speaker does, in fact, himself witness the event he is reporting on, but registers it with surprise, as his mind was not in any way prepared for this particular event. This is still indirective, in that reality in a sense belies the picture which the speaker / writer had made of it for himself, the

⁴⁶¹ The identity of the two forms extends to the feature that both are, in Old Turkic, replaced by *-mAdOk* when negated.

former abruptly superimposing itself upon the latter. All uses of the indirective essentially include implicit reference to a foreign viewpoint, emanating from the event itself or from some other focus of consciousness.

In *önrä nä bar ärmış tepän biltimiz, täñrili yäkli nädä ötrö süñüşmiş, yaroklı karalı kalti katılmış, yerig täñrig kim yaratmış tepän biltimiz* (Xw 134-6) ‘we know what there was before ..., for what reason god and demon fought, how light and darkness were mixed (and) who created the earth and the sky’ the speakers do not (pretend to) have any postterminal evidence for the contents of the subordinated sentences; rather, they were told about it by others. Similarly in ... *bulmaz ärmış tep sav äşidti* (Suv 621,20) ‘She heard the news that they were not finding ...’, where the object proposition is verbal, with present taxis. Cf. further *edärür ärmış* in *az inaru barm[iš], bir ögü[r]*⁴⁶² *muygak kör[mış], ymä muygak sigunug uvu[tsuz bi]lig üçün edärür ärmış. bo bälgü körüp ymä ... inča tepän aymış* (M I 35,7) ‘He went a bit further and saw a herd of female maral deer. A female maral deer was pursuing a male for sex. He saw this omen and ... asked as follows:’.

When reportive *-mIš* appears in questions, the addressee is expected to give a merely reportive answer, as in *bo tñnliglar nä ayig kilinč kilmışlar ärki, kim bo montag ažunta tugup ...* (MaitH XX 1v20) ‘These creatures, what sins are they said to have committed, that they are born in such an existence and ...’. Reportive past perfect gives *-mIš ärmış: antag ešidmişim bar: mahapraçapati gautami hatun ... tapinmiş udunmiş ärmış (tep)* (MaitH III 1b17) ‘I have heard the following: Queen Mahārajāpatī Gautamī had done obeisance to ...’.

The inscriptional sentence *’karlok eši ñä kälmädök” tedi.* signifies ‘He said ‘The K. are said not to have come for service’’, to judge by its context. This is an example for the negative counterpart of inferential *-mIš*: The Karlok are absent.

In the following example, on the other hand, *ärmış* is added to the predicative verb form to signal mirativity: *ančama mäñi, ančama ädgü asig tusu, ančama ädgü kut kiv kim mäniñ ävimtä barkimta burxanlıg kün täñri tugar ärmış* (MaitH XI 3v11) ‘Such happiness, such good favour, such good luck and blessing that – it turns out – sun-like Buddha is being born in my home’. Similarly, the little mouse which climbs on top of a pot in HTs VIII 391 and then says: *sumer tagka agtünmak alp ärmäz ärmış* ‘It turns out it isn’t difficult to climb mount Sumeru’. Such surprise can also apply to the 1st person (as it also can in

⁴⁶² The editor here writes *ökü[š]* ‘many’, which seems quite unlikely.

modern Turkic languages), e.g. in the following passage (U I 8-9, Magier): *biz[iñä] tapıngu yüküngü ärdini berüp ärmış. biz tapınguka tögimsiz ärmış biz; bilmätin kudugka kämişmiş biz* ‘It turns out that he has given us a jewel to worship (but we were unworthy of it). It turns out we are unworthy of worshipping (Jesus Christ); unwittingly, it appears, did we throw it (i.e. the stone which he gave us) into the well’. Little Jesus had given the three kings a stone which they had found too heavy to carry and, unaware of its value, had thrown into a well, whereupon a blaze reaching all the way to the sky came out of the well. With nominal predicate we find *amranmak nızvani ät yedäçi kan içdäçi yäk içkäkklärä ymä üstünräk yavlak ärmış* (DKPAMPb 152) ‘The passion of lechery is – as I now see – worse than demons and vampires eating flesh and drinking blood’: The pupil discovers a ‘truth’ already known to his addressee who is his teacher. When saying *bo nä amgäklig yer ärmış* (KP 4,8), for instance, the Good-thinking Prince expresses his surprise that the world, as he comes to discover it, turns out to be such a place full of suffering. The nominal sentence *män kololadokum kamagdä ärklig yultuz ärmış* (1.5-9 in ms. TM 342 = U 5) ‘What I have discovered is that stars turn out to be the mightiest’ has a sentence as comment (or ‘predicate’). This subordinated sentence is the result of the speaker’s observations, what he finds out and presents as their result, what has become evident to him but is not evident to his addressees. In HTs VII 199-201 the (in this case perhaps rhetorical) surprise appears to come by reading: *[okiyu] tögindim täñri xanümüz yaratmış sudurlar şastrların şwö başlagın: yarumış ol öñräkilärniñdä, ärmış ol amtükilärniñdä* ‘I have respectfully [read] the preface to the *sūtras* and *śāstras* composed by our divine ruler: It turns out that it overshadows those of the previous ones (i.e. the previous authors) and surpasses those of the present ones’. This points at the pragmatic use to which mirativity is put.

Old Turkic clearly distinguishes between epistemic mood and what is conceived of or presented as (in)ability, unlike Western European languages which use the verb ‘can’ in both functions. In Old Turkic, (in)ability is expressed by the verb *u-(ma-)* and by verb phrases of the shape *-U bol-* and *-gAll bol-*; these do not serve epistemic mood. In this language, epistemic mood is communicated through other analytical verb constructions, through various simple verb forms and through particles.

There are two particles expressing the speaker / writer’s attitude towards the likelihood of the content of a proposition, both excellently

documented: *ärki* in the UW and *äriñč* e.g. in T.Tekin 2000: 161-162 for the inscriptional instances and the UW for the Uyghur ones. Parts I and II of the UW entry for *ärki* deal with the interrogative uses of this particle, especially in the sections m) – o), which refer to nominal sentences and sentences with the aorist and the constative preterite; in section p), which documents uses of *ärki* with forms expressing the future, its meaning is mostly ‘hopefully’. The epistemic meaning of *ärki* can be translated to English as ‘clearly’ or ‘apparently’ or ‘perhaps’. *äriñč*, on the other hand, signifies ‘surely’, ‘probably’ or ‘no doubt’. Runiform instances accompany forms in *-mIš* (and its negative counterpart *-mAdOk*) or the preterite and there is one nominal sentence; Uyghur also has, in addition to the mentioned verb forms, aorist and future instances. In all of these, *äriñč* is the last word of the sentence. This is often also the case with *ärki*; the rule for that, however, appears to be that it immediately follows the predicate or comment, whether that is at the end or not. *IA*, a particle which, according to DLT fol.538, was used by the Oguz, is assertive: See section 3.341 for it.

The verb *bol-* sometimes has a content which is marked within the epistemic category, when it signifies not ‘to become’ but ‘to tend to be’ or ‘to be expected to be’: thus in the sentence *bramanlar küvänčlig bolurlar* (TT X 474) ‘Brahmans are normally arrogant’. The sentence *muntada ymä muñadinčig nägü bolgay* (Mait 26A r4) can be translated as ‘What could be more wondrous than this?’; this instance of *bol-* does not signify ‘to become’ either: The sentence amalgamates interrogative with dubitative content, the latter being expressed both by *bol-* and by the future form. In the following sentence we have the *-sAr* form, the most prominent function of which it is to form conditionals, used for expressing doubt, an epistemic content; the stem is again *bol-*: *kim bolsar*⁴⁶³ *bo yer suvda ol tülnüñ tüzü tükäti tüşin sözlädäçi* (MaitH XI 3r13) ‘Who on this earth might it be who could fully express the import of that dream?’

In the Orkhon Turkic sentence *Türk bodun, ölsüküñ / ölsüküg* (KT S6, S6-7 and N5) ‘Oh Turk nation, you are bound to die’, certainty about the future is expressed by a form consisting of the necessitative participle in *-sXk* together with the possessive suffix of the 2nd person referring to the subject.

The primary meaning of the *-gU täg* construction discussed at the end of section 3.284 is to qualify an entity as ‘suitable for the activity

⁴⁶³ The second syllable of this word is quite unclear on the facts. and could in fact be *-gay* and not *-sar*. Q and S on the one hand, Y and R on the other, don’t look all too different and not much remains in the ms. anyway.

denoted by the verb'. In Middle Turkic and some Siberian Turkic languages it came to express conjectures and fears that the activity denoted by the verb would take place; an Uyğur example for this meaning, which makes the construction relevant to epistemic modality, seems to appear in *yetgü tæg kälir oğlanig* (BT XIII 2,44) which, in its context, signifies '(someone) could come and might lead the children off'.

Uyğur has an analytical construction for expressing that the speaker considers the realisation of a certain proposition unlikely: The verb is put into a phrase of the shape *-gU+sI yok*, the subject staying in the nominative; e.g. *ig toga ketgüsi yok* (U I 45,4) 'It is not expected that the illnesses will disappear'; *mäniñ köñülüm yüräkim [...] sintädä öñi ketip bargüsü yok* (TT X 466) 'It is [quite] unlikely that my heart should abandon you'. *siggüsü yok ärdi* 'it could not be expected to fit in' shows the same analytical construction transposed into the past. *-gUlXk+I yok* is used in the same way, e.g. in *muntada yegädip utup üstün bolguluki yok* (PañcÖlm 55) 'There are no chances of them to prevail and overcome (them)':

ärgäy, the future form of the copula, may express presumption: *amti čaštani elig közünmüz bolup bardı; kalın yäklär tægirmiläyü avlap altılar ärgäy* (U IV A 233) 'Now king Caştana has completely disappeared; the numerous demons have crowded around him and will have captured him'. Such a presumption can be linked with a rhetorical question, as in the following instance of direct speech: *ay ulug elig bäg! män montag montag sav äšidtim. bo nä sav ol?! azu biziñ amrak ögökümüñ äñ kičigi maha satvi⁴⁶⁴ ičginmiş ärgäy mu biz?* (Suv 622,11) 'O great king! I have heard such and such news. What matter is this? Might we possibly have lost Mahasattva, our dear beloved smallest one?' Röhrborn (UW 402a, §18c of the entry for *är-*) thinks these instances must be errors for *ärki* but it is not good philological practice to assume an error to have taken place over and over again in the same word. A future form would not be unreasonable in view of the English translation, German '*werden ihn gefangen genommen haben*' and Turkish '*esir etmiş olacaklar*'. See section 3.343 for a proposed connection between *ärgäy* and *ärki*. The sentence *munuñ tüşämiş tüllärin koduru kololasar män otguratı ordog karšig kodup tašgaru üngäy tæg män* (MaitH XIII 4v7) signifies 'If I deeply meditate on the dreams she dreamt, it looks as if I would definitely abandon the palace

⁴⁶⁴ In his edition of this text, Kaya adds a *g* not found in the ms. to make this into an accusative form; this is not necessary as Old Turkic proper names used as direct objects can also be in the nominative case. The *i* is part of the name.

and go out', where I have translated the postposition as 'it looks as if'. The sequence *-gU tög* discussed above also fused in Middle Turkic to give just this meaning, as does Khakas *-gAdAg*. The history of *-gU tög* can be followed well through Middle Turkic, but by shape the Khakas form is actually closer to *-gA(y) tög* than to *-gU tög*.

The content of the forms in *-yOk* and *-gAllr* (discussed in section 3.26) has *some* connection to epistemic mood, as they make the addressee look at events of the recent past and the imminent future respectively though their relevance for the moment of speaking, involving a special assertion that they are 'real'.

3.28. The non-finite verb

Non-finite verb forms are either infinitives referring to non-factive action (section 3.281), converbs (section 3.286), imperfect participles (section 3.282), perfect participles (section 3.283) or projection participles (section 3.284). All participles can also refer to an action, event, state or process whereas infinitives cannot, inversely, refer to any participants in the action as participles do. The *-gAllr* form, being difficult to classify, gets a section for its own (3.285). Infinitives and participles can either be used attributively or be nominalised (irrespective of whether they refer to participants or to actions etc.); when nominalised they show the category of case and can be governed by postpositions. Converbs can only be used adverbially and normally show no nominal behaviour; they do, however, sometimes get case suffixes and get governed by postpositions suiting their adverbial meaning: The expansion following the /p/ in *-(X)pAn* as compared with *-(X)p* could be related to the instrumental suffix and *-mAtIn must* have been expanded from Orkhon Turkic *-mAtI* with the help of this suffix; the vowel converb appears to be governed by the postposition *birlä* in a construction denoting action immediately preceding the action of the main verb and *-gAll* can be governed by the postposition *üçün*.

The border between participles and deverbal nominals (section 3.113 above) is a bit fuzzy, as different criteria are possible for the distinction, and these can lead to different classifications. One criterion for distinguishing the two is that the former are, like verbs, negated with *-mA-*. Another criterion is the degree of lexicalisation; but deverbal nominals are often not lexicalised either, although their creation belongs to word formation. A third criterion is whether the word qualifies the subject, object, etc. as a permanent characterisation or something which the participant is involved in temporarily; the former

is more nouny (and hence belongs more to word formation), the latter more verblike. This semantic-pragmatic distinction is not always easy to decide on even in context, and may not always have been meant to be clear-cut by the speaker/writer in the first place. The fourth criterion is government: In principle, verbs (including participles) govern direct and indirect objects while nouns don't. In fact we find that a large group of forms consisting of deverbal nominals with the agentive denominal suffix *+ĉI* – and a few others as well – do govern objects, though by far not as extensively as participles. Old Turkic participles govern objects exactly as finite verbs do.

3.281. The infinitive

The form in *-mAk*, which denotes actions, events, states or processes, is not all too common in Old Turkic, as the normal verbal complement for verbs is the *-gAll* converb and as participles can also refer to events or actions. The infinitive is closest to the projection participles discussed in section 3.284; it differs from them in that it refers *only* to events or actions, whereas *-gU* or *-sXk* forms can also refer to direct or indirect objects, to time or place and the like. Considering the following instance (from Wilkens / Zieme / Laut in Ölmez & Raschmann 2002: 131) we note another difference between *-mAk* and the projection participles: *üztüntän enip ölmış üzütüg ölmäkdä turgürmiş täñrim* signifies 'my lord, who revived from death (= from being dead) the soul which descended from above and died'; *ol-gü+dä* would have signified '(saved) from dying' and would not have been compatible with *turgür-*.

There do not appear to be any negative infinitives in early texts. We have them e.g. in *[subu]di ... ötünti ayütdi [ät]özlüg savig köñüldä kilmamakig* (BT I F47) 'Subhüti ... begged to ask about the non-creation of bodily matters in the heart'⁴⁶⁵ and *ïdmamakïñizlartin ötgürü* (Suv 671,15) 'because you did not give up on it'; there are many more such forms in Suv.

We turn to the use of this form. In *yeg bolgay arigda semäkdä yoriþ otin suvin ütöz eltinmäk* (MaitH XX 13r11) we find an impersonal infinitive phrase as the topic of a nominal sentence; it signifies 'It would be better if one lived in the forest, getting along with herbs and water'. While behaving like a verb within the phrase of which it is the kernel, the infinitive also shows nominal categories like case, the accusative in the example quoted. In the following instance it appears in the locative and governs an object: *nom nomlamakta uz ... boltılar*

⁴⁶⁵ The BT I instance must be late also because a parallel, otherwise identical passage (D 117-118) has a different formulation with a positive infinitive.

(HTs VIII 64) ‘They became masters at preaching’. In *alku ... ayig tütüš kariš karišmakig amirtgurdači ärür* (U II 58,5₁) ‘They (are the ones who) pacify all quarrel and disagreement’ the infinitive is parallel to deverbal nouns and serves as direct object of another verb. Infinitives can qualify nouns, e.g. in *ulimak sigtamak ünlär* (MaitH XX 1r18) ‘voices of moaning and weeping’ or *ölürmək sakinčün* (TT IV A 29) ‘with the intention of killing’; in the second instance quoted here, however, it qualifies another verbal abstract and is in fact its object.

Nominal subjects which accompany this form appear in the genitive or in the nominative. *ol orontaki alku tünliqlarniñ artokrak arig süziük bolmakı bolur; tamuda tugdači tünliqlarniñ üzülmäki bolur* (U II 38,74-5) ‘There takes place the perfect purification of all creatures who are in that place and a stop to creatures destined to be born in hell’ is an example for the former; another one is *samtso ačariniñ tavgaç xan birlä kälüş bariš bitig idišmakın ukitmak* ‘the description of the correspondence between Xuanzang and the Chinese emperor’, the title of a chapter in HTs, where Xuanzang is the subject of *idišmak*. In *burxanlarniñ tünliqlarig ädgü ögli köñülin ömäki ögnüñtä kaññıñta takı artok üçün* (Warnke 195) ‘because the Buddhas are well-meaningly considerate of the creatures even more than (their) mothers and fathers’ the infinitive, with genitive subject and accusative object of its own, is the topic of a nominal clause which, in turn, is subordinated by *üçün*. With nominative subject we have *bökünki künkätägi mogočlar ootka tapınmak tiltagı bo ärür* ‘this is the reason for the Magi’s worship of fire to this day’ in Magier, U I 9. Other such instances are *biz bir ikinti birlä öčäšmək kargäk ärmäz* (Wettkampf 54) ‘There is no need for us to fight with each other’ or *činäk keginč bermäki nom* ‘the treatise of Č.’s answer’, the title of a book in ChrManMsFr 1208. The first two quoted texts are Buddhist whereas the third is Christian and the fourth and fifth Manichæan. The case of the subject is crucial: The existence of nominative subjects shows that *-mAk* is inflectional and not derivational while the existence of genitive subjects does not speak against this status.

An infinitive is governed by instrumental *üzä* in “*käl toyin!*” *temäk üzä toyin kigürüp ...* (U III 75,2₁) ‘(Buddha) enlisted (them) as monks by saying “Come, ⁴⁶⁶ monk!”’. The sequence *-mAk üçün* ‘in order to’, so common in Turkish, seems to be rare in Old Turkic. We find it in *täñrikän uyğur bokuk xan ... koyn yilka üç maxistak olormak üçün možagka kəñädi* ‘His Uyğur majesty Bokuk xan (came to Xočo and)

⁴⁶⁶ Or, if the first word is an Indo-Aryan noun, ‘(It is) time, monk!’.

consulted with the Možak in view of the taking of office of three Mahistaks in the year of the sheep' in BuchFrag 1,1,2,7, a very early text. Note that the (nominative!) subjects of *olor-* here differ from the main subject.⁴⁶⁷

Reference to subjects can appear in the form of possessive suffixes added to the *-mAk* form, e.g. *sinmakimizni buzulmakimizni tükätgäli umadimiz* 'we couldn't stop our heartbreaking' (HTs VII 1916) or *maña amranmakimiz* (U III 29,1) 'your love for me'. With the third person e.g. *turkaru ögrünčün mäjin ärmäki bolur* (TT VI 101) 'He enters a state of continuously living (or: dwelling there, i.e. in the house) in happiness'; DreiPrinz 121, an early Manichæan text, has *-mAk+lArI bol-*. *kältökümün kertgünzün[lär], siziñ bägädmäkäniz(i)n ärklänmäkäniz(i)n bilzün[lär]* (DreiPrinz 65-67) has the infinitive in a construction identical with the perfect participle in *-dOk* and in parallel with it. *ol ok künkä ärtiñü ögrünčüläsmäk kiltilar* (DreiPrinz 109) 'On that very day they had a lot of mutual rejoicing' looks like a circumlocution for '*ögrünčüläštilär*', perhaps copied from a source text.

Translating the instances we quoted, we used the English *-ing* form, abstracts such as the nouns *stop*, *answer*, *love* or *worship* or Latinate forms in *-tion*, *-ence* or *-ment*. The only case where we used the English infinitive was when mentioning the 'need to fight'. What corresponds to the English infinitive is rather the converb in *-gAll* or, in other types of cases, the projection participle in *-gU*. *-mAk* is not a deverbal noun either, however, as it has full verbal government, can (on occasion) be negated with *-mA-*, can get nominative subjects and its forms are clearly not created for the lexicon. Unlike the English infinitive, it is not used adverbially. It is like the German infinitive or the Semitic *mašdar* when getting accompanied by its subject in the genitive but unlike them when the subject is in the nominative.

The form *-mAk+lXg*, appearing rather extensively in adnominal function, is discussed in OTWF 154-155 and in section 4.61 below.

⁴⁶⁷ The reading *ämgäk ämgädi bizni kutadm[ak] üčün*, in a passage in P. Zieme, 'Das nestorianische Glaubensbekenntnis in einem alttürkischen Fragment aus Bulayiq', *UAJbN.F.* 15 (1997/8): 173-180, has no certainty, as the facs. shows that the lacuna could have contained much more than two letters. In itself such a phrase would not be surprising in a ms. dated by the editor to the 13th-14th century, which shows *kutar-* < *kutgar-* and metatheses such as *nl > lñ* and *yr > ry*. The reading *ämgändi*, which the editor here proposes (against his reading *ämgädi* in his quote from the ms. in 1974), is possible in view of the fact that the base verb is otherwise not attested in Uyğur although there is only one N / ; I do not think it is obligatory, however, as *ämgä-* is attested in Qarakhanid Turkic, and the text does have the aberrant feature of writing the ablative form in *+dAn* several times instead of classical *+dIn*.

-mAkšXz, which is just as common, is dealt with in OTWF section 3.329. *-mAk* with possessive suffixes referring to the subject of the action and in the dative case is used in temporal clauses (section 4.633) or can give instrumental meaning.

3.282. Imperfect participles

Participles are verbal adjectives which, like other adjectives, readily assume nominal tasks, i.e. they can be heads of noun phrases. I here deal with participles under the headings ‘imperfect’, ‘perfect’ (section 3.283) and ‘projection’ (section 3.284); these are meant to be very wide labels, as the forms dealt with in section 3.283 do not necessarily have ‘perfect’ aspectual meaning, and the ‘projection’ in section 3.284 can mean many different things.

Imperfect participles turn out mostly to qualify nominals referring to *subjects*, or themselves to refer to subjects of actions expressed by the verbal base. They are only very rarely used for qualifying non-subjects; when they are, there is no explicit or implicit reference to the subject linked to them.⁴⁶⁸ The perfect participles of section 3.283 regularly refer to *non-subject* participants, e.g. to direct or indirect objects, and to circumstantial entities; only rarely do they qualify subjects. Projection participles, dealt with in section 3.284, *never qualify the subjects* of their bases. All participles can also refer to actions, events, processes or states, in accordance with the fact that an Old Turkic adjective can, beside qualifying or denoting an entity bearing a particular quality, also be used for referring to the abstract quality as such. When serving as predicates, participles demand no copula, but the element *ol* may be used after them in such cases.

Imperfect participles are used as finite predicates to different degrees: *-Ur* is used much more often in such function than as participle and *-dAčI* is used in this way mainly in the runiform inscriptions.⁴⁶⁹ On the other hand, we have come across only one instance of *-(X)gII* in predicative use and *-(X)gmA* is never used in this way. *-gAn* and *-gUčI* forms are, in Old Turkic, even farther from finite use.

The suffix *-(X)gmA* forms positive imperfect participles: Negative forms are not attested; this may be a sign of reduced productivity:

⁴⁶⁸ The use to which the Suv puts forms in *-gUčI* is an exception: Those do get accompanied by explicit subjects.

⁴⁶⁹ Another question, of course, is whether the present participle in *-dAčI* and the future suffix *-dAčI* should not (when disregarding diachrony) be considered to be mere homophones.

-mAdAčI and *-mAgUčI*, e.g., are common. Nor do *-(X)gmA* forms ever appear to be used predicatively; examples are heads or attributes. A number of Orkhon Turkic examples are quoted in Tekin 1968: 176; we also have *är-igmä* in QaraBalg d 5, a runiform inscription of the Uygur steppe empire. The form is rather common in Manichæan sources, e.g. *iki yarok ordo içrä olorugma täñrilär* (Xw 40-41 and 52-53) ‘the gods residing in the two palaces of light’; *tört elig täñrilärdä tanïgmalar, täñri nomïn tutagmalar, tünäriḡ yäklärkä tapunugmalar, tümänlik erinčü kilïgmalar* (M II 11,5-8) ‘those who deny the existence of the four ruling gods, disparage divine law, worship murky demons, commit sins by the ten thousands’. Cf. further *yerdä yoriḡma yalaḡok* ‘people living on earth’.

Substantivised we have, e.g., *bo ... agnayu yatagma* ‘this (person) lying (there) writhing’ (ManErz I 6); several further examples appear in the Xw. Substantivised *-(X)gmA* forms can, of course, also get case suffixes and *+lAr*, e.g. in *nomčï män tegmäkä artizip ...* ‘getting (oneself) deceived by those who say “I am a preacher”’ (Xw 122); there are further such examples in IrqB XX or HTs Biogr 135.

As pointed out in UW 429b (where examples of *är-igmä* are mentioned), the Uygur use of this participle is productive only in Manichæan texts;⁴⁷⁰ Buddhist sources only have petrified forms from the verbs *är-* ‘to be’, *käl-* ‘to come’, *te-* ‘to say’ and *uč-* (because of *učugma* ‘flying’ qualifying ‘creature’ and referring to birds). The Mait has the forms *kälïgmä* and *äriḡmä*, the latter e.g. in *täñri yerintä äriḡmä täñrilär* (Mait 103v5) ‘the gods staying in the divine country’. Another set phrase which stayed in use in later Uygur is *ken kälïgmä üd* ‘the future’ (e.g. BT II 141).

te-gmä is the only *-(X)gmA* form used for qualifying the verb’s object; we have it e.g. in *darni te-gmä kapïḡ* ‘the gate called *dhāraḡī*’ (Suv 457,4 and BT II 1077), *činžu tegmä ärtöktäḡ kertü töz bälḡüsi* ‘the mark of the so-being true root called *tathatā*’ (TT VI 190), *bo yertinčüdäki kamag eliglär kanlar tegmä üküši bodisatvlar tetir* (TT VI 248) ‘most of those called kings and rulers in this world are considered to be *bodhisattvas*’ and several more in that text. This use is very common in Buddhist texts (including early ones like TT VI) but seems to appear only in them. Possessive suffixes referring to subjects are never appended to *-(X)gmA* forms.

⁴⁷⁰ The word read as *y(a)rlïkagma* in M III nr.9 II,I r9 is now by P.Zieme (personal communication) seen to be *yalvarar m(ä)n*.

-*Ur* (negated as *-mAz*) is much more common in predicative verb forms than as a participle suffix. Examples for its use as participle are *uyakur yultuzlar* (Mait) ‘setting stars’, *akip* (or *agip*) *kälir sogik suv* (TT I 104) ‘cold water flowing forth (or coming up)’, *nom bilir är* (KP 14,3) ‘a person who knows the doctrine’, *bilig bilmäz kiši* (KT S 7) ‘an ignorant person’, *tayšanvu ögäsi bilgäsi tetir ärklik* (Mz 711 lines 32-33 quoted in TenKings, 6th and 7th court) ‘the mighty one called minister and counsellor of Taishanfu’. *körür közüm körmäz täg, bilir biligim bilmäz täg bolti* (KT N 10) ‘My (normally) seeing eyes seemed as if they had lost their sight and my (otherwise) thinking mind seemed to have lost its senses’ shows the form as a nominal governed by a postposition. *yazmas atim* ‘a marksman who does not miss’ in DLT fols.470 and 610 is a negative adnominal instance; note that both DLT passages show it in proverbs.

In early texts the participial use of the aorist is not limited to agentive heads: The head of *yanmas yerdä oztumuz* (M III nr.16 v3) ‘We escaped the place of no return’ is the *source* of the movement described by the verb, the place *from* which no creatures come back.⁴⁷¹ Nor is *bo tugar ölür yertinçü yersuv* (BT V 866-7; Wilkens 170) ‘this world *where* one gets born and dies’ agentive; in this instance the head refers to the *place where* birth and death takes place continuously. Cf. *tugar ölür sansar* in AranemiZieme 88. In *yeltirär ay* (Windg 17), literally ‘the month (in) which (the wind) blows’,⁴⁷² the head refers to the *time* frame. The verbs have neither explicit nor implicit subjects in any of these instances, so that no agentive possessive suffixes are necessary

⁴⁷¹ The form is irregular in that the suffix is in Old Turkic otherwise *-mAz* and not *-mAs*, and an early source would not confuse voiced and voiceless consonants. The ms. is now lost. *-mİš* would not fit the context very well (though *ī* is sometimes written with *alef*). Qarakhanid sources also have *-mAs* although they do not confuse the velars either; the text may therefore belong to a different dialect.

⁴⁷² ‘Windiger Monat’ in UW 380. A literal German translation would be ‘der Monat in dem es weht’, ‘wehen’ (unlike ‘to blow’) being a verb which always has the wind as subject. Various Asiatic nature calendars have a month named ‘windy month’. Zieme, who last edited the fragment in BT XIX 186-189, translated this expression as ‘antreibender Monat’, taking the verb to be the causative of *yäl-* ‘to trot, to amble’. There are three problems with his interpretation, adopted from EDPT 923b: Firstly, *YYLTYRR* differs from *yäl-tür-ür* in all three vowels, the aorist vowel of *yeltir-* ‘to blow’ always being /ä/. Secondly, the earliest certain instances of *yältür-* are from the 15th century; it does not appear to have turned up in Uygur and a different reading is just as possible for the Tuñ word referred to in the EDPT entry. Thirdly, the Tuñ and Ottoman instances referred to in the EDPT are about ‘riding fast’; the *Tarama Sözlüğü* also confuses the semantically and syntactically distinct Ottoman verbs *yäldür-* and *yeldir-*. See section 4.612 for the frame sentence.

either on the head or on the participles. In MaitH Y 243 which, unlike the previous instances, is Buddhist, the head (*ig*) is the *cause* of the (averted) event (*öl-*); it (and not the satellite) is marked with a possessive suffix referring to the person who might have died: *purani atlag tirtilär baxšisin ... višučik atlig ölüg igintä ozguru yarlikadi* ‘He graciously saved Pūraṇa, the heretics teacher, from his deadly illness called *višūcikā*’.

The *-Ur* form is also governed by *ärkli* (runiform inscriptions) or *ärkän* (the rest of Old Turkic) to form the kernel of temporal clauses. The following sentence shows it in three different functions, governed by *ärkän*, qualifying a head referring to time, and governed by a postposition: *kaltü män öjrä uzun asankilig yolda bodisatvlar yorikinda yoriyur ärkän burxan kutiṇa katiglanur ugruda kaltü alp är čäriḡkä täḡir täḡ isig özümin äsirkänčsizin titip idalap bo montag sukančig nom ärdinig bošgundum tutum* (Suv 395,4-10) ‘While I was previously walking on the bodhisattvas’ path along the world-age-long road and at a time when I was striving towards buddhahood I grudgelessly gave up my life as, for instance, a valiant man goes to the army, and learned and kept this treasure of a *sūtra* which is lovely to such an extent’.

The *-(X)gII* participle is mostly used in Manichæan sources and found also in two Yenisey inscriptions but is not too common in Buddhist Uygur. *yaltrigli yašin täjri* (M I 25,33) ‘the goddess of flashing lightning’ is an instance with an intransitive verb; *üzjütläriḡ udgurugli, köñlülüḡ açigli ymä köküzüḡ yarotugli ... tirig öz berigli ... bilgä bilig* (M I 26,12-17) ‘wisdom, which awakens the souls, opens the heart, brightens up the breast ... gives life’ has transitive *-(X)gII* forms which govern objects.⁴⁷³ In M III nr.12 r3 we find a negated *-(X)gII* form: *üč yäg* (thus!) *savın simagli ... tärs azag nomlaglar* ‘the ... propounders of heretic doctrines, who do not contradict the words of the three demons’.⁴⁷⁴ Buddhist examples appear in Fedakâr 135 (Sogdian script)

⁴⁷³ Some further examples: *okigli üntägli täjri* ‘the calling god’, *buzugli artatigli* ‘destroying’ (ms. T I D 200 in the n. to TT V A 23); *üzüldäci [ol] mänü ol tegli bitiglar* (HTs VII 1952) ‘writings saying “it is perishable” or “it is eternal”’, *ačarika tušugli bursaḡ* ‘the congregation meeting the master’ (HTs III 377), *bodisavtniḡ kalgüsin küdügli ketumati kânt uluštaki bodun bukun* (Mait 146r5) ‘the population of Ketumati, which was expecting the arrival of the bodhisattva’. *tüz tuyugli* is a common attributive phrase for Buddha, e.g. in Mait 197r4. In TT VI 153 *yokug biligli* ‘a person knowing nothingness’ is, in half of the ms., replaced by *yokug bilir*.

⁴⁷⁴ This fragment in Manichæan script (Wilkens 127) must be rather late, as it confuses voiced and unvoiced consonants (e.g. *yäg* for *yäk*, *b(ä)grü* for *bäkrü* ‘firm’, *toturu* for *tod-ur-u* ‘to satiate’) and has some other errors.

and e.g. in VimalaZieme 1080 and 1081. Kāšgarī fol.582-3 lists a number of participles, then says that all are negated like *togra-ma-dači* and *yüklä-mä-däči* and adds that, ‘in another dialect they say *togra-magli* and *yüklä-mä-gli*’. The *-(X)gli* form was still in use in Middle Turkic (Ata 2002: 88).⁴⁷⁵

Substantivized *-(X)gli* forms refer to the subject of the action, e.g., *kiši ät’özün bulugli antag ol ... üç yavlak yolka tüsügli anča ol* ‘Those who attain human bodies are like ... (but) those who fall into the three evil ways are as ...’ (TT VI 336-7); *bayin barimligin ... kavışigli az ürür, yok çigay bolup ... barigli ölügli üküš* ‘those who come together again under eased circumstances are few; those who become poor, leave and die are numerous’ (TT VI 314-5). The sentence *üküş tünliglar barip ölügli* ‘many creatures go there and die’ in KP 26,7 is similar, but here the *-(X)gli* form is predicative.⁴⁷⁶ In *tana muna yoriglilar bar* (Mait 165v23) ‘there are people who live unaware of what they say and do’ (and in another instance in Mait 83v29) we find the form in the plural. *ikint[i] käliglika tayak berg[äy] män* ‘To the one coming second I will give the staff’ (DreiPrinz 28) and *içiglikä yaraşı säviglig bolur* (Windg + U132c 42) ‘it becomes agreeable to whoever drinks it’ are among the rare examples of the *-(X)gli* suffix with an oblique case form.

The phrases *ädgü ögli* ‘well thinking, kind, compassionate’, *ayig ögli* ‘evil meaning (person), enemy’ and *köni tüz tuyugli* ‘he who senses rightly and evenly’ are lexicalised and are used unusually often, e.g. in KP and Mait. This is why we find *ädgü ö-gliärim* ‘my friends’ or, in Suv, *ayig* or *ädgü ögli+kä*, *ögli+lär+kä*, *ögli+m* and *ögli+sin*; similarly with the third phrase. The UW (353-355) treats *ädgü ögli* as a lexicalised phrase, mentioning that F.W.K. Müller already pointed out that it was a loan translation from a Sogdian term lexicalised already in that language. *ögli* is the only *-(X)gli* form attested in the Hami ms. of Mait; where the Sängim ms. has such forms they are, in the Hami ms., replaced by *-dAçI* or *-gUçI* forms.

-(X)gli participles generally have intra-terminal meaning. The only possible exception I have met is *barma yıl änätkäkdin käligli arkıştün darmaguptakä ... baxšimizni kiyilti äšidip* ‘last year (we) heard from the messenger coming from India that our ... teacher Dharmaguptaka had

⁴⁷⁵ In OTWF a form ending in *-(X)glXg* (< *-(X)g+lXg*) and functioning a bit like a participle is documented; though it may live on in Turkish *-(I)II*, it does not seem to be the source of the Middle Turkic forms.

⁴⁷⁶ In the n. to this passage, Hamilton states that this participle refers to actions reoccurring constantly. Such an interpretation is possible for many of the examples, but not, e.g., for the one in HTs VII 1913.

died' (HTs VII 1913), where the time reference is past and the messenger must have given the news after he arrived: *käl-igli* should therefore here have post-terminal meaning, unless there is reference to regular messenger service; the meaning should then not be 'the messenger who came from India' but 'the messenger who comes from India'; this would be possible even if it were not the same person every time.

The *-(X)gli* participle is obsolete in inscriptional Turkic, where we only have the clearly petrified *är-kli*⁴⁷⁷ 'being': In *yuyka ärkli tupulgalı ućuz ärmiš; yinćgä ärklig üzgäli ućuz* (Tuñ 13) 'It is easy to pierce what is thin, they say, and easy to break what is fine'. The form *är-kli+g* just quoted shows that *ärkli* is also a participle and not a converb. Nor had it, at that stage, become a postposition as yet, since postpositions do not feature actant case morphology.⁴⁷⁸ In other examples quoted in section 4.633, *ärkli* is added to *-Ur* participles from intransitive verbs to form an analytical temporal adjunct describing resultative states. What I here, following Tekin 1968, read as *ärkli* is spelled as $r^2k^2l^2I$, its accusative form as $r^2k^2l^2g^2$. Thomsen and Gabain had read it as '*ärikli*'. Schulz 1978: 192-205 attacked both readings and the connection with the participle suffix *-(X)gli*; he instead suggested reading the form as '*ärkäli*' (following Aalto, an editor of the Tuñ inscription) and deriving the suffix both of this and of *ärkän* from some mysterious element *-kä* or *-gä* which he was unable to explain. $r^2k^2l^2g^2$, again, was considered to be some remnant of unexplained archaic morphology. One of Schulz's motives for this proposal, that the participle clearly has a /g/ (as shown in the spelling with Manichaean letters in Xw 117; 1.127 of the relevant ms.) while *ärkli* is spelled with k^2 , is not so serious; cf. footn.477. The central argument for his attack is the fact that the *ärkli* constructions are adjunct clauses whereas *-(X)gli* forms participles which never serve as adjuncts. I would not consider this to be a serious problem either (beside the fact that the Tuñ inscription twice uses *ärkli*

⁴⁷⁷ In runiform inscriptions /g/ is spelled with k^1 / k^2 after /r l n/, presumably to show that it is a stop in this position. For this contact between the two elements to take place, the onset vowel of the suffix must first have been elided, which it does not do e.g. in the form *berigli* quoted above, nor in *är-igli* in the Uygur example mentioned further on. There is no phonotactic reason why it shouldn't, especially if we decide that the velar in *ärkli* is not only a stop but also voiceless (that it should, in other words, be assigned to the phoneme /k/), as /rk/ is a sequence well-attested in syllable-final position.

⁴⁷⁸ Adjuncts, including postpositions, do get instrumental and equative case suffixes in *ašnu+ća*, *azu+ća*, *öñi+n* and *birlä+n*, dealt with in section 3.3. These suffixes serve to make the adverbial status of these elements explicit, however, and do not assign participant tasks to them.

as headless participle, once in the accusative case): Forms of the copula in many languages develop special uses, Turkish *ol-arak* ‘as’ being one example for such a special use. Translating *ärkli* with the German and English participle forms ‘seiend’ and ‘being’ will easily show that the participles of these languages can also be used in ‘absolute’ manner, i.e. as adjuncts. All this could equally hold for Uygur *ärkän*, prominent in Schulz’s argumentation, which OTWF 383 had considered to be a remnant of the *-gAn* participle obsolete in most of Old Turkic though so active in the modern languages:⁴⁷⁹ There, again, it would only be normal for an obsolete form to have survived in the copula, and with an aberrant function. The reading of the Tuñ instances of *ärkli* and their interpretation as participles is unproblematic on the one hand, and cannot, on the other hand, be separated from the other inscriptional instances spelled in this way. T. Tekin’s understanding of the forms must therefore be correct.

In the following example the *-(X)gII* form has been taken to qualify a head which is not a subject, something for which I have found no parallel: *bögü xan kántü [dindar]lar ärigli kuvraggaru kälti, d[e]ndarlar[ka] söküdüp ...* (TT II,1 34), translated ‘Bögü Qan kam seinerseits zu der Versammlung, wo die Elekten waren, und vor den Elekten auf die Knie fallend ...’. *[dindar]lar* may, however, be a wrong conjecture;⁴⁸⁰ it seems likelier to me that we might have had the same construction as in Orkhon Turkic, with an *-Ur* participle before *ärigli* = *ärkli*, giving ‘B. khan came towards the assembly himself being [adjective], knelt [before] the elect and ...’. Note, on the other hand, that this is a Manichæan text and that the use of the aorist to qualify circumstantial heads is also a Manichæan characteristic.

The participle suffix *-dAčI* is in runiform sources spelled with *t¹ / t²* in *öltäči* and *kältäči*, in both cases because of the */l/*. In Manichæan sources *T* appears in *bošuntači*, *kurtultači*, *tapintači*, *sakintači*, *kiltači*, *bertäči*, but also in *kömüštäči* in fragmentary context; on the other hand we find *tägürdäči* in M I 26,17-18. This list excludes the late Pothi book and TT IX, which do not follow the early rule of spelling suffix-onset */d/* as *T* after */r l n/*. I have come across one (adnominal) *-dAčI*

⁴⁷⁹ The etymology suggested for *ärkän* by Erdal 1991 was severely criticised by Johanson 1994 but adopted by Johanson 1996: 91, subsequently to be rejected again (oral communication). It may, instead, come from **ärür kän*, with a particle discussed in section 3.341, in case the temporal suffix *-mAzkAn* dealt with in section 4.633 is formed with this particle.

⁴⁸⁰ The editors mark the *l* as well as uncertain.

form also in the (runiform) Yenisey inscriptions, in YE 28,9: *altun Soņa yiš käyiki artgıl taşgıl; atdači Upa Barsim adrılı bardı* ‘Oh animals of the wooded mountain of Soņa, multiply and flow over; my hunting Upa Bars has died’. This instance is clearly imperfective although it refers to the past. In the Orkhon inscriptions, *-dAčI* serves in positive finite verb phrases with future meaning (see section 3.26). That group of sources also shows this form in participial function with future reference, e.g. in *öltäči bodunug tirgürü igittim* (KT E 29, BQ E 23) ‘I revived a dying nation (or ‘a nation about to die’) and took care of it’. Nominalised, *üküş öltäči anta tirildi* ‘Many who were about to die were saved there’ (BQ E 31). The instance in *eki üç biñ sümüz kältäčimiz bar mu nä* (Tuñ 14) can, in its context, refer either to the present or the future; it should mean ‘We presumably have two to three thousand soldiers, including the ones who are coming / about to come’.

The KT and BQ instances just quoted show clearly that Orkhon Turkic *-dAčI* forms are not factive; their use differs from that of inscriptional *-sXk* participles (section 3.284) in that the former qualify or refer to subjects (in accordance with the normal behaviour of the other imperfective participles), the latter to all other participants in the action but not to subjects.

In Classical and Late Uygur as well as in Qarakhanid, the *-dAčI* suffix forms present participles, replacing the participle suffixes mentioned above, most of which are typical for pre-classical sources: *bo nom ärdinig boşguntacı tutdaci tört türlü terin kuvrag* (Suv 423,16), e.g., is ‘the four types of communities which believe in this jewel of a doctrine and adhere to it’. *tuttači* is attested also in the QB. Further examples are *olordacı* (U I 15), *turkaru katıglandači bodisatv* ‘the bodhisattva who is continuously exerting himself’ (U I 17,3). In Uygur, the negative counterpart of participial *-dAčI* is *-mAdAčI*, e.g. *[siz]ni ayamadači agırlamada[či yok]* (HTs V 42) ‘There is nobody who does not honour you’. Similarly, *sävmädäči idi yok* ‘there is nobody who doesn’t love’ in Suv 579,12, *nomlarnıñ asılmakın koramakın körmädäči* ‘he who does not see the increase and the decrease of the teachings’ in 245,17. A *-mAdAčI* form in adnominal use: *tugmak ölmäk sansar içintä tägzintürdäči, ämgäklig tägzinčdin taşgaru idmadači igid äzüg adkangular* ‘the deceitful and false bonds which make (the creatures) revolve in the *samsāra* of birth and death and do not let them out from the whirlpool of suffering’ (Suv 305,1). Further examples are *bolmadači* in BT II 667 and 1030, *itürmädäči* ‘he who does not lose’ in BT II 718 or *üzmadäči käsmädäči* in BT VIII B 253; timeless (i.e. presentive) *-mAdAčI* forms are very common in Uygur. While finite

-dAĉI, which refers to the future, often had *-mAĉI* as negative counterpart, there is no evidence for *-mAĉI* as present participle suffix.

ät'özüg talgokladaĉi tamu (BT II 551-2) is the hell where the devils employed there nail a person's body onto things. The head of this relativisation therefore represents the place of action; the expression *could* also be understood to say that this is the 'hell which nails bodies (onto objects)' if there is no other documentation for heads of *-dAĉI* referring to place. *tamu* is, however, unlikely to be the subject.

UW 404 lists numerous examples of verb phrases in *-dAĉI ärür / ärmöz, -dAĉI ärti, -dAĉI ärmış, -dAĉI ärsär, -dAĉI ärip* and *-dAĉI ärmädin*, as if these were analytical constructions. The meanings of these sequences can, however, generally be distinguished from the corresponding simple forms: *Sew Keytä ulatı bäglär közgäşdäĉi, kördäĉi, užıklarığ ornatdaĉi ärdilär* (HTs VIII 1507), e.g., should not, presumably, be translated as "Xiao Jing ... und die übrigen Begs revidierten und prüften [den Text] und plazierten die Zeichen ..." but "The lords Xiao Jing etc. were in charge of collating and controlling (the text) and placing the letters": The formulation describes the division of labor and is not identical to the description of processes. Similarly *anin öz ät'özlärin ölgökä bolar siziŋ ütünüzni äriğizni ärttäĉi ärürlär* (TT VIII N 10), which Hartmann and Maue in their reedition (Mātṛ 78) translate as "darum übertreten [die Toren] Eure Anweisung, dadurch, daß sie sich selbst töten". What is presumably meant is not a characterisation of acts, but a characterisation of a set of people committing these acts as sinners.

-gAn has wide-ranging and highly important functions in modern Turkic languages but was rather obsolescent in Old Turkic. It is dealt with in detail in OTWF section 3.324, as a number of *-gAn* forms got lexicalised; cf. also section 3.113 above: Some of the instances mentioned there may in fact belong here. OTWF 386-387 also refers to a number of *-gAn* forms, both in Old Uyğur and in Qarakhanid, where it is used as a part of the verbal system, as a habitual participle; we especially note the sequence *-gAn bol-*. Kāşğarī says that the form denotes duration, continuity, habituality and/or frequent occurrence of an action; this is also how he translates the numerous examples which he mentions. Kāşğarī's *-gAn* forms govern direct and indirect objects quite freely, although the fact that he lists the instances at all must have meant that he thought the form belonged to the lexicon and not to inflection; all of them refer to the subject of the verb. Some of the Uyğur examples are late (such as were edited in TT VII and ETŞ, e.g.

12,6 or 30,9-10) but *kalin kuvragag yet<i>gän uduzgan buyruklar* ‘the commanders leading the dense crowd’ (MaitH XVI 9r28-29), e.g., is quite early and also shows the forms to have verbal government. In *atamniñ maña ülüštä täggän Taysañdaki ... borlukta* ‘in the vineyard in T., which I got as my share from the inheritance of my father’, which appears in a late legal document (AmongUigDocc 3 = Sa11,3 in SammlUigKontr 2), the form is not habitual, i.e. it does not describe any quality of its subject, but is used as perfect participle. Another late economical document again has *-gAn* in perfect use, qualifying the verb’s object: *inäčiniñ sañka kudgan üç [k]ürü ü’rni ... altim* ‘I have received three bushels of millet which Inäči poured into the barn’ (Mi15,2, same collection).

-gAn apparently came to refer to the action in the aberrant dialect of the fragments in Sogdian script: We find] *ketäriñ kim [...]*K *ölgändä kurtul*] (AlttüSogd 415), where *+dA* is caused by verbal government: The meaning may have been ‘do away with ..., so that (we, they etc.) may be saved from dying’. In this instance, *-gAn* is neither perfective nor future, in agreement with its other uses.

Negative adnominal participles from the forms mentioned appear to have been rare: With *-(X)gmA* and *-gAn* none appear to be attested. Adnominal *-mAz* is, of course, attested already in the KT inscription and *-mA-gII* in an early Manichæan source but ‘normal’ Uygur apparently did not make active use of these forms in the agentive domain. What became more and more normal was *-mAdAčI*; *-mAksXz* (dealt with in OTWF 3.329) appears to have been used extensively as habitual negative imperfective participle at the classical and post-classical stage. It had free verbal government; a majority of the instances appears to have been created for the passages in which they occur, i.e. not to be lexicalised. *-mAksXz* was often formed from secondary stems, including the passive; this is why it did not *need* to qualify its object: When the head was an object, the attributive verb form was derived from the passive counterpart.

The formation with *-gUčI* consists of *+čI* added to *-gU* (section 3.284 below). It can be negated with *-mA-*: *köni kertü sözlämägüči kiši alku tamularniñ ülüši bolur* ‘The fate of a person who does not say the truth is (to suffer in) all the hells’ (DKPAMPb 279-80, alternating with *üzüglägüči* ‘telling lies’ in 1.281); *adašniñ ešniñ m(ä)n tep tiliñ sözlä[p] sözlämiščä kilmadin utru sävinč u[tli] bilmägüči bolsar ...* (U IV D 64) ‘(Whoever) says ‘I am your friend and companion’ with his tongue but

does not act in accordance with his words and is ungrateful, ...';⁴⁸¹ *tsuy ayig kilinč kilip ökünč köñül öritmägüčilär* (MaitH XXIII 9v2) 'those that have committed sins secretly and have not repented'. The form can govern converbs, as in the example quoted last. Both *köni kertü sözlämägüči* and *sävinč utli bilmägüči* are presumably meant to denote character traits. We have an early instance of a *-gUčI* form as head of a relative clause: *kunčuyılar taysılar başlagüči [u]lug kičig kam(a)g bodun* (TT II,1 64) 'the whole nation, both big and small, led by princesses and princes'; instances of headless and headed relativisation are quoted above. *-gUčI* forms govern objects, as in TT IV A 56-61: *toñuzčü balikčü käyikčü äñči tuzakčü boltumuz ärsär, torčü čivgačü kuščü edärčü, uçugma, bagrın yorıgma tınl(i)glarig ölürgüči boltumuz ärsär, it ätin satgučü boltumuz ärsär, açakram yılan ölürgüči boltumuz ärsär, luu üntürgüči yadčü boltumuz ärsär, [tinlig]larig kinagučü bukagučü boltumuz ärsär, ...*⁴⁸² 'If we have been hunters of wild boars, fishermen, wild game hunters, trappers, if we have been netters, bird-snarers, wild-fowlers or trackers who kill flying and crawling creatures, if we have been sellers of dog meat, if we have been killers of boa snakes, if we have been snake charmers or rain-stone magicians, if we have been jailers who torture people, ...'. On the other hand we note in this passage that, from the actionality point of view, *-gUčI* is the verbal counterpart of *+čI*; both denote professions or people's characteristics: None of the eleven *-gUčI* forms quoted refers to an event, as verb forms are expected to do; all characterize people by their occupations, by social position, by recurrent behaviour or by psychological traits. By formal characteristics, however, this *is* a participle. The *-gUčI* forms in KT N 13 already show this behaviour; they govern direct objects and refer to professionals: *bark etgüči, bädiz yaratıgma bitig taš etgüči tabgač xagan čikanı čaᅇ säñün kälti* 'There came an architect, (and there also came) the sculptor General Chang, the nephew of the Chinese emperor, who creates the ornaments'. Being a sculptor was clearly the imperial nephew's vocation, whereas *bädiz yaratıgma* refers to his actual work on Köl Tegin's grave (and 'general' is his title). In Uygur we have e.g. *ot yegüči tınl(i)g* (UigPañc) 'a herbivorous creature'. In nominal use: *k(ä)ntü bargay tamuka udu eltkäy bergüčig* (M III 29, Nr.12 r 7) 'He himself will go to hell and will take the donor after him';

⁴⁸¹ The phrase *sävinč utli bil-* 'to be grateful' appears also in lines 38 and 57 of the same passage and *sävinčsiz* is 'ungrateful'.

⁴⁸² A very similar confession in U II 84-85 adds two further *-gUčI* forms, among them another one with direct object: *ämğätgüči boltum ärsär, kiši ölürgüči čantal boltum ärsär* 'if I became a torturer, if I became an executioner killing people'.

in M III Nr.7 II r 5 the king's clothes are washed by an *uz yuguči* a 'master washer'. In KIP 4a a *bodhisattva* gets the name *ün äšidgüči* 'the one hearing voices'. When Bögü Xan decides to adopt Manichæism for his people the Uygurs, he appoints some persons to the administrative position of *tavratguči* (TT II,1 93): They get the task of urging the population to carry out pious deeds. Here is an equally agentive instance with direct object: *kayu nomčılar bo altun öñlüg y(a)rok yaltriklig kopda kötrülmiş nom ärdinig nomlaguči ärsär ...* (Suv 474,1) 'Whichever preachers occupy themselves with preaching this golden, radiant all-surpassing jewel of a text ...'. Persons involved in transactions are also referred to with *-gUčI* forms: *algučika bergüčikä ayitiip* (Acte 35,18) signifies 'asking the buyer and the seller' and *čamlaguči kiši ... korlug bolzun* (Yamada, Slaves 198,22-23) 'The person lodging an objection shall be responsible for any loss'.

A *-gUčI* form qualifying its object, thus no longer being agentive, is *samtso ačari kälürgüči burxanlar bitiglar* (HTs VII 1119) 'the Buddha figures and books which Xuantsang brought along'. The Suv has many such examples: *ol künki biziñ ašda ölürgüči ud koyn toñuz başlap tñlïglar* (Suv 6,13) 'creatures, mainly bovines, sheep and pork, which we slaughtered on that day at our meal'. *tükäl bilgä t(ä)ñri t(ä)ñrisi burxan y(a)rlikaguči bo bodi tegmä yorik* (Suv 379,9) 'this path called *bodhi* which Buddha, the perfectly wise god of gods, teaches / taught'; *birök eliglar xanlar k(a)lti t(ä)ñrim siz y(a)rlikaguči bo töröčä ävrilip ... bo nom ärdinig äšidsärlär* (Suv 423,13; similarly 436,21) 'if kings and rulers should, however, live according to the teaching which you, my lord, propound (= *yarlikaguči*), and ... listen to this jewel of a doctrine'. Another *-gUčI* form qualifying the verb's object appears in a Mz (i.e. earlier) ms. version of Suv 189,13 but is replaced by the *-dAčI* form in the much later Petersburg ms. These instances do not refer to persons by their occupations or characteristic behaviour, as agentive *-gUčI* forms do.

3.283. Perfect participles

Perfect participles qualify or refer to their direct or indirect objects, to other participants in the event or to entities describing circumstances; even more often, they refer to actions or to states. They can also, like the imperfect participles, qualify nominals referring to subjects or themselves refer to subjects of actions. They appear to be always factive.

The perfect participle suffixes are *-mIš*, *-dOk* and *-yOk*; positive *-dOk* is used mainly in runiform and Manichæan sources while *-yOk* is never

used in those sources. Suffixes of these shapes appear also as finite verb forms, but the uses and meanings of the finite forms and of the perfect participles are different and not to be confused. *-dOk* does not in Old Turkic appear in finite use (as we shall show below) in its positive form but only as negative *-madOk*; this latter is the negative counterpart of both finite and infinite *-mIš* in earlier Old Turkic texts: *-mAmIš* comes up only in late Uygur. While finite *-mIš* (and with it finite *-mAdOk*) express evidentiality and mirativity, the perfect participles in *-dOk* / *-mAdOk* and *-mIš* (as well as the late *-mAmIš*) never have this content. Finite *-yOk* is vividly post-terminal, implying the speaker's direct observation of an event (whereas the use of finite *-mIš* involves autopsy only if the speaker is using it as a mirative, then referring not to an event but to a state). The meaning of infinite *-yOk* does not seem to differ much from infinite *-mIš*, on the other hand, and that of infinite *-mAyOk* not much from infinite *-madOk*.

In the perfect domain, the earliest Old Turkic (including Orkhon Turkic, the Uygur kaganate inscriptions and most Manichæan texts) differs from the rest of the corpus: In the Orkhon inscriptions, *-mIš* (or *-mis*, as it is spelled there) mainly qualifies or refers to subjects, while *-dOk* appears in the inscriptions and in most Manichæan sources when the head refers to participators other than the subject (e.g. the direct or indirect object) or to circumstances (e.g. the time of the event). *-mAdOk* is well documented in all manner of Uygur texts as readily qualifying subjects as well as non-subjects; e.g. in *arimadok tsuy irinčülärim* (TT IV B50) 'my unpurified sins' where the head is subject and *täñri unamadok avinču* 'a pleasure woman not approved of by heaven' from the IrqB⁴⁸³ or *körmädök ešidmädök savlarig kördüm tep tedimiz* (MaitH XX 14r5) 'We said (about some) matters that we had seen (them although we) had neither seen (them) nor heard about (them)', where the head is direct object.

In Orkhon Turkic, *-dOk* is spelled with t^1 or t^2 after stems ending in /l n r/ such as *kazgan-*, *olor-*, *yañil-*, *yazın-*, *ber-* but never after ones ending in other consonants or vowels; this apparently shows that /d/ was realised as a stop after the sonants. This distribution appears to have been retained in Manichæan texts, which write *-tOk-* with stems such as *bol-*, *ämğän-*, *ärksin-*, *kargan-*, *tägin-*, *ör-*, *ür-*, *är-* *kurtgar-*, *azgur-*, *kör-* and *turgur-*. When a *-dOk* form is used not for qualifying a

⁴⁸³ T.Tekin 1997: 6 takes *täñri unamadok* to be a sentence by itself, which he translates as 'Heaven was apparently not pleased with it'. This is not acceptable because the 'it' which he introduces into his translation would have to refer *forwards* to *avinču*, which zero anaphora do not do.

nominal but itself serves for reference and when it refers to an entity other than the subject, reference to this latter *can* appear in a possessive suffix added to it. This is by no means obligatory as it is in Turkish, however, and the *-dOk* form does appear without possessive suffix when the hearer or reader is expected to know the identity of the subject in some other way.

In section 4.622 we quote some examples of (positive) *-dOk* forms used as direct objects; most of them appear in Manichæan texts, but there is, e.g., an instance of *är-dök+in* ‘its being (acc.)’ in a rather late letter. This may not be an archaic trait in that case; rather, *är-dök* from *är-* ‘to be’ appears – as in Turkmen – to have developed a life of its own, independent of that of the suffix itself. If the literal source of *ärdök tæg*, corresponding to the common Buddhist term Skt. *tathatā* ‘thus-ness’, is ‘like what is’, this would mean that *ärdök* here refers to the subject of *är-*. In a Buddhist text we have a headless *-dOk* form referring to the object of the subordinated verb and serving as subject of the whole sentence: *ogrï tep tedökünjüz nägü ol* (KP 59,5) ‘What is that which you have called a thief?’. A further such instance is quoted in section 4.621. In *kältöküm bo tep ötünti* ‘He said ‘These are (the circumstances of) my coming’, on the other hand, the *-dOk* form, which serves as topic in a nominal sentence, appears to refer to circumstances (the same Buddhist text just quoted, KP 60). We also have *-dOk* forms in oblique cases: An inscriptional example (with 1st person possessive and the instrumental case) is *biltökümün ödökümün bunča bitig bitidim* (KČ S 2) ‘I wrote all this text based on what I know and remember’. *aydokinča kertü bolur ärti* ‘it used to come true according to what he said’ (M III nr.13 I v3) and *yarlikadokumča* ‘according to what I ordered’ (ms. U 311 b v4) are both from Manichæan sources. Then we have *-dOk* forms governed by postpositions and relational nouns: *tutdokumuzda bärü* ‘since we kept’ (Xw 148) is, again, Manichæan. *Burgučan Alp tarxan bæg eläntök ärksintök ugurinta* (M I 27,10) ‘on the occasion of the coming to power of the lord B.A. *tarxan*’ could in principle be analysed in two ways: Either, as happens in many modern Turkic languages, the possessive suffix in *ugur+in+ta* refers to the subject of the adnominal participle, which does not itself inflect for subject but transfers that onto *ugur* ‘occasion’, the head of the construction. Alternately (and I think correctly), *ug(u)rinta* is taken to be part of the relational noun construction (see section 4.22); the *-dOk* forms themselves are then understood to refer to the action and not to the event’s circumstance.

In *it ürdöki kuš üni ... äštilmäz* ‘No barking of dogs and no sound of birds is heard ...’ (M III nr.32 r1) or *bo kargantokin, alkantokin, känräštökin yöntüštökin bilmäz kiši tāk sögüščä oyunča sakanur* ‘An ignorant person takes this cursing and quarreling of theirs to be just scolding and play’ (M I 9,16-18), the *-dOk* forms refer to the action; as the contexts show, the 3rd person singular possessive suffixes refer to plural subjects. The possessive suffix can also be wholly absent with *-dOk* forms used as perfect participles, if the context makes this reference superfluous, even if the verb is not impersonal; e.g. *yarok kälip tünäriḡig yaydok üčün* (M III nr.1,IV v3) ‘because light came and dispersed darkness’: The *-dOk* form is often governed by *üčün* with the meaning ‘because’. In the *-dOkIn üčün* phrase (discussed in section 4.635), intransitive verbs appear as freely as transitive ones. The locative of the *-dOk* form rather commonly serves as a common temporal converb (see section 4.633); it can also be governed by temporal postpositions such as *bärü* ‘since’ or *kesrä* and *ken* ‘after’. In Manichaean sources, the instrumental form (added to *-dOk* with possessive suffix) supplies ‘reasons’ for the main clause, e.g. *azgurdokin* ‘because he led (our senses) astray’ (Xw 19) or *kop yerdä ačḡ ämgäk körtökin* ‘because they suffered bitter torments everywhere’.

Tekin 1997 quotes instances of *-dOk* and *-mAdOk* found in the runiform inscriptions and further deals with the etymology of this suffix and with its real or assumed finite uses.

-mIš forms are generally subject participles in Orkhon Turkic, whereas *-dOk* forms serve as perfect-domain non-subject participles of that dialect (as of Turkish). *-mIš*, which also serves the expression of indirective status (section 3.27), is often spelled with *s*² (not *š* or *s*¹)⁴⁸⁴ in Orkhon Turkic: More in some texts than in others; the BQ inscription often changes *-mIs* forms of its source, the KT inscription, to *-mIš* without changing much else in the passages, and inscriptions of the Uygur Steppe Empire write *-mIš* even more often. These fluctuations do not specifically concern this particular suffix but are related to the spelling and pronunciation of Orkhon Turkic /š/ in general; nevertheless, one gets the impression that /š/ surfaces as *s* a bit more often in this suffix than elsewhere.

In Uygur as distinct from Orkhon Turkic, *-mIš* forms refer to non-subjects more often than to subjects. Examples for adnominal

⁴⁸⁴ Yenisey inscriptions have both *š*¹ and *š*², but Orkhon Turkic uses the character serving as *š*² in the Yenisey inscriptions both in front and back contexts.

inscriptional *-mlš* participles are *elsirämiš kagansiramiš bodun* (KT E13) ‘the people who lost state and ruler’⁴⁸⁵ and *igidmiš kagan* (BQ N6) ‘the ruler who has nourished (you)’. In *anta kalmiši* ‘those among them who stayed there’ (KT S9; similar expression in Tuñ 4) the verb form itself refers to the subject. *tägmiš* in *türk bodun k[ilīngal]i, türk kagan olorgali Šantuñ balikka taloy ögüzkä tägmiš yok ärmiš* (Tuñ 18; there is a similar passage in Tuñ 47) can be understood in participial use, giving the meaning ‘Since the Türk people came into existence and since a Türk ruler gained power there it is said that nobody had reached the town(s) of Shantung or the sea’. Another possibility (cf. T. Tekin 1968: 179) is that it is to be understood as action noun: ‘... it is said that it (i.e. the Türk people; or ‘he’, i.e. the Türk kagan) had never reached ...’. The latter possibility is supported by the same construction appearing in Fedakâr 239: *ol üdün uluš üzä burxan tiši [en]miš⁴⁸⁶ yok ärti; bolar yalñoklar tümän türlüg ämgäk ämgänip ...* ‘At that time the buddha Tišya had not yet descended upon the people; these persons were suffering a myriad sorts of suffering and ...’. There is one clear Orkhon Turkic example for *-mlš* in non-subject use: *kañimiz äçimiz kazganmīš bodun* (KT E26; BQ E22). Tekin takes this passage to signify ‘the people who were conquered by our father and uncle’; however, the Türk people, who are here being referred to, were hardly conquered by Köl Tegin’s father and uncle but rather were conquerors together with them. It might just be possible, therefore, that the *-mlš* forms here also qualify their subject, the nominatives *kañimiz äçimiz* standing for comitative content. Had it not been for this example, the Orkhon Turkic use of the *-mlš* participle would have been identical to the Ottoman and Turkish one, whereas the Uygur use of *-mlš* reminds one of the use of *-gAn* in many Non-Oguz languages. The inscriptions of the Uygur Steppe Empire keep the use of *-mlš* forms within the sphere of subject participles. We have, first, the proper name *Ozmīš* (‘one who has prevailed’) *Tegin* in ŠU N9 and Taryat E6 and 9 and the regal name *Täñridä Bolmīš* (‘born in heaven’) *El Etmiš* (‘who has organised the people’) *Bilgä* (or *Uygur*) *kagan* in ŠU N1, Taryat S6 and W1 and 6 and Tes 12. *anta kalmiši bodun* (ŠU N3) reminds one of *anta kalmiši* quoted above from the Orkhon inscriptions and appears to signify ‘that part of the nation which remained there’.

⁴⁸⁵ See section 3.211 for the *+sIrA-* formation.

⁴⁸⁶ The string MYŠ appears at the beginning of a line and the end of the previous one is torn away with about three letters missing; the editor’s *t(a)yšimmiš* makes no sense. *Tišya*, the name of a previous Buddha, has already appeared several times in Uygur texts as *tiši*.

In Classical Uyğur, *-dOk* is not used as positive non-subject perfect participle; the whole perfect domain is covered by *-mIš*. *-mIš* and *-dOk* enter into complementary distribution in that *-mAdok* serves as negative counterpart of *-mIš*; *-mAmIš* appears rarely, and only in very late Uyğur sources. This is the situation e.g. in the voluminous *Suv*, where there are 11 *-dOk* forms all referring to the action and not to any participator,⁴⁸⁷ 26 instances of *-mAdOk* but, on the other hand, only 3 instances of *-mAmIš* (all three in 57,13-15, where they are contrasted with *-mIš* forms of the same verbs). Cf. *kälmädök üdtä tugar tugmaksızın* ‘He will in the future (*käl-mä-dök üd*) be born without birth’ (BT I D161); *kut bulmadok toyınlar* (Maitr XXIV Endbl 13) ‘monks who have not attained salvation’.

-mIš forms not representing their subject often have possessive suffixes referring to the subject, as *zaxariya dendarniñ ölüm täginmiši* (U I 9,9) ‘how the priest Zakharias met his death’; *kälmišimizdä* (HTs VII 2046) ‘when we came’ (literally ‘at our completed coming’), *kämišmišniñizkä* (HTs VII 2147) ‘because you have thrown it away’. They do not, however, always get the genitive of personal pronouns: *anin män anta azun tutmišim kärgük* ‘therefore I should get born there’. In section 3.24 we mentioned an emphatic construction of the shape *-mIš+Im bar* which clearly involves *-mIš* forms used as action nouns.

Reference to subjects of such action nouns by possessive suffixes is not obligatory; thus in *bo ülüštä Samtso açari ... čoonanka barmišdin başlanur, ... ät’öz kodmiš üzä üzülür* ‘this section starts with Xuanzang having gone ... to Č. and ends with his death’, where the *-mIš* forms refer to the action. The introduction to another HTs section (HTs VII 9) has the same form. *bo nom bititmiš buyan ädgü kilinč* ‘this meritorious deed consisting of having had the *sūtra* written down’ shows an adnominal action noun in *-mIš*. In *tegin alkuni taplamadi, tāk taloy ögüzkä kirmišig tapladi* (KP 15,3) ‘The prince didn’t like any (of the other ideas presented to him), he only liked going out⁴⁸⁸ to the sea’, the verb is not impersonal either, though the subject of the *-mIš* form is again not expressed: The reader understands it to be the same as the subject of the main verb. In the sentence *ol bermiš bušida kilmiš ädgü*

⁴⁸⁷ Another four instances of *-dOk* which appear in the colophons or in the *Buyan Ävirmäk* section which is a later addition represent the finite *-dI* past in the 1st pers. pl., and show that these sections belong to Middle Turkic. The *Buyan Ävirmäk* has been excluded from the material serving as base for this grammar.

⁴⁸⁸ *kir-* for this meaning is a calque on a Chinese expression, as shown by Hamilton in his note.

[ki]linčda ötrö yarok [täñri] yerin utlisin bultum (M III nr.13, 31,3₂) ‘Because of those alms which (I) gave and the good deeds which (I) performed I found the bright [heavens] as retribution’, reference to the subject is inherited from the main verb. In the following example (from Suv 5,8) the perfect participle used as action noun is also adnominal but it has a subject, referred to by a possessive suffix on the head: *korkmañlar, m(ä)n amti sizlärkä tirilmiš tiltagimän sözläyin* ‘Don’t be afraid, let me now tell you all why I got resurrected’. *ögmiškä ymä sävinmädin, yermiškä ymä yerinmädin ikigükä barča bir täg ädgülüg bolurlar burxanlar* (U III 73,21), finally, signifies ‘without being glad when somebody praises them nor sorry when somebody criticizes them they, the Buddhas, have an equally positive attitude towards both’. F.W.K. Müller’s translation as “Weder über das Lob freuen sie sich, noch vom Tadel fühlen sie sich betroffen” is acceptable because the context lets the reader understand *Lob* and *Tadel* as action nouns and complete the subject of *ög-* and *yer-* as ‘somebody’. It is misleading, however, when Gabain 1974: 73 defines *-miš*, *-miš* as “zeitlich indifferentes Verbalnomen, aktiven oder passiven Charakters” only because *-miš* clauses can qualify both subject and object heads, and wrong when she renders *ögmiš* as ‘Lob’ in §122 in the same way as she renders *yaymur* as ‘Regen’ in §123 and *tügün* as ‘Knoten’ in §124, as if it were a derived lexeme.

-miš forms are also used as attributive and predicative participles, as the two instances in the following sentence: in *ol yarok yašuk važir öñlüg alkatmiš yer ... beš bölükün bölmiš ol* (BT V 188-191) ‘That bright and shining praised land with diamond appearance is divided into five parts’. Note that *yer* is the object of *böl-* but the subject of reversive *alkat-* ‘get (oneself) praised’. A number of *-miš* forms from causative *-(X)t-* stems (in later sources replaced by *-tXl-* stems) are lexicalised: No bases are attested for *alkatmiš*, *amratmiš*, *bayutmiš*, *bulgatmiš*, *eritmiš*, *kargatmiš* and so forth. *olar bo darni sözlämišig umagaylar ämgätgüli* (DhāSū 12) ‘They will be unable to torment somebody who has recited this *dhāraṇī*’. In two attributive examples quoted in the previous paragraph from M III nr.13 the *-miš* forms qualify their objects. Predicative participial (and perfect) *-miš* presumably *has* to be followed by copular *ärür* or *ol*, as it would otherwise be confused with evidential *-miš*, which is always predicative; the former is dealt with in section 3.26, the latter in section 3.27.

The *-yOk* form was in use only in Uygur; its suffix is attested with a rounded low vowel in Brāhmī script, in TT VIII H5 (*ünmäyökiñä*) and

L18 and 21-22 (both *tükämäyök*).⁴⁸⁹ It has a finite use as vivid past, a past with relevance for the speaker's present, as discussed in section 3.26. In infinite use, however, it merely expresses post-terminal content, mirroring the split found in the use of *-mİš* between finite and infinite use; e.g. *bulganyok köñüllüg tinliglar* 'creatures with confused hearts' (Pohti 227-8); *tükäl yazoklug, sinyok çaxšaputlug dentar* 'an utterly sinful priest who had broken the precepts' (fr. TI D 200 in the n. to TT V A 23); *ädgü tetyök nom* 'the teaching considered to be good' (Pohti 108). Negated e.g. *övkä köñül öritmäyök tinlig* 'a creature which never let itself get into an angry frame of mind' (U III 42,12). In all the instances quoted hitherto, the head was the subject of the *-yOk* form. Negated and qualifying the verb's object, as the negative counterpart of *-mİš*, as it were, we have, e.g.: *kilmayok ayig kilinčlarig ikiläyü taki kilmaz män* (Suv 138,3) 'The sins which (I) have not committed till now I will not commit in the future either'; *körtüm körmäyök yerig, äšiddim äšidmäyök nomug* (HTs Tug 13a3-4) 'I have seen places hitherto unseen, have heard teachings hitherto unheard'. Nominalised, representing the object: *kemi siyokin tuta üntüm* (KP 54,6) 'I got out holding on to a piece of ship debris' (*si-* 'to break – tr.').⁴⁹⁰

-yOk forms are also used as abstracts; possibly, only negative verbs here occur with this function: The instances *sundari kizniñ četavan säyrämtin kälmäyökin bilip ...* (BT III 210) 'learning that the girl S. had not yet arrived from the J. monastery, ...' and *özümniñ başgarip umayokum ärür* (r63 of a colophon published in AbiShōtan p.76) 'this is a case of my being unable to succeed' both have possessive suffixes referring to the subjects and subjects in the genitive. *sav söz ötmäyökkä* (HTs VII 2065-66) 'because the news had not yet gotten through' has no such suffix and the subject is in the nominative; a further instance without possessive suffix appears in HTs V 192. Similarly, *bir küp bor tägmäyök üčün* (Sa9,6 in SammlUigKontr 2) signifies 'because a container of wine has not arrived'. The following *-yOk* form is governed by a relational noun, again giving the same meaning: *tävlig kürlüg sakinčün köni sözlämäyök tiltaginta alku tinliglar yerip yarsip uzati kargayurlar* (DKPAMPb 273) 'Because, due to his deceitful thoughts, he has not been saying the truth, all creatures despise him and

⁴⁸⁹ The low vowel is not certain: All the Brāhmī examples we have use the suffix after /ä/, and this may have been a lowering factor. The suffix is in use in South Siberian Turkic, mostly in the shape *-čXk*, and was borrowed into Kamas, a Samoyed language spoken in South Siberia, as *-yUk*.

⁴⁹⁰ Concerning this last instance one might consider the possibility that it is a coyist's misreading of *si-n-ok*; cf. also the passage discussed in OTWF footn. 271.

curse him incessantly'. The preceding sentence quotes people's judgements about this person.

3.284. Projection participles

The participles with the suffixes *-sXk* (used in the runiform sources and in the Manichæan Uygur X^wästvānift), *-gU* and *-gUlXk* (used in all other sources) are here called 'projection participles' because they are used for presenting projections of expectations, evaluations and intentions.

The shape of the *-sXk* suffix needs some clarification. That it has fourfold harmony in the runiform inscriptions follows from the fact that *kün tugsuk* 'east' is spelt with ^wq in runiform script (Qara Balgasun B7) whereas *batsik* 'west' is spelt with runiform ⁱq in KT S2 = BQ N2 and as b¹t¹s¹Ik¹ in Qara Balgasun B9. Other forms with rounded-vowel bases are *to(s)suk* in KT S8 and BQ N6, *olorsukum* in Tuñ 12 and 22, *ölsükünün* and *tutsukuñun* in KT S10 and BQ N8, *tugsuk* in KT E4 and 8 and S2, BQ E5 and 8 and Ongin 2. In none of these is the vowel of the suffix written out explicitly. On the other hand, the suffix is spelled with s² in the Tuñ 22 and Ongin 2 examples, although their bases are *olor-* and *tug-* respectively, as is the suffix of *udisikim* in Tuñ 12 and 22. Since s² often appears beside /i/ as well as beside front vowels, the idea that the suffix was *-slk* in the Orkhon texts (as proposed by T. Tekin) cannot be wholly ruled out. Rounding is in this suffix actually documented first in the Qara Balgasun inscription from the late Uygur steppe empire (quoted above), but implicit vowels must nevertheless be expected to be either /A/ or /X/: *-sXk* therefore remains the form we take the suffix to have had. The *k ~ g* variation is found also within the Xw, whose ms. in Manichæan script uses quite distinct characters for the two phonemes. Referring to the lines of that ms. we find *ančola-sik* (222 and 248), *olor-suk* (246 and 273) on the one hand, *alkan-sig* (210), *kigür-süg* (229), *sözlämä-sig* (295) and *išlämä-sig* (297) on the other. The likely explanation for this variation is that the form was no longer alive in the language of the person copying it from a source in Uygur writing and that he therefore did not know how it was pronounced; this is, after all, the only extant Uygur text with this form.⁴⁹¹

⁴⁹¹ Otherwise the ms. confuses velars only very rarely (once ḠSWG for *ägsük*, which appears correctly elsewhere in the text, and twice S'GYZ for *säkiz*).

The sentence *esig küčüg bersägin* (b²r²s²g²m) *bar ärmiš* was read in Ongin 10 in Clauson's 1957 reedition, and there translated as 'I had a wish to give my services'. Tekin 1968 proposed reading *ber-sig-im*, assigning the form to the suffix discussed here. He is right in stating that *-sA-(X)g*, which Clauson was presumably thinking of, is

In one Orkhon Turkic passage repeated in different texts a *-sXk* form appears to be used several times in finite use for expressing predictions, with reference to the subject in a possessive suffix appended to the form itself; see section 3.26 for that.

Infinite *-sXk* either refers to the action or to non-subjects, or qualifies non-subject heads. Examples for the first are *tün udisikim kälmädi, küntüz olorsukum kälmädi* ‘I did not feel like sleeping at night nor like resting at daytime’ (Tuñ 12), *yañilip ölsükünün ... bunta urtum* ‘I set down here (how) you will needs err and die’ (KT S10), *ančolasik k(ä)rgäk ärti* ‘it was necessary to give presents’ (Xw 176-177) or *wusanti olorsuk törö* ‘the rule of sitting in fasting’ (Xw 175). *el tutsuk yer* ‘the place to rule the realm (from)’ (KT S4) or *sözlämäsizig ... söz* ‘words which one should not utter’ (Xw 198) are examples for forms of this formation qualifying non-agent participants. The only *-sXk* forms in use in other Manichæan texts are the petrified *kiin tugsuk* ‘east’ (e.g. in M III 9,1) and *kiin batsik* ‘west’ e.g. in M III 9,3); these two terms appear also in a runiform inscription and were known to Kāšgarī as well.

In non-inscriptional Old Turkic (except the Xw), the non-factive task of *-sXk* is filled by forms in *-gU* or *-gU+lXk*. There is a single, abstract *-gU* form already in the KT and BQ inscriptions (E23 and E19 respectively): *kürägünin üčün ... xaganiñin ... elinä ... yavlak kigürtüg* ‘Because of your obstinacy / unruliness⁴⁹² you introduced evil into the

highly unlikely here: There is a denominal desiderative suffix *+sA-* and a deverbal desiderative suffix *-(X)g+sA-*; *-(X)gsA-* became *-(X)sA-* only in Qarakhanid. The reading is hardly correct: All reference to this inscription (including Clauson’s) is based on Radloff’s work, which is known to have often been untrustworthy in the Old Turkic domain; there is no free alternation between voiced and voiceless consonants in any Orkhon Turkic text.

Benzing 1980 suggested that the suffix was originally *-sXk* but that the phrase *kiin tugsuk* ‘east’ etc. was in fact petrified and lexicalised and that the productive forms were to be read as *-(A)sXk*. This was meant to explain why Tuñ 22 and Ongin 2 have *s*² in the suffix when added to the stems *olor-* and *tug-*; Schulz 1978: 139 follows his teacher in reading the Tuñ 12 and 22 instances as ‘*olurasiqim*’ and ‘*olurasiqim*’ respectively. According to Benzing, *-(A)sXk* then changed to *-(A)sXg* as first documented in the Ongin inscription in the form just quoted, and was the source of the Turkish, Tatar etc. future participle in *-AsI* with possessive suffix, already attested in the DLT. The problem with this idea is that the additionally hypothesized vowel is nowhere attested in Old Turkic and that it contradicts the facts: *tug-suk* in Qara Balgasun B7 would not have been written with ^wq if it had been ‘*tug-asik*’; nor can *kigür-süg* in Xw 167 be read as ‘*kigür-äsizig*’.

⁴⁹² *kürä-gü+η+in* with agentive 2nd person suffix referring to the Turk nation, and accusative ending as demanded by the postposition by which the word is governed.

realm of your emperor'. As bases of *-gUčI*, derivatives such as *ölürgüči* 'killer' or *kolguči* 'beggar', *-gU* forms did not have perfective meaning either. *-gUlXk*, another composite suffix based on *-gU*, is necessitative; *+lXk* appears to have been added to *-gU* to make this meaning explicit. *-gU* is negated with *-mA-* (as is *-gUlXk*); e.g. in *uzatmagu* (BT V 908), *kilmagu kilinč* 'a act not to be carried out' or *tünlä küntüz sakınmagu sakınip ...* (l.13 in ms. Wilkens 421) 'by night and by day thinking things which are not to be thought'. This is a clear indicator of its belonging to inflection and not word formation. The fact that some *-gU* forms got lexicalised is no counter-argument, as lexicalisation took place with inflected forms as well. Nor is the fact that *-gU+sXz* is also attested⁴⁹³ a counter-argument: Similar to it we have the equally nominally negated *-gUlXk+sXz*⁴⁹⁴ (OTWF section 3.312) and *-mAk+sXz* (OTWF section 3.328) beside the verbally negated *-mA-gUlXk* and *-mA-mAk* (a rather late and rare form). The difference between the two ways of negation is clearest with *-mAk*, in that *-mAksXz* is a full-fledged nominal whereas *-mAmAk* stays an infinitive.

The 'projection' quality of *-gU* will be clear from the meaning of, e.g., *adin bergüm yok ücün* (Sa2,2 in SammlUigKontr 2) as 'because I have nothing else to give'. In the following Uygur instances the form with *-gU* refers to a necessity or an intention: *sözläşgünj ärsär ünüp kalgil* (UigBrief D) 'If you have anything to discuss, come on here'. In *tinliglarig kutgarguda* 'when one intends to save living creatures', the whole *-gU* expression has been put into the locative, the *-gU* form again referring to a projected action; the use of *-gU+dA* is discussed in section 4.633. In the following two sentences the form is the object of a verb of saying and a verb of sensing: *alkiš başik sözlägüg, ... amv(a)rd(i)šn kilip yigingug ayu y(a)rlıkadiñiz olarka* (Pohti 226-7) 'Thou hast commanded them to say blessings and hymns, ... to concentrate one's mind and meditate'; *maytri bodisavtnij ... burxan kutin bulgusin ... ukar mu siz?* 'Can you ... grasp that bodhisattva Maitreya is to ... attain Buddhahom?'

In the last-mentioned instance the subject of the *-gU* form was in the genitive, but a construction of the shape *-gU+sI yok* has the subject in

kör-, which editors before Tekin had thought of, much less accords with the context even when taken with the meaning 'to obey'. I take *kürägü* to have been lexicalised; the context does not permit projectional *-gU* here.

⁴⁹³ A few examples for this suffix sequence are quoted in OTWF 138; cf. also *bo ... sävgüsüz taplagusuz yarsinčig ütöz* (Suv 613,2) 'this ... disgusting body not to be loved or desired'.

⁴⁹⁴ *-gUsXz* is not the negative counterpart of *-gUlXk*, as stated in Gabain 1974 § 141.

the nominative: *ig toga ketgüsi yok* (U I 45,4) ‘It is not expected that the illnesses will disappear’; *mäniñ köñülüm yüräkim [...] sintädä öñi ketip bargusi yok* (TT X 466) ‘It is [quite] unlikely that my heart should abandon you’. *siggusi yok ärdi* ‘it could not be expected to fit in’ shows the same analytical construction with abstract *-gU* transposed into the past.

Like the ones with *-sXk*, *-gU* forms can also refer to or qualify non-subject participants: In *bergü bulmatin* (KP 10,4) ‘not finding anything to give’, e.g., the form refers to the direct object; this is also the task of the form *sakınmagu* ‘things not to be thought’ quoted above, and of the form in *kılmaqu kilinč* ‘a deed not to be done’. In *ayançañ köñülin yüküngü ayaglıg atlıg kañim mani burxan* (Pohti 2) ‘my respected and famous father, the prophet Mani, whom one should worship with a reverent mind’ it qualifies the indirect object, in *engü üdi yagumiš* ‘the time when he is expected to descend is said to be nearing’, the time adjunct. *äv* in *olorgu äv* (HTs III 739) ‘a house to live in’ is the *place* of the activity referred to in the verb. In TT VA 88-98 we have three instances of *-gU* used adnominally to qualify entities which serve as instruments to the action and a fourth one referring to the action itself: *alñadturgu sakinč* (TT VA 88) ‘meditation *for* weakening (the demons)’, *alñadturgu biliglär* (TT VA 92) ‘notions for weakening’, *ulug alñadturgu tamga* (TT VA 94) ‘the great weakening seal’ and *ulug alñadturgu iş* (TT VA 97) ‘the business of the great weakening’. *ornangu* (TT I 114, M I 27,32) and *kongu* (M I 27,35) ‘dwelling-place’ are local. A number of examples qualify *yol* ‘way’, clearly used as instrument in the contexts quoted; among them we have *ozgu kutrulgu yol yinjak* (Pohti 63) ‘the way and direction to salvation’, *t(ä)ñri yerinčä bargu ... yol* (Pohti 72) ‘the way by which to go to the land of gods’ and *bošungu yol agtingu šatu bilmädök üçün* (M III nr.1 IV v14-15) ‘because he knew no way to freedom and no ladder for rising’. In the following three instances the *-gU* form qualifies the means to an end or the material, i.e. an instrument: *tükädi n(i)gošaklarniñ suyin yazokin öküngü xwastwan(i)vt* (Xw 221, ms. B) ‘The Xw., with which the auditors are to repent their sins, has ended’; *kaltü uz kiši uzlangu äd bulmasar ...* (M I 17₁) ‘when, e.g., a craftsman does not find the material to carry out his craft (with) ...’; *alñadturgu sakinč* ‘meditation by which to weaken (bad influences)’.

-gU forms can also be used predicatively, as in *bo yertinčö yer suvdaki tünliglar birök burxan körkin körü kurtulgu ärsär ...* (U II 17,26) ‘If, now, (any) creatures in this world are to be saved by seeing the figure of Buddha, ...’; this is followed by *pr(a)tikabut körkin*

kurtulgu tñlğlar ärsär (U II 17,28) ‘If they are creatures to be saved through the appearance of a pratyeka-buddha, ...’, where the *-gU* form is attributive. Similarly *sinxadivipka bargu ärsär suv yolın barmak kãrgãk siz* (HTsPar 108r19 quoted in the note to HTsBriefe 1870) ‘If (you) are to go to Ceylon you have to go by sea’.⁴⁹⁵ The construction of these two sentences, where the subjects are referred to by nominals in the nominative case, should be compared to *sözlãşgün ärsär* discussed above, with the possessive suffix referring to the subject. There, the *-gU* form was taken to refer to the content of a future discussion; it could also refer to the projected event.

-gU also appears within the construction in *-gU ol* referred to in section 5.2, which expresses obligation or advice. The analytical form *-gUĀ ärsär* is discussed among the conditional constructions in section 4.64. *nãgü ... bulguĀ bolsa* (Ad3,16 in SammlUigKontr 2) is ‘whatever one can find of ...’.

-gU tãg signifies ‘suitable for the activity denoted by the verb’: *tarig tarigu tãg ädgü är karabaş* (ZiemeSklav III 14) ‘a male slave good for working in the field’, *tapingu tãg kız karabaş* (ZiemeSklav III 16) ‘a female slave suitable for service’, *kilmagu tãg nä nãgü iş* (U III 54,13) ‘some unsuitable piece of behaviour’. ‘*korkgu tãg yalınlar* (MaitH XX 1r18) are ‘frightful flames’; the meaning of *korkgu tãg* (attested also e.g. in TT X 362 and DKPAMPb 81) should be similar to *korkinċig* (formation discussed in OTWF section 3.311). *-gU tãg* is also put to predicative use: *oglanlarimni bulmatin älvirgü tãg bolur män* (BT XIII 2,48) ‘Not finding my children (i.e. if I didn’t find them) I would be as if in a rave’. *alimċilarim ma tãlim bolup turgu tãg bolmayin kaċip yaşıp ...* (Mi19,4 in SammlUigKontr 2) signifies ‘my creditors also having become numerous (the situation) was not suitable for staying around and I fled and hid and ...’. From this comes Rab ġũzĩ’s use of the phrase *-gU tãg turur* in the meaning ‘to intend / to be ready to carry out the main action’ (documented in Schinkewitsch 1926: 100). The meaning ‘suitable for doing’ appears to have moved towards ‘in order to do’ in the example *yetip ikilãyü yanginċa yetgü tãg kãlir oğlanig* (BT XIII 2,44) ‘Till (I) get (there) and come back again (someone) could come and might lead the children off’: The accusative object *oğlanig* is here governed by *yet-*, showing that *yetgü tãg* functions as a verb phrase

⁴⁹⁵ Gabain reads *krãksiz* and translates this as ‘braucht man nicht’. In view of the fact that Ceylon is an island, I have here followed Anderson 2002 § 1.1.3 in taking *siz* not to be the privative suffix but the 2nd person plural pronoun, on assumption that the Chinese text is compatible with this. There is no need to take *-gU är-* to be an auxiliary construction, as Anderson did in the lecture referred to.

although it is also a postpositional phrase. This construction developed further in Middle Turkic; Brockelmann 1954: 247-8 gives numerous examples from the QB and a great variety of Middle Turkic sources.⁴⁹⁶ Cf. also the sequence *-gU tæg ärmäz* expressing impossibility, dealt with in section 3.253.

The sequence *-gUIXk tæg* is attested e.g. in M III nr.7 II v1, in *eligkä yaraguluk tæg yontug aritirča* ‘as one cleans a horse which would be suitable for a king’; there are other examples in M III nr.5 r4. See section 4.636 (on final clauses) for the use of the analytical forms *-gU ücün* and *-gU+kA*.

In *-gUIXk* e.g. in *nomumin işidgülik küsüş* (MaitH XV 2v1) ‘the wish to hear my teaching’, it seems as if the suffix *+IXk* has kept its meaning, as the wish is directed, as it were, towards future hearing activity. *kudiki bolguluk savlar* (BT II 232) are ‘matters to be disparaged’, *sözlägülik savlar* (BT II 257) ‘things one is to say’. Manichæan texts also have such forms e.g. 4 times in TT II,2 41-44. *-gUIXk* forms can be used predicatively, e.g. *näčä täñlig kalin küčlüg yavlak yäk içkäk bolsarlar, bodisatv uguşlug elig bəgniş äñ mintin ätözintäki bir ävin tüsiñä ymä ada tuda tægürgäli uguluk ärmäzlär* (U IV A 260) ‘However numerous, powerful and evil *pretas* and *bhūtas* there might be, they would not be able to do any harm even to a single hair on the body of the king of *bodhisattva* lineage’. Now consider the sentence *küsüşüm ol ötüngülik / tolp yertinčüg yarotdaçtka* (Suv 372,12)⁴⁹⁷ ‘It is my wish to pray to him who brightens up the whole world’: The *-gUIXk* form has here become the predicate of a nominal sentence and refers to activities the speaker considers to be desirable, in accordance with the function of this fused suffix. In the following example, the *-gUIXk* forms, with possessive suffixes referring to the object of their verbs, themselves refer to the action (*bil- uk-*) which is expected to be carried out: *keñ yöriğ kiltılar. bilgülikin ukgulukin ornatu tükätip ...* (HTs VIII 72) ‘They set forth a detailed commentary. Having finished to determine how they (i.e. the teachings) were to be understood, ...’. The same can be said of the following example, which even has a 2nd person possessive suffix: *udumbar čäčäk tæg alp tuşgulukuñuz üzä tañlančig ärür siz* (Suv 654,5)

⁴⁹⁶ The sequence subsequently fused to give *-gUdäg*; Brockelmann 1954: 248 quotes Nawā’ī as defining it as a special form for expressing conjectures. *-gAdAg* lives on in Tuvan or in Khakas, expressing the same content of ‘it seems, it looks as if’.

⁴⁹⁷ This is a verse passage, whence the unusual word order. Cf. the sentence quoted at the end of section 4.8.

‘You are marvellous by being as difficult to come by as the *udumbara* flower’.

Section 3.312 in OTWF deals with the composite suffix *-gUIXksXz*, the formation there being called ‘the negative modal oblique’. Its content should not be confused with that of *-mAgUIXk* (attested e.g. in HtsPar 14 r22 and Suv 6711,17): When used predicatively, the latter expresses the speaker/writer’s attitude with respect to the non-desirability of a proposition, while *-gUIXksXz* qualifies nominals as related to such an attitude on the part of the speaker.

Orkhon Turkic and Uygur *-gUIXk* can form small clauses with ‘difficult’ or ‘easy’ as predicate: *yuyka kalin bolsar topolguluk alp armiş* (Tuñ 13) ‘If thin gets thick it is hard to pierce, they say’; in a rather similar phrase, *bo innelun šastr ärsär ärtiñü täriñ alp tüpkärgülük ärür* (HTs VIII 152) ‘As for this Ying ming lun *śāstra*, it is exceedingly profound and hard to fathom’. *učuz bulguluk in ol barča učuz bulguluk ol* ‘All that is easy to find’ (DKPAMPb 358) is constructed in the same way as *alp tüpkärgülük* of the previous example. In *tinliglarig ütläyü ärikläyü alp kutgarguluk üçün* ‘because it is difficult to save living beings through advice and admonishment’ (DKPAMPb 115) we find a similar small clause – again with *alp* as predicate – governed by the causal postposition or conjunction.

The projection participles never qualify or refer to subjects, which the imperfect participles generally, the perfect participles sometimes do. The label of ‘projection’ attached to the forms of this section is to be understood as an either epistemological or volitional orientation towards possible future events. *kün tugsuk* and *kün batsik* are the directions in which one *expects* the sun to rise or to set with no volition attached; *maytri bodisavtniñ ... burxan kutin bulgusı*, similarly, refers to something *expected* to happen in the future. *el tutsuk yer* on the other hand, is the place which the speaker considers to be *best suited for* the activity of ruling; *olorgu äv* a house to live in, one *suitable for* living. *sözlämäsiz ... söz* are words one *should* not utter, *kilmagu kilinč* something one *should* not do. *bergü* is something to give, *intended for* giving. *tinliglarig kutgargu* refers to the *project* of saving creatures, something one *plans* to do.

3.285. The prospective

The imminent future form in *-gAllr* is difficult to classify among the parts of speech: It is never found as an attribute, nor ever as the head of a nominal phrase and thus is never, in fact, a participle in any narrow sense. It is either used predicatively with pronominal subject (like

Turkish *-Iyor*) or governed by postpositions or by *ärkän* ‘while’ (which otherwise governs locatives, *yok* ‘non-existence’ and the aorist). The uses of finite *-gAllr* (attested in that function also in DLT and QB) are discussed in section 3.26. Its most common non-finite use is to be governed by *üçün*, e.g. in *koluğalarin ädäddürgälir bädütgälir üçün* (BT III 77) ‘in order to let their shoots materialize and grow’ or *män ol ... köni kertü savig közädgälir üçün* (U III 68,31) ‘so that I might document that true statement’. A few sentences before the last expression (U III 68,22) the same speaker says *agüzimtin ünmiš köni kertü savig közädgäli barayin* with the same verb, signifying ‘Let me go to document the true statement which I uttered’; this highlights the similarity between the suffixes *-gAll* and *-gAllr* (which perhaps comes from *-gAll ärür*). Note that *-gAll üçün*, *-gU üçün* and *-gUlXk üçün* also appear in final clauses, *-gAll* being the supine suffix and the forms in *-gU* and *-gUlXk* necessitative participles. In the example *častani eligig ... siñirgälir osoglug kilinip* (U I 41) ‘they behaved as if they were about to swallow king Č.’ we find *-gAllr* governed by the postposition *osoglug* ‘similar to’. We further have (Suv 536,14) *bo darnig sözlägälir ärkän* ‘while about to pronounce this *dhāraṇi*’; another example of *-gAllr ärkän* is quoted in section 4.633.

3.286. Converbs

Converbs are verb forms used adverbially or, especially in the case of *-(X)p* and *-(X)pAn*, used within a sequel of clauses forming a sentence, linked so that their content comes to be understood as coordinative. There are two types of exceptions in which we find converbs in adnominal use: One is the construction with vowel converb found in *tik-ä kulgak+in* ‘with cocked ears’, discussed below in this section, where the whole phrase *is* adverbial. The other is the use of *är-ip* linking two attributive satellites to each other when the first is more complex than the second; see the end of section 4.122 for that.

Converbs’ subjects are often identical to that of the verb to which they are subordinated; when they do have their own subject it appears in the nominative. A third possibility, when no subject is stated, is that the clause’s content is meant to hold for any appropriate entity as subject; a fourth that the subject should be supplied by the addressee or reader from out of the context. Thus, when, at the beginning of a letter but after the address, we find the sentence *adrilgäli yirilgäli ärü ärü [ür] keč bolti* (HTs VII 2064) we know that we have to translate ‘Bye

and *bye*⁴⁹⁸ it has become a long time since (*you* and *me*) were separated and torn apart' although the con verbs in *-gAll* are not accompanied by any explicit reference to a subject.

From the morphological point of view we can classify converb suffixes into ones that are opaque and such that show, in various degrees of transparency, that they come from some other form. Some elements bringing verb stems into adverbial function are in fact not mere morphological forms but whole phrases, in which nominal verb forms are governed by a postposition. We shall here list all converbs and discuss their morphological aspect; we start from opaque converb suffixes, adding their various evident or putative derivatives, then mention converbial derivatives from verbal nominals. The functions and syntactic uses to which all these are put are dealt with in section 4.63 ('Clauses as adjuncts'). Adjunct clauses can, in Old Turkic, also be formed without resorting to simple or complex converbs, by using conjunctions; such structures are not mentioned in the present section. The conditional suffix dealt with in section 3.287 is actually also a converb suffix at least in the runiform inscriptions: We have already, in connection with *-(X)p*, granted that converb clauses can be highly independent syntactically; the *-sAr* form is a converb in that it has neither verbal nor nominal inflection and is used adverbally. It does, however, become increasingly linked to the category of subject person already at a very early stage and moves towards finite status in the course of the development of Old Turkic.

The most common converb suffix appears to be *-(X)p*.⁴⁹⁹ It is further discussed in 4.631, the section on the use of contextual converbs. Clearly related to it morphologically is the suffix *-(X)pAn*, also discussed in that section. *-(X)pAn* is used in runiform inscriptions (e.g. *el örginin anta örgipän etitdim* 'I set up the national throne there and had (the place) arranged' in ŠU), rather commonly in the runiform ms. IrqB and in Manichaean texts (e.g. *üzü]g saviṇa arilipan* 'cheated by her false words' in BT V 277, *ay täjri ordosinta enipän*, 1.9 of the hymn

⁴⁹⁸ *ür-ü*, the vowel converb of the copula, is only attested in lexicalised *ürü ürü* 'gradually etc.'

⁴⁹⁹ Johanson 1988: 136 quotes several unacceptable 'etymologies' for this suffix, says 'we shall refrain from adding new proposals here' and then does add a new proposal in the long footnote immediately attached to this sentence. Johanson's proposal is unacceptable as well, as it is based on an intermediate form '-yUb' (to be derived from a Mongolian converb suffix ending in *U*); such a form is not and cannot have been attested, as there is no trace of a 'buffer y' in Old Turkic, nor indeed anywhere outside Oguz.

edited in *UAJb* 16:221-2, ‘coming down from the palace of the Moon God’). *kara xanka barıpan, yalavaç barıpan kälmađıñiz bägim-ä* in the epitaph E30 tells of a South-Siberian nobleman who went as a messenger to the Qarakhanid ruler and did not return. There are also a number of examples in the DLT in verse. This not very common form and the even rarer $-(X)pAnXn$ (early Uygur, Manichæan and Buddhist) are discussed in Johanson 1988, who quotes a number of examples. Among the etymologies quoted or suggested there for $-(X)pAn$, the only possible one seems to be the segmentation $*-bA+n$, i.e. that it should be formed with the instrumental suffix $+(X)n$ as in $-mAtI+n$ discussed below. Another possibility is that $-(X)pAn$ comes from $-(X)pAnXn$ by haplology; that (attested e.g. in *ukupanin* in Mait 23r12, *körüpänin* in MaitH Y 194) would come from $-(X)p anin$, i.e. from the instrumental form of *ol* used in the meaning ‘thereby’ beginning the superordinate clause, secondarily adapting to synharmonism as the two fused: Johanson stresses the instrumental meaning of these two forms as against the other Old Turkic converbs including $-(X)p$, and in UW 142 we find a number of examples for the ‘superfluous’ use of *anin* after subordinate clauses. IrqB 35 can be read as *kugu kuş kanatıña urupanin kalıyu barıpan ögiñä kañıña tägürmiş* or *kugu kuş kanatıña urup anin kalıyu barıpan ögiñä kañıña tägürmiş* and in both cases signify ‘The swan put him on his wings and so rose in the air and brought him to his parents’. Johanson 1988: 146 quotes three DLT cases of *anin* written separately after $-(X)p$ forms; these passages, which he interprets as instances of wrong spelling, in fact agree with the use of *anin* in Uygur and go a long way towards explaining $-(X)pAnXn$. The problem with the Johanson hypothesis is that $-(X)pAn$ by no means always has instrumental meaning; in Xw 134, a rather early text, its use is temporal or conditional: *öñrä nä bar (ärmış in a ms.) tepän biltimiz* clearly means, in its context, ‘We know what there was (or ‘what there is said to have been’) before that’ or perhaps, more literally, ‘If one said ‘What was there (or ‘What is there supposed to have been’) before , we know (the answer)’.⁵⁰⁰

A construction of the form *nä + -(X)p* converb + *Ok* appears to have exclusively temporal meaning; see section 4.633.

In BT XIII 1,96 we find the verse *yagiz ye[r] täñinčä särip siz* in quite fragmentary context, translated as ‘übe r die ganze braune Erde seid ihr

⁵⁰⁰ The *te-* form corresponds to Turkic *diye* or *dese*. The three subsequent sentences have the same structure though they contain different interrogative clauses.

ausgedehnt”.⁵⁰¹ This should be an instance of a verb phrase of the shape $-(X)p$ with pronoun, which is put to finite use in some modern Turkic languages and in Middle Turkic (cf. Brockelmann 1954: 313 §g); I have not come across any other such instance in any variety of Old Turkic, including Qarakhanid (though $-(X)p$ *är-*, discussed in section 3.251, appears not to be all too rare).

Another contextual converb suffix is that of the vowel converb, most of whose uses are discussed in the sub-sections of 3.25 and in 4.631. It has the variants *-A*, *-I*, *-U* and *-yU* alternating as in the aorist form, i.e. *-yU* after bases ending in vowels, *-A* after most underived bases ending in consonants and after some (generally intransitive) formatives, *-I* after the $-(X)t-$ causative suffix and *-U* with most other derived bases ending in consonants; see Erdal 1979b for more details. I am using the term ‘vowel converb’ as this distribution (like that of the aorist) cannot be summed up with a single archphonemic representation. E.g. inscriptional *bodunumun ter-ä quvra-t-ï altim* ‘I brought together my nation and ruled them’ and *sälänä käč-ä udu yoridim* ‘Crossing the S. I marched after (them)’. The vowel converb suffix can get fused with the verb *u-ma-* ‘to be unable to’; when it precedes this auxiliary, its vowel is generally /U/ in Uygur also with verbs which otherwise have *-A* or *-I*.

It has been stated that the juncture between vowel converbs and main verbs is especially close, but the fact is that vowel converbs of early texts are quite independent prosodically (as in the examples quoted). On the other extreme there also are cases of incorporation, e.g. in nominalisations like *körü kaninčsüz* or *ešidü kaninčsüz* (q.v. in OTWF 354), where the suffix $-(X)nčsXz$ is added to the complex verb phrases *körü kan-* ‘to have seen enough’ and *ešidü kan-* ‘to have heard enough’.

Vowel converbs are sometimes part of the verb phrase, the converb being adjacent to the finite verb; they then do not serve as independent kernels for clauses. In some of these cases the main verb is in fact an auxiliary expressing the category of actionality or the like, an auxiliary of politeness (e.g. *ögrünčülüg sävinčlig bolu täginip* in TT VI 458 ‘they – deferently – got exceedingly joyful’) or the two verbs have a new, fused meaning; see sections 3.25 (with subsections) and 5.3.

⁵⁰¹ Better perhaps ‘You have been showing endurance like the brown earth’. The beginning of the following verse is lost, but in none of the more than 100 interpretable lines of the poem is there any instance of a word divided between the lines. *särip süz* as imperative makes no sense either, especially since another sentence in the context also shows the polite plural address to a bodhisattva.

When considering the functions of vowel converbs one should also disregard cases of lexicalisation, when petrified converbs like *yan-a* ‘returning’ → ‘again, moreover’ *tap-a* ‘finding’ → ‘towards’ and numerous others got into quite different parts of speech. The OTWF mentions numerous petrified converbs coming from secondary verbs, e.g. from causatives, which became lexemes in their own right. Classes of vowel converb forms or vowel converb constructions have, moreover, come to express grammatical categories, as the simulative case in *+lAyU*, perhaps the directive in *+gArU* or, in the verbal domain, the construction consisting of the vowel converb followed by the postposition *birlä* which refers to events preceding the main event by a short time interval. In some cases, finally, elements by scholars like Bang or Gabain thought to be original vowel converbs never were representatives of this morphological class: Such are *kud-i* ‘down’ (dealt with in Erdal, 1991: 341) or *tüzü* ‘all’ (which is probably a simplex): As shown in Erdal 1979b, the vowel of the vowel converb suffix is strictly determined, mostly by the morphological class of the stem. Anything which does not have the appropriate vowel⁵⁰² or for which no appropriate base can be made out is not a vowel converb.

In adjunct phrases such as *äñitä ät’özin* ‘with bowing body’, *külçirä yüzin* ‘with smiling face’, *titräyü ünin* ‘with a shaking voice’, *yaşru köñlin* ‘with secret intentions’ or *tikä kulgakin* ‘with cocked ears’, the vowel converb is used adnominally; the head of this construction is in all cases an inalienable part of the subject of the verb.⁵⁰³ The instrumental suffix, clearly characterising the phrase as a whole, marks the whole phrase for its adverbial function in its context. *tuga täglök kişi* ‘a person blind from birth’ in MaitH XV 6v9, U II 29,14 and 31,41, U III 76,13₁ and 77,20 is a different structure; the form here qualifies an adjective and not a noun (cf. *tuga közsüz*, same meaning, in the Middle Turkic Tafsīr).

In the following Mait passage, which is about an interpretation of dreams, we have further evidence that the vowel converb apparently did have non-adverbial functions with imperfect meaning: *kim äv täñrisi ordo waxşiki ünmiş tüşämişi antag ärür: ... nä tişläri tüşä tüşämişiniñ tüşi antag ärür: ... kim oronluk yerkä tüşä t[okir] yuplunup tüşä tül kördi, ... nä ymä ton kädimtä [a]drilmış kördi, ...* (MaitH XIII 4v7-19) ‘That she dreamt that the house deity or the palace spirit had left is as

⁵⁰² Some of the ‘ausnahmsweise’ instances in Gabain 1974: 121 are simple errors; *tükün-i* (from TT I 126), e.g., is a mistake for *tükäti* and *oñal-i* is in fact a *-gAll* form.

⁵⁰³ See OTWF 770 with footn. 506 for documentation and discussion and cf. Röhrborn 2000: 271.

follows ... The result of her having dreamt that her teeth were falling out (*tüš-ä*) ... That she saw a dream of the throne falling (*tüšä*) to the ground and her bun disintegrating and falling off (*yuplunup tüš-ä*) ... That she saw (herself) separated from (her) clothing ...'. The activities seen in the dreams and made the objects of the verbs *tüšä*- 'to dream' and *kör*- 'to see' are expressed by the verb forms *ün-miš*, thrice *tüš-ä* and *adril-miš*; the first and third present the activity as having been accomplished while the instances of *tüš-ä* may be presenting a view of it as still going on. Here, then, the vowel converb is used as a participle referring to an event, like the aorist.

A converb suffix '-čA' has been read in BQ S9; a converb of this shape is postulated already in Thomsen 1916: 82-84, followed by Gabain 1941: 116 (§223)⁵⁰⁴ and Doerfer 1993: 30. This may in fact be a composite form, consisting of the vowel converb with the equative suffix; that would give the reading *bol-(u)+čä* in that passage and *yogur-(u)+čä* in Tuñ 26. *bolučä* appears also in KT SW as completed by Matuz in *Turcica* 4(1972): 15-24, in the passage *J b(ä)g(i)m teg(i)n yüg(ä)rü* (or *yüg(ü)rü*) *t(ä)ñri bol(u)čä*, where *täñri bolučä* as well as *yok bolučä* of BQ S9 both signify 'after he died'. Tekin 1968 translated the passage *öñräki är yoguručä*⁵⁰⁵ *idip ... ašdimiz* as 'having sent the vanguard forward as if kneading (the snow), we climbed ...', and has adhered to this translation in his reeditions of the inscription in 1994 and 1995. Thomsen 1916: 82-84 had discussed the passage and interpreted the function of this form and the meaning of the verb correctly (apparently not noticed by Clauson since EDPT 906a is quite off the mark); see OTWF 755 (and 354) for the (quite solid) evidence for *yogur*- 'to open the way, cross a dangerous or difficult area', a meaning which Thomsen had already determined (although his interpretation of the clause is not, I think, satisfactory); it is probably related to *yöl* (thus in Tkm.), *yoguč* etc. and not to be confused with the verb spelled the same way signifying 'to knead'. I would translate the passage as 'After the vanguard opened the way (through the Sayan mountains, I) sent (the army) off and we went over the ...'. A converb

⁵⁰⁴ The form '*türčä*' in BQ W4 mentioned there should be read as *ät-är+čä* and has nothing to do with this converb, since it comes from an aorist.

⁵⁰⁵ He reads this as '*yogurčä*' and on p.74 declares it to come from '*yogururčä*' by haplology. While a haplology of aorist forms of the shape *°Ur-Ur* is indeed attested in non-canonical Uyghur texts (see section 2.412 above), there is no inscriptional evidence for the phenomenon.

of this shape is not attested anywhere else in Old Turkic,⁵⁰⁶ but a construction in which this converb is used adnominally was mentioned above, and Uyğur has the vowel converb together with the postposition *birlä*, which we mention straightway. Its meaning seems to be quite close to that of this one; since the vowel converb is attested in the equative only in Orkhon Turkic and with *birlä* only in Uyğur, it may well be that the latter replaced the former.

When the vowel converb is followed by *birlä* we get a temporal converb phrase quite well attested in Uyğur, discussed in section 4.633; it gives the meaning ‘soon after’. The relationship between the vowel converb and *birlä* need not have been one of government: As other postpositions in Old Turkic (and e.g. *sonra* in Turkish), *birlä* can govern zero anaphora, in which case it is, to all intents and purposes, an adverb signifying ‘therewith, together with that’. The construction in question probably came from a converb followed by *birlä* as adverb (similar to what may have happened with *anın* as discussed above), giving the meaning ‘carrying out action₁ and (practically) together with it (action₂)’. *birlä* is, in this construction, often followed by the particle *Ok* (e.g. *alu birlä ök* in ETŞ 16,62, “alır almaz”), since it describes events immediately preceding the main action; it is this immediacy that gets stressed by *Ok*.

None of these converbs is negated with *-mA-*;⁵⁰⁷ their negative counterpart is suppletive, using the suffix *-mAtI(n)*. The runiform inscriptions have *-mAtI* in KT E 10, Toñ II E2 and ŠU E3; *-mAtIn* is spelled with *t¹In²* in KT S9, with *t¹In¹* in ŠU E10 (fragmentary) and S1 and with *t¹n¹* in E28,2 (1.5 in the edition of Kormušin 1997: 80).⁵⁰⁸ The best explanation for the /n/ is that it is the instrumental suffix: That is, beside being a nominal case suffix, added also to the converb suffix *-(X)pAn*, to the case suffix *+lXgU*, to the postpositions *birlä* and *öñi* and so forth. *-mAksXzIn*, a late equivalent of *-mAtIn*, is also, after all, in the instrumental case. Was there ever a converb suffix of the shape *-tI*?

⁵⁰⁶ The Old Anatolian Turkic converb suffix *-(y)IcAk* signifying ‘when’ could very well come from this suffix together with the particle (*O*)*k*.

⁵⁰⁷ There are a few exceptions, e.g. *u-ma-yu* in BT II 266, *körmäyü* in TT VIII A28, *ilinnäyü* in TT VIII A40 and Middle Turkic *bulmay* (thus!) in KP X,5.

⁵⁰⁸ Schulz 1978: 214 finds this spelling “merkwürdig” and thinks it may mean that the suffix was here to be read with A in the last syllable; in fact, implicit vowels can also be read as X in standard runiform spelling: What this instance means is only that the writer of the inscription apparently no longer knew the form *-mAtI* and could not know that the second vowel of *-mAtIn* had originally been a final vowel.

Some of the petrified formatives of this shape, discussed in OTWF 797-798, may in fact not have been related to any *-(X)t-* causative but be petrified forms of the direct positive counterpart of *-mAtI*; this may be the case e.g. with the conjunction *ulatī*, since *ula-t-* is apparently not really attested in Old Turkic proper.⁵⁰⁹ T. Tekin 2002 wants to explain the suffix through the Tunguz verb of negation + a gerundial suffix *-tI(n)* which, he says, “is found only in the structure of the Uigur adverb *näçöklä-ti ~ näçöklä-di* ‘doing how, doing in what way or manner’”.⁵¹⁰ I think *näçükläti*, *nätägläti* and *kaltī* were not formed with *+lA-* and a converb suffix but with adverbial *+lA* and *+tI* (taking these to have been distinct). Tekin is, however, right in referring to the Khaladj converb suffix *-di / -ti*, corresponding to common Turkic *-(X)p* in that language. The question of which alveolar *-mAtI* had is discussed by Johanson 1979: 137-139, Maue 1983: 55-56 and Tekin. It is always spelled as *T* in runiform sources and mostly as *T* in Manichæan ones as documented in Zieme 1969: 168.⁵¹¹ On the other hand, the Mait mss. edited by Şinasi Tekin, which are also quite early, have 19 instances spelled *-mAdIn* as against only 5 spelled *-mAtIn*. Brāhmī sources show *ilinmädin* in TT VIII A28 but *sö[zlä]šmädin* (spelled with *dh*) in C11. The alveolar of *kilmädin* in TT VIII G44 is the character transcribed as *ḍ*, which definitely belongs to the phoneme /d/. In the DLT this suffix is spelled with *dāl* and not *dhāl*. In the QB, which also spells the suffix with *dāl*, we find not only *-mAdIn*⁵¹² but (twice) also *-mAdI* (e.g. *bilmädi* ‘without knowing’ in 4187). The Qarakhanid forms speak for [d] as intervocalic allophone of /t/ in this suffix, as these sources do not confuse the two consonant series. We adhere to *-mAtI(n)* as phonological spelling, noting that the phonic realisation of /t/ as [d] here probably holds not only for Qarakhanid but also for earlier stages of the language.

⁵⁰⁹ Johanson 1979: 21 thinks it is “eventuell möglich” that there should be a positive gerund [Ti] in the form [tökTi] in the passage *tün udīmati küntüz olormati kizil kanim tükäti kara tärim yügürti esig küçüg bertim ök* (Tuñ 52) ‘Not sleeping by night and not resting by day, squandering my red blood and letting my black sweat run, I constantly gave my services (to the ruler)’, which, he thinks, could be *tök-ti* ‘pouring out’ or *tök-üt-ti* ‘letting get poured out’.

⁵¹⁰ See section 3.134 above.

⁵¹¹ Among the instances he mentions, 23 have *t*, 4 *d* and 3 *dd*. The exceptions appear in Xw, TT II B and Pothi, which in other cases also occasionally confuse the alveolars; all three instances of *dd* are from Pothi.

⁵¹² *bilmädin* 634, *yermädin* 592. Spelled with *t* in the late ms. in Uyğur script.

Forms formed with *-mAkšXzIn*, a rather late suffix composed of the infinitive, the suffix of lack and the instrumental, are documented in OTWF 397-8; it is more or less equivalent to *-mAtIn*.

There is a converb form in *-(X)yXn*,⁵¹³ attested four times in runiform inscriptions, beside *te-yin* ‘saying; in order to, etc.’, of which there are nearly forty examples. This great number of examples for this particular form, in Uygur replaced by *te-p* with a different converb suffix, is not surprising: It reminds us of Republican Turkish *diye* which, in the same functions as Orkhon Turkic *teyin* and Uygur *tep*, underwent petrification.⁵¹⁴ Among the other *-(X)yXn* forms we find *süŋgülüğ kandan käl(i)y(i)n sürä eltdi?* ‘Where did armed (men) come from to drive (you) away?’ (KT E23) and *kara bodun tur(u)y(u)n xagan atadı, täñridä bolmiš el etmiš bilgä xagan atadı* (Tariat S5; similarly S4) ‘He named him kaghan in the presence of the common people and gave him the title of “... kaghan”. This form is different from the previously mentioned ones in that it can be negated: *-mAyXn* is found, e.g., in *türk bodun xanin bolmayin / bulmayin tavgačda adrilti*. ‘Not being with’ or ‘not finding its khan, the Turk nation separated from China’ (Tuñ 2).⁵¹⁵

We again come across the form in *kälmäyin anta ok tursar sän* ‘if you do not come but stay right there’ in UigBrief C11, a late Uygur letter.⁵¹⁶ Further in contracts in SammlUigKontr 2: *alimčilarim ma tälim bolup turgu täg bolmayin kačip yašip ...* (Mi19,4) ‘my creditors also having gotten numerous it became impossible to stay around and I fled and hid and ...’; *oronin yegin kilmayin ädgü tutmayin kudı asıra kišičä tutsar män* (Ad3,21) ‘if I do not ameliorate his position, do not keep him well

⁵¹³ *-yXn* and *-(A)yXn* are other possible shapes for this suffix; the former is preferred by Doerfer 1993: 26. Johanson 1988: 137 (n.15) spells it as *-(y)Xn*; this is not only counterfactual (since the /y/ is not dropped after consonants), it also contradicts morphophonemic structure, in that Old Turkic knows no ‘buffer y’. The participle suffix *-yOk* is a suffix starting with /y/ and not dropping it after consonants. The thoughts around this converb form in the n. to TT II,2 26 are obsolete.

⁵¹⁴ This term is in order in view of the fact that the vowel converb is, in Turkish, always doubled when in living use.

⁵¹⁵ The suffix is here spelled with *n*² in spite of back synharmonism; this is not so surprising, however, as we also find *bat-sik+iŋa* (KT S2; suffix *-sXk*) or *yagı+sız* (KT; suffix *+sXz*) spelled with *s*².

⁵¹⁶ The form *kaygu* < *kadgu* ‘sorrow’ also found there shows that this text had already undergone the passage *d > y*; most other intervocalic *ds* in that text belong to the Old Turkic phoneme /t/. Other late characteristics are the particle *mA* used after nouns (and not just after pronouns), *tur-* used as copula, *+nl* as accusative suffix for nouns, *-gUl* as suffix for the 2nd person imperative (replacing older *gll* under the influence of the contraction of *-gU ol*) and *özgä* (spelled with *s*) ‘other’.

but treat him as an inferior person'; there is a further instance in Mi21,5. This late revival could mean that *-mA-(X)yXn* got fused with *-mAtIn* and *-(mA-)yU*, perhaps together with analogy from the instrumental suffix. *-mAyIn* lived on in Middle Turkic, e.g. in the Codex Comanicus forms *ar-mayin* (150,4), *yät-mäyin* (138,7), *är-mäyin* and *bil-mäyin*.⁵¹⁷ *-mAtIn* is unlikely to be behind these forms by itself though the */t/* may have gotten realised as [d] even at an early stage, as the sound change *d > y* applies only to original */d/*. Johanson 1979: 138-139 is right in defending the view that */-mAtIn/* and *-mAyIn* are unrelated, against Menges, Korkmaz, Brockelmann 1954: 253 and Ščerbak 1961: 160 and in connecting the former with general Oguz *-mAdAn*.⁵¹⁸ He also quotes the form *ađir-mayin*, with both */d/* and the *y*-suffix, from the Rylands interlinear Coran translation (which supports the view that the two converb suffixes cannot have simply converged). Cf. further *-mAtIn* in *bir kodmatin tükäl sanap altimiz* 'we have not left (even) one but have counted and taken them all' (Sa9,12) and *tägmätin* in WP1,5, both in SammlUigKontr 2.

The converb form in *-gAll* has two main functions, one temporal (discussed in section 4.633), the other one 'final'; the final function (for which see section 4.636) is akin to the use of *-gAll* as supine suffix (details in section 4.23). A few instances which appear to have consecutive meaning are quoted in section 4.637.

The negative counterpart of *-gAll* is rather rare; examples are *yogulmagali* (HTsPar 55 v13), *atamagali* 'so as not to pronounce' (HTs III 399, in final use) or *küsäyür män kántü özüm anitmagali* 'I wish I would not let myself remember' (supine use).

-gAll is also part of verb phrases, all discussed in section 3.25: *-gAll är-*, *-gAll tur-* and *-gAll alk-* express actionality while *-gAll bol-* or *-gAll u-* express ability. Here again, as in some constructions just referred to, the meaning is neither final nor temporal but more similar to the English infinitive (as pointed out by Nevskaya 2002) or to the Latin supine; see section 4.23.

The meanings of *-GInčA*, 'as long as' and 'until', make it likely that it comes from the formative *-(X)g* with the 3rd person possessive suffix and the equative case ending. This etymology is hypothetical, as *-(X)g*

⁵¹⁷ The QB forms *bol-mayin*, *kör-mäyin* and *säv-mäyin*, which were by some also thought to represent this form, are negated volitives, i.e. finite. This is also how they are translated in Dankoff 1983. The *-mAtI(n)* converb appears in the QB as *-madI(n)*.

⁵¹⁸ Early Anatolian Turkish has *-madIn* as well.

is, in the language we have, not a flecional but a derivational suffix (albeit the most common suffix for deverbal nominals). It gains likelihood from the fact that we find $+(X)m+$ in the Nahju 1-Farādīs when there is a 1st person subject, e.g. *mān ölgümčä* ‘till I die’ (cf. Ata 2002: 90).

The subjects of *-GInčA* forms are more often different from than identical to the subject of the main verb. *turginčara* in Höllen 21 has been taken to signify ‘as long as (they) stay (there)’. It is probably a contraction from *turginča ara*, with the postposition *ara*; the case suffix $+rA$ unlikely to have been added to such stems. *-gInčA ara* is not attested, but we have *bošumaginča titmāginčä ikin ara* (Abhi 1398-99) ‘as long as they haven’t sent them off and given them up’. The quoted passage shows two examples of *-mA-gInčA*, which would be incompatible with the etymology proposed if they were to appear in an early text. Other negative examples are *üč yıl tükāmāginčä* ‘as long as three years are not over’ (P1,23 in SammlUigKontr 2) and *bilgü ärmāginčä* (HTs VII 25) ‘as long as one is not wise’.

The meanings and functions of *-gInčA* are discussed in section 4.633 on temporal clauses. Two proverbs which turned up in very different sources have a different, comparative meaning for this suffix: *öküz adaki bolginča buzagu baši bolsa yeg* (DLT fol.41) ‘Better to be the head of a calf than the foot of an ox’; *müñ kiši yüzin bilginčä bir kiši atin bilgü* (runiform ThS III a5 with the emendations of Bazin in *Turcica* 4 (1972): 37) ‘Better to know the reputation of one person than the face of a thousand’. This meaning of the suffix relates more directly to the usual ones of $+čA$ than the temporal uses of the suffix.

The subjects of the contextual converbs (see section 4.631) and of the *-gAll* form are generally identical to those of the main clause, though there are some clear exceptions of various types. In this matter they differ from *-gInčA* and *-sAr* but are similar to the secondary converbs.

Beside the synthetical converb forms we have secondary converbs consisting of nominal forms of verbs in oblique cases. The following all have temporal content and are therefore all discussed in section 4.633 as to their functions and uses: *-dOk+dA*, very common both in runiform inscriptions and in Uygur, and *-mIš+tA*, *-Ur+dA* and *-GInčA*, none of which are attested in the inscriptions. *-dOkdA* can also be used with the possessive suffix referring to the subject placed before the case suffix, as can *-UrdA* and *-mIštA*; e.g. Orkhon Turkic *eli kamšag boltokinta* (KT N3) ‘when his realm had become shaky’ or Uygur *tütsüg yidin*

tuydokumuzda ‘when we feel the smell of incense’ (Suv 424,18).⁵¹⁹ The QB also uses both *-dokdA* and the aorist in the locative case for temporal expressions. It is not, of course, evident that any perfect participle in an adverbial case form has to be an instance of a secondary converb suffix. Forms in *-gU+dA*, e.g., could be both a secondary case suffix and the mere sequence of *-gU* and *+dA*; more research into the actual distributions is needed.

The dative case is also used for forming complex temporal converb suffixes, with *-dOk* and possessive suffix in Orkhon Turkic, with *-mAk* and the possessive suffix in Uyghur. Clauses around *-gU+kA*, on the other hand, have final content. *-mIš+kA* and *-mA-yOk+kA* serve as kernels for causal clauses, sometimes with possessive suffix referring to the subject before the case suffix. *-mAk+IηA* also forms causal clauses and, like the other converbs in this function, is discussed in section 4.635. Clauses in which *-mAk+IηA* has temporal meaning all have a noun phrase referring to a stretch in time as subject of the verb; that appears to be what supplies the temporal content, which means that the basic meaning of *-mAkIηA* must have been causal. Limiting ourself to Uyghur we could therefore say that the basic meaning of the dative when added to verbal nominals is either causal or final, depending on whether the nominal itself is factive or not, and depending on the nature of the adjuncts within the subordinate clause.

-mAk in the ablative case, sometimes with possessive suffix before the case suffix referring to the subject, also forms causal clauses, discussed in section 4.635. Causal clauses can further have *-dOk+In*, which has the *-dOk* form in the instrumental case, as kernel.

Comparative clause converbs are formed from nominal forms of verbs by putting them in the equative case; their uses are discussed in section 4.632. In this function we find *+čA* added to the aorist form (already in Orkhon Turkic), to *-mIš* and, in Manichæan sources, to *-dOk+* with the possessive suffix.

The construction *-dOk+In üčün*, in which a postposition governs the *-dOk* form with possessive suffix referring to subject, the sequence *-mIš üčün* and the aorist with *üčün* are kernels of causal clauses and are therefore discussed in section 4.635. The quite rare sequence *-gAll üčün*

⁵¹⁹ Johanson 1995: 318 quotes *olor-dok+um+a* (by him spelled differently) as example for the phenomenon of personal converbs; this form is attested only once in the KT inscription where the dative may be governed by a verb signifying ‘to rejoice (at)’ (making the *-dOk* form an action noun and not a converb) and once in the BQ inscription in a damaged passage.

and the more common *-gAlIr üčün* and *-gU üčün*, on the other hand, forms final clauses, q.v. in section 4.636: The former are factive while these latter ones are not. Other nominal forms of verbs governed by postpositions, *-mIš+tA* or *-dOk+dA* with *bärü*, *ken*, *ötrö* or *kesrä*, have temporal meaning.

Secondary converbs very often have their own subjects differing from those of the main clauses. These are generally expressed by nominals in the nominative case, as subjects in general are; subject nominals of secondary converbs can, however, also be in the genitive case because the kernels of such converb phrases are perfect participles which, as nouns can govern the genitive case.

In general, the syntax of converbs and converb phrases is described in section 4.63 and its subsections.

3.287 The conditional

The conditional suffix *-sAr* has by some (e.g. Johanson 1995: 340, note 13) been said to come from the aorist of *sa-* ‘to reckon’; the aorist *sa-* is actually attested in the DLT. It would be possible from the semantic point of view that *sa-r* should have been added to the vowel converbs of lexical verbs for (at first) asyndetic subordination, but there is no actual evidence to speak for this hypothesis: not a single trace for a putative converb vowel before the *-s^o* within any attested form of *-sAr*.⁵²⁰

-sAr appears to have been pronounced as *-sA* already in some varieties of Uygur, on the evidence of medical and astrological texts, the collection of proverbs in the latter part of HamTouHou 16 or the rather early catechism in Tibetan script. In the Brāhmī mss. of TT VIII, on the other hand, we have more than 20 *-sAr* as against only three *-sA*,⁵²¹ which shows that the */r/* was quite real there. We consistently find *-sA* in Qarakhanid. The negative counterpart of this suffix has the shape *-mAsA(r)*. The form *är-sär* serves as conditional conjunction added to full-fledged verb forms (e.g. *uzun yašadi ärsär* ‘if he should have lived for a long time’ in M III nr.5 r 10-11 with a finite verb or in *üd ärtürürlär ärsär* with a verb in the plural), to *bar* ‘there is’ and so forth.

⁵²⁰ The aorist being a participle, the idea would be corroborated by the converbial use to which *ärkli* and *ärkän* have been put, on the assumption that these are old *-(X)gII* and *-gAn* participles respectively. This assumption is, however, vehemently opposed by Johanson, presumably because he does not believe in the possibility of a neutralisation between the phonemes */g/* and */k/* after */r/*.

⁵²¹ Two appear in text A; an additional one in TT VIII N 1 was reconstituted in the reedition of that text in Mätr.

In the runiform inscriptions the conditional is a converb in that it is not directly linked with the expression of person; it usually (but not always) joins personal pronouns in the 1st and 2nd persons when these are subjects. When the *-sAr* form is accompanied by subject pronouns, they follow it and are presumably clitic, e.g.: *tinlaglarniñ ädgi töröläriñä tidig ada kilmiş ärsär män, ...* ‘If I have set up hindrances to the good habits of people’ (MaitH XV 1 v 13). Such subject pronouns turn up also if they are present in the main clause as well, e.g. *ol altun tagka tägsär siz, kök lenxwa körgäy siz* (KP 28,1-2) ‘If (or: When) you get to that golden mountain you will see blue lotuses’. This was not, apparently, obligatory in verse quoted in DLT fol.201, where it suited the metre: *apañ kolsa udu barip / tutar ärdim süsin tarip* ‘Had (I) wished I would have followed him, taken him and dispersed his troops’.⁵²²

At a rather early stage, though not in the runiform inscriptions, the 3rd person plural of the conditional was expressed by adding the nominal plural suffix onto it; e.g. *mini täg tümän tinligkyalar bolsarlar, ...* (PañÖlm 53) ‘If there were 10,000 poor creatures like me ...’, which also shows that the form appears also with an explicitly plural subject. This suffix can be shared by adjacent forms, e.g. *muntakä yörügçä bişrunsar yorisarlar, ...* (BT I A₂ 15-16) ‘if they live according to this interpretation’.

är-sär is linked to participles to give analytical forms; instances are listed in the UW entry for *är-* ‘to be’: with the aorist 401b (§17e), with the preterite 402 (§18d), with *-mIš* and *-madOk* 403b (§19e) and 404a (§21c) respectively, with *-dAçI* 404b (§22d), with *-gAy* 405b (§23b). The main use of the *-sAr* form is conditional or concessive as described in section 4.64; this covers such meanings as ‘if; in case’, factive ‘since; seeing that’ and concessive ‘although’. In many other cases, the suffix has purely temporal meaning, for which see section 4.633. There is no overt means for determining which is the appropriate meaning in any particular instance, but the form is generally to be understood as temporal if it refers to the past. The use of *-sAr* forms with correlating indefinite and demonstrative pronouns to give a use which comes close to relativisation is dealt with in section 4.65. *är-sär* with non-correlating indefinite pronoun is discussed in section 3.134. In section 4.612 we meet *-sAr* forms in relative clauses introduced by the particle

⁵²² A later hand added a *mim* under the line, changing the form to *kolsam*. From here it got into Atalay’s edition (who ‘reproduces’ the verse with the *mim* in the line) and into Hacıeminoğlu 1996: 188. The widely used correct Qarakhanid form for this is *-sA män*, also proving the lateness of the addition.

kim, whose main clause contains the element *yok* ‘there isn’t’. In section 3.27 we quote an example where *kim* ‘who’ appears with a *-sAr* form in a main clause with what appears to be dubitative meaning.

Some scholars from Thomsen 1916 to Doerfer 1993 have thought that there also was a conditional suffix ‘-čA’, which Tekin 1968: 186 takes to be a gerund suffix. I have proposed in the previous section that the Orkhon Turkic words which can be read in this way be interpreted as vowel converb + equative suffix +čA, as a precursor to the vowel converb + *birlä* construction, with which it is synonymous. There is no need to posit obscure suffixes if the data can be interpreted successfully by existing morphology.

3.29. The copula

The verb *är-* ‘to be’ is a fully conjugated regular copula; e.g. *bay bar ärim* ‘I was well to do’ or *sunčuklar yadıgılg töltäglig ärip ...* (BuddhUig 352-4) ‘the mats are spread out and ...’. UW 391b-409a offers an exhaustive documentation of this verb’s uses in (non-runiform) Uygur. A variant *er-* is found e.g. in HamTouHou 18,2 and 6. Forms of *är-* may have been unstressed, like e.g. the forms of *i-* in Turkish; one indication for this is the contraction with *nä* in *n(ä)rgäy* (YE 41,8, runiform script), where the interrogative pronoun is sure to have borne full stress. Its positive aorist *ärür* is rather rare in the inscriptions, appearing once to refer to the future and in two other instances in a set phrase. In Uygur, positive sentences with non-verbal predicates unmarked for tense, aspect or mood often have *ärür* (e.g. *bo mäniñ äñ kenki aźunum ärür* ‘This is my last existence’), but sentences without verbal copula are also well attested; cf. section 4.31. *är-* is used in various analytical verb phrases; forms coming (or presumably coming) from *är-* as *ärki*, *ärinč* and *ärsär* have become particles while *ärü ärü* is used adverbially. *ärmiš* is added to sentences to express indirectivity.

bol- ‘to become’ is also a copula of sorts; it implies that the subject undergoes a change or a transformation in the course of, or related to the event being referred to; e.g. *xagan bol-* ‘to become a ruler’, *kul bol-* ‘to become a slave’, *yagi bol-* ‘to start hostilities’, *yok bol-* ‘to perish’ and the like. *añ(i)g ögrünčülüg boltum* (M I 6,18) signifies (in its context) ‘It has been a great pleasure’: If one has ‘become’ something in the past, one still feels the results; in this sense, *bol-* can, in the constative preterite, convey post-terminal states. *bol-* can also signify ‘to ripen or to grow’: *bo tuturkan yalğuz [magad] eltä ök bolur, adin*

[*oron*]ta bolmaz (HTs III 488-9) ‘This rice grows only in the country of [Magadha], it does not grow in any other (place)’. Kāšgarī knows this meaning and it is attested to this day beside the less lexical one. ‘Becoming’ is a content belonging to actionality: Sequences of lexical verb plus + *bol-* are described in section 3.251. When *bol-* follows *-mIš* participles, however, the phrase has a resultative content which is aspectual; see section 3.26. *-gAll bol-* expresses ability, a category discussed in section 3.253. One difference between *är-* and *bol-* and other auxiliaries like *kal-*, *tur-*, *yor-* or *bar-* is that the others are used as auxiliaries only when combined with lexical verbs, whereas *är-* and *bol-* have just been shown to be in use by themselves as well. Moreover, the lexical meaning of those other verbs is sometimes quite different from their meaning as auxiliaries, which is not the case with *är-* and *bol-*. Thirdly, other actionality auxiliaries are linked with converbs and not participles, whereas the verb forms with which *bol-* can be linked are participles and verbal nouns such as *-dAčI*, *-gAn*, *-(X)gčI* or the aorist.

There is a dream recounting mode characterised by verb phrases consisting of the aorist plus *bolur*, e.g.: *tüšämiš tüllä{r}in*⁵²³ *öp sakin[ip inča] tep teyür: altunlug oronluk yerdä tüšär bolur. äv kuti waxšiki ünüp barir bolur. bašimtakī etiglig tokirim yuplunup yerdä tüšär bolur. agzimtakī üstün altin tišlärim tüšär bolur. ätözümteki tonum etigim yokadur bolur* (MaitH XIII 4r4-9) ‘She remembers the dreams she dreamt and says the following: The golden throne falls to the ground. The house spirit goes away. The adorned bun on my head disintegrates and falls to the ground. The upper and lower teeth in my mouth fall off. The dresses and adornments on my body disappear’. Other dreams are characterised in the same manner in lines 5 r1-4, 5-8 and 9-12 of the passage. Similarly in a dream of Xuanzang: *ät’özin ketärü täzgürür bolur. näčä täzgürsär ymä ol kišil[är] amru yakın kälip “yarlikazun ayagka tägimlig” tep teyür bolur. montag tüšäyü yatur ärkän ...* (HTs X 549-50) signifies ‘He becomes reticent; the more he does so, (the more) those persons keep coming to him and saying “Will his honour deign to ...”. While he was lying and dreaming in this way, ...’.

ol ‘that’ can stand for the agent with verbs which are neither in the 1st nor in the 2nd person. Sometimes, its only task seems to be the assertion of the nexus between subject and predicate; in that function it can truly be called a copula (as the 3rd person pronoun serves as copula in

⁵²³ Here and in a few subsequent passages I use such brackets to mark part of a word which I consider to have been inadvertently omitted by the scribe.

Hebrew and Arabic). It can, however, also denote existence. See section 4.3 and Tuguševa 1986 for details.

While positive sentences with nominal predicate get either forms of *är-*, *bol-* etc., or *ol* or nothing at all to indicate the nexus between subject and predicate, negative sentences can have only verbal forms, *ärmäz* etc., to correspond to Turkish *değil* and the like. *ärmäz* is extensively documented in the UW entry for *är-* and in UW 445-6.⁵²⁴ A couple of details are worth highlighting. An example for a double negative is *näḥ tutyaklanmaz ärmäz* (Abhi A 144a3) ‘It absolutely has to be grasped’. Then there are tag question type constructions; here a rhetorical question addressed to the king who is the object of the verb: *elig bägig ölüm madar agzintin bultumuz ärmäz mü?* (U III 69,14) ‘Haven’t we gotten the king from (out of) the jaws of death?’.⁵²⁵ *ärmäz* is used for negating verb forms also when a proposition is to be stated to be untrue; e.g.: *burun til ätöz ärklig alir ärmäz iraktaki atkangug* (Abhi B 77b13) ‘It is not the case that the smelling, taste and tactile senses grasp phenomena at a distance’.

Also worth mentioning is the pro-verb-phrase function in elliptic clauses: In *män inčip utli biltäci bolu täginür män; näḥ utli bilmädäci ärmäz* (U II 41,14) ‘I want to become a thankful person; by no means a thankless one’, e.g., *ärmäz* in fact stands for a 1st person verb. In *birdämlig tanuklamakig adınlar ärmäz yanturu kántü özläri ök bulurlar* (Abhi A 36b3) ‘The absolute evidence, in turn, they find only themselves; others do not’ *ärmäz* stands for the plural content of **bulmazlar*. Similarly *anıḥ içintä yänä visimpat bulmişlar ärsär olar äşidgäli bolurlar; näḥ adınlar ärmäz* (BT III 738) ‘If there are among them such as have received ordination, they can hear it; others by no means’. There are further examples for this use in UW 406 (§28); in all these cases Turkish would have used *değil*.

bar ‘there is’ and *yok* ‘there isn’t’ fill tasks belonging to the copula in some other languages (like English); they are dealt with in section 4.31. In the following examples *yok* is used for negating adjectives, where one would expect *ärmäz* instead: *ätözüntäki küçüm taḥ adinčig yok*

⁵²⁴ *ärmäz* is here made into an entry; the motive for doing this seems, however, to come from German: I do not find any lexicalization in the examples quoted. Nor do I find any of the instances quoted in § b) to have the meaning “-los”, one of the meanings proposed in that paragraph.

⁵²⁵ Some more such instances are mentioned in UW 401-2 (§18a of the entry). The sentence I have quoted appears there as “*bultumuz ärmäz mü biz*”, but *biz* in fact belongs to the beginning of the next sentence: The speakers in that passage, trying to convince the king not to go to a certain place, are proposing to him to go there *themselves* instead.

(PañcÖlm 49) ‘The strength in my body is not admirable’; *birök tapig udug yevigläri anuk bar ärsär a[ni] üzä tapig udug tutguluk ol*; *birök tapig [udug yev]igläri anuk yok ärsär* (Abitaki quoted in UW 159-160) ‘In case their offerings are ready, offering is to be presented therewith; if their offerings are not ready, ...’. In the last example *anuk yok* is opposed to *anuk bar*, as if *anuk bar* were more assertive than *anuk* by itself.

yori- comes close to copular use when it is used in the meaning ‘to live’: This is attested several times in the IrqB, e.g. *otsuz suvsuz kalti uyin, näčük yoriyin?* (45) ‘In what way should I manage without grass and water? How should I live?’; *öliümtä ozupan ögirä savinü yorir* (49) ‘Having been saved from death it happily goes on with its life’. Also e.g. ... *yorikinča yori-* ‘to live a life of (righteousness, etc.) in HTs VIII 83. The sentence *ud ätözlüg, koyn ätözlüg, kiši başlig yoriyur biz* (MaitH XX 13v5) is uttered by creatures in hell who have human heads but bodies of animals; it can best be translated as ‘We exist with bovine bodies etc.’ or, more idiomatically, ‘have bovine bodies (or) sheep’s bodies (but) human heads’.

te-t-ir, the reversive aorist of *te-* ‘to say’, does not always signify ‘is called’ or ‘is said to be’: In didactic texts or passages, where it is common, its meaning often comes very near to that of the copula, implying doctrinal identity between two notions. E.g. *bo tetir kertgünčniñ on törlüg yöriği* (TT VB 128) ‘These are (considered to be) the ten meanings of faith’.

Another form sometimes appearing in near-copular use is *turur*, the aorist of *tur-* ‘to stand’: e.g. *bo taš ärtiñü agir turur* (U I 8; Magier, a Christian text) ‘This stone is exceedingly heavy’; *mini birlä bir uguşlug turur sän* (TT X 472) ‘You are of the same clan⁵²⁶ as me’; *biz su körmişdakičä äs(ä)n tükäl turur biz* ‘We are as well as one who has seen happiness’ (UigBrieffr C6, a letter). The same letter (C11) has the clause *kälmäyin anta ok tursar sän* ‘if you do not come but stay right there’. This is not an instance of *tur-* used as copula but it shows the probable semantic source of that use. Kāšgarī expressly refers to the copular use of *turur* as such, giving the sentences *ol taš turur* ‘That is a stone’ and *ol kuš turur* ‘That is a bird’ as examples; he says that this aorist has no past form and no infinitive and signifies ‘he’. Arabic *huwa* and Old Turkic *ol* do, in fact, serve as copula. The DLT and the QB have further examples with *turur* as copula.

⁵²⁶ The adjective-forming suffix *+lXg* added to *bir uguş* ‘one clan’.

turur can sometimes express existence, e.g.: *okısar män ol bitig içintä ol künki biziñ ašda ölürgüçi ud koyn toñuz başlap tınlıglarnıñ savi turur* (Suv 6,13) ‘When I read it, *there were* in that writing the words of creatures, mainly bovines, sheep and pork, which we had intended to slaughter that day at our meal’; *kamag sansar ortosınta sab atlig üç miñ ulug miñ yertinçü yer suvlar tururlar. ol üç miñ ulug miñ yer suvlar otrasınta çambudvip uluñ turur. çambudvip uluñ otra yerintä matyadeñ uluñ turur. matyadeñ uluñ otrasınta ketumadi balik äriür* (MaitH X 4r11-16) ‘In the middle of the whole of *samsāra* *there are* 3000 great thousand-worlds called ‘earth’. In the middle of those 3000 great thousand-worlds *there is* the country called *jambudvīpa*. In the middle of the country of *jambudvīpa* *there is* the country Madhyadeśa. In the middle of the country Madhyadeśa lies the city of Ketumatī.’ The passage explains why the speaker wants to go to Ketumatī, the name of which was mentioned earlier. This explains why the first three sentences end in *turur* while the last one has *äriür*.

In *isig öz alimçilari birlä turuñur osuglug turur* (Suv 18,13) ‘It seems as if he is struggling with his angels of death’ the struggle is described as going on at the time of speech. This last instance appears to come from the use of *tur-* to express actionality (see section 3.251).

3.3. Adjuncts

The term ‘adjunct’ is in fact a syntactic one, not one referring to a class of lexemes. Adjunct phrases and adjunct clauses are adjuncts, as are e.g. nouns in the equative, the instrumental or the similitive case. This section will not deal with all these, however, but with lexemes which are adjuncts by themselves and not by virtue of a case suffix. Lexical adjuncts and interjections have neither the nominal categories of number, possession etc., nor the verbal categories, and are hard to define by morphological shape. Adjuncts do not refer to entities, nor do they qualify heads serving for such reference; they are not normally used within noun phrases (postpositions govern noun phrases but are not within them).

It does happen that adjuncts get case suffixes, as *azu+ča* ‘on the other hand, otherwise’ etc. with the equative or *öñi+n* ‘separately’, *birök+in* ‘however’ and *birlä+n* ‘together’ with the instrumental. The equative and the instrumental are, however, the foremost adverbial cases in Old Turkic, and here just come to underline the adjunct status of the elements: The meanings of the quoted elements hardly differ from those of their bases, *azu*, *öñi*, *birök* and *birlä*. The instrumental case suffix,

one of whose functions it is to turn nominals into adjuncts, appears to have been added also to form one or perhaps two contextual converb suffixes: *-mAtIn* from *-mAtI* and perhaps *-(X)pAn* from **-(X)pA* (which might be the source of *-(X)p*).

Old Turkic converbs, which are verbs converted to adjunct status, can also be governed by postpositions: There is *-A birlä* in which the vowel converb is governed by the postposition *birlä* ‘together with’, e.g., and *-gAll üčün* with *üčün* ‘for’, where the meaning of the final converb suffix and postposition support each other mutually.

ančip / *inčip* and *ančaginča* are formed in hybrid manner from demonstrative *an+ča* / *in+ča*, similar to Turkmen *šeydip* ‘having done that, thereupon’. No verbal stem as intermediate base has to be assumed to have existed to explain these: *anča* and *inča* are adjuncts as it is, and these are made a bit more specific by expansion with *-(X)p* and *-gInčA* respectively; in principle this is not very different from the hybrid forms mentioned in the previous paragraphs. The forms are discussed in section 3.132 because of their stems; see also section 3.33 for *ančip* and *inčip*.

Suffixless nominal stems can also take on adverbial tasks: The stem forms of most nominals denoting space or time are found in adjunct use; e.g., in *tün udimatı küntüz olormatı ... esig küčüg bertim ök* ‘Not sleeping *by night*, not resting during the day ... I offered my services’ (Tuñ II E1-2), *tün* is a noun in the stem form while *küntüz* must be derived from *kün* ‘sun, day’ by an obsolete case suffix (preserved, among other places, in the composite suffix *+dXrtI*). Any adjectives are, *in principle*, candidates for adjunct use, their meaning permitting: What is translated as ‘by’ in the translation of *taloyka kičig tägmädim* (KT S3, BK S3) ‘I missed the see by a little bit’ remains unexpressed in Old Turkic. In KČ E8, another runiform inscription, the same content is expressed by the instrumental form *kičigin*. The adjective / adverb distinction appears to be quite fuzzy.

Adjuncts can be repeated iconically, e.g. *kat+in kat+in* ‘repeatedly’ in HTs VIII 21.

Particles are here distinguished from the other adjuncts mainly by their prosodic and word-order dependence on the linguistic units which are in their scope. Postpositions and relational nouns differ from other adjuncts in that they govern noun phrases (in particular case forms). Conjunctions do not have single linguistic units in their scope but link phrases, clauses or sentences to each other in various ways. Passage between the various adjunct types is fluid in Old Turkic, words being often used in various tasks.

By function, the distinction between sentence particles and conjunctions on the one hand and adverbs as described below is not always clear, but nevertheless needs to be made: *ärki* and *ärinč* are listed as particles, e.g., because they have the sentence as a whole in their scope (without linking it to something). Another distinction to be used as criterion is that adverbs have relatively much, particles and conjunctions little lexical content.

Postpositions not governing noun phrases are adverbs, e.g. *üzä* or *öñi*; or *birlä* ‘together’ in sentences such as *biz ymä kamag ka kadaš Ketumati kändä birlä enälim* ‘We, all the family and friends, want to descend into the city of Ketumatī together’ or *birlä yana törčimäksiz ... yokadzun* ‘May (the sins) disappear ... together and without reappearing’ (BT XIII 13,128); there is another such example in HTs III 798. In *näčük ol birlä [to]o wañ vudi atlig xanlar* (HTs VII 128) ‘How (does he compare) with the kings Tang-wang and Wu-di?’ *birlä* even follows a pronoun in the nominative case. *ekilä*, *yana* and *yičä*, all signifying ‘again’, are adverbs, but *yana* (which also appears as *yänä* or *yinä*) also serves as connective particle. *udu* in *udu käliñ* (ŠU E2) ‘Follow me!’ or *kamag dentarlar udu atlantilar* (TT II,1 63) ‘All the elect got on their horses after him’ is also an adverb; a runiform instance of *udu* is, however, described below as conjunction. In *azkya öñrä yoriyu turzunlar; män una basa yetdim* (Suv 615,14) ‘Please walk on a bit; I will have reached you in a moment!’ *basa* serves as adverb with roughly the same meaning as *udu*. Originally no doubt the petrified converb of *bas-* ‘to press upon something, attack, come up suddenly’, we find it to be used as a postposition in the common phrases *anda basa* ‘after that’ (see examples in UW 145-6) and *munda basa* ‘after this’ or *ärtmištä basa* (BT II 1330). It then gets nominalised in *basa+sın+da*, e.g. in such phrases as *basasında bar-* or *yori-* ‘to walk after him’ (TT X 142-3 and U IV A 141-2 respectively).⁵²⁷ In *az inaru barm[iš], bir ögü[r] muygak kör[miš]* (M I 35,7) ‘He went a bit further and saw ...’ we find *inaru* adverbially qualifying the verb *bar-*; its use is here local, whereas the postposition *inaru* governing the locative has temporal meaning. *ara* and *utru* are further elements serving both as postpositions or adverbs and as relational nouns.

ötrö is a postposition governing the locative and signifying ‘after’; it also has a conjunctive use signifying ‘thereupon, then’, as in the sentence ... *tep sakınmiš k(ä)rgäk. ötrö üt’öz küzädgü tamga tutmiš k(ä)rgäk* (TT V A 53) ‘One must think “...”, then hold a *mudrā* to

⁵²⁷ *basa basa* has been lexicalised with the meaning ‘repeatedly’.

guard the body'. Sometimes, e.g. in TT X 33, where it actually starts a story, *ötrö* is an element like the English particle 'now'. Postpositions can govern anaphoric zero objects, in which case no explicit objects appear; it would be wrong to classify a use such as the one quoted as "elliptic", as done by Gabain 1974 § 281: Old Turkic postpositions can serve as sentence adverbs, like conjunctions referring to the context. When – as in the TT X case – no reference to a zero-anaphoric is discernible, one might consider the two to be homophonous elements resulting from a functional split.

There are even clearer cases when the existence of homophonous adverbs and postpositions is only due to etymology: Take the postposition *ötgürü* 'because of', which presumably comes from *öt-gür-* 'to get through, to cause to penetrate'. The instance in *sansiz tümän azunta bärü ötgürü bökünki künkä tägi* (TT VI 015) 'since countless myriads of lives, all the way through to the present day' must be a petrified converb of this verb,⁵²⁸ but its meaning is still much closer to the verb than to the postposition. In *adın kişikä ötgürü satsun* 'he may sell it on to a different person' (USp 13,11 etc., in civic documents) the best translation of *ötgürü* is simply the adverb (not the preposition!) 'on'; this, again, comes directly from the verb and has nothing to do with the postposition *ötgürü*. Similarly we have, beside the postposition *eyin* 'according to, in accordance with' the common sequence *eyin käzigcä* (e.g. in U III 10,10, 55,7, 67,2₃, 89,7) signifying something like 'in the appropriate order'.

A different domain of fuzziness is that between conjunctions and particles, as can be observed with *ymä*: This is, on the one hand, a clitic particle even breaking into noun and verb phrases; on the other hand it serves as a conjunction introducing sentences.

The distinction between various types of adjuncts is fluid also in the sense that elements often allow several interpretations letting them get classified one way or the other. Discussing the sentence *yagru kondokda kesrä añüg bilig anda öyür ärmiş* (KT S 5), Johanson 1988: 144-5 notes that *kesrä* could either be understood as a postpositive conjunction, as has been done hitherto, or as an adverb: Either 'after they had settled nearby, they seem to have thought evil thoughts there' or 'when settling nearby, they are reported to have afterwards thought evil thoughts there'; *kesrä* either as 'after' or as 'afterward'. I have already remarked on what seems to be the same ambiguity above, concerning *birlä* and *ötrö*; this should probably not be considered an ambiguity

⁵²⁸ Especially because its meaning is not causative: See OTWF 403 (with bibliography) and the discussion in that work of the various petrified converb forms.

from the language's own point of view, however, but a merely partial distinction between adverb and postposition. That *kesrā* can also be considered a conjunction has to do with the fact that clause subordination *is*, in Old Turkic, often effected in a rather nominal way, making an element a postposition on the syntactic and a conjunction on the functional level.

3.31. Adverbs

Adverbs are lexemes which serve as adjuncts qualifying the verb phrase. They come from different sources: *+lA* sometimes forms local or temporal adverbs (e.g. *tün+lä* 'at night'; see OTWF 404-405), petrified vowel converbs serve as adverbs (thus e.g. *utru* in *bän utru yoridim* 'I marched forth'; see OTWF 741).

There is a formative *+tl ~ +dl* which forms adverbs from adjectives, as in *bo savimin ädgüti äšid, katıgdı tıŋla* 'hear my words well and listen to them carefully' (KT S 2) from *ädgü* 'good' and *katıg* 'hard'. Another lexeme formed with this suffix is *amtı* 'now', whose base lives on in South Siberian languages. There is an adverb *tü* 'firm(ly), constant(ly)' attested in HTs VII 1613⁵²⁹ and *ädgü tü, üküš tü, ulug tü, katıg tü, tü yavlak* apparently are collocations involving this; see EDPT 432a for further instances. The formative may come from such a collocation. *nätägläti, kaltü* (both discussed in section 3.134) and *birtämläti* 'once and for all' are formed with the combination of *+lA* and *+tl*.

There are two other *+tl* elements whose meaning and use does not quite permit us to link them to the above: One is *ikinti / äkinti* 'second', the ordinal of *iki / äki*, which appears with an *+n* in *ikin ara* 'among (the two)'. Another *+tl* is added to an obsolete case suffix *+dXr* to form a group of local adverbs:⁵³⁰ *üstürti* 'from above' documented in the phrase *üstürti küdi* 'downwards from on high' several times in the EDPT and attested also in Mait 187r26, 197r8, 141 r17 and 75 v3 (*üstürti örtlüg yalinlig bi biçgu ätözläri üzä yagar* 'From above fiery and flaming knives rain on their bodies'); *içtirti* 'innerly' in TT V A 55 and 95 and AraçemiZieme 77 and its antonym *taštirti* 'from outside' in M III nr.8 IV r12; *kedirti* 'from behind' and its antonym *öñdürti* 'from before' in one passage in TT I 122 and 123 and *kedirti* also in Mait

⁵²⁹ See Röhrborn's note to this for the Chinese equivalent.

⁵³⁰ *+dXr* forms appear also with personal and demonstrative pronouns in *mintirdin* 'from me', *sindirtin* 'from you', *mundirtin* 'from here' and *andirtin* 'from there'.

67r11.⁵³¹ +dXn nominals, *üstün*, *içtin* and *taştin*, *kecin* and *öhdün*, are related to these five. *yañirtı* ‘afresh, anew’, attested in OTWF 798, is probably not formed with this suffix but was a petrified converb from an unattested +(A)r- derivative from *yañi* ‘new’. I take *taştirtı* and *taştirtin*, attested in QB 3115, 5547, 5936 and 6259, to have been simplified from *taştirtı* because of the three *ts*.

Time adverbs such as *temin* ‘shortly before or afterwards’ or *aşnu* ‘before, earlier’ (originally the vowel converb of *aşun-* ‘to hurry’) are a group by themselves, showing functional affinity to postpositions like *ötrö* when used absolutely to signify ‘thereupon’ (e.g. in Suv 194,16). *kačan* ‘eventually, at some point in time’, is of pronominal origin. This is an indefinite adverb, usually appearing with temporal clauses; some examples are quoted in section 3.134. In *kačan ol mogoçlar bîdîlximka tâgdilâr ârsâr ol yultuz tâprâmâdin şük turdi* ‘When those Magi eventually reached Bethlehem, ...’ (U I 6, Magi, a Christian text) or in *kačan küsüşî kanguçâ ârsâr ...* (Suv 362,14) ‘when, eventually, his wish reaches fulfillment ...’ it is used with the conditional form; in the following the verb is finite: *kačan vuu tayşî aya îgâçîn bultî, ötrö lovudi xan üskintâ utru turup ... tokuz âlig şlok sözlâdi* (BT I A₁ 9) ‘At some stage V.T. found his beating board, then stood up in front of the emperor L. and ... recited 49 *gâthâs*’.

A particle such as *soka / suka* ‘just’ turns out to have aspectual uses as well (like English ‘just, right when’); see OTWF 381 for some preliminary documentation.

It happens that adverbs are treated as nominals morphologically; from the temporal adverb *aşnu* ‘earlier’, e.g., we have the case forms *aşnu+ça* and *aşnu+dîn bärü+ki* (further expansion, +*kl* governing the postpositional phrase). These and *aşnu+sîn+ta* are documented in the UW, whose author for this reason takes *aşnu* to have gotten nominalised. *öñi+n* and *birlä+n* are postpositions with the instrumental case suffix, while the base of *azu+ça* is a conjunction. Cf. also *basa+sîn+ta*, *yügärü+dä* and *azu+sîn+ta*. this is not really a question of this or that lexeme getting ‘hypostasied’, to use Röhrborn’s term, but rather of the structural fuzziness around adjuncts in general, as discussed in the previous section.

⁵³¹ A secondary form *kendirtı* has been read in Suv 10,9.

3.32. Postpositions

Dealing with the Turkic languages, scholars have distinguished between ‘proper’ and ‘improper’ postpositions, which both govern noun phrases.⁵³² The ‘proper’ postpositions of Old Turkic (here simply called ‘postpositions’) are not inflected as such, although many of them are inflected forms of nouns or of verbs. Elements serving as postpositions can, on the other hand, be inflected if they serve as adverbs or are used in some other function; thus the instrumental *öñi+n* ‘separately’ or *adın öñilärtä* ‘in other separate ones (i.e. places)’ (Suv 32,21). The ‘improper’ postpositions are, in fact, nouns from the morphological and the syntactic points of view, both diachronically and synchronically. Since they are not postpositions (and not themselves adjuncts) although they also serve as heads of postpositional adjunct phrases, we call them relational nouns.⁵³³ Relational noun constructions are dealt with in section 4.22; see section 4.21 for details on the use and functioning of postpositions.

Some of the (proper) postpositions are opaque like *täg* (e.g. *yultuzlar täg* ‘like the stars’). Others have a pronominal origin, like *bärü* ‘hither’ (e.g. in *antada bärü* ‘since then’), which might be related to *bän* ‘I’ and *bo* ‘this’. *ınaru* ‘forward, further’ is both a postposition and an adverb. Its base lives on in the case forms *inča* ‘thus’ and *intin* ‘that side’, in *inčip* ‘thus’ and perhaps in the shorter allomorph of the 3rd person possessive suffix. *ingaru*⁵³⁴ in ŠU N10, the older variant of *ınaru*, is clearly a directive of this pronoun. *siñar* ‘in the direction of’ appears to be identical with the noun signifying ‘half’ or ‘one of a pair’ and may possibly be the dative form of an obsolete pronoun of the shape **sī* (which may live on as the other allomorph of the 3rd person possessive suffix). *siñaru*, which Heschke 2001 makes likely to have been a synonymous postposition in Orkhon Turkic, may originally have been the directive form of this base.⁵³⁵

⁵³² *üčün* is a postposition which governs what we have called clauses, functioning like a conjunction meaning ‘because’ or ‘in order to’; cf. sections 4.635 and 4.636. Although such units are clauses from the functional point of view and although they involve predication, they still also have all the categories, and hence also all the characteristics, of nominals. *üčün* therefore has the meaning of a conjunction but in fact governs these units exactly in the way and in the sense it governs other nominals.

⁵³³ Following Larry Clark’s *Turkmen Grammar* (Wiesbaden: Harrassowitz) 1998.

⁵³⁴ Spelled thus and not as *ıñaru*.

⁵³⁵ The apparent consistent frontness of the possessive suffix must have been secondary; note that monosyllabic nominal bases such as *it* ‘dog’ also get fronted.

Still other postpositions come from nominals: *üzä* ‘over; by (the use of), on the part of’ is apparently related to *üstün* ‘above’; alternately, it may come from a noun attested only in the Codex Comanicus (and possibly in Chuvash) with an obsolete variant of the dative case suffix (thus T. Tekin) or directive-locative *+rA* with subsequent zetacism. *birlä* ‘(together) with’ comes from *bir* ‘one’ with the adverbial suffix *+lA*;⁵³⁶ in later Old Turkic sources, *birlä* can lose its */r/* and/or be expanded with the instrumental suffix to give *bi(r)län*. *öñi+n* is another postposition expanded with the instrumental. The instrumental case suffix is no doubt to be found also in *ken* ‘after’, which is related to *keđin*, *kesrä*, *kerü*, *keč* and *kečä*.⁵³⁷ In *balık taštün* ‘outside the town’, a *+DXn* derivate (called ‘orientational’ and discussed in section 3.12) governs a nominative as a postposition; further examples of *+DXn* forms, governing the ablative, are mentioned in section 3.12. *+rA* nominals such as *öñrä* ‘before’, *kesrä* ‘after’ and *ičrä* ‘inside’ are also locally relational like *+DXn* forms and govern noun phrases in the locative or (*ičrä*) the nominative. *osoglug* ‘like’ is a *+lXg* derivate from *osog* ‘manner’ (normally, e.g. in U II 41,20, used in a binome with *yañ*, a Chinese loan). *yañlig*, which comes from a base copied from Chinese, has a very similar meaning and structure. *täñlig*, which is also formed with *+lXg*, is quantitative rather than qualitative. *yañlig* survives as a postposition in Uzbek, *täñlig* in Turkish (*deñlü* > *denli*). Meaning, use and distribution show that these three are not mere instances of a complex *+lXg* construction but have fused and moved away from their bases.

Most postpositions were originally vowel converbs, e.g. *körö* ‘with respect to’, *ötgürü* ‘because of’, *tapa* ‘towards’ (e.g. inscriptional *čik tapa yori-* ‘to march against the Čik’ < *tap-* ‘to find’), *aşru*, *togru* (e.g. inscriptional *kün togru süñüşdüm* ‘I fought throughout the day’, <

⁵³⁶ The function of this suffix is discussed in OTWF p.403-406. Tekin 1968: 110 thought that *birlä* was an *-A* converb from a denominal verb in ‘*+l-*’ derived from *bir*, but there is no such denominal formative in Old Turkic. Gabain 1974: 136’s proposal of an *-A* converb from **bir+i-l-* is not possible either, as the converb vowel of *-(X)l-* is not */A/* but */U/*. The idea, in Gabain 1974 par. 295, that *bi(r)län* comes from an *-n* converb of a denominal verb ‘*bir+lä-*’ is also unacceptable, as no such verb is known, and as *bir+lä* and *bilän* etc. are clearly variants of one and the same postposition.

⁵³⁷ Attempted etymological explanations for *üčün* ‘for; because of’ have assumed an instrumental form, generally from *uč* ‘tip, extremity’; *uč* is, in fact, used in some such function in Ottoman. Within such an hypothesis, the only way to account for the front vowels would be to take *uč+i+n* with the possessive suffix before the instrumental to be the source. The possessive suffix may have been fronted also when added to back-harmony bases; one would assume it to have caused the fronting of the first syllable when the form got fused. Backward fronting is found e.g. in *bökün* ‘today’ as well.

togur- ‘to cross’), *utru* ‘facing’, *tägi* ‘till’. *tuta* < *tut-* ‘to hold’ attested as postposition in Abhi, signifies ‘concerning’. *tägrä* ‘around’ is by Gabain 1974 § 286 thought to come from a converb of *täg-ür-* ‘to convey’, but the vowel converb of this stem is /U/ and not /A/ and the meanings of the two are too far apart; the EDPT is probably right in assuming the existence of another verb **tägir-*, which must also have served as base for *tägirmi* ‘round’ and *tägirmän* ‘mill’. Some conjunctions (e.g. *yana* / *yänä* ‘again; moreover etc.’ from *yan-* ‘to return’), adjectives and adverbs (e.g. *ašnu* ‘before’ < *ašun-* ‘to hurry’) are lexicalised vowel converbs as well.

kudī ‘down’ (e.g. *sälänjä kudī yorīpan* ‘marching down the S. river’ BQ E37) comes from *kud-* ‘to pour’, liquids always moving downward. The form is not that of a converb, however, as that would be *kuda*; rather, it belongs, like *töni* and *yarašī*, to the formation in *-I*, discussed in OTWF 340-344. *kudī* is attested with /u/ in Brāhmī script, survives with /u/ in Uzbek, Tuvan and Tofa and in ETŞ 9,23 alliterates with seven other instances of *ku*^o. The postposition *tön-i* ‘during’, discovered by Zieme 1992, is clearly formed in the same manner, as is *yaraš-ī* ‘suitable for’: The vowel converbs from these stems end in *-A* and *-U* respectively.

adīn ‘different’, which *can* function as a postposition, probably comes from the base of *adīr-* ‘to separate’ with the formative *-(X)n* discussed in the OTWF. *eyin* ‘according to’ could come from *ey-* ‘to pursue’ with the same formative or it could be a petrified shortened *-(X)yXn* converb.⁵³⁸ *artok* ‘more’ < *art-* ‘to increase (intr.)’, with a formative *-(O)k* dealt with in the OTWF, also serves as a postposition (cf. UW).

⁵³⁸ Gabain 1974 has *iyin* in §296 and *iyä* in §277, deriving both from the same verb *iy-* translated as “folgen” in the former paragraph and “folgen, verfolgen, bedrängen” in the latter. In §277 she also includes the phrase *iyä basa* which she translates as “ständig”. The two readings both represent *eyin*, with implicit vowel in the instances quoted as *iyä*, *alef* and *nün* looking identical in the texts in question. In the TT VI instance quoted, ‘*iyä*’ is found only in one ms. while another writes *iyin*, and in the U III instance ‘YYYN’ is added under the line. *eyin* is found spelled 9 times with *e* in Brāhmī texts and in no case in any other way, and onset *e* is never used in those texts to represent any other vowel in word onset. I now no longer think that the first verb in the biverb *ey- bas-* is to be read as *iy-*, as against OTWF 602-3: The Tekin proposal for reading Tes E5 is in any case too uncertain to make the difference. In ‘Bemerkungen zum lexikalischen Sondergut des Uigurischen’, an unpublished lecture held at the Frankfurt VATEC symposium (September 2002), K. Röhrborn expressed the view that *eyin* / *iyin* comes from a misreading of *ävin* ‘grain; single hair’ by being part of a loan translation of a Sanskrit expression; this seems unlikely to me, for reasons which cannot be detailed here.

The border between converbs (of transitive verbs) and such among them that have become postpositions is not always clear; the problem for the linguist is that both govern noun phrases: Gabain 1974 § 273 and 278 and Tekin 1968: 163, e.g., consider *aša* and *käčä* to be postpositions signifying, respectively, ‘beyond’ and ‘beyond, across’. The sentences which they quote, e.g. *kögmän aša kirkiz yeriñä tägi s[ülädimiz]* (BQ E 15) ‘We crossed the Sayan and campaigned all the way to the land of the Kırkız’ and *käm käčä čik tapa sülädim* (BQ E 26) ‘we crossed the Yenisey and campaigned against the Čik,’ give the impression that they are converbs and not postpositions. The examples with *aš-a* and *tog-a* refer to the crossing of mountain chains, those with *käč-ä* to the crossing of rivers. Such words can be called postpositions if they are lexicalised in a meaning in any way distinct from that of the verb (e.g. *tap-* ‘to find’ vs. the postposition *tapa* ‘towards’) and if they are also attested in a way which does not call for a subject. With *öñi* ‘separate or distinct from’, there is a functional ambiguity as to postpositional or adverbial function discussed in section 4.2 below.⁵³⁹

The common postposition *sayu*, presumably a petrified converb form from the obsolete verb *sa-* ‘to denumerate, enumerate, recount’, serves as a peculiar amalgam of ‘all’ with locativity; it signifies ‘to all, in all, at all places’: *uluš sayu balik sayu kim bägläri ... ärsär* (TT VI 9) ‘In all states, in a cities, ... whoever are their rulers, ...’. It is still in use in languages so remote from each other as Yakut (*ayi*) and Krymchak and finds its analogue in Mongolian *büri*. Like the other postpositions governing the nominative, *sayu* as well governs the accusative of possessive suffixes; e.g. *ay täñri künin sayu* ‘on every day of the Moon God (Xw 301).

tägimlig ‘worthy of ...’ is derived with the formative *-(X)mlXg* dealt with in OTWF section 3.322. Beside the common *ayagka tägimglig* ‘venerable’, instances such as *alkiška tägimglig* ‘praiseworthy’, *iki didimka tägimglig*, ‘worthy of the two crowns’, *müñ ögmäkkä tägimglig* ‘worth a thousand praises’ quoted in OTWF show that Uygur had created a postposition of this form, governing the dative.

⁵³⁹ There does not appear to be any grammatical or functional ambiguity concerning *alku* ‘all’, mentioned as a postposition in Gabain 1974 § 272: As shown in its UW entry and elsewhere, it is always an adjective (sometimes used adverbially, like many adjectives) and never a postposition; it seems more likely to have come from a contraction of the verbal nominal **alk-gu* than from a vowel converb (as stated in the UW), because the converb vowel of *alk-* is /A/.

In Orkhon Turkic the noun *yan* ‘side’ became a postposition signifying ‘on the side of’; in addition, it follows synharmonism.⁵⁴⁰ We find it in *kan+ta yan* ‘from those around the khan’ (Tuñ 33), *bir+din yän* ‘on the southern side’, *öŋ+dün yän* ‘on the eastern side’ and *yir+din+ta yan* ‘from the northern side’ (Tuñ 11) and *täŋrikän yän* ‘beside his majesty’ (Ongin F5). *yAn* shares the feature of adhering to synharmonism with the postposition *täg* ‘like’. In *kan+ta yan* and *yir+din+ta yan* in Tuñ, the two Orkhon Turkic instances of *yAn* where it follows vowels, these vowels are not actually explicit, which would be the normal spelling of vowels at the end of words (and often indeed at the end of stems); nor is there any punctuation mark before *yan*. From this it follows that the scribe actually felt *yAn* to be a suffix. We cannot go so far, as this element actually follows the locative case suffix and as this would be the only instance where the locative form of a noun would be followed by another case suffix; but synharmonism does bring *yAn* quite some way into that direction.

In the inscriptional pronoun sequences *antag* ‘like that’ (related to *ol* ‘that’) and *montag* ‘like this’ (related to *bo* ‘this’), *täg* also follows the harmony of the base. Note that the base of these two forms is the oblique stem and not the accusative form, which otherwise serves as pronominal base for postpositions governing the nominative of simple nouns. The same clearly happened to *nätäg*, which is spelled as one word though otherwise identical to *nä täg*, and gets expanded to give adverbial *nätäg+in* and *nätäg+läti* (cf. section 3.31). In the Orkhon inscriptions, *antag* still alternates with *antäg*. *sizintäg* ‘like you’ in the archaic Manichæan ms. in ChristManMsFr (r10, clearly visible on the facs.) must be another example for this process, since *sizin+* is the oblique base while *sizni* is the accusative of this pronoun. In view of all this, *+tAg* can be said to have become a case suffix as far as pronouns are concerned. In *bintägi* ‘someone like me’ in Tuñ 57 (before Alyılmaz 2000: 110-111 erroneously read as ‘*büntägi*’) the base is also the oblique stem. The possessive suffix at the end is demanded by the context: A *täg* phrase gets a possessive suffix also in *bars täg+im* ‘my tiger-like one’ in the runiform epitaph E28,1; possessive suffixes are not normally added to postpositional phrases.

⁵⁴⁰ *bağan* ‘to me’ *sağan* ‘to you’ in Anatolian dialects and in Kazakh may possibly be contractions of the normal datives *baŋa* and *saŋa* with this element; I know of no other explanation for these forms.

3.33. Conjunctions

Conjunctions are elements joining clauses to their matrix sentences, linking sentences to their context, linking sentence parts or noun phrases to each other and the like. They normally precede the stretch which is in their scope, but *ärkän* and the collective numerals (see below) follow what they subordinate. Conjunctions generally do not govern the elements they are attached to, but subordinating conjunctions like *kim* can be considered to govern what they subordinate. The postposition *üčün* can also be considered a conjunction where, in its causal use, it often serves for subordinating clauses; cf. *tapigčī kirkīnlari ägsük kargäk üčün* (Mait 120r23) ‘because her serving maids were insufficient or lacking’, with *üčün* subordinating the predication as a whole. Conjunctions do not demand that what is in their scope should have any particular form. Many of the elements mentioned in this section are not conjunctions in the narrow sense, but all serve the task of in some way connecting. What follows is an unstructured and possibly incomplete list.

birök and *ymä* are mentioned among the connective-adversative particles (section 3.342) and not among the conjunctions as their presence does not bring about subordination or coordination but is optional in these juncture types; their function is to make the logical, semantic or rhetorical relationship between subordinating and subordinated clauses (more) explicit.

Let us, here, first mention a number of coordinating elements: *takī* functions as coordinating conjunction signifying ‘and’. We translate *muntada adīn takī öñi aš ičgü yok* (Suv 610,16) as ‘There is no other or different food than this (i.e. than eating the prince)’, but use ‘or’ only because English demands such translation under negation. What is linked in the previous example are two postpositions; in the following example two nominal clauses having the same predicate are linked: *ančama kutlug bo üd kolo ... takī kutlug bo yer oron kim ...* ‘So happy is this time and so happy this place that ...’ (MaitH XV 6r5). In the following examples full verbal sentences are linked: *bir äkintikä karganurlar alkanurlar takī ... okišurlar* (MI 9,11-14) ‘They curse each other and shout at each other’; *amarı tinliqlar čaxri äñirär yünj äñirär kentir äñirär, böz batatu kars tokiyur, takī ymä adrok uzlar kántü kántü uz işin işläyür* (KP 2,5) ‘Many people make wool or hemp thread, weave linen or woolen cloth and (in general) various professionals carry out each his special profession’. In some other cases (mentioned in the next section) *takī* must be considered a particle rather than a

conjunction; while the two uses clearly have a common source (see OTWF 340 for an etymology which accords with both meanings), these should probably be considered different elements synchronically. *taki* is not attested in Orkhon Turkic.

yana was originally the vowel converb of *yan-* ‘to return’; it appears with back harmony in Orkhon Turkic. Subsequently, in Uygur, it changed to *yänä* and *yenä*; *yänä ök*, e.g. in TT X 17, shows the new harmony class. It became an adverb signifying ‘again’ before it also developed a conjunctive function, then bearing the meaning ‘moreover’ (also in combinations such as *yenä ök* or *yenä ymä*).

azu ‘or’ appears already in Orkhon Turkic *azu bo savimda igid bar gu?* (KT S 10) ‘Or is there anything false in these my words?’ In Köktüturf TM 342 1 r 1-4, a runiform ms., there are two consecutive sentences both starting with *azu*; in such cases the translation should be ‘either ... or’. See the UW entry for Uygur documentation. *azu* cannot be the petrified converb of *az-* ‘to stray’, as stated in UW 324a, as that is *aza* (cf. UW 319a for Uygur evidence for this). *azuća* (also documented there) has a similar meaning and use as *azu* and no doubt comes from it. Cf. also *azusinta* ‘beside; on its side’ (attested only in HTs) and the even rarer *azuki* ‘secondary, subsidiary’.

ärmäsär, the negative conditional form of the copula, serves as an adversative conjunction with meanings such as ‘otherwise’ or ‘however’; examples are given in UW 445a. In USp 24 we find *bol-ma-sa* with the same meaning and function.

In Uygur, *ap* practically always appears in pairs of stretches, where it signifies ‘both ... and’; in longer chains its meaning can be given as ‘as well as’. See the UW for this documentation; in many of the instances *ap* is followed by the particle *ymä*. The UW also quotes one sequence of two instances in U II 4,2 where, after a sentence with a negative verb, the two *aps* signify ‘neither ... nor’. In the UW the U II passage appears as the only example for this latter meaning, but we find it also in Wettkampf⁵⁴¹ 17-18: *bo tört savda adin tusulmagay, ap alp ärdämäjiz, ap özlük başlık atijiz* ‘Nothing beside these three words will serve you, neither your bravery nor your high-bred race-winning horse’. *ap* is used also in Qarakhanid sources; there, however, all the instances are negative: The DLT has double *ap* signifying ‘neither ... nor’; in one QB and one Middle Turkic example, there is single *ap* following a negative verb and introducing a positive verb form, to be translated as ‘nor’.

⁵⁴¹ Published after the appearance of the fascicle of the UW containing the entry for *ap*; the positive translation offered by the editors does not suit the context.

The source of runiform *ančip*⁵⁴² and Uygur *inčip* and the documentation for *ančip* are discussed in section 3.132. The examples for *ančip* all show it at the beginning of sentences but not of paragraphs, preceded by *-dl* or *-mlš* in the historical narrative of the inscriptions but by a nominal sentence in the epilogue of the IrqB. *ančip* always signifies ‘having done that; thereupon’. This is also the meaning of *inčip* in the following passages: *inča sakintim ... mini ... dendar kilgay siz tep. inčip amtikatägi mäniñ köñülüm näñ ornanmaz* (TT II,1 40) ‘I thought you would ... make me into an elect. As a result of that my heart has not calmed down till now’. TT II,1 is Manichæan; another Manichæan instance: In *tümkä ärdim ärsär ymä inčip yana kamgak kántirkä tayaklığın köntülmiš tæg boltum ärdi* (HTs VII 1974) ‘Even though I was foolish, I had thereupon again become like the *kamgak* plant which gets upright by leaning upon hemp’ the main clause of a concessive construction is introduced by *inčip*. *amtī anī barča ökünür biz bilinür biz. inčip tükäl bilgä täñri täñrisi burxan kañimzñi körür biz, no[mīn äšidür] biz* (TT IVB 23) ‘Now we repent and admit all that. As a result of this we now see our father the perfectly wise Buddha, king of kings, and [listen to his tea]ching’.

In M I 16,15 *inčip* appears to signify ‘similarly’: *ančulayu kalti uzlar ädsiz näñ iş işläyü umaz, inčip ärli uzuntonlugli näčäkätägi beš täñri kücin yemäsär näñ ätöz sävigin uvutsuz işig sürü umaz* ‘Just as e.g. craftsmen can by no means carry out their craft without material, similarly men and women can by no means carry out the shameless activity by bodily love as long as they do not use the power of the fivefold god’. In TT I 79 *inčip* appears to signify ‘because’: *busuš kadgu bälğüsü äñirä turur; inčip ädgü kilinčlig eşlärkä inanmagınca ...* ‘The marks of sorrow haunt you; because, as long as you don’t trust helpful friends [you will not get rid of] (anxiety)’. Sometimes *inčip* signifies ‘hereby’ or ‘in spite of this’; the EDPT (mentioning a number of additional examples) also gives the meanings ‘this being so; so much for that; on the other hand; but’ and ‘then’.

The adverb *udu* ‘following, after’ has been derived from the verb *ud-* ‘to follow’, which did not survive in Old Turkic. In Tuñ 55 we find *udu* used as a conjunction: *elteriš xagan kazanmasar udu bän özüm kazanmasar ...* ‘If king Elteriš kagan had not won and if I myself had not won (either), ...’.

⁵⁴² In Saddh 32 (context fragmentary) the transliteration gives ṆCYP but should be corrected; the transcription correctly writes ‘*inčip*’ (see facs.). By origin this word and *ančip* appear to be pronoun – verb hybrids.

kaltī ‘for instance’ does not itself normally create comparison as it is practically always used together with elements doing that: the equative case or the postposition *täg*. With *täg* it appears e.g. in *kaltī yaḡi alkinmiš yula täg* (Mait 103v11) ‘for instance like a beacon whose oil has been consumed’, with an equative in *üç yavlak yolka tüşügli anča ol kaltī bo yertäki tuprakča* (TT VI 337) ‘those who fall into the three evil ways are (as numerous) as e.g. the soil in this earth’. In the last sentence *kaltī* correlates with *anča*, in the following one with *ančulayu*: *saḡa utruntači kišilär ančulayu bolur kaltī ... iši küdügi bütmäyök täg* (TT I 52) ‘People who oppose you are, for instance, similar to somebody ... whose business does not work out’. It appears with an aorist in the equative case in *kaltī ... kün täjri orninta yarok ay täjri yašiyu bälgürä yarlikarča eligimiz ... bälgürä yarlikadü* (U 57,7) ‘our king graciously appeared ..., like, e.g., the bright moon’s shining appearance instead of the sun’, with a demonstrative of manner in *inča kaltī täjri yerintä ... tugmišin öyür sakınur* ‘he remembers, e.g., how he was born in the divine realm’ (MaitH XV 1v21). The following comparative sentence serves as a comparison to the one preceding it, whence twice *kaltī*: *kaltī ol kiši ätözin bulugli yalḡuklarta kertgünč köñüllüg tünliḡlar anča ol kaltī türḡak üzäki tuprakča* ‘as, e.g., among people who acquire a human body, creatures with faith are e.g. like soil on one’s fingernail’ (TT VI 338). Finally, *kaltī* introduces converbial clauses ending in *-(X)p* or *-sAr*, with the same meaning: *kaltī yürüḡ tašig alsar* ‘if, for instance, one takes the white stone’ in Blatt, a runiform ms., where the author dwells on one of the stones after mentioning it together with some others. In M III nr.4 r9–v18 the human body is compared to the ocean which is jostled and shaken by winds coming from all different directions; the element *kaltī* appears in this passage seven times, five times with *-sAr* clauses and twice with noun phrases. In one of these the meaning ‘for instance’ is still acceptable; in *ančula män(i)zlig ärürlär kaltī ulug tal’uy s(a)mutre kim bulgak t[älgäki] üküš ol* (r16) ‘They (i.e. all thoughts, feelings, forces etc.) look like the great sea samudra, whose whirling and jostling is great’ however, there is neither *+čA* nor *täg* and *kaltī* should signify ‘as’. *kaltī bo tört sav agzaḡızda tutsar siz, inčip ulug takda muḡda kurtulḡay siz* (Wettkampf 21) ‘Inasmuch as you mention these four words, to that degree will you be relieved of the great sadness and trouble’ apparently shows *kaltī* and *inčip* in an early correlative function, these two elements originally coming from interrogative *ka+* and demonstrative *in+* respectively. See section 3.134 concerning the etymology of *kaltī* and some other meanings it has.

The postposition *ötrö* is discussed in section 3.32; governing a zero anaphoric and thus serving as temporal adverb it comes to mean ‘thereupon’. In an instance like the following, however, *ötrö* has become an introductory element (here translated as ‘well’): *amti bo savig magat ulušta ... bilmiš ukmiš kärgäk. ötrö [...] atavake yäk katig ünin kik[irip] ... ünliġlarig ölürgäli ugradı* (TT X 33) ‘Now this matter has to be imagined in the country of Magadha, Well, the demon Aṭavaka shouted with a loud voice, intending to kill ... living beings’.

kim is a subordinating conjunction placed before the clause it governs. In *ötündilär kim kälürmiš ärdilär üç törlüg közünč* ‘They said they had brought three types of present’ (U I 6,14, Magier) it introduces an utterance as an object of a verb of speaking (section 4.7). *kim* can introduce consecutive clauses (discussed in section 4.637), causal clauses (section 4.635) or final clauses (section 4.636); in these the verb is in the conditional or in a volitional form, whereas consecutive clauses have *kim* with indicative verb forms. *bo yer üzä näñ andag t(ä)v kür yälvi arviš yok kim ol umasar* (M II 5,10) ‘There is no such trick and magic in this world as he would not be capable of’ is an example of *kim* used for the introduction of a relative clause (as described in section 4.612). The (Qarakhanid) QB also has relative clauses introduced by *kim*, with a finite verb or with the *-sA(r)* form.

apam ‘in case’ appears to have always been used with the conditional, mostly together with the particle *birök*; see the UW for documentation. Unlike English ‘if’, its presence is not a condition for conditional meaning. However, as stated in the EDPT entry, *-sAr* also has non-conditional uses and *apam* selects the conditional one. QB and DLT use *apañ* instead of *apam*. In case the Qarakhanid variant does not represent the original shape of this conjunction, its original meaning may have been ‘now’: I tend to follow Ramstedt (as mentioned in the UW entry) in believing it to be a derivate of **am* ‘now’⁵⁴³ with intensifying reduplication; the semantic process seems a likely one.

The postposed conjunctions *ärkli* (runiform inscriptions) and *ärkän* (the rest of Old Turkic) are discussed in section 4.633 and signify ‘while (being)’ or ‘when (being)’; examples for the latter are also listed and classified in UW 433-434: They turn sentences, normally having an aorist verb form or a noun phrase as predicate, into temporal adjuncts.

⁵⁴³ Living on in this meaning to this day in Sayan Turkic and probably eliminated everywhere else due to its phonic similarity with the noun signifying ‘vulva’. (In Proto-Turkic this noun may have signified ‘mouth’ and not ‘vulva’, to judge by its Mongolic cognate.) Old Turkic *amti* ‘now’ is no doubt formed from the same base with the adverb forming suffix *+tl*.

The negative counterpart of positive aorist + *ärkän* is *-mAz ärkän* in Qarakhanid, *-mAzkAn* in Uygur. *ärkän+ki* is, however, made to govern negative aorists in two late texts, as documented in the UW entry for it. See OTWF 62 for possible etymologies for *-mAzkAn* (and cf. Bang 1915: 631-32), OTWF 383 for *ärkän* in general⁵⁴⁴ and cf. section 4.633 below. It might, perhaps, be possible to take it to be syncopated from **ärür kän* (with the emphatic particle *kAn*); that would make it similar to *-mAzkAn*, in case this same explanation can be offered for that suffix (which see in section 4.633).

3.34. Particles

Particles are unbound elements of weak or no lexicality, which are not marks of grammatical categories either; they do not inflect but some come from inflected forms of other words. Particles are classifiable by scope and position. The term ‘particle’ is not defined by any syntactic task but by prosodic and/or word-order dependence of such elements on other words; particles can serve to connect, e.g., or fulfill other tasks. The border between ‘particles’ and what I have listed as ‘conjunctions’ is fuzzy, as elements such as *ymä* and *birök*, dealt with below, show both clitic and clause-starting behaviour.

The emphatic element *Ok*, the interrogative *mU* and the late *mat* or *mAt* are instances of postclitics. When such particles are joined to a phrase or clause consisting of more than one word, they can insert themselves within it after the first word, though their scope may be the whole phrase; e.g. *ol ok oron* in *maytri bodisavt ol ok oronta olorup ...* ‘The *bodhisattva* Maitreya sat down in *that very place*’. In *kučmazlar mu ärdi?* (DKPAMPb 608) ‘weren’t they want to embrace?’ or *mini sävär mü siz* (KP 6,4-5) ‘Do you love me?’ such a particle introduces itself into a verb phrase, before the auxiliary in the first case, before a clitic pronoun in the second. Other particles, e.g. *čak* and *äj*, are proclitics. Clitic particles share the feature of phonetic dependence with affixes. What distinguishes them from affixes is that affixes are added to narrow sets of lexeme classes, whereas particles can generally be added to wide arrays of them; their scope covers whole words or even phrases. Unlike postpositions, particles do not govern their scope. They are here classified as emphatic, connective-adversative, epistemical and volitive.

⁵⁴⁴ Johanson 1994: 177 finds the view expressed therein unconvincing but has no alternative explanation. *ärkän* cannot be a converb of *är-* ‘to be’, as expressly stated in UW 433, as no converb suffix *-kän* is attested in any other word.

3.341. Emphatic particles

The clitic particle *Ok* emphasizes the word it follows. It drops its vowel when added to some elements ending in vowels, e.g. *inčä+k* in v 2 of the runiform ms. edited in SEddT-F I 542 and TT II,1 29, *inčak* (with dotted Q; Manichæan script) in M I 7,17, *ančak* and *antak* (the latter two quoted with numerous examples in the UW), *ölürtäčik* < *ölürtäči ök* in Tuñ 11, *ančulayuk* in LautBemerk 29 beside *ančulayu ok* on 1.43 of the same text. The fact is that *anča ok* and *anta ok* are also common, the latter even more than *ančak*. Uygur also has numerous instances where *Ok* regularly retains its vowel after bases ending in vowels, e.g. *bo ok*, *munta ok*, *sağa ok*, *ymä ok*, *yänä ök*, *antakya ok*, *körmištä ök*, *yarlikamišta ok* and so forth. That non-elision is phonetically real is shown by Brāhmī instances, *bo ok* (TT VIII H3), *ani ok* (TT VIII D18) and *inčgäkyä ök* (TT VIII F14). Note, though, that *ök* in *yänä ök* is, e.g. in TT X 17 and 358, spelled not 'WYK but 'WK, in the way in which rounded vowels are spelled in non-first syllables; i.e. the scribe at least partly felt the two units to 'belong together'.

Ok can apparently be added to any part of speech, as the examples above show. An example such as *körmištä ök* 'the moment he saw' just quoted shows that it can be added to temporal expressions; another such instance is *bo nomka kertgünmägüči tünlig yoriyu turur ärkän ök ölüp bargaylar* (1.28-9 of a text mentioned in footn.186) 'Creatures who do not believe in this teaching will suddenly die *right* in the middle of their life'.

In the Tuñ inscription there are four instances of a particle *kök*, presumably consisting of (*O*)*k Ok*: In all the instances it appears at the end of a sentence, after a finite verb form ending in a vowel (e.g. *ölürtäči kök* 'he will really kill (us)'); it may therefore just be that it is in complementary distribution with *Ok*, a mere *k* after vowels presumably not being felt to be expressive enough.

čak is a preposed particle signifying 'just, exactly, no other': *kim ärti ärki ölürtäči – ögökkyäm – čak sini* (Suv 626,20) 'Who might it have been, my darling, who singled you out for killing?'; there is a similar instance in BuddhKat 23. *čak amti* (Suv 612,20) is 'right now'. Another temporal instance of this particle is quoted by J.P. Laut from the Hami ms. of the DKPAM in *SIAL* 17 (2002): 67: *čak bo kolota ymä šakimuni ... siğun ažuñinta tugdi ärti* 'Right at this moment, now, Śākyamuni ... had been born as a deer'. DLT fol.167 says that *čak* is 'a particle expressing the ... exact identity of a thing' and gives the examples *čak*

ol atnï tutil ‘Hold that very horse!’ and *čak amačnï urgil* ‘Hit the target on the nose!’.

soka, for which more than a dozen examples are listed in OTWF 381, appears to have a similar meaning: Its Chinese equivalent signifying ‘geradewegs, genau, direkt’ is mentioned in the note to ZiemeLegenden p.152 1.8 (ms. filling a lacuna in Suv 8,1). Some of the instances have it together with *ugrayu*; in some others it is used for stating that something happens ‘right that very moment’: (*suka sözläyü turur ärkän* (AbitAnk 68) ‘right while speaking’. *soka* may come from *sok-* ‘to hit, beat’ (or from *suk-* ‘to thrust in’, in which case it would be *suka*). Unlike *čak* and *kAn* it is not added to time adverbs.

kAn is added to adverbial temporal expressions and appears to give them some meaning such as the one which ‘just’ has when qualifying ‘now’ or ‘then’. We find it with *amtï* ‘now’ and *ašnu* ‘before’ (examples for both in the UW), *ertä* ‘early in the morning’, *öñrä* ‘before’ (cf. OTWF 62) and as *yañirtu kan* (BuddhUig I 227) ‘recently’. Then we have *anč(a)ginča kan yarın y(a)r’udï kün tu gdi* (M I 6,19) ‘In a short while⁵⁴⁵ dawn broke and the sun rose’; *anč(a)ginča* is a hybrid from *an+ča* with the temporal *-gInča* converb meaning ‘until’ with perfective verbs, and clearly formed in analogy with that converb: *kAn* is attested with a regular *-gInča* form in *tašikginča kan* ‘just until (you) get out’ (fragment quoted in a n. to BT V 521). The temporal form in *-mAzkAn* dealt with in section 4.633 may also have been formed with this particle (though *-mAz* is not in temporal adverbial use as the words in the scope of *kAn* quoted in this section are). If one accepts this derivation in spite of the problem, one can not exclude that *ärkän* ‘while’ comes from **ärür kän* by syncope and assimilation of the two /r/s.

The emphatic particle *mat* is added to personal (*sen* in the QB), demonstrative (*bolarnï* in ETŞ 12,6, *bo* 15,57, *andag* in the DLT) and interrogative (*nätäg* and *kim+i* in the QB) pronouns and to verb forms (three in *-gAll*, three in *-dI* and once the future in *-gA* in the DLT). It is always spelled together with them and may have followed vowel harmony, as assumed by the editors. If it did, it should be related to the second syllable of *ävät ~ äwät ~ yämät* ‘yes’ (DLT). This may link it to *bat* ‘quickly and for sure’ (DLT fol.161, TT VII 28,28 and 37, H I 23, 39 and 43), which stands *before* the verb.⁵⁴⁶

⁵⁴⁵ The translation is tentative and follows *anča* meaning ‘a little bit’.

⁵⁴⁶ Words of Turkic origin do not have onset /m/ except when the following consonant is a nasal, but another clitic starting with /m/ is *mU*. *mat* might, on the other hand, be related to Mongolic *mayad* (pronounced with [t]) ‘certainly, really’, attested from the

A particle *čI* is in Suv 34g,22, BT VIII A 132 and 276 and BT XIII 3,29 in conditional clauses added to the particle *birök* with no noticeable difference in meaning or function;⁵⁴⁷ in section 3.4 we find that *čI* is also in Mait added a number of times to presentative *muna*. In both cases *čI* is spelled together with the preceding element.⁵⁴⁸

äñ ‘most’ is preposed to noun phrases, e.g. in *äñ öñrä* ‘the foremost’; it is often spelled with two *alef*. See the UW entry concerning its uses in Uygur. It appears to have joined some words following it in closer juncture: *äñ ür* ‘lately, recently’ with *äñ ür+ün* and *äñ ür+ki* are all spelled as single words, as quoted in UW 389a. Further cf. *äñ mintin* ‘even’, which is often spelled as one word, documented in UW 388; note also that the very common *äñ ilki* ‘the very first’ is already in KT E32 spelled as *ñ²k²I*, without the *I* which would have appeared before the *l²* if the scribe had taken *äñ* to be a word by itself. Its synonym *äñ baš+la-yu+ki* also got fused.

The phrase *äñ mintin* ‘even’ should probably also be considered a particle; see the UW for examples: It either qualifies sentences or clauses or (with a meaning similar to Turkish preposed *ta*) phrases.

ayï and *kodï* as in *ayï kodï öpkäsi kälip ...* (HtV 287) ‘he got exceedingly furious’ are intensifying particles. *ayï* ‘very’ appears to be shortened from *ayïg* ‘bad’, as words like ‘terribly’ in many languages get downgraded to mere intensifying meaning. *kodï* should not be confused with *kudï* ‘down’.

Secret History on and in modern Mongolic languages (and borrowed into Turkic Karaim). The ultimate source appears to have been Sogdian, which has an element *m't* (with long *a*) ‘thus’; this is exactly the meaning given to *mat* by Kāšgārī. For ‘yes’ cf. the semantic development of Latin *sic* > Romance *si*. *bat* must have been created at a stage when onset /m/ was unacceptable. One or two runiform instances of *bat* are not very clear. When Classical Mongol ‘X’ reflects the pronunciation [ā], as happens in some of the instances, it is pronounced as [ā] in Modern Mongolic languages, which is not the case with this word; modern usage may, however, be a case of pelling pronunciation, which also sometimes happens.

⁵⁴⁷ In Maue 1996 14,7, a brāhmī source, *birökči* appears in fragmentary context. Ottoman *eğərçi*, which is mentioned in the note to BT XIII 3,29, was borrowed from Persian and has concessive meaning in both of those languages (cf. Turkish *gerçi*). However, this opens the possibility that Uygur *či* was borrowed from some Iranian language, where it could have meant ‘what’; cf. Latin *siqui, siquid, siquidem.*, whose second syllable is a cognate of Persian *či*.

⁵⁴⁸ The particles *či* in the Mongolian Secret History and *čU* in later Mongolian (best dealt with in Street 1984) differ somewhat from Uygur *čI* and *čU* (the latter discussed below) both in distribution and function, but may still be related: Uygur *čI* appears in conditional clauses while Mongolian *čU* became part of a concessive verb form. Cf. the adversative or concessive particles *či* in Khakas and *čī* in Shor. Uygur *čI* and Qaraxhanid *čU* differ in shape, function and distribution and cannot be equated.

All types of negation are intensified by preposing *idi* ‘by (no) means, (not) at all’: *idi ok+suz* ‘with no interruption at all’; *türk bodun tämir kapıgka ... tägmiš idi yok ärmış* ‘It had never been the case before that the United Nation⁵⁴⁹ had reached the Iron Gate’ and *idi yorımazun* ‘by no means must they roam around’ are all three from the Orkhon inscriptions and there are many more inscriptional examples. From Uygur e.g. *siziñä idi bilmäyöki kalmadı* (HTs VII 1802) ‘has certainly not remained unknown to you’. Gabain deals with this particle in the n. to l. 70 of her 1935 edition of a portion of HTs; she quotes a number of instances, some of which show that *idi* need not be adjacent to the negative element. She there spells the word as ‘*idi*’ proposing to connect it etymologically with the verb *id-* ‘to send’. This is rather unlikely, as the spelling in runiform sources shows *d*². The only place where *idi* appears without an explicit negative is in a description of how the Uygur ruler Bügü xan made Manichæism his state religion. He there (TT II,1 44) says (among other things) ... *ät’öz mäñisi ... közümtä idi uçuz yinik boltı* ‘... bodily pleasures ... became quite worthless in my eyes’. This appears to be negative *by sense*, in that *yinik* and especially *uçuz* reflect a negative value judgement.

näñ strengthens negations, signifying ‘(not) any’: e.g. *näñ kiginč bermädök* ‘he is said not to have given any answer’; *näñ bujug yok* ‘you have no trouble at all’. It can also signify ‘by (no) means’, as in *näñ olar mamika kiz üçün busanmazlar* (TT X 523) ‘They are by no means sorry about the girl Mamika’. I take this to come from *näñ* ‘thing’,⁵⁵⁰ discussed in section 3.134. No other originally Turkic words (except *nä* ‘what’, the presumable source of the two *näñ*) begin with /n/. HTs VII 636 has *näñ idi ... yok*, linking two particles. In Manichæan texts *näñ* gets contracted with (interrogative-) indefinite pronouns: *kimkäñ* < *kim+kä näñ* is attested in ManErz 265,24 and, as *kimkäñ be[rmäz] m(ä)n* ‘I don’t give it to anybody’ in DreiPrinz 71. *k(ä)ntüni kimiñ näñ körmäz* ‘nobody can see him in any way’ (DreiPrinz 14) appears to show the particle doubly, once with and once without contraction. The meaning of *nä ärsär* ‘any’ is similar, e.g. in *muñar nä ärsär yazok yok* (PañcÖlm 23) ‘He does not have any sins’. Other preposed (probably a bit more lexical) strengtheners are *ärtiñü*, *ančakya* and *ar(i)ti*. The last two strengthen negations, as in *burxan kutilig*

⁵⁴⁹ I do follow the semantic interpretations of Tezcan 1991 but there seems to be no doubt that the author was here using the term *türk bodun* to refer to the state in the name of which he was speaking.

⁵⁵⁰ As French *rien* ‘nothing’ comes from Latin *rem* ‘thing’ (accusative) and Latin *nihil* ‘nothing’ from *ne hilum* ‘not a thread’.

küsüsintä ančakya ymä tınmatın ... işiñä ... ariti armadi (U IV A272-3)
 ‘Not leaving off a bit in his wish for Buddhahood, he did not at all get tired ... of his task ...’.

3.342. Connective or adversative particles

The connective and occasionally topicalising particle *ymä* is often enclitic; in fact, it often breaks noun phrases apart, inserting itself after their first element. E.g., it gets introduced between a noun and a demonstrative qualifying it, as in *ol ymä ugurda* ‘On that occasion, then, ...’(Maue 1996 l. 3,96) or *ol ymä nirvan mäñisi* ‘that bliss of nirvāṇa, now’. Further *bir ymä ämgäktin ozmatın* ‘not saving (themselves) from even one pain’. *ölü ymä umaz biz* (MaitH XX 14r17) ‘Yet we are unable to die’ shows it breaking a verb phrase apart. The source of such behaviour, found also with *Ok* and *mU*, is not that the scope of the particles is limited to the first word; rather, it is identical to the phenomenon described for many early Indo-European languages by Wackernagel’s law, whereby there is a slot for clitics after the first *word* of sentences.

ymä can also be used in topicalizing function in correlative context, e.g. *bay ymä bar, yok čigay ymä bar* (KP 6,1) ‘There are *both* rich and poor people’. In the following example, a still different translation for *ymä* is indicated: *koltgučılar yiglayu barsar tegin ymä iglayu kalir ärti* (KP 10,6) ‘When the beggars went away crying, the prince would stay behind, *also* crying’.

Orkhon Turkic has nearly 20 examples of *ymä* and none appears at the beginning of a sentence or of any other syntactic structure. However, at a post-Orkhon stage, *ymä* lost part of its weak prosodic status. In the runiform ms. TM 342 2 r (SEddTF I 542) we already find *ymä biri inčä temiš ... ymä ikinti är inčä temiš ... ymä bo s[av]iğ inčäk öznämišlär* ‘Well, one of them said ... Then the other man said ... This is how they argued about this matter, but ...; there are instances of onset *ymä* also in Xw 177-181. Cf. further *ymä ulugi täñri inča tep tedi* (Arañemi 1 a r1) ‘then the greatest among the gods said the following’.

mA appears to be a shortened variant of clitic *ymä* (cf. Bang 1909: 235) generally used with pronouns: E.g. in *biz mä uzun yašap ...* ‘we also, living a long time, will ...’ in ChrManMsFr ManFr r 15; cf. *kayu ma oronta* (BT XIII 13,140) ‘at any place’, *näčä mä ulisa* (QB 1371) ‘however much he howls’, *nägükä mä tildamayin* ‘not taking anything as pretext’ (KurzeEinf 108: 15), *aña ma* ‘for that as well’ (TT VII 41,15), *kim mä yok* (BT XIII 2,75) ‘There is nobody at all’ or *kim kim mä* ‘any person’ (in a contract in *Túrán* 456, 1.12). The well attested

anča ma ‘so much’ (normally spelled as *ančama*) is documented in the UW, in one instance in correlation with *inčämä / inčama*; so is the less common *ančulayu ma* ‘just in that way’, attested thrice in M I and also spelled as one word. I have met *nämä*, which replaced *nä* in many modern Turkic languages, only in a very late Tantric text, BeidaFu T1 r2, A. Yakup, ‘A new *cakrasaṃvara* text in Uighur’, *Kyoto University Linguistic Research* 19(2000): 43-58; an apparently instrumental form *nämän* was, however, read already in HTsBiogr 27 and 54. Cf. also *nägümä* ‘any sort of’ (Adams 56,29) < *nä+(A)gU ymä. ol-ok ma* (M II 11,8) ‘that as well’ shows that the particle (*O*)*k* precedes the particle (*y*)*mä* when both are to be added to a stem.

In a letter (UigBrief C), reflecting spoken language, we find *mä* once after *amtī* ‘now’ (which is, in fact, deictic like the pronouns); *amtī ma* also appears once in another late text in TT VII. In the same letter we also have it twice after nouns, once signifying ‘either’ and once ‘and’: *aka enilär mä barip körüp kalmaz* (9) ‘the elder and younger brothers do not come to see us and stay either’; *yerni mä karī kišini unitmiš bolgay sän* (12) ‘you will have forgotten home and your old people’. OTWF 422 (footn. 9) proposed reading *küčäp mä tariyur m(ä)n* in HamTouen 29,17-18, where the editor reads *küčäp m(ä)n tariyur m(ä)n*. The latter is less likely as *-(X)p* converbs and the superordinate verb normally share their subject and there would be no reason to repeat the pronoun. Another instance of *mA* added to an *-(X)p* converb is *ätäkim yadip ma yükü[nür män]* ‘I bow, spreading my skirt.’⁵⁵¹

birök, signifying ‘however’ or corresponding to non-temporal ‘now’, is an adverbial connective mostly found in sentences with the verb form in *-sAr*; e.g. in correlative constructions: *kim birök täñri burxannañ bir p(a)dakča täñlig nom bilir ärsär, ol kälip elig bägkä sözläzün* (U III 29,16) ‘Anybody who knows even as little as one line of the divine Buddha’s teaching, however, let him come and tell (it) to the king’. A number of examples, many of them at the beginning of clauses, are cited in sections 4.64 and 4.65 below. In MaitH XV 3v4 it appears with instrumental suffix, as *birökin*.⁵⁵²

⁵⁵¹ What was read as *xanma* in M III nr. 35 r7, v6 and v8 was by Zieme 1969: 130 taken to contain this element and translated as ‘auch der Xan’. The context of these forms is quite fragmentary, however, and Le Coq attempted no translation. *xan(i)ma* ‘to my khan’ or *xan m(ä)n* ‘I am the khan’ are possible readings, since the fragment is written in Uygur script.

⁵⁵² This is clearly visible on the facsimile. If there are no additional examples for such an instrumental form of this particle, it may nevertheless possibly be an error for *birökči*, with the element *čI* mentioned in the previous section.

takī is both a conjunction (see section 3.33 for that) and a particle: It is the latter when its content is temporal, with meanings like ‘yet, still’: In *sāṅrām takī bütmezän ...* ‘when the monastery was not yet completed’ (Mait 52r19-22) and *an bitigdä savī takī adirip barmayok ol;* (Suv 18,14 + a Berlin fr.) ‘In the court register her case has not yet reached a decision’ the verb is negative, in *amtika tägi takī bar ärür* ‘it still exists even till now’ in BT I A₂ 4) positive. As a particle it can further qualify gradable adjectives adding the meaning ‘more’ (or, with the elative-comparative suffix +*rAk*, ‘even’ as in *antada takī yegräk* ‘even better than that’), stressing the elative. The bi-adverb *ikiläyü takī* signifies ‘again’ when proposed to noun phrases.

ärsär, the conditional of the verb *är-* ‘to be’, has evolved into a topicalising particle; see section 4.4. It can signify ‘as for’ or ‘concerning’ and is mostly added to noun phrases (including nominals, pronouns, numerals, participles); examples are given in UW 406b-407a. That it is a particle can best be seen in an example such as the following, where the accusative is governed by *sakin-* ‘to think’: *bo täṅri kızlarni ärsär birär yüzlüg ... sakingu ol* (BT VII A 666) ‘As for these divine girls, one should imagine them as having a (different) face each, ...’. As a particle, *ärsär* does not appear to show any inflexion; *ärsärlär* in BT V 164 cannot be translated as ‘was sie betrifft’, e.g., as the editor does.

3.343. Epistemical particles

The particles of this section generally ask for information or signal what value the speaker is giving to the veracity of the proposition expressed in the sentence, what chance he sees for verification.

The ubiquitous interrogative particle *mU* appears, e.g., in *mini sävär mü siz* (KP 6,4-5) ‘Do you love me?’. In Uygur writing as in this example the particle is spelled as MW and not MWY; we think that it followed synharmonism because its vowel is spelled as front in TT VIII H5 and 6: These two are the only instances I am aware of where it is found in front harmony context in Brāhmī writing. There is some discussion of the use of *mU* in section 4.3.

A particle *gU* (otherwise known from Early Mongol) is attested twice in the Orkhon inscriptions in KT S10-11 and in a parallel text in BQ N8: In the first case it follows the predicate it queries while, in the second case, it precedes the sentence which is in its scope. *gU* expects negative answers; see chapter V for more details.

äriñč ‘apparently, presumably, no doubt, obviously’ (runiform inscriptions and Uygur) appears at the end of declarative (not interrogative) sentences which are never indirective. E.g. *xan bodun*

tiliŋa korkup inča yarlıgkadi ärinč (KP 11,3) ‘The king probably gave this order because he was afraid of what people would say’. In Orkhon Turkic there are twelve examples, all of them with past reference; one of these is a nominal sentence. Schönig (lecture at the VATEC symposium, September 2002) pointed out that the instances of this particle in the Orkhon inscriptions express respect towards the higher powers, whose activities and motives one does not presume to know about too closely. In later sources *ärinč* appears to have been compatible with all tenses, as we find e.g. *käntü bilingäy ärinč* (KP 10,1) ‘I imagine he’ll understand (the hint) by himself’. Uygur documentation for *ärinč* is rather limited (see the UW for examples).

The Uygur particle *ärki* mostly appears in interrogative sentences, where it signifies ‘I wonder’; it usually indicates that the questioner has no hope of receiving a clear-cut and authoritative answer, either out of genuine doubt or out of politeness and timidity. In declarative sentences *ärki* expresses doubt, to be translated as, e.g. ‘maybe; I guess, apparently’. Sentences like *enč äsän bay ärki sizlär* in a letter (UigBrief C5) presumably express a hope as well as a wish: ‘Hopefully you are well, in good health and in prosperity’. Exhaustive documentation for the Uygur uses of *ärki* can be found in the UW; it occurs also in Qarakhanid texts. Cf. the etymology proposed for *ärki* in OTWF 321.⁵⁵³

The DLT has several particles not found in Uygur or Orkhon Turkic. Thus, *la* (fol.538) is said to have been used by the Oguz (and only by them) to indicate that an action has been verified or completed; today it is attested in other (e.g. South Siberian) Turkic languages. Kāšġarī adds that the use of this particle involves a degree of denying what the addressee has said, implying that the latter does not know about the actual occurrence of the event.

⁵⁵³ The UW entry refers to the etymology suggested by Röhrborn 1998a to derive it from *är-gäy*, the future form of the copula. While I would not wish to exclude this as a possibility, the etymology does have some problems: A sound passage /äy/ > /i/ is not known to me (though particles could have their own rules) and the /k/ of *ärki* is documented in sources in Indic scripts (as against *g* in *ärgäy*); but that is not a decisive counter-argument either, as inflectional suffixes do tend to be less variable than opaque words (in view of alternation after /t/ in this case). Röhrborn himself mentions ‘koine’ examples of *ärgäy* with similar meaning (inelegantly trying to explain them away as ‘Schreibfehler’) and *ärki* is, in turn, attested in such early texts as TT II,2, TT VI and Mait.

3.344. Volitive particles

The particle *gIl* is commonly added to the 2nd person singular imperative⁵⁵⁴ and is used for emphasis. It is always spelled together with the verb form, e.g. in *čaxšaputlug törö yaŋ buzma artatma; täŋri yeriŋä bargu yolug ač; üç tamu yolın to-gil* (MaitH XV 13v13) ‘Do not corrupt the teaching of the commandments; open up the way leading to the divine place; block the three ways to hell’. *gIl* has hitherto been assigned to morphology, but it has no categorial meaning and is optional. It was rarely used with the negational affix *-mA-*, though we find (M III nr.12 r1)] *yemägil* ‘do not eat’ in fragmentary context, and e.g. *köŋül[ü]ŋin [...]rmağil ağıtmağil* (BT XX 948) ‘do not ... your mind and do not turn it away’. *gIl* may possibly come from *kil*, the imperative of the verb ‘to do’; this would be similar to saying ‘Do come!’ in English, which (also) consists of two imperative forms. For this hypothesis to be correct, one might have to assume that *kil*-originally started with a voiced velar. *gIl* occurs already in Orkhon Turkic, e.g. in *yälmä kargu ädgüti urgil* (Tuñ I N 10) ‘Place vanguard and patrols properly!’. In KT S 1 we find the sentence *sabimın tükäti ašidgil* ‘Listen to my words fully!’ where the otherwise identical passage in BQ N 1 only has *sabimın tükäti ašid*; the BQ inscription was erected approximately two years after KT. In a Manichaean text we have, e.g., *sezig aysar inča kikinč bergil* (M I 19,12) ‘If one asks ..., answer as follows:’

The particle *čU*, documented in DLT fol. 535-536 (cf. Brockelmann 1917: 149-150) and also in use in some modern languages,⁵⁵⁵ also modifies 2nd person imperatives. Kāšgārī says that *čU* is used only in direct address and gives the examples *käl čü* ‘Do come’ and *barma ču* ‘Don’t go’. He also (fol.537) states that one can use *šU* instead of *čU*, giving the examples *bargil šu* ‘Go!’ and *käl šü* ‘Come!’. Another example of *šU* added to imperatives is *tušu* (< *tur šu*), an exclamation to make donkeys stop (DLT fol.544). *šU* is clearly a phonetic variant of *čU* (/š/ being barred from the onset of original Old Turkic words); the fact that one of the DLT examples has it together with *gIl* therefore shows that *čU* and *gIl* must have meant different things.

⁵⁵⁴ In the Middle Turkic Oguz Kagan text we find *gIl* added several times to the 3rd person imperative form.

⁵⁵⁵ Cf. Barutçu Özönder 2001; however, some of the uses of the particles mentioned in this paper go back to a homophonous Mongolic particle. The proposals of this author to consider the syllable °*ču*° in forms like *ančulayu*, *buličulayu*, the *-čI* in the future suffix *-mAčI* etc. to be instances of this particle are, however, quite unacceptable for semantic, morphological and functional reasons. *čI* (mentioned above) is a different particle.

The verb form *bol-gay* also became a modal particle or was on the way of becoming one; see section 5.1.

3.4. Interjections

(y)a is an interjection mostly postposed to vocative noun phrases, e.g. in *täñri oğli-ya* ‘O son of a god!’ (Arañemi 1 a r 2); *una amtü bilij toyınlar-a* (Suv 643,17) ‘There, now know (it), oh monks!’. Uygur examples of (y)A are dealt with in the UW as *a*, the very first entry; we therefore need not list any here.⁵⁵⁶ Most of the UW’s examples are vocative, which is also the case with an Orkhon Turkic instance: “*bäglärim a!*” *ter ärmiš*, “...” (Ongin F7) ‘He used to say ‘My lords! ...’. In §2 the UW quotes two or three instances from the DKPAM where (y)a is used as an interjection for expressing pain, added to *ängäk* ‘pain’ or *ängäk+im*. This appears to be the main use of this element in the Yenisey inscriptions, most of which are epitaphs (written as if they were utterances of the deceased); it is exceedingly common in those sources, especially in the phrase *äsiz ä* ‘Alas!’. We there also find *ačig-a* ‘Oh bitterness!’, *ökünč-ä* ‘Oh repentance!’, *buñ-a* ‘Oh sorrow!’. A second Yenisey function of this element was to be added to verb forms referring to an event one was sorry about. *adrildim-a / adrindim-a* ‘I got separated!’, *azdim-a* ‘I went astray!’, *ogadmadim-a* ‘I did not get a chance!’, *bükmädim-ä* ‘I did not have my fill!’. Vocative uses in the Yenisey inscriptions are *ečičim-ä* ‘Oh my dear elder brother!’ in E32,11, *oglanim kızim-a, ürüñüm karam äsiz yüz elig ärim-ä* ‘Oh my sons and daughters, my white and black (animals) and my poor 150 men!’ in E45,7, *bägim-ä* ‘Oh my lord’ in E30,5, *yärim-ä suvum-a* ‘Oh my country!’ E152,3. After an /i/ Uygur texts write a mere *a*, e.g. in *eliglär eligi-a* ‘Oh king of kings!’ (U IV A 103); after what is presumably /i/ there is just *a* in e.g. *baxši-a* (DKPAMPb 1306) and *vayšir(a)vanı a* ‘Oh Vaišrāvana!’ (TT X 324 and 333); but cf. *a m(a)xas(a)tvı-ya* (HTs III 779) ‘Oh Mahāsattva’. In Uygur this element appears not to follow synharmonism, as we have a Brāhmī instance spelled *bäg-a* (TT VIII G 56); nor would we necessarily expect it to do so since it is not a suffix. In the Yenisey inscription E15 (dealt with by Erdal in Ölmez & Raschmann 2002: 56), however, *äsiz-ä* and *äsiz+im-ä* are spelled with the rare runiform letter for Ä: The particle may, therefore, have had a different sort of behaviour outside Uygur.

⁵⁵⁶ In U III 57,10₁ a male elephant addresses his wife as *katunum subadra a*; this could be an instance of this interjection used after a vowel without /y/ rather than a doubling of the final vowel of the name.

The §3 of the UW entry refers to cases where *a* is used for forming proper names (cf. the end of section 3.1 above); Röhrborn is probably right in assuming that this comes from the vocative use of *a*. The examples for this are quite numerous, but the author was aware of just one of them when he wrote the entry. In a document in 'Phags-pa script there is a proper name *Savinä*, no doubt to be understood as imperative *sävin* 'rejoice' and this element; this would speak *for* vowel harmony here.

The HTs III example quoted above also showed a vocative preceded by an interjection, *a*.⁵⁵⁷ Vocatives are more commonly preceded by *ay* and not *a*. The use of *ay* is described in UW 285a-286a. This entry covers various spellings such as "Y , 'Y , 'Y Y , "Y ' and even Y', which could be read as *ay*, *äy*, *ayï*, *ay a* and *ya* respectively and be different interjections; Turkish, does, e.g. distinguish between *ay*, *äy* and *ya* both by sound and by function. In U I 7,10 (Magier) we have *äy* together with *(y)a*, in *äy mogočlar a* 'Oh Magi!'. The element in question is in U I 7,10 spelled with one *alef*; in the following example the vocative element is spelled with two *alef*, whence my reading as *ay*: *ay, kim sän?* (U I 41,5) 'Hey, who are you?'; cf. e.g. *ay yäklär* in U IV A 25 and 61. It is not clear whether these are two different elements or a single one and, if it is a single one, if it is to be pronounced as *äy* or as *ay*; both spellings could, conceivably, be read either way. Whereas *(y)a* (discussed above) always accompanies vocative NPs, *ay* is, in this last instance, used by itself as an exclamation for calling people's attention.

In TT X 301 and 409 *ay* and *a* are combined, in what are exclamations of grief: *inča tep tedi: "ay a ämgäk [...]"* 'He spoke as follows: 'Oh pain! ..."'; *ay a ačig ämgäk ä!* 'O bitter grief'. *ay a amrak kañičim-a* (DKPAMPb 838, the same text as TT X; clear on the facs.) 'Oh my dear father!' is also a call of grief, as is an instance in Mait 117v5. *ay a* in BuddhUig II 296 signifies 'come on!', however, and an instance in BuddhUig II 397 expresses joyful surprise. In UigTot 98 *ay a* expresses the surprise of a person on finding out that he has been dead for a few days, in 201 the surprise at having been born. The UW's referring to *ay a* as if it were a variant spelling of *ay* is unacceptable, as the presence of the additional *alef* is not explained. *ay a* could be a combination of interjections or it could be an independent interjection *aya*; in the latter case the space before the final *alef* could be explained by the need to avoid a reading such as '*änin*'.

⁵⁵⁷ "*a tañlančig* Oh, wonderful!" in HTs III 945 is a mistake for *nä tañlančig* 'How wonderful!': 'N' and " look identical in most varieties of Uyghur writing.

UW *ay* III §A,c describes cases where *ay* is used for expressing sorrow. In Suv 623, 9, the mother of the prince who sacrificed his body for the sake of the hungry tigress shouts out *muṇ ay muṇ ay!* ‘Oh sorrow, oh sorrow!’ when she loses him and then utters a verb-initial sentence when she hears what exactly happened; later, when she sees the pieces of his corpse (626,15-16), she cries out *öñi sačilip yatur äy, kalmiš süñük yer sayu* ‘They lie scattered around, alas, the bones left over everywhere’. UW 285a-b thinks that cases where *ay* is postposed and not preposed represent Chinese loan syntax but it is hard to see how this can be proven: The positioning of emotive elements is notoriously variable. Here and in the next instance, uttered by the prince Mahābala when he sees the starving tigress, *ay* appears to be used for attracting the addressee’s attention to a third party: *ay irinč tiši bars änüklägäli yeti kün bolmiš* (Suv 610,2) ‘Look, it is evidently seven days since the tigress has given birth (to seven cubs, and she is terribly hungry)’.

ya appears in *ya kwotaw, tinliglarig ölürtidiñ ärsär ymä* ‘Oh K., even if you have had creatures killed, ...’ (Suv 15,10) and *ya, böküñki kün üzä baxšimüz šakimun täñri täñrisi burxan ... ordumka karšümka kirü yarlikadi* (Suv 420,18) ‘Hey, today our teacher the Buddha, god of gods Šākyamuni ... deigned to enter into my capital and my palace’. These two instances are not sufficient to define the use and meaning of a particle; nor is another instance in an utterly fragmentary passage (BT XIII 5,213).

awu or *awo* is another interjection expressing pain, attested in MaitH XXIII 10v6 / Mait 75r17; cf. *awu tesär, ariči muṇ tesär* ‘when (they) say “Ow!”, when (they) say “(Oh) pain! (Will nobody) intervene?”’.

yüta ‘alas’ is especially common in the Yenisey inscriptions. In the EDPT this element is quoted in the entry for *ayüt-* because Clauson took it to be a converb form, but the converb vowel of that verb is not /a/. Since *yüta* appears to have turned up only in runiform sources,⁵⁵⁸ the reading *ayüt-a* remains a possibility; *ayüt* would then be an imperative form of ‘to ask, to speak’, hinting at communication (by the shaman?) with the dead. The final *a* would be the interjection so common in those epitaphs, referred to earlier in this section.

äsiz, another Yenisey exclamation of woe, was quoted when discussing the exclamation *A*; it is also documented in the DLT as interjection and also served as a noun signifying ‘pitiable’.

⁵⁵⁸ What is read as *ita* in KP 19,6 and *itta* in KP 57,3 are not instances of this element; the first must be *inča* and the second a locative form as pointed out by Tezcan in *TDAYB* 1975/6.

täŋrim ‘your majesty’ (lit. ‘my god’) is used for addressing male or female ‘majesties’, e.g. in *nä sav ärki täŋrim* ‘What matter is (this), my lord?’ (MaitH XX 1r17). In DLT fol.199 we find this to have become *tärim* ‘address for princes and princesses from the Khāqānī family’. The appearance of the 1st person singular possessive suffix is similar to French *monsieur*, Arabic *sayyidī* and English as in the translation above; the semantic development is ‘lord’ → ‘god’ in English or German (presumably following Classical Greek and Latin) but ‘heavens’ → ‘god’ → ‘lord’ in Old Turkic.

*muna*⁵⁵⁹ (e.g. U III 6,1 and 42,16, TT II,2 80, BT XIII 13,112 and 138 or TT X 125 as completed by Zieme in his ‘Nachlese’ to the text) and *ona* or *una* are presentative interjections (like Turkish *işte*, Russian *вот*, French *voilà*), roughly to be translated as ‘look at this’ and ‘look at that’ respectively. The first vowel of *ona* / *una* is not known as it is not attested in Brāhmī or Tibetan writing; I do not know that it survived in any modern language. What morphological relationship there is between that and the pronoun *ol* / *anı* and between *muna* and the pronoun *bo* / *munı* is not clear. The Old, Common and Proto-Turkic dative suffix had a velar in the onset but one is reminded of the Mongolian dative. With these elements the speaker calls attention to an event which has just taken place, is taking place or about to take place, one which is imminent or about to be presented or to an entity the speaker wishes to be noticed: *muna munı bilmiş k(ä)rgäk* (TT II,2 24) ‘This, you see, should be known’; *muna amtı balik içinä kirgäli turur* ‘(The monster) is, right now, about to enter the town (fragment quoted in the note to TT V A41); *ratna raşı atlıg ačari una amtı bo ärür* (Suv 573,20) ‘Here now, this is the teacher Ratnarāši’. The last sentence occurs in direct speech; the context makes it clear that R. is in fact sitting in front of the speaker and the addressee. We further have *una bo ärür* in HTs III 465, V 28,12 and 56,7, VI 38,11, *una bo tetir* in VIII 30,9 (quoted from the edition of the Petersburg fragments), etc. In *azkya öŋrä yoriyu turzunlar; män una basa yetdim* (Suv 615,14) ‘Please walk on a bit; I will have reached you in a moment!’ the form *yetdim* in fact referring to the future lets the addressees expect the imminent reappearance of the speaker. That *una* is not a mere interjection but has evolved a temporal content of imminence becomes clear when considering the use of *una+kya* ‘in a moment’ in instances quoted in the note to TT VB 80 and in OTWF 55. The particle *ma* or *mah* which,

⁵⁵⁹ In the Analytical Index, Bang & Gabain mention *mina* as variant of *muna* but none of the passages they refer to shows this form; nor could I find such a variant anywhere.

according to DLT fols. 493 and 539 signifies ‘Take it!’ or ‘Here!’, could be a contraction of *muna* (over **mna*).

In MaitH XIII 4r15 *muna* is followed by an element *čI* (discussed in section 3.341) spelled together with it: *nä ymä inča tep teyür siz oronlukum tüšär bolur? munači bo [...] oronlukuñuz bo ärmöz mü?* ‘Why do you say ‘My throne is falling down’? Here it is; is this not your throne?’ *munači* appears also in MaitH XI 7v13, XIII 7v13 etc..

oš oš is in the DLT said to be an exclamation used for calling cattle to drink; this is clearly the same as the Common Turkic presentative interjection of the same shape found in DLT fol.30 as *oš mundag kıl* ‘Do thus’. *akar köziüm oš täñiz* (DLT fol.289) can be translated as ‘Look how my eyes are overflowing like the sea!’, the use in DLT fol.332 is similar. *oš* became the first part of modern demonstrative pronouns such as *ošol* and *ušbu*.

Exclamatory sentences can be introduced by interrogative-indefinite pronouns such as *nä* ‘what’, *kaç* ‘how many’ or demonstratives such as *anča* ‘so’, sometimes accompanied by *ymä / mA*; see part V.

CHAPTER FOUR

SYNTAX

Texts consist of sentences interconnected by certain, mostly coordinative principles to be discussed in section 4.8. Orkhon Turkic sentences have a close-knit internal government structure incorporating subordinate predications, but Uygur subordinate clauses are often linked with conjunctions. The question of loan syntax is a vexed one: Most of the Old Uygur texts are translations whose syntax can be expected to have been influenced by the source at least to some degree, especially when the translators were better versed in the source than in the target language. There are some texts, e.g. some written in Brāhmī, which are evidently not even meant to be received as a coherent text but only as a word for word or even morpheme for morpheme rendering; these are disregarded here as far as syntax is concerned. Others can be difficult to understand unless confronted with the source: Chinese art prose style is borrowed e.g. into Xuanzang's letters to the emperor copied into his biography. Many sources can, however, be – subjectively – judged to be ‘normal’ Old Turkic, if one claims extensive reading to have given one the ability to pass a founded judgement on this question; not forgetting, of course, that Old Uygur may have acquired some lasting ultimately foreign characteristics through contact. Loan syntax seems to be especially conspicuous in Christian manuscripts, e.g. *oxšayur sän sän yaljuk ogli ol ingäkkä kim iraktin üntädi öz buzagusına kim azip barmış ärdi. näčük işidti ol buzagu öginiñ ünin, tärkin yügürüp kälti ögiñärü, sezigsiz bolti* (ChrManMsFr Chr r11-v3) ‘You resemble (VSO word order; first *sän* harking back to a language with verbal subject marking in present forms – like Greek), o son of man, that cow which (relativisation with the particle *kim*) from afar called out to her (use of *öz* similar to languages with analytical marker of possession) calf which (same analytical relativisation structure) had gone astray. As (= ‘how’, as in spoken German) the (*ol*, literally ‘that’) calf heard (again VSO) its mother's voice, it immediately came running (VO word order) to its mother and was no longer afraid.’

One domain in which sources must especially have influenced our texts is word order, particularly since denotative content is little affected thereby. We will here disregard this possibility, for the following reasons: No research has hitherto been done on this matter,

because possible source texts often exist in several Asian languages and sometimes in different versions and because there does not appear to be much difference between texts we know to have been translated from different languages.

One important principle of Old Turkic syntax is that there is no automatic agreement in the sense that categories of one word in some construction *have* to be reproduced in some other word. As an example for this principle, adjective attributes are never for any nominal category inflected in accordance with their head. Redundant expression of a category is by no means excluded, however: Some nominal attributes *are* inflected in this way and can then be considered to be appositions. Plural agreement of numerals is common in post-inscriptional Old Turkic especially for living beings. Within the noun phrase we have, e.g. *üç ačarilar* ‘the three teachers’ (HTs VIII 67). It is not rare (but by no means rule-regulated) for verbs to stand in the plural also when they have plural subjects; e.g. *alko tünliglar mäniñ yatim ärmäzlär* ‘no living beings are strangers to me’.

Another important feature of Old Turkic syntax is the possibility not to fill out patterns. Argument slots opened up by verbs can be left empty, with two possible consequences: Either the context enables the addressee to gather the reference when the sentence itself does not supply it in some way; if context means textual context, we then speak of zero anaphora. If no reference is retrievable, another possibility is that the proposition is understood to hold for any entity appropriate to the situation, what is sometimes (wrongly) called ‘impersonal’. All this holds for all arguments including the subject. *buluñ yïñak kararip körgäli bilgäli bolmadï* (Suv 630,20-21) ‘The corners (of the world) got dark and it became impossible to see or recognise anything’ is an example with unexpressed direct object which is not implicit either: That we have to add the word ‘anything’ follows from the fact that the context does not supply us with direct objects for the verbs *kör-* and *bil-*. In other cases entities not referred to should have been known to be quite specific, e.g. *nädä ötrö ulug äñ(ä)lyon bitig içintä başlayu ay täñrig ögär alkayur, ken ulug elig täñri xanï äzrua täñrig ögär* (M III Nr.6 II v16-18 ‘Why does it, in the great Gospel, first praise and glorify the Moon (i.e. Jesus) and then praise the great king, the king of gods, the god Zerwan?’: The Manichæan Gospel (not to be confused with any part of the New Testament) was the first of the seven canonical works written by Mani, the founder of Manichæism. Readers of the text presumably knew that he was the subject of the sentence. English and

German⁵⁶⁰ can also, in such a case, use an ‘impersonal’ construction though the author of a work is known, if the text itself is in focus.

4.1. Nominal phrases and their categories

Nouns and adjectives do not differ all too much as to morphology⁵⁶¹ but one might distinguish between them by use. ‘Nouns’ would presumably be used more as heads of noun phrases, ‘adjectives’ more as satellites; but instances such as *agiči ulug+i* ‘the treasurer in chief’ (KP 7,7), where the rather general predicate *ulug* ‘great’ is used as head are not rare at all. Attributive adjectives are not inflected for number, possession or case and show no agreement with their head. See section 3.1 for further considerations related to this distinction.

Nominal phrases are generally referential-denotative if they contain lexemes; if they consist solely of pronouns, they are purely referential. There are also non-referential nominal phrases, e.g. *but* in *but kötürmä tinlig* ‘a walking creature’, literally ‘a creature lifted up by legs’, or *kut* in *kut kolunč* ‘prayer for grace’: *but*, the subject of *kötür-* ‘to lift’, and *kut*, the object of *kol-*, here appear within phrases denoting concepts. The phrases can (and usually are) then put to referential use but no such use is made of *but* or *kut*, which are parts of definitions.

All nominals and adverbs can serve as noun phrases, with or without attributes or other subordinated or appended elements. Since all sentences can be nominalised around participles, many subordinate clauses are also nominal phrases. Nominals can be qualified by other nominals as set forth in detail in section 4.12 and subsections.

The word ‘one’ is used as indefinite article, e.g. in *antag antag yertä bir köl suvi sugulup ...* (Suv 603,11) ‘In a certain place the waters of a lake are withdrawing and ...’; *bir braman [ol] kuvragta taštün turup ...* (HTs III 801) ‘a brahman was standing apart from (that) company and ...’. When the nominal is in addition accompanied by an adjective, there are two possibilities: Either the article appears before the adjective, as in *bir kari öküzüg ... kumursga yemiš* ‘An old cow was ... eaten up by ants’ (IrqB, a runiform ms.), or it appears after it, as in *adin bir teva arži* ‘another *devarši*’. This alternation may be related to the fact that

⁵⁶⁰ Cf. “Weshalb lobt *man* im großen Evangelium, ...” in the translation of the sentence in UW 95b under *alka-* 1). The word I have spelled as *äḡ(ä)lyon* is not mentioned in the UW either under *aḡ°* or under *äḡ°*; the main variant, borrowed from Sugdian, may have started with *aḡ°* but there should at least have been a cross-reference.

⁵⁶¹ See section 3.1.

kari is more of a lexical complement to the head than ‘other’, which is referential. There is no definite article, and definiteness is not grammaticalised in any clearly definable manner. Other categories of nominal phrases are possession, number and case. The functioning of the first two of these is described together with their morphology, the expression modalities for possession also in section 4.121.

4.11. Case functions

The case forms themselves are discussed in section 3.124. All case suffixes have a number of functions and it is often difficult to see a coherent whole in them; sometimes, as with the dative, these functions and meanings are practically each others’ opposites. We will here deal with the functions case by case, not by their semantics.

The cases which can be used adnominally are the nominative, the genitive and the directive-locative; the equative is so used when it expresses an approximation.

One problem to be mentioned here is a question around verbal nouns and the like in oblique case forms; should *-gU+kA* or *-mAk+kA* be considered to be complex converb suffixes or should they be discussed as dative forms? This depends mainly on whether the suffix sequence has evolved a life of its own and gained its paradigmatic place in the verbal system; in this case it is dealt with as a complex converb suffix. Finding a straightforward answer to this question is not always easy.

4.1101. The nominative

The stem unmarked for case could be used in all functions otherwise expressed by the common case suffixes, except, apparently, (concrete or abstract) motion *towards* and motion *from* a point.⁵⁶² In principle, at least, case suffixes can be taken to have originally been (with the just mentioned limitation) as facultative as the other nominal category morphemes: the plural suffix(es) with plural entities, the possessive suffixes with possessed entities and the antonymy and parallelism marker with elements used in parallelism. When context and lexical meaning made the case function of a noun phrase clear, the speaker apparently could, if he had no wish to stress this function, omit its case marker.

⁵⁶² However, the phrase *altun soṅa kälip* ‘coming to Altun Soṅa’ may possibly have to be read in 1.3 of the Yenisey inscription E38, an *Altun Soṅa yiš* being mentioned also in E28 C 3.

The function of the nominative as subject is well known. In *bilgä tuñokok bän özüm tavgač eliñä kilintim* (Tuñ W1) ‘I, T. the wise, was myself born (or educated) in China’ *bilgä tuñokok* can be considered the topic of the sentence, the rest of the sentence being predicated upon this topic. In the following instance word order shows the nominative subject not to be the topic but the predicate: *bo taška ... kop yollug tegin bitidim* (KT SE) ‘Everything on this stone I, Y. T., have written’.

In *Bilgä Xagan bo üdkä olortum* (KT S1) the noun phrase *Bilgä Xagan* should also be considered to be the subject of *olortum* ‘I reigned’ though this verb is in the 1st person. This is possible in some languages, one condition being that there are verb forms inflecting for person. About the sentence *üküš türk bodun öltüg* in KT S6 Grønbech 1936: 136 writes: “Wörtlich läßt sich der oben zitierte Satz gar nicht ins Deutsche übertragen. Dem Sinne nach könnte man ihn etwa wiedergeben: ‘Viele von dir, o Türkenvolk, sind gestorben.’”; a nominal subject for a 2nd person verb is unthinkable in German. In *sü bariñ tedi* (Tuñ 31) ‘He said “Army go!”’, *sü* could, of course, be either a vocative or the subject of a 2nd person verb. In the 1st person plural, finally, we have the following: *oguzgaru sü tašikdimiz*; ‘We / I and the army moved out towards the Oguz’ is here the best translation. Another possibility would be that, in *sü yoriyin* ‘I intend to draw into the field with my army’ and *sü tašikdimiz* ‘We (the army and I) set out into the field’, *sü* has sociative meaning, *yor-* and *tašik-* being intransitive verbs. Or else, *sü yori-* and *sü tašik-* are lexicalised verb phrases of military language, so that the bracketing (*sü yori-*)-yin and (*sü tašik-*)-dimiz would be possible, getting transferred from the 3rd to the other persons.

The nominative is used for address, e.g. *türk bodun in täñri basmasar, yer tälinmäsär, türk bodun, eliñin törögün kām artaŋi udači ärti?* (KT IE22) ‘As long as the sky did not press down (upon you and) the earth did not open (beneath you), oh Turk nation, who could have been able to destroy your land and your government?’ or *ädgü tinlaglar in körüñlär ädgü tinlaglar* ‘See, good creatures!’ (MaitH XX 13v3). When it precedes a sentence, a vocative nominative is often coupled with a vocative particle; see section 3.4.

The use of nominative adjectives within predications, as in *amrak oglum, nä üçün busuşlug kältiñiz?* ‘My dear son, why have you come in sadness?’ (KP 4,5), should also be noted. Such predicative adjectives can even have their own nominal topic, as in *közi yümüglüg olorur ärti* ‘He used to sit with closed eyes’ (HTs VI 2b9).

The nominative case is also used for nominals denoting things the subject of the verb will become, as *tünür böšük boluşup ... bağir böšük ädgü ögli bolurlar* (TT VI 308-9) ‘They become each others’ brothers - and sisters-in-law and become friends and well-wishers’. Perhaps unexpectedly, this construction is also used with the verb ‘to appear’, as in *šakimuni atlig burxan yertenčüdä bälgürgäy sän* (Laut 26) ‘You will appear in the world as the buddha called Säkyaamuṇi’ or *alp bulguluk burxan yer suvda bälgürmiš ärür siz* (MaitH XV 11r23) ‘you have appeared in the world as a buddha hard to encounter’; there is no need for any Turkic counterpart of ‘as’.

The nominative is further used in adnominal constructions in which the genitive is also used, as described in section 4.121; the semantic content of the relationship is rarely related to actual ‘possession’, although the term possessive construction is generally used for it: One example is *oglum savı* in KP 63,2 which, in its context, signifies ‘news from my son’ or ‘about my son’; note that there is here no case suffix although the satellite is quite definite and specific. Other implicit semantic relationships of this construction have to do with ‘part – whole’, ‘place’ or ‘assignment’.

Direct objects often appear without accusative suffix without being confined to preverbal position (as e.g. in Turkish); e.g.: *turkaru aš içgü inča kolosinča ašanmak kargäk* (M III nr.6, 12,3₂) ‘It is necessary to have one’s meals thus, at the right times’. In the inscriptions we find *yälmä kargu ädgüti urgil* (Tuñ 34) ‘Place (the) vanguard and watch-towers well!’ or *xagan at bunta biz bertimiz* (KT E20) ‘It was we who gave (him) the title “kagan” on this occasion’. BQ E 17, which is parallel to KT E20, here writes accusative *xagan atig*; the scribe of the BQ may have felt there was here something he wanted to change, but the KT text cannot, nevertheless, be considered to be incorrect. The absence of the accusative suffix is not related to non-specificity, e.g. *kara kum ašmiš* ‘They had crossed the Kara-Kum (desert, mentioned also in Tuñ 7)’ (ŠU N8) or (in Uygur) *bo nom bititmištä ögirdäči kizim* ‘my daughter who rejoiced when this book was written (by commission)’; similarly *bo idok nom ärdini bititdäči upasi küč ogul* ‘the lay brother K.O, who has this holy *sūtra*-jewel written down’ or *bo tört sav agızda tut-* (Wettkampf 27 and 30) ‘to repeat these four words’.⁵⁶³ With possessive suffix, *agır ayig kilinčlarım ikiläyü takı kilmaz män* (SuvSündenbek 75) ‘I will not repeat my gravely evil

⁵⁶³ In an instance like *bo yarlig ešidip* (KP 18,8) ‘having heard this order’, on the other hand, *yarlig* could also have been simplified from accusative *yarlig+ig*; cf. *yiglig* < **yig-iglig* in Abhi B 1404.

deeds', *könjülümüz amirtgurup* (TT II,1 72-73) 'calming our hearts', *küçümüz bir ikinti birlä sinalim* (Wettkampf 41) 'Let us test each other's strength', *atij atayu* 'calling out your name' (TT I 116) or *öz kartij kartaj* 'Treat your own wound!' (DLT fol. 390). In the following example from IrqB LIV (one of the beautiful instances of man–nature parallelism in that text) the suffix in *savi* can only be the possessive suffix, and the two instances can only be direct objects: *kul savi bägiñärü ötünür, kuzgun savi täñrigärü yalvarur* 'The servant addresses his words to his master; the raven prays his words to the sky (or to the god)'. Similarly in *tamu yolü tuduñuz* (Pothi 14) 'You have blocked the way to hell', where the possessive suffix signals the compounding with *tamu*.⁵⁶⁴ In the inscriptions, even pronouns can serve as direct objects without accusative suffix, e.g. *bo bitidöktä* 'when I wrote this'. In DreiPrinz 28-30, an early, Manichaean text, we find one direct object without, one with accusative suffix in two adjacent, structurally identical sentences: *ikint[i]g käliglika tayak berg[äy] män; üçünč käligli[ka] saxay(i)g bergäy män* 'To the one coming second I will give the staff; to the one coming third I will give the sandals.' By the context we know that the staff is not less definite and specific than the sandals; the position of *tayak* just before the verb does not have anything to do with (in)definiteness or (un)specificity either. Zieme 1969: 105 states that the direct object not marked as accusative is more closely linked to the verb, giving these examples: *näčä anig kilinč kilt(i)m(i)z ärsär* 'whatever evil deeds we should have carried out' (Xw 125; I would read *any(i)g* instead of *anig*) vs. *üč üdki nomug bilt(i)m(i)z* 'We knew the doctrine of the three periods' (Xw 132). The material does not prove this to be a general rule.

Verbs can govern two direct objects, the first in the accusative and the second in the nominative, as in *kirkiz xaganig balbal tikdim* (KT) Translating the nominative form with 'as', we get 'I set up the Kırkız ruler as anthropomorphic stele'; translating more loosely one could say 'I set up a *balbal* for the K. ruler'. On the other hand *balbal tik-* could also, in Orkhon Turkic, have become a lexicalised phrase. Another inscriptional example could be *bälgüsin bitigin bo urti bo yaratdi* (Tes 20) 'This is what he incised and created as his mark and his testament'; here, the forms *bälgüsin* and *bitigin* could also be instrumentals. This instance again shows, in any case, that Old Turkic pronouns representing direct objects need not be in the accusative. The causative of the inscriptional phrase *xagan olor-* 'to rule as *xagan*' is *xagan olort-*

⁵⁶⁴ Clark (edition of Pothi) writes *yoli[n]*, although Bang & Gabain indicate no lacuna, stating that the 'context requires D[irect] O[bject]'; EDPT 434a tacitly *yolin*.

, as in *özümüñ ol täñri xagan olortdı* (KT E26 and BQ E21 complementarily) ‘That god installed me as *xagan*’. Cf. *käntü ät’özün bars bälğürtüp* (MaitH Y 59) ‘making his own body appear as a tiger’. Similarly the second instance of *toyin* in *täñri burxan ol aržilarig “käl toyin!” temäk üzä toyin kigürüp ...* (U III 75,2₁) ‘Buddha enlisted those *řis* (*arži*) as monks by saying ‘Come, monk!’”.

Another type of double object is found in *arimadok tsuy irinčülärimin bošug kolup ...* (TT IV B50) ‘asking for forgiveness for my unpurified sins’ and *altı azıgın ...käyikčikä buši berü* (HTs III 259-60) ‘(The white elephant) gave his six molars to the hunter as alms’. Here as well the first object is in the accusative while the second is in the stem form; both are in the stem form in *[b]iziñä isig öz buši bergil* (U IV C91) ‘Bestow life upon us!’. In these cases one should consider a closer juncture for *bošug kol-* and *buši ber-* which might, as lexicalised verb phrases, have taken ‘the sins’ and ‘the six molars’ respectively as objects of the whole phrases. This approach is clearly appropriate for *burxan kutıña köñül örit-* ‘to set one’s heart on the Buddha’ in BT I 1184, where the whole phrase *köñül örit-* in fact governs the dative. The status of *tuš* ‘encounter’ in *keniñä tözün maytri burxanıg tuš bolalim* (Pfahl I 10) ‘Ultimately we wish to meet the noble Buddha Maitreya’ is quite different: *tuš* is not the object of *bol-* ‘to be’, of course, nor is it its subject: Rather, the accusative is the object of the complex verb *tuš bol-*, whose subject is the 1st person plural.

Predicative adjectives accompanying verbs of thought and sensation as objects also have the base form, e.g. *yakin* ‘near’ with *sakin-* and *busušlug* ‘sad’ with *kör-* in the following sentences: *irak yolug yakin sakinti* ‘He felt the long road to be short’ (HTs VIII 9); *Maxarit eläg ädgü ögli teginig busušlug körüp inča tep yarlıgkadı: amrak oglum, nä üčün busušlug kältiñ?* ‘Seeing (that) the well-thinking prince (was) sad, the king M. said as follows: ‘My dear son, why have you come in sadness?’” (KP 4,5). The adjective *arig* in *čaxšapatig böküñki küñkätägi arig küzädtim* (DKPAMPb 1282) ‘I have observed the precept perfectly until this day’ also belongs to this category.

In *bir tümän ağı altun kümüş kargäksiz kälürti* (KT N 12) ‘He (i.e. the Chinese emissary) brought exactly 10 000 (units of) brocade, gold and silver’ *kargäksiz*, a predicative adjective in the nominative case, (literally ‘without any missing’) is translated as ‘exactly’; its use is adverbial.

türk xagan ötükän yiš olorsar (KT S3) ‘If the Turk ruler stays in the Ötükän mountain forest, ...’ has nominative *yiš* in local function; elsewhere *olor-* governs the locative. The space one moves through can

also be referred to by a nominal in the nominative, e.g. in *yol yoridači yalɣuklar* (MaitH XX 13r16) ‘people travelling on roads’.

The nominative is used for expressing time in three ways: Firstly it can express duration: *tün kün* (U III 75,3 or 80,15) is ‘throughout day and night’ and *isig özin ... üç ay köni ... tuta yarlikadokta* signifies ‘when he graciously kept him alive through three months’. Noun phrases in the nominative with *yaš* or *yil* appearing as object of the verb *yaša-* are used for stating that certain persons ‘lived for so and so many years’. Secondly, runiform inscriptions show nominative temporal expressions in narrative, where the time elapsing during the event is not made salient: *tün terilmiš* is ‘They are reported to have reorganised at night’ (ŠU E1); *taɣ üntürü tägdimiz* (Tuñ 35) ‘We had (the soldiers) get up at dawn and attacked’. Thirdly, deictic noun phrases in the nominative can also express a point in time, e.g.: *bokünki kün sizlär toyınlar-a ... šravast kántkä pinvantka kiriɣlär* (U III 34,5) ‘Today you, o monks, can enter the town of Śrāvasti for alms’.⁵⁶⁵ The dative expresses the point in time at which an action takes place if the reference is absolute and not deictic: *yeti yegirmikä uçti* signifies ‘he died on the 27th’, while *yeti yegirmi kün uçti* would presumably have meant ‘he flew for 27 days’. There also is a temporal locative and a temporal instrumental.

In *taloyka kičig tägmädim* (KT S3) ‘I did not reach the sea by a little (distance)’ (i.e. ‘I nearly reached the sea’) the adjective *kičig* stands for what may otherwise be expressed by the instrumental.

4.1102. The genitive

The genitive is usually adnominal and thus attributive, as discussed in section 4.121; one pronominal example is *mäniɣ balikimtaki bodun bukun* (U IV A26) ‘the people in my town’, where *män* ‘I’ qualifies *balik* ‘town’. In section 4.611 we describe relative constructions whose subject is in the genitive. Genitive forms can also be used predicatively, as *siziɣ* ‘your(s)’ in the following example: *mäniɣ ... kazgančim siziɣ ärmäz mü?* (KP 16,4) ‘Doesn’t my gain belong to you? (said by a father to his son)’; also in *bo nišan män Miɣ Tämürniɣ ol* ‘This mark is mine – Miɣ Tämür’s’ (USp 1,10). In *siziɣ män* (M III 24,10) ‘I am yours’ the

⁵⁶⁵ The UW (284b-285a) makes the absolute temporal use of *ay* ‘month’ into a special lexicon entry (*ay* II). This is not, however, a different lexeme from *ay* ‘moon, month’. Nor can an oblique use of the nominative be considered a case of ellipsis of a case ending (instrumental, dative or locative) or a postposition, as the author writes. Such uses are clearly a syntactic matter – the temporal use of the nominative of terms denoting stretches of time – and not a lexical one.

genitive is also predicative although preceding the (presumably clitic) topic. As a headless attributive NP, a genitive form can get governed by a postposition, e.g.: *agir ayig kilinčlarim olarniñ tæg arizun alkinzun* (Suv 139,13) ‘May my grave sins get purified away and disappear like theirs (i.e. the *bodhisattvas*)’.

4.1103. The accusative

The accusative marks direct objects as in *šimnu+g utup* ‘defeating Māra’. Numerous Orkhon Turkic examples are mentioned in T. Tekin 1968: 127-129; at least at first sight, none appear to be non-specific. Section 4.1101 mentions numerous examples of direct objects appearing without the accusative suffix even when they are specific and definite. We are at present unable to state any rule in this matter; at least it seems that – in Orkhon Turkic – the accusative suffix does not appear when the object is non-specific. That may have been different in Uygur *altı kızlarig bulun alip* ‘taking six girls as prisoners’ (MaitH Y 204) is what the senseless king Virūḍhaka does when conquering the city of Kapilavastu in Buddhist mythology. The girls were obviously not mentioned earlier in the story and should not have the accusative suffix if that were a mark of definiteness. Since, however, these girls were so beautiful that they resembled divine girls, they may possibly have been specific.

There is a construction of double accusatives (inscriptions and Uygur) when an indirect object in the semantic role of ‘sufferer’ is topicalised, as in *anta ötrö türgäš karlukug tavarin alip ävin yulup barmiš* (ŠU S5) ‘Thereupon, the Türgäš robbed the Karluk of their livestock, pillaged their horses and left’. The Karluk are here the ones affected by the fact that their possessions are taken from them. The construction is also used with living beings and their body parts: *adgürig udlukin siyu urti* (KT E36) ‘He hit the stallion, breaking his thigh bone’. In the following example one of the objects is in the stem form: *munı iki köz täglärip sančayin* (KP 57,5) ‘Let me smite this guy, blinding both his eyes’. Both the person and his eyes are to be pierced, both the person and his eyes to be blinded.

In section 4.622 we discuss object clauses where, in different constructions, their topic or their predicate are put into the accusative case.

4.1104. The dative

The concrete dative of direction is found e.g. in *täñrilär ... tužit ordoka yigilurlar* ‘the gods assemble at the Tušita palace’ or *adnaguka tutuzur*

‘he gives (it) to others’ (M III nr.8V v5); it expresses direction also with speech, e.g. in *täjri kuvragïña nom nomlayu* ‘preaching to the assembly of gods’. The difference between this use and that of the directive is that the dative is used when the goal is reached (or is meant to be reached), whereas the directive mostly expresses mere movement in the direction of something.

There are temporal datives in the passage *koñ yilka yoridim ... tokuz otuzka süñüšdüm* ‘I set out in the year of the sheep ... and fought on the 29th’ (inscription of the Uygur steppe empire); the same *tokuz otuzka* ‘on the 29th’ is attested also in M III nr.2 r8. *yazïña* (BQ E31) signifies ‘in that spring’, the possessive suffix referring to the winter mentioned in the previous sentence (or to the same year as that winter). Sometimes inscriptional temporal datives refer to stretches of time as frameworks for events, as in the sentence *bir yilka tört yoli süñüšdüm* (BQ E30) ‘I fought four times within one year’. The suffix sequence *-mAk+InA* discussed in section 4.633 forms temporal expressions; in Orkhon Turkic, nominal predicates can also be put into the dative to specify the time a certain event takes place. The common expressions *küniñä*, *ayïña* and *yiliña* mean ‘day by day’, ‘month by month’ and ‘year by year’ (e.g. in KP 7,4-5 and 13,6). Concrete dates such as *üçünç ay iki otuzka* ‘on the 22nd of the 3rd month’ or *takiğu yıl ikinti ay on yañika*⁵⁶⁶ ‘on the 10th of the 2nd month in the year of the hen’ are always in the dative. Early Manichæan texts also have temporal datives: *ol ok künkä* ‘on that very day’ (DreiPrinz 108), *ol aylarka* ‘during those months’ (Windg 19). In Tuñ 27 we find *kirkizig uka basdimiz* ‘We fell upon the K. while they were asleep’; interestingly enough, the same event is in KT E35 referred to with the sentence *Kirkiz bodunug uda basdimiz*. See section 4.1106 for the locative in temporal function.

There appears to be a static local dative in the following sentence: “*iki agulug yol başïña, tamu kapigïña azgurugli yolka kim?*” *tesär* (Xw 116-7) ‘If one asks “Who is at the beginning of the two poisonous ways, who is on the way which misleads to the gate of hell?”’. Also e.g. *ol kam köñüliñä inča sakinti* ‘That magician thought as follows in his heart’ (M I 34,18); thus, with *köñüliñä ... sakinti* also in M I 6,17. I know of no such instances in non-Manichæan Uygur.

In *näj yerdäki xaganlig bodunka bintägi bar ärsär nä buñi bar ärtäçi ärmiş* (Tuñ 56) ‘If any independent nation anywhere were to have one like me, what trouble could it ever have?’ *bodun*, which appears in the dative, refers to a possessor; similarly *muñar nä ärsär yazok yok*

⁵⁶⁶ This term, literally ‘the new (moon)’, is used when referring to a day in the first third of a month.

(PañcÖlm 23) ‘He does not have any sins whatsoever’. Semitic languages or Latin also have datives of possession; Turkish uses the genitive instead. The dative is basically possessive also in *ögrünçükä mänikä bolmaki bolzun* (BT V 149-150) ‘May he attain joy and happiness!’. Below we mention a few instances where the dative with *bol-* ‘to become’ has a different meaning.

The dative can also be abstract, when it marks the aim of an abstract action: *burxan kutiṇa köñül öritü* (BT I 1184) ‘setting one’s heart on his majesty the Buddha’. The DLT proverb *sögüt söliṇä, kadıñ kasıṇa* ‘The willow for its sap, the birch or its bark’ has the same sort of content without a verb. It is in this sense that the compound suffix *-gU+kA* forms final clauses (section 4.636).

Reference to the action one is directed towards can be generalised by being expressed by *bol-* ‘to become’: *yilkika barımka bolup* (Xw 152, 177-178) ‘being busy with tending livestock’; *alkinču üdkä boltumuz* (M III nr.12 v3) ‘We have had the moment of death on our minds’. Thus also DLT fol. 355 *közi yolka bolur* ‘his mind gets directed towards leaving’.

An instance like *özrua täñrikä yazıntımız* (Xw 22-23) ‘We sinned against the god Zerwan’ is again different,⁵⁶⁷ as Zerwan is not the beneficiary of the action but the one displeased by it.

In a sentence quoted in Wilkens 2000 nr.65 the dative marks the topic of speech: *ätkä kanka “ičmāñ yemāñlar” tepän kinin ayıtdı* ‘Concerning meat and blood he said “Don’t eat or drink it” and mentioned its punishment’.

In the following examples entities meant to benefit from the action are marked by the dative: *kün täñri bo yer suv üzä tugar, kántü yarokın kamagka yarotır* (M III nr.7, 14,10₁) ‘The sun rises above this world and lets its light shine for the benefit of all’; *ät’özin ämgätip el işiṇä* (M III nr.23 r8-9) ‘straining his body for the sake of the state’. In *yegädmäk utmak bolzun maṇa* (M I 28,18-19) ‘May I ... attain victory’ the beneficiary is also in the dative.

The objects of emotions can be marked by the dative, e.g. *maṇa amranmakijüz* ‘your love for me’ in U III 29,1 or *saṇa amranmakın ... ölür män* (U III 82,28) ‘I die from love for you’. The dative in *m(ä)šixa burxan ... buši berigli ... kişiläriḡ kántüniñ ädgü öglisṇä ädgü ögli tep atadı* (M III Nr.6 I r5) presumably also expresses positive emotion:

⁵⁶⁷ If interpreted correctly; the ms. has been read as *täñrikän*.

‘The prophet Christ called ... almsgiving ... persons ‘compassionate to those who were compassionate towards him’’.⁵⁶⁸

Causes and sources of processes and events are equally expressed by the dative: *täñrilär täñri katunları täñri mänisiñä äsürüp* ‘the gods and goddesses were intoxicated by divine bliss’; *tavgač xanniñ ötügiñä ... alip bütürmiş* (BT II 105) ‘complying with the request of the Chinese ruler ... he took it and finished it’. *ol ogurka* in U I 23,17 is ‘because of that event’. What we find in *näkä iglayu busušlug kältiñ* (KP 5,2) is also causal, whether we translate it as ‘At what’ or ‘Why did you come crying and sad?’. *kork-* ‘to be afraid of something’ governs the source of fear in the dative, e.g. in U III 75,6; this source could, of course, also be classified as an object of an emotion.

In economical documents the price of a transaction is often mentioned in the dative case.

In *okigčika okitip* ‘having (somebody) called by the herald’ the dative marks the intermediate agent which accompanies the causative derivate of a transitive verb. The dative in *sogdak tavgačka ... bay balik yapiti bertim* (ŠU) is therefore to be translated either as ‘he had B. B. constructed for Sogdians’ or ‘by Sogdians’. Cf. further *bo burxanlarka kutgarguluk, bo arxantlarka kutgarguluk, bo šarirkä süzüliüp kutgarguluk ol* (MaitH Y 118) ‘This one is to be saved by *buddhas*, this one by *arhats* (and) this one by having faith in relics’. The agentive dative is not limited to causatives, however, as shown e.g. in *kalmadi ärki ayig kilinč maña kilmadok* (BT XIII 13,109) ‘There probably are no more (types of) evil deeds not carried out by me’. Similar is *siziñä idi bilmäyöki kalmadi* (HTs VII 1802), ‘... has become quite well-known to you’ or ‘no aspects of it have remained hidden to you’.

The sentence *ötrö maxendrasene elig öz tiri[g] ätözintäki kaparmiš ätin yara biçip ak[a] kälmiš söl suvin iglig ärkä ičürüp ...* (U III 45,13) can be translated in several ways: Either as ‘Thereupon, king Mahendrasena split and cut the swollen flesh of his own live body, *had* the sick man *drink* the lymph water which had come flowing ...’ or ‘... *let* the sick man *drink* the lymph water ...’ or ‘... *had* the lymph water *drunk* by the sick man ...’. In other words, the sick man is both the beneficiary and the intermediate agent of the action in which he is either an active or a passive participant. The functions of datives with causative verb forms are further discussed in section 4.5.

⁵⁶⁸ This follows the interpretation of UW 257a top; the editor proposed a causal interpretation (see below), which left *käntiniñ* unexplained.

4.1105. The directive

The directive is very much alive in Orkhon Turkic. It is there used to express motion towards or to places, e.g. in *bän ävgärü tüšäyin* ‘let me (go) home and dismount’ (Tuñ I N6) or *ötükän yišgaru uduztum* (Tuñ I S8) ‘I led (them) to(wards) the Ötükän mountain forest’. In the direction of peoples: *oguzgaru sü tašikdimiz* ‘we started a campaign against the Oguz’ (KT N 8); individuals: *apa tarkangaru ičrä sav idmiš* (Tuñ I N10) ‘we heard he sent a secret message to A.T.’ or, with a pronoun, *xagan baŋaru anča ayi idmiš* (Tuñ I N10) ‘the message sent to me by the king was as follows:’. The object to be reached can also be abstract: *bunča esig kučüg bertökgärü sakınmatı* (KT E 10) ‘without giving thoughts to the fact that they have given so much service’; *öltäci bodunug tir(i)g(g)ärü igi(d)tim* (KT E 29) ‘I have reared the dying people (back) to life’.

In Manichæan sources the directive is also relatively common, and most of the nouns used in this case form again refer to places: e.g. *m]anistangaru ter(i)ltiŋ(i)zl[är* ‘you have flocked to the sanctuary’ (M III nr.27 v5). There are also individuals, e.g. *täŋrigärü* ‘to god’ in Xw 160 and 165, *siziŋ kutuŋuzgaru* ‘to your honour’ in M III nr.9 II r8, *mani burxangaru* ‘to Mani the prophet’ in Wettkampf 11, *älgiŋärü* in M III nr.8 V v2 ‘to his hand’ etc.; *siziŋärü* is especially common. No action nouns are known to me to appear in this case form in Uygur, however, as we found in Orkhon Turkic. In some instances, e.g. in the IrqB, the subject clearly does reach his goal, as with the dative.⁵⁶⁹

The directive is rather rare in non-Manichæan Uygur. We find it e.g. in *yakin kälip bäggärü ötünti ol buryuki* (Suv 637,23) ‘He came close and spoke to the lord, that minister.’ *ötün-* can also govern the dative, but perhaps *bäggärü* is actually governed by *yakin käl-*; this is, at any rate, the only example of a non-petrified directive form in the Suv. In the sentence *v(i)rxarka yakin yergärü olorup v(i)rxar ičintä kovuk sovik arıgsız kämištimiz* (Mait Taf 174r28), the form does not appear to have been used in directive meaning, as one does not sit (down) towards a place. Petrified directives such as *ičgärü* ‘in’, *tašgaru* ‘out’, *ilgärü* ‘forward’ or ‘towards the east’ *oŋaru* ‘to the right’, *yokaru* ‘up’, *birgärü* ‘to one place’ and perhaps a few others appear in all sorts of Uygur texts, Manichæan and other. In *barčada ičgärüräk* (BT V 170) ‘more internal than everything (else)’ we see that *ičgärü* need not have

⁵⁶⁹ The difference between concrete dative and directive needs more elucidation. In Tuvan, e.g., the directive is used if an object moves away from the observer, the dative if it moves towards the observer; some such principle might be at play in Old Turkic as well.

had strictly directive meaning even in a Manichæan source. Cf. also *ilgäriüsi kerüsi* ‘its east and west’, used without directive meaning in HTs III 577.

The directive no longer exists in Qarakhanid; the verse *anda bolup täñrigärü tapgin ötär* ‘Being there he gives his service to God’ in DLT fol.555 must therefore be particularly archaic.

4.1106. The locative

The locative refers to placement, e.g. in *Kögmän tagda* ‘on the Sayan mountain’ (Orkhon Turkic); *ol ävdä* ‘in that house’ (U III 35,18). It can also refer to states: *Kirkiz bodunug uda basdimiz* (KT E 35) ‘We fell upon the K. people while they were asleep’ (on l.37 with the Türgäš as object). In *ädgü kü at tört buluñda yadilti* (KP 7,2) ‘The good reputation spread everywhere’ (literally ‘in four corners’) the locative form refers to the domain of the action.

Implements serving as containers are also found in the locative case: *suvlukta täñridäm suv kälürüp* ‘bringing water in a ... water vessel’ (U III 38,26).

The temporal use of the locative is apparently not too common. The London (Manichæan script) ms. of the Xw on its l.338 adds *bir yegirminč ay beš otuzda* ‘on the 25th of the 11th month’ as dating to the text; its copyist appears to have spoken a dialect which differed in this matter from his source. Further examples are *bokünki küntä* ‘today’ (U III 50,8 as against *bokünki kün* in 34,5), *añ kenintä* ‘at the end’ (U III 31,2) or *sizñ yarligiñizni bir azunta arig közädgäli taplayu tägintim* ‘I have endeavoured to accept your commands so as to observe them throughout one life’ (U III 36,1). The dative and the nominative are also used for expressing time.

The locative is used also with verbs of motion to mark the goal if the result of the event is a state. In Manichæan texts: *ol ašanmiš aš kim ol ät özintä kirür ölüür* (M III nr.6 II r3) ‘That eaten food which enters that body dies’; *ol i yalpragakä yerdä tüšdi* (ManUigFr r7) ‘(The demon hid in a tree, but) the leaves of that tree fell to the ground’ or *özi täñ[ri] yeri içindä kirti* (l.8 of ms. M 541 edited in the note to BT V 217) ‘He himself entered into the divine country.’ In Buddhist texts: *dyan sakinčlig y(i)ti kilič köñüllüg eligtä kirsär tutulsar* (UigBlock 30-31) ‘if the sword – i.e. meditation – enters the hand – i.e. the heart – and stays there, ...’; *ikiläyü tamuda tüšmätin ...* (BT II 374-377) ‘not falling into hell once again ...’; *bašimtakä etiglig tokirim yuplunup yerdä tüšär bolur* (MaitH XIII 4r6) ‘I dreamt that the adorned bun on my head disintegrates and falls to the ground’; *ikinti azunta bargali sakinyok sän*

(U III 48,6) ‘you’ve decided to go to another existence’; not, of course, coming back.⁵⁷⁰

In *ol yäkniñ üstün täñri altın yalñukta kim ärsär küčün tidači yok* (TT X 104-106) ‘There is nobody, neither among gods above nor among humans below, who restrains the power of that demon’ the locative indicates membership in a group; it is here translated as ‘among’. Similarly *biz ikigüdä kanyusı küçlügräk biz* (Wettkampf 43) ‘Who among us two is the stronger?’.

In relatively early texts, including the runiform ones, the locative has ablative meaning in addition to the locative one, as in inscriptional *Tabgač xaganta bädizči kälürtüm* ‘I brought decorators from the Chinese emperor’. Cf. further *ay täñri ordosinta enipän* ‘coming down from the palace of the Moon God’ (1.8 of the Manichaean hymn edited in *UAJb* 16:221-2) and *mintidä ... tutgil* ‘receive ... from me’ (Mait 187r11-12). In Mait 5r16-17 (missing part completed from out of the parallel Hami ms.) the ms. had the clause *tagda činagantik atlig [ot kälür]jüp* ‘bringing the herb named *činagandhika* from the mountain’, but *barip* ‘going’ was subsequently added above the word *tagda*, in order (according to Laut 1986: 62) to get the now unusual ablative use of the locative understood by the reader. The phrase *ölümtä / ölmäkdä oz-* ‘to escape death’ appears a number of times in *IrqB* and in 1.2 of the hymn mentioned above, and cf. *ämğäklärintä ozg[ur]-* (Mait 135r16-17), *ämğäktä ozgur-* (KP 6,2). In *siz tidimliğ xanlarnıñ töz yiltizda siz* (Wettkampf 49) ‘You are from the root of crowned kings’ an ablative locative is used predicatively.

Comparatives always govern the +*dA* form, as in *antada takı yegräk* ‘even better than that’ or *barçada içğärüräk barçada üzäräk* (BT V 170-171) ‘more central and higher than everything (else)’. They need not have +*rAk*, as in *kamagda öñrä* ‘first of all’, *muntada ymä muñadınčig* ‘more wondrous than this’ (Mait 26A r3) or *sinidä üstün sävgülük taplaguluk äd tavar bulmaz män* (U III 83,3) ‘I can’t find anything more highly lovable and desirable than you’.

Elatives can repeat the same adjective, putting it first into the locative case form, as *aglakta aglak* (MaitH XI 6r10-11) ‘most unfrequented’, *täriñdä täriñ* (Suv) ‘exceedingly deep’, *artokta artok* (U IV B2) ‘very much’.

Relational nouns (discussed in section 4.22) practically always appear in the locative. This holds not only for local and temporal ones such as

⁵⁷⁰ Another DKPAM instance of *bar-* + locative appears in *SIAL* 18(2003): 155 (1.7); the editor in a note expresses his opinion that this is rare and quotes three further instances from Suv.

ičintä ‘in’, *öñüñüzdä* ‘before you’, *üskümtä* ‘in my presence’, *kenindä* ‘after’ but also for the ones with abstract meaning such as *yolınta* ‘concerning’, *ugrinta* ‘for the sake of’, *tiltagınta* ‘because of’, *küčintä* ‘due to’ or *tüšintä* ‘as a result of’. I take it that the non-local ones, such as *tiltag* ‘reason’, *küč* ‘force’ or *tüš* ‘fruit’, do this in analogy to the ones having local or temporal semantics in the first place, such as *yol* ‘way’ or *ugur* ‘point in time, occasion’.

4.1107. The directive-locative / partitive-locative

With *+rA* we have to distinguish between living uses with partitive locative meaning and petrified forms, which we have called directive-locative. Among these latter *tašra*, *ičrä* and *asra*⁵⁷¹ are local, while *öñrä* ‘before’ and *kesrä* ‘after’ are temporal; the late BT III 891 adds *tüp soñira* ‘at the very end’ < *soñ+ra*, which is also temporal. We find the directive-locative in a number of functions: The forms are, first of all, used adnominally, both by themselves as *ičrä sav* in Tuñ 34 ‘internal (perhaps ‘secret’) letter’, *asra mansız sakınčlar* ‘humble unassuming thoughts’ (TT II,2 68) or *öñrä ažundaki kilinč* (TT VIII F 15) ‘an action in a previous incarnation’, and with *+kl*, as *ičräki* (also lexicalised as a title) and *öñräki* (*öñräki eliglär* ‘the ancient kings’ in TT I 93); we even have *äñ öñrä* ‘earliest’. The inscriptions used the *+rA* forms in pairs, to represent opposite topics: *ičrä ašsüz*, *tašra tonsuz* (KT E26, BQ E21) ‘no food in their stomachs and no clothes on their backs’, *beriyä tavgäčig*, *öñrä kitanığ* (Tuñ 7) ‘in the south the Chinese, in the east the Kitans’ or *üzä kök täñri asra yagiz yer kilintokda* (KT E1) ‘when the blue heaven was created above and the brown earth below’; in BQ S13 *kesrä* and *öñrä* are opposed in a similar way. In adverbial use we find them in *ičrä bän bulgayin* (ŠU S4) ‘I will stir up internal dissent’ *öñrä kün tugsıkda* (KT E4) ‘in the east, where the sun rises’ or *tašra yoriyur* (KT E 11-12) ‘They are marching out’; documentation for directive-locative forms as postpositions is given in section 4.21: *kesrä* and *tašra* are found to govern the locative, *asra* the nominative, *öñrä* and *ičrä* either the locative or the nominative.

In living use we find *+rA* added to names of body parts of persons or other creatures, which are also referred to as such in the sentence: *süñün yüräkrä sančit-* (Mait Taf 33r8) is ‘to be pierced at one’s heart by a lance’, *kušlar kargalar kälip töpörä sokup karakimzñi sačraturlar* (Mait Taf 203r5 = MaitH XX 13r4) ‘birds and ravens come, pick at our

⁵⁷¹ The Uygur use of *asra* and *asrakı* is documented in the UW; see the EDPT for their cognate *as+tin*, which was in use from Qarakhanid on (both in DLT and QB).

heads and gouge out our eyeballs'. *bašra täpip* (U III 14,3) appears in fragmentary context but the DLT has four instances of *bašra* 'on the head' all connected with the meaning of 'striking' or 'hitting'.

The 'body part – body' relationship prompted the term 'partitive-locative'; if the reference to living beings is by noun phrase or pronoun, the nominals referring to that whole are placed in the accusative: *üč adri süjün olarni ogsuz täginčsüz öz konokra sančarlar* (Mait Taf 75r16) 'they pierce them with tridents at any moment at the seat of their soul (*öz konok*)', In *bir ikintiškä közrä kulkakra sančišur biz, tiližni biçišur biz* (Mait Taf 174v29) 'We stab each other in the eye and the ear and cut each other's tongue' and in *agulug oqin yüräkrä urup amrak isig özin üzgil* (U III 55,4) 'end its (i.e. the elephant's) dear life, hitting (it) at (its) heart with a poisoned arrow', we find that the body parts *köz*, *kulkak* and *yüräk* are put into the partitive-locative case while *til* and *isig öz* are in the accusative with possessive suffix. For the first group there is explicit or implicit reference to the owners of the body parts, the speaker in the first sentence, the elephant in the second; this reference is taken up by possessive suffixes in the second part of the sentences, but that is linked with a switch to the accusative. In *orgaklar kälip bizni tüprä orarlar* 'Sickles come and mow us off our roots' (Mait 201v9) the speakers and victims are plants and not living beings; it is not clear whether plants are in principle included in the domain of +rA or whether the use of this suffix here indicates that the plants are being metaphorically assimilated to (suffering) living beings. Note that this partitive-locative use is compatible with the victim (e.g. *bizni*) or a part of his body + possessive suffix (e.g. *tiližni*) being put into the accusative, but that the +rA noun itself is incapable of such reference by possessive suffix. In *täñri burxan yarlığın töpörä tuta täginip kántü kántü ärgüsiñärü yadiltılar* (TT VI 464) 'They respectfully brought the divine Buddha's decree to their heads and dispersed each to his own abode' the action is a gentle one, unlike the other instances quoted. This is also an example for all the ways in which +rA and +gArU (which some had thought to be related or even identical) differ: the former referring to a body part without possessive suffix, the latter referring to a place and coming with a possessive suffix which refers to the subject of the two verb phrases.

4.1108. The ablative

The ablative expresses 'source', as in *ögdin kañdin bälgürmiš ät'öz* 'the body which emerged from mother and father' (as distinct from the spiritual body; Mait 26A r12), or *täñri yerintin tayarlar* 'they slip down

from the divine land'. In Manichæan texts we have, e.g., *xormuzta täŋrig tamudan yokaru agturti* (M I 13,19) 'They raised the god Ohrmizd up from hell'; *ig yaŋi yerdän temin örtürürčä* (M I 14,11) 'as one straightway grows a plant from fresh earth'; *töpödän tiraŋak uçŋa [tägi* (M I 17,19) 'from head to the tip of the (toe-) nail' etc.; many more examples are mentioned in Zieme 1969: 115. Ablatival content is, in all runiform and most Manichæan sources, mostly expressed by the suffix +dA, and some Manichæan texts have both +dAn and ablatival +dA. The examples *ot kim iŋaçdan ünüp yana iŋaçag örtäyür* 'the fire which arises from a tree and then burns the tree' (M I 7,3) and *tonnuŋ biti kim kišinäŋ tärisintä ünüp yana kišinäŋ kanin kántü sorar* 'the clothes' louse which arises from a person's skin and then itself sucks the person's blood' (M I 8,15) occur in the same passage of one and the same text and are intended to serve as similes for the same phenomenon; yet one has *iŋaç+dan* while the other uses the form *tärisin+tä*. But then fire and lice do not behave in the same manner; in English one would also say that lice arose *in* somebody's skin (as believed in the Middle Ages). A flame has an upward movement by nature and continuously, which is not the case with lice (presumably not while being born, at any rate). From looking at the examples of +dAn (which is the form most Manichæan texts have) and of ablatival +dA one gets the impression that their uses are not identical: The former is generally used of physical movement away from a source, while the latter refers to sources from which the subject merely separates or keeps apart, serves in comparison, is governed by postpositions like *ken* 'after'.

oz- and *kutrul-*, both 'to be saved, escape', as well as their causative counterparts govern the ablative or the ablatival locative; e.g. *alp adalarintin ozsunlar* (thus the ms. in Pothi 233) 'May they escape their grave dangers', *bo adatin kutrulgay san* (DKPAMPb 228) and *tamutün tüzüni ozkurtuŋuz* (Pothi 68) 'You have saved them all from hell', *ulünčig a[žun]larintin kutgarip* (Pothi 119) vs. *ölüntä ozmiš* (IrqB XLIX) 'She escaped death' and *ängäktä ozgurgay san* (KP 6,2) 'You will free them from suffering'.

In section 4.635 we mention a number of examples in rather late texts of the ablative added to the infinitive or to verbal nouns such as the one in -dOk to express cause.

The DLT proverb *küč ildin kirsä törö tünluktin čikar* shows ablatives in prolativ meaning; it signifies 'If violence comes in by the (tent's)

entrance,⁵⁷² proper conduct goes out by the smoke hole’. Orkhon Turkic and Uygur use +čA as prolative case.

The ablative formed with +dIn ~ +dAn is not easy to distinguish from the orientational formative +dXn (which, in fact, often appears as +dIn in Buddhist texts): The latter never has ablatival meaning, is added to bases whose actual interpretation is deictic and can be used adnominally; the former never qualifies nouns.⁵⁷³

4.1109. The equative

Examples for the original spatial meanings of the equative are rather rare. One of these meanings is limitative (‘up to a certain point’), e.g. *belčä boguzča suvda yori-* (KP 36,4) ‘to walk in water reaching up to one’s waist or throat’ or *tizčä* ‘knee-deep’ (MaitH XXV 3v19). Another spatial meaning is prolative (‘by a certain road’); e.g. *frišti utuzup adin öñi yolča yorüdi ol mogočlarig* (U I 9, Magier) ‘the angel led the Magi by a different way’; *kök] kalik yolınča* (DKPAMPb 215) ‘through the sky’ or *ögnüñ agızča kirip* ‘entering by the mother’s mouth’ (BT VII A 262-3). It is this meaning which also gave *kanča* ‘where to’ and the like. I take the prolative meaning of +čA to have been the primary one, as the passages from that to accordance or similarity seem to be likely semantic paths. In the previous section we mentioned a Qarakhanid instance of the ablative used as prolative case.

Quantitative approximation is a content often expressed by +čA, as in *gañ ögüzdäki kum sanınča* ‘as many as the sand particles in the river Ganges’ (U II 47,83) or, adnominally, *äligčä är* (Tuñ 42) ‘approximately fifty men’. *köñülčä* is ‘as much as one’s heart desires’. *barča* ‘all’ is presumably also constructed from *bar* ‘(what) there is’ by using +čA in such a quantitative use, originally presumably meaning ‘as much as there is’. *tükä-gü+čä* in *näčä taplasar tükägüčä tavar algil* (U

⁵⁷² *il* is the base of *ilgärü* ‘forward, eastward’ and *ilki* ‘first’ because the entrance of the early Turks’ tents were made to face the rising sun.

⁵⁷³ Examples for orientational +dXn are *ikidin äyägüsintä* ‘from his ribs on both sides’ (DKPAMPb 207) and *orton* (< **ortodun*) *yol* ‘the middle way’. *ol yäknüñ üstün täñri altın yalñukta kim ärsär küčün tıdtačı yok* (TT X 104-106) signifies ‘There is nobody, neither among the gods *above* nor the humans *below*, who restrains the power of that demon’. (BT I D 186). +dXn forms can also be used as postpositions governing the locative or the nominative; cf. section 4.21. In *kiši alasi ičtin, yilki alasi taštın* (DLT fol. 58) *ič+tin* and *taš+tin* are used predicatively; this proverb can perhaps be best translated as ‘An animal’s leprosy is visible; a person’s leprosy (metaphorical for treachery) is hidden’. +dXn forms can get possessive suffixes referring to the orientational centre: *tagdın+ın+ta* (e.g. in HTs III 275) signifies ‘to its north’. Forms like this last one show that +dXn is not a case suffix, as its place is before, not after the possessive suffix.

III 47,19) and *ärdni yenčü kämikä tükägüčä urup* (KP 34,3) has a similar meaning: ‘Take as much stuff as you like, till there is none left’ and ‘loading as much jewels and pearls on the ship as there were’.⁵⁷⁴ More documentation for *-gU+čA* and *-mIš+čA* expressing limitative quantification is quoted at the end of section 4.124. Many instances of the very common *bunča* (*munča*) and *anča* also refer to quantification, as *anča ämgänip* (KP 47,3) ‘going to so much trouble’.

Just as often, however, *+čA* expresses abstract accordance, e.g. *bodunug äčüm apam törösinča yaratmiš* (KT E 13, BQ E 12) ‘he organized the nation according to the tradition of my ancestors’; *küyiniḡ könlünčä ay* (Tuñ I N8) ‘pass judgement as you see fit’, lit. ‘according to your heart’; *yalyuklar saninča bögsär* ‘if one sums (it) up by human reckoning (as against divine years which, in Buddhist mythology, are considerably longer)’ or *tokuzunč kay törösinčä altunlug kürekarniḡ ärdnilig toraninta olorup* ‘sitting among the jewel nets of the golden tent in the manner of the ninth stratum’.

There is an ‘equative’ of judgement with *sakin-*: *tiši kišilär(i)ḡ körkin mänjizin nän yokča ädligsizčä sakinur* (M III nr.8VII r8-9) ‘He thinks of female persons’ appearance and face as (*+čA*) nought and worthless’ or *bäksiz mänjüsüz ät ’özüg bäkčä mänjüčä sakinip ...* (Mait colophon edited by Laut in Ölmez & Raschmann 2002: 133) ‘(I) considered the fickle and transient body to be stable and durable’.

Similarity is also expressed by this suffix: *ikinti kün örtčä kizip kälti* (Tuñ II W4-5) ‘the next day he arrived red-hot as fire’; *kaninḡ suvčä yügürti, süñükünḡ tagčä yatdä* (KT E24) ‘your blood flowed like water, your bones lay there like a mountain’. In this last function *+čA* was in competition with the similitive (and with the postposition *täg*): We have *arpača sačilmiš* ‘scattered like barley’ in 1.3 of the (early) hymn edited in *UAJb* 16: 221-2 but *[ka]viklayu sačilu* ‘getting scattered like chaff’ in (late) Neujahr 29.

In *süčig savin yimšak aḡin ariḡ irak bodunug anča yagutir ärmiš* (KT S5 = BQ N4) ‘They used to cheat them with sweet words and soft textiles and thereby used to attract the distant tribes to their vicinity’ the form *anča* refers to means (detailed in the first part of the sentence) used for the purpose expressed by the main verb.

+čA is often added to names for peoples to form adjectives, as *änätkäkčä* ‘Indian’. The reference to languages by equative forms also comes from this special use of similitive *+čA*. The target language of translations can appear with *+čA*, e.g. *k(ä)ši ačari änätkäk [ti]lintin*

⁵⁷⁴ In his note to his edition of the KP passage, Hamilton argues for translating *tükägüčä* as ‘as much as is necessary’; this is possible.

toxri tilinča yaratmış, [pra]tnarakšit açari toxri tilintin [türk] tilinča ävirmiş maytrisi[mit] nom bitig (MaitH XX Endblatt v7-9) ‘the doctrinary text Maitreyasamiti, which master K. adapted from Indian to Tokharian and master P. translated from Tokharian into Turkic’ or *tavgač tilinča agtar-* (HTs VIII 48) ‘to translate to Chinese’.

+čA can, finally, be added to adjuncts such as *ašnu* ‘previous(ly)’ and in such cases makes their adjunct function more explicit.

The name ‘equative’ has been retained for this case form only out of convenience, to accord with general Turcological usage; equative meaning is not in any way central to the use of Old Turkic +čA.

4.1110. The instrumental

One of the meanings of the instrumental morpheme is instrumental in the narrow sense, as *amari tamuluglarig irig erpäkin erpäyürlär, kärkin yonarlar, baltun yararlar* ‘They saw some of the dwellers of hell with large saws, hew them with axes, split them up with hammers’ (MaitH XV 3v25-26), from *erpäk*, *kärki* and *baltu* respectively. The instrumental is used for expressing a tool or a means to an end already in Orkhon Turkic *ok+un* ‘with an arrow’ (KT E 36). In *bo yolun yorisar* ‘if we walk this way’ (Tuñ I S8) the way is the ‘means’ for carrying out one’s aim. The subject’s body parts are also instruments, e.g. in *tumšukin tarmakin tarma-* ‘to scratch with their beaks and claws’ or in *ol känč ogulkya ... iki kolučakin atasiniñ boyunin kučup ...* (DKPAMPb 197) ‘that sweet little boy ... embraced his father’s neck with his two little arms ...’. In the sentence *bodisavt yarlikančuči biligin inča sakinč sakinur* ‘In his commiseration, the *bodhisattva* has the following thoughts’ we find the instrumental in its most abstract instrumental use.

ämgäklig / katig / ulug ünin uli- / küliš- / müñrä- is ‘to moan, to laugh or to bellow with a painful, strong or loud voice’. The voice is here no longer an instrument in the narrow sense, in that the subject does not make conscious and purpose-oriented use of it.

The instrumentals in *ag(a)r kadgun ulug busušun yanip bardı* ‘He burned away in great grief and sorrow’ (early Uygur), *sağa amranmakın ... ölür män* ‘I die from love for you’ (U III 82,28), *äsrokün ögsüz bolup* ‘getting senseless through drunkenness’ (M I 6,16) or *tinliglarig ... artiñü ämgäkin ölürür* (TT X 50) ‘He kills the creatures with great pain’ may all express manner, circumstance or what brought the event about; cf. *tiltagin* ‘because’ and *nä tiltagin* ‘why’. Here the instrumental does not, of course, express a conscious means either.

Measure is expressed e.g. in *tužit täñri yerintäki yıl sanın sanasar* ‘if one counts by the reckoning of years of the Tušita heavens’.

The instrumental expresses manner in *bodun ... yadagin yaliğin yana kälti* ‘the people came back on foot and practically naked’ (KT E 28). It expresses posture in *töpö+n* ‘head down(wards)’, in phrases such as *töpön tüš-* ‘to fall head downwards; to bow with one’s head on the ground’ or *töpön yatgur-* ‘to make somebody lie down with one’s face to the ground’ both attested several times.

Its appearance is frequent in temporal expressions, as in *kışin* ‘in winter’ (BQ S 2), *ol üdün* ‘at that time’ (Xw 7), *sön* ‘for some time’ (Xw 9), *nä kolon* ‘at what moment’ (M III nr.7 III v15-16); as non-referential temporal in *temin* ‘just now’, *tün+ün kün+ün* ‘by day and night’ or *yilin ayin turkaru av bark içindä ada tuda ägsömaz* (TT VI 62) ‘Continuously, through years and months, hazards and calamities at home do not stop’.

It has been said that the instrumental does not have local meaning (Gabain 1950: 10, a.o.). With *amga korugun kišla-* ‘to spend the winter in the goat reserve’ in Orkhon Turkic, however, and in *çit+im+in yayladim* ‘I spent the summer within my borders’ (ŠU) a purely instrumental meaning would I think, be very unlikely. Another spatial use of this case, already mentioned above, is the ‘path’.

The use to which *baş+in* from *baş* ‘head’ is commonly put does not enter into any of the mentioned categories; e.g. *sanki č(a)kr(a)v(a)rt elig xan başin säkiz tımän tört miş bağlar* (MaitH XVI 2a7) ‘the 14000 lords headed by the *cakravartin* king Śaṅkha.’

With *är-*, the instrumental suffix describes states, e.g. in *äsänin ädgün är-* ‘to be well’ (UigBrief A), *tirigin är-* ‘to be alive’ (BT V 220; also 517-8 and 523), *käntü ymä arigin turugun ärür, üzüksüz arigin ärmäkiğ sävär amrayur* (M III 8 V r 6-7) ‘And he himself keeps pure, and loves being clean all the time’. *kutlugun kiviligün ornanur* (TT VI 101) ‘He dwells in blessing’ may be similar, or the ‘blessing’ may be instrumental in the narrower sense.

Schinkewitsch 1926 gives examples for the use of the instrumental in the DLT, stating that it is fully productive in that source.

4.1111. The comitative

This rare case gives the meaning ‘(together) with’. It appears as *+IXgU* in inscriptional sources, as *+IUgUn* in Manichaean ones. Examples for the latter are *täñri üç täñrilärlügün ... kälir* (M III 31,2₁, nr. 13II r2) ‘The ... god comes with the three gods’, and *täñrilär söz+in+lügün yäkkä süñüşgäli kälti* (Xw 2) ‘with the word of the gods he came to fight the demon’. In *anig kilinčlig š(i)mnulugun beš törliğ yäklärlügün süñüşdi* (Xw 4-5) ‘He fought with the evil-doing devil and with the five

classes of demons' and *ot täŋri sön yäklügün süŋüşüp* (Xw 74) 'the god of fire fought with the demon a long time ago'⁵⁷⁵ the comitative is also reciprocal in content. In BQ E33 we have *iniligü* 'together with a younger brother', in BQ E41 *eki üç kişiligü täzip bardı* 'he fled with two or three persons'.

4.1112. The similitive

The similitive in *+lAyU*, common in Orkhon Turkic, Uygur and Qarakhanid with nouns in all semantic domains and with pronouns, signifies 'like, similar to, as if'. Its use appears to have been mainly adverbial, in accordance with its origin as a converb form (*+lA-yU*). The common Orkhon Turkic expression *oplayu täg-* 'to attack like a threshing ox' already has this case suffix. The form is discussed, with numerous examples, in OTWF 406-9. Cf. further *yultuz+layu tizilmış* 'arranged in a row like stars' (HTs III 532), *säkiz yïŋak barča küzäçläyü çokradı* (HTs VII 816) 'The four corners of the earth are boiling like a pot' or the adnominal instance *yul+layu bay* 'rich as a fountain' (HTs VIII 177). *munilayu* signifies 'thus', whereas *anilayu ok* (with *ok* in all examples known to me) has a more sentence-adverbial function. The similitive was in competition with the postposition *täg* and with the case suffix *+čA* when used with similitive meaning (rather rare in Old Turkic).

4.12. Complex nominal phrases

Old Turkic complex nominal phrases are practically always syntactical constructions with one nominal phrase as head and another one as satellite. It is quite rare for them to become one word; such an instance is *ät'öz* 'body', in Semitic scripts always spelled without space between its parts (*ät* 'flesh' and *öz* 'essence; self') but with an *alef* before the rounded vowel. Three instances in BuddhKat (Tibetan script) and nine instances in TT VIII and Maue 1996 (Brāhmī) spelled *ätüz* show that it was treated as one word: In non-first syllables of words, /o ö/ appear only if the preceding syllable is also /o/ or /ö/ or if the word ends in a /k/ immediately following upon the vowel in question. (There are, on the other hand, 24 Brāhmī instances where it does show *ö* in the second syllable.) *künt(ä)ŋri* is, e.g., spelled as one word in TT X 288; it denotes the 'sun', not necessarily as a deity. *yer suv*, literally 'land [and] water' signifies 'country'; we find the two words spelled as one in TT X

⁵⁷⁵ A further, fragmentary instance of this phrase appears in Xw 9.

371.⁵⁷⁶ Proper names formed with the element *xan* ‘ruler’ are discussed in OTWF 76-7.

There is a variety of complex nominal phrases; we here group them according to whether their satellite is possessive, descriptive, deictic or quantifying. Descriptive satellites specify the meaning of the head. The difference between deictic and possessive ones should become sufficiently clear when considering pronominal satellites: *ol* is deictic, its genitive *anıñ* possessive. Descriptive, deictic and quantifying satellites are not, as such, NPs, and do not establish any reference relationship distinct from that of their head; possessive satellites, on the other hand, do establish a reference relationship of their own, unless they are sortal (generic in a sense, in which case they in fact describe the kernel). Any morphology relating to the syntactic use to which the nominal phrase as a whole is put is borne by the head and not the satellite; such morphology will be disregarded in this section.

4.121. Nominal phrases with possessive satellite

What is commonly termed as ‘possession’ is often expressed with both the possessive suffix on the head and the genitive of the satellite: Pronominal examples are *mäniñ süm* (ŠU S9) ‘my army’, *mäniñ yutuzum* (M I 5₂) ‘my wife’ or *bizniñ üzütümüz* ‘our souls’ (Xw 8). In the last instance the phrase is an apposition to ‘the fivefold god who is the son of Hormuzta’; the identity of this god with *our* soul is indeed something to be stressed.

Nominals can, in addition, be qualified by a demonstrative (as in Italian, unlike English, French or German), e.g. *bo bizniñ ämgäkimiz* ‘this suffering of ours’ (TT X 68) or an adjective. An adjective need not follow the genitive of the personal pronoun but can also precede it, as *amrak mäniñ oglum* ‘my dear son’ (DKPAMPb 1024), *k(a)mug mäniñ sürügüm* (BT V 941-2) ‘my whole herd’, *yavaş mäniñ ögüçüm* (BT XIII 12,111) ‘my dear gentle mother’. *altunlug kürekarniñ ärdniliğ toranı* ‘the jewel net of the golden temple’ and *satigčiniñ ödi äriği* ‘the merchant’s advice’ are instances with nominal satellite. When a nominal satellite refers to a person other than the third, the possessive suffix of the head is also of that person, e.g. *män xwentsonuñ küçüm* (HTsPek 89r5-11) ‘my, Xuanzang’s, powers’ or *män kitay kayanıñ ... kitay oglanım* (Mi3,2 in SammlUigKontr 2) ‘my, Kitay-kaya’s ... Chinese servant’.

⁵⁷⁶ This ms. may have been particularly prone to such spellings or its editor may have been especially sensitive to them.

For an example like *tonnuḡ biti* ‘clothes’ louse’ (M I 8,14) the context makes it clear that clothes and louse are generic: In Old Turkic it does not seem to be the case that genitive satellites are specific while non-adjectival satellites in the nominative are generic (as we know it e.g. from modern Turkish).

Text organisation can get other parts of a sentence intervene between a genitive and its head; thus in the following example (TT X 104-106), where *yäk+niḡ* ‘the demon’s’ is a satellite of *küč+in* ‘his power (acc.)’: In *ol yäkniḡ üstün täḡri altın yalḡukta kim ärsär küčün tüdäči yok* ‘There is nobody, neither among the gods above nor among the humans below, who restrains the power of that demon’ the demon is the topic. There is no justification for the view expressed by Gabain in her note to the passage that this is an instance of ‘üntürkische Wortfolge’.

In instances as the following the head has the 3rd person possessive suffix but the satellite is unmarked: *kelän käyik muyuzi* (TT I 42) ‘the horn of a unicorn’, *täḡri yeri* ‘divine land’, *xan süsi* ‘the royal army’, *kögmän irintä* ‘north of the Sayan (range)’, *burxanlar tamgasi* ‘the seal (i.e. the last) of the Buddhas’, *beš täḡri yarokü* ‘the light of the fivefold god’, *nom kuti* ‘the holy doctrine’, *sansar ämgäki* (U II 81,68) ‘the sufferings of *saḡsāra*’, Orkhon Turkic *köl tegin atisi* (*yollug tegin*) ‘(Y.T.) the nephew of K. tegin’. Plural satellites need not be in the genitive either: *täḡrilär sözinlügün* (Xw 2) ‘with the word of the gods’; *täḡrilär ordoları titräyür* ‘the palaces of the gods are trembling’. Another instance where both head and satellite are in the plural (the head being marked by possessive suffix) is *bo yaḡilar kızların ... bičip käsip* (MaitH Y 211) ‘cutting up (the bodies of) these daughters of enemies’. Even satellites shown to be definite by having possessive suffixes do not have to be in the genitive, e.g. *oglum savı* (KP 63,2) ‘news from my son’ or *izim bälgüsi* (HTs III 318) ‘the mark of my footprint’. These contents are not, of course, very well described with the label ‘possessive’, since no possession is involved.

In some cases, what looks like this construction may be one nominal phrase only at first sight; the following sentence could instead be an instance of the ‘construction with two subjects’ (discussed in section 4.4): *antag antag yertä bir köl suvi sugulup on miḡ balıklar künkä köyüp ...* (Suv 603,11) could signify ‘what happened to a lake in some particular place was that its waters got drained and 10,000 fish got burned by the sun’. The relationship between *bir köl* and *suvi* would then be not one of government within a single nominal phrase but one of apposition; *bir köl* might have been mentioned as topic while *suvi* would be the actual subject of *sugul-*.

Relatively rarely the attribute stands in the genitive although the head has no possessive suffix. This happens in the inscriptions (e.g. *māniñ är* ‘my men’; *Yegän Silig bägiñ kädimliḡ toruḡ at* ‘the harnessed bay horse of S. *bäg*, the khan’s nephew’ in KT E33), most often in lamaistic texts of the 14th century. Further examples are *sāniñ alimēi är kaldi* ‘Your creditor came’ (UigBrief D 6, a personal letter) and *biziñ beš yüz ärän* ‘our 500 men’ (KP 53,4-6). In instances in Classical Uyghur, the satellite is often a highly honored person or entity; e.g.: *eligimiz kutiniñ idok y(a)rl(i)ḡ üzä* (HTs VIII 58) ‘by the holy order of his majesty our king’ or *t(ä)ḡri burxannañ bir p(a)ḡdakča täḡliḡ nom* (U III 29,16-17) ‘as (little as) one verse from the divine Buddha’s teaching’. In Manichæan texts: *t(ä)ḡ[rim]*, *m(ä)n siziñ yultuzu[ḡ] körüp kololap ...* (M III nr.13 v7) ‘My lord, I have viewed and observed your star ...; *siziñ üdrülmiš frištilär* ‘your chosen messengers’; *siz tidiḡliḡ xanlarniñ töz yiltizda siz* (Wettkampf 49) ‘You are from the root of crowned kings’. Two hymn titles, *vam vaḡinuñ baš* ‘the hymn of the god Vam’ and *b(a)ḡ roš(a)n zaw(a)r žiriftnuñ bašta* ‘the hymn to god, light, power and wisdom’ (M II 9 and 10 respectively) show the same structure.

Sometimes heads appear without possessive suffix and attributes in the nominative although the relationship is neither appositional nor adjectival, as in *balik kapagda olor-* (KP 64,7) ‘to sit at the city gate’ or *beš ažuñ tinliḡlar* ‘the beings of the five existences’. *kün orto* ‘noon’ would seem to be of the same type, as its literal meaning is ‘the middle of the day’.

There is an adnominal partitive locative with referential satellite, as in *ol yäklärdä uluḡi* (ManUigFr r5) ‘the leader of those demons’.

As a rule, the genitive precedes its head; this was the case in all the examples quoted. An occasional exception occurs e.g. in Windg, which has *äkinti / üçünč / törtünč / bešinč ärdäm(i) sävinč(i)*⁵⁷⁷ *yel täḡri küčiniñ* ‘the second / third / fourth / fifth virtue and joy of the power of the wind god’ as titles of text sections. The text is a translation from Parthian and the translator clearly copied the word order of his source, in which all the corresponding phrases follow their head as well. Making the genitives precede would have pushed the ordinals out of the prominent first position.

⁵⁷⁷ There are some lacunas in the text but it is also clear that there is an intended stylistic variation, the possessive suffix being either present on both terms, present only on the second (making that an instance of group inflection) or absent on both.

4.122. Nominal phrases with descriptive satellite

When satellites do not refer to a possessor, do not quantify and are not deictic they *describe* the head. When neither the satellite nor the head have any morphology, the satellite is most often an adjective, as in Orkhon Turkic *yimšak agi* ‘soft textile’. Heads can also be adjectives governing other terms, e.g. degree adverbs. Further expansions of adjectives have the shape *-gAll učuz* ‘easy to ...’ and *-gAll tägimilig* ‘worthy of ...’, where they govern the supine; examples for this construction are mentioned in section 4.23.

In a case like *beš yüz tämir talkuklar* (U III 47,8) ‘500 iron pegs’ the attribute is the name of some matter, like ‘iron’ or ‘wood’. Such attributes have at least some adjective characteristics; cf. German ‘eisern’, French ‘en fer’.

In other instances the attribute is a proper name, e.g. *orkon ögüz* ‘the Orkhon river’, *ram ay*, the name of a month, or *kögmän tag* ‘the Sayan mountain (range)’, or the whole phrase is a proper name, as *yel täñri* ‘the Wind God’, *suk yäk* ‘the Demon of Greed’. The attribute in *takigu yil* ‘the year of the hen’ is a proper name in a sense, as no real hen was probably denoted: To the Old Turks, the association of years with particular animals was presumably already arbitrary.

kulum küñüm bodun ‘the nation (consisting of) my male and female slaves’ (ŠU S9) and *köl tegin atisi yollug tegin* ‘Yollug tegin, the nephew of Köl tegin’ (KT SE) are instances of apposition; the satellite here refers to the same entity as its head, unlike possessive satellites: *kulum küñüm* and *bodun*, *köl tegin atisi* and *yollug tegin* are coreferential. With *keđin [änät]käk yerintä* (HTs VIII 11) we know only because of the context that we should not translate it as ‘in the country of western India’ but as ‘in the west (as seen from China, where the text was written), in India’. Note that ‘in the west’ is not *keđintä*, the locative suffix being applied only once, after the second element: It turns out that apposition applies group inflexion to noun phrases as well. Appositions can also follow the head, e.g. *yašovati kunčuyar ärdinisi* (Mait 51r31) ‘Yašovati, the jewel of ladies’ with a metaphorical phrase. *yegädmäk utmak bolzun maña agdok karı petkäči mar išoyazd maxistak üzä* ‘May I, the worthless old scribe, attain everlasting life through his holiness the *maxistak* Išoyazd’ (M I 28,19) shows an apposition in the nominative, *agdok karı petkäči*, to *maña*, a pronoun in the dative case. Even a whole clause can be an apposition, e.g. the one with *ärtökin* as head in apposition to *munı* in the following instance: *munı körüp bodisatv, montag osoglug ärtökin, ... ärtiñü korkdi*

sezinti (Suv 630,10) ‘He saw this, the *bodhisattva*, i.e. that this was the situation, and became exceedingly frightened ... and worried.’

The most elaborate descriptive satellites are the adnominal relative clauses; these are described in section 4.61 and its subsections.

A further way to link nominals is for the satellite to get the suffix +*IXg* with no suffix on the head. Such instances can be classified into two main groups: Either the two nominals have two distinct referents or they refer to the same entity. In a first type, the content of the satellite can be said to be ‘at’ the content of the head, or the latter to ‘have’ the former; e.g. *didimliġ bařlar* ‘crowned heads’ (Mait) or, with inalienable possession, *aziglig toņuz* ‘a tusked boar’ (KČ 18); in principle, +*IXg* has no content of its own but merely serves subordinative concatenation. The satellite often has a further qualification, as *altun öņlüġ ... siġun* (U IV C58) ‘a golden-coloured deer’, *sukančig tözlüġ nom* (BT I D 197) ‘a pleasant-natured doctrine’ or, with a nouny qualifier, *uri oġlanliġ ävči* (Heilk II 2,65) ‘a woman with male offspring’. The satellite can also be a verbal abstract whose subject is the head, as in *yavlak sakinčliġ rakřasa* (U IV A66) ‘an evil-thinking *rakřasa*’; the *rakřasa* (a female demon) is here doing the thinking (*sakin-*).

Some +*IXg* forms specify the material of which the referent of the head is made; *altunlug kürekar* ‘golden temple’, *altunlug lenxwa* (BuddhStab II 23) or *tämirlig tag* (U II 25,26) ‘iron mountain’ consist wholly of gold and iron respectively; such satellites appeared also without +*IXg* (cf. *tämir talkuklar* quoted above). In *t(ä)ņri kızlariliġ terin kuvrag* (U II 30,29), the ‘gathering’ (*terin kuvrag*) is made up of ‘divine maidens’ (*täņri kızları*). This is the second general type of +*IXg* construction, and it is found only in Uygur.

Sometimes the head is a borrowed element while the satellite is original Turkic, as in *takřutlug řloklar* (BT I A₂40) ‘verse *gāthas*’ or *bodisatavniņ kalmiř süņüklüġ řariri* (Suv 627,16) ‘the remaining bone relics of the *bodhisattva*’: Here the verse and the *řlokas*, the bones and the relics are identical and coreferential, though their respective denotees *may* be different; the words *may*, however, also have been felt as mere translations of each other.

The following are relatively short examples of metaphorical +*IXg*, also found only in Uygur: *keniņä burxan kutinliġ kölöġ üzä nirvanliġ konoklukta konar* (Pfahl I 8) ‘In the end he will settle in the resting place that is *nirvāņa* (which he will reach) with the vehicle that is Buddhism’; *dyan sakinčliġ y(i)ti kilič köņüllüġ eligtä kirsär tutulsar* (UigBlock 30-31) ‘if the sword – i.e. meditation – enters the hand – i.e. the heart – and stays there, ...’: In each of these cases, the head is the

metaphor for the satellite. In *sansarlıg tãgzinč* ‘the *saṃsāra*-whirlpool’ the whirlpool serves as metaphor for the manner in which souls are, according to Buddhist doctrine, whirled around among the various this- and otherworldly ways of existence. Buddhist Uyğur literature shows numerous and often quite involved examples of extended metaphors which make use of +IXg. OTWF § 2.91 has more details on this formative; the uses listed above are the syntactic ones.

The relationship between *kan* and *ögüz* in *tünlıglarıg ölüür, tãrisin soyar, kan ögüz akıtar* (KP 2,4) ‘They kill living beings, flay their skin and spill rivers of blood’ can be called metaphorical quantification.

Then there is the Old Turkic *bahuvrīhi* construction, where the satellite itself is a nominal clause whose topic includes reference to the head. Here is an example, where *köz*, the topic of the satellite clause *közi yarok* ‘his eye is bright’ has the possessive suffix to refer to *ıdoklar* ‘the saints’: *közi yarok ıdoklarka bargıl yakın* (ETŞ 12,18, verse) ‘Go close to the bright eyed saints.’ Such complex attributes can also be used predicatively; e.g. *sav+i süzük* and *köñül+i katıg* in *savı süzük köñüli katıg tetmiş siz* (HTs VII 2128) ‘You are said to be clear of discourse and firm of heart’, or *köñül+i ögrünčülüg* ‘joyed of heart’ in *ol ödün yagı w(o)rm(i)zt bo savd[a] ötrü köñüli ögrünčülüg bolmadı* (Wettkampf 73) ‘Then the valiant Wormızt no longer enjoyed this matter’. In the following sentence (Warnke 434-439) three *bahuvrīhis* alternate with +IXg and adjective satellites: *ayayu tutdaçılar uzun yaş+lıg bolgu ärip inçip yana öz+i kışga bolmişları közüniür; yavız y(a)vlak [ölü]tçi etitçi kışılär kışga yaş+lıg bolgu ärip öz+i uzun bolmişları közüniür; arıg süzük köñül+i yığıglıg [kiři]lär ärtiñü bay barım+lıg bolgu ärip inçip yana çıgay [...]g+lıg bolmişları közüniür* ‘Those who care about honour should have long lives but in fact their lives turn out to be short; evil and murderous persons should have short lives but it turns out that their lives are long; people who are pure and serious should be very rich but instead they turn out to be poor’. The *bahuvrīhi* construction helps underline the contrast between *kışga*, the predicate of the first sentence, and *uzun*, the predicate of the second. See Erdal 1998b for further thoughts on this.

Local expressions ending in +dXn or +rA appear in adnominal use, e.g. *ikidin äyägüsintä* ‘from his ribs on both sides’ (DKPAMPb 207), *taštün ilinçükä ün-* (KP 5,4) ‘to go out for a pleasure outing’ (from *iki* ‘two’ and *taš* ‘outside’ respectively) or *asra mansız sakınçlar* ‘humble unassuming thoughts’ (TT II,2 68). Other local and temporal constructions are made adnominal by +kI, as elaborated upon in section 3.126; e.g. *yazki ärümiş yuka buz* (HTs VII 731) ‘the thin melted ice of

spring'. Partitive meaning can be expressed by adding *+dA+kl* to the satellite and having *birisi* 'one of them' or some other head with a possessive suffix; e.g. *inmelun šastr ārsār inčip samtso ačari ävirmiš änätäkäčä bitiglärädäki birisi ärür* (HTs VIII 29) 'As for the Yin ming lun *śāstra*, it is one among the Indian writings translated by Xuanzang'; *tört buluñtakä ädgüsi uyurı terilipän mäñiläyür* (IrqB 28) 'The best and most capable people among those of the whole world assemble (there) and rejoice'.

It happens that postpositional phrases are used adnominally, e.g. in *yugant üdtäki täg ulug bädük ot yalinlar közünür* (MaitH XX 1r12) 'There appear fires and flames as big and tall as in the yugānta age'; the phrase *yugant üdtäki täg* here qualifies either the two adjectives *ulug bädük* 'big and tall' or the noun phrase binome *ot yalinlar* 'fires and flames'. The sentence *ada öčü(r)gü üçün sakinč ayu berälim* (TT VA 75). does not signify 'Let us tell (you) thoughts so (you) can allay dangers' but 'Let us inform you of the meditation (serving) the allayment of dangers'; the postpositional phrase is, again, adnominal, qualifying *sakinč*. This is shown by the context, where other meditations serving different purposes are mentioned. Postpositional phrases are dealt with in section 4.21, where we mention two instances of adnominal *birlä* phrases (one qualifying an adjective, another a noun). A very special type of construction dealt with there is that around the element *ulatı*, which is used when the head names a set, of which one or more members are to be mentioned attributively: Examples of this can be translated either as 'my classmates, including (or 'above all') John' or 'John and my other classmates'; note that, in the second type (where *ulatı* governs the locative and not the nominative) English can not make the 'classmates' into the construction's head.

Two nominal attributes can be linked by *är-ip*, a converb of the copula; e.g. *aglak ärip köñülkä yaraşı oron* (BT VII A361) 'a solitary place which is beneficial to the heart'; *särmälip akar suvlug ärip säp sām aglakta* (UigStab A10) 'in an absolutely isolated place with pure flowing water'; *utpal öñlög ärip iki kollug, oñ eligintä vačir tutdači ... ulug küčlög maxakalaka yükünür biz* (BT XIII 25,15) 'We bow to mighty Mahākāla, lotus coloured, two armed, holding the *vajra* in his right hand ...'. There are further examples for this in UW 408-9, §36 of the entry for *är-*.⁵⁷⁸ None of the instances are pre-classical.

⁵⁷⁸ Röhrborn writes "zur Trennung von komplexen Attributen ... ungleicher innerer Struktur," but the attributes in the last mentioned example are identical in structure. The

Consider finally the noun phrase *bökün bar yaran yok baksız mänüsüz ät'öz* 'the fickle and transient body which is here today and gone tomorrow' (r12 in a Mait colophon reedited by Laut in Ölmez & Raschmann 2002: 133): The attributes *bö+kün bar* and *yaran yok* show the predicates *bar* 'existent' and *yok* 'non-existent' used attributively and accompanied by temporal adverbs and thus come close to being verbless relative clauses (cf. their translation).

4.123. Nominal phrases with deictic satellite

Beside their pronominal function, the demonstratives *bo* and *ol* are also common as ('pro-adjectival') satellites, and then do not get inflected for case or number: There is no satellite concord in Old Turkic.⁵⁷⁹

When a noun is accompanied by both a demonstrative and one or more adjectives, the demonstrative normally precedes the adjective or the adnominal noun. The inverse order is, however, possible, as in *umugsuz inagsüz bo tünliġlar* 'these hopeless and destitute creatures' (U II 4,7, in a rather early text), *aklančġg utun bo sansar* (BT III 902, a quite late source) 'this repulsive and shameless *samsāra*' or (perhaps by poetic licence, for the sake of the rote-rhyme) *ariġ gadirakud ol tagta* (BT XIII 7,1) 'on that pure *Gr̥dhrakūta* mountain'.

Interrogative-indefinite pronouns are also used attributively, both in their interrogative and their indefinite uses. Here is an example for indefinite *nä* used in a correlative pair: *nä ymä taštġn siġarki bälgöläriġ nä ymä ičtin siġarki [bälgöläriġ] adruk adruk tülläriġ koduru kololasar* (MaitH XI 3r29-30) 'if one meticulously examines whatever external and internal signs there are as well as the different dreams'. Indefinite *kač* and *kayu* can also serve adnominally.

The reflexive pronouns *käntü* and *öz* appear in adnominal use both in their nominative and their genitive forms and then signify 'own'; examples for this are quoted in section 3.133. Where Orkhon Turkic has attributive *käntü* to show that the head is assigned ('belongs') to the sentence topic, Uygur uses *öz* instead. A further way to rhematise possession is through the genitives of personal and demonstrative pronouns (sometimes combined with *öz*). Attributive demonstratives and possessive pronouns can be used together in one noun phrase, as in *mäniġ ol kaġġm xan* 'that father of mine, the king' (KP 16,1).

UW translates *särmälip* of the UigStab A10 example (there quoted as 'UigStab 117 o. 10) as 'reinig end' but *särmäl-* is 'to get strained', hence 'purified, limpid'.

⁵⁷⁹ There appears to be a single exception in *bolar yalġoklar* 'these persons' (Fedakâr 239); the language of the mss. in Sogdian script is aberrant in other ways as well.

4.124. Nominal phrases with quantifying satellite

Numerals are joined to their head without marker, e.g. *eki šad* (BQ E 21) ‘two *shads* (a title)’; but names used for referring to tribal confederations such as *Üč Karlok*, *Tokuz Tatar* or *Säkiz Oguz* are not normal quantifications unless shortened from *üč (karlok bodun)* ‘the three Karlok peoples’ > (*üč karlok) bodun* ‘the Three Karlok people’. Numerals demand no number agreement in that heads do not have to be in the plural, e.g. *üč otuz balik* (Tuñ 19) ‘23 cities’. In Uygur, however, it is not rare to find the plural suffix in nouns accompanied by number words, often when referring to well-known and closed groups; e.g. *ol üç yäklärig anx(a)rw(a)z(a)nta badi* (M I 19,1) ‘He bound those three demons to the zodiac’; *on miñ baliklar* (Suv 603,11) ‘10,000 fish’; *säkiz tümän tört miñ ... baliklar* ‘84000 ... towns’; *altı kızlarig bulun aliñ* ‘taking six girls as prisoners’ (MaitH Y 204). *[ka]tiñ tigrak bürtgäli yumšak iki ämigläri* (TT X 445) ‘her two breasts, firm (but) soft to touch’ shows a numeral following other attributes.

Zieme 1969: 97 put together the material for the appearance of +*lAr* with nouns in Manichæan texts, when these nouns are qualified by numerals or by the quantity words *kamag*, *kop* and *alku* all signifying ‘all’ and *üküš* ‘many’ and *amari* ‘a few, some, a part’. It turns out that, in the sources reviewed, the vast majority of nouns referring to humans or to mythological beings (with the exception of *beš täñri*, which signifies ‘the fivefold god’ and not ‘five gods’ in Manichæan mythology) have +*lAr* when quantified. When these elements qualify nominals referring to other entities, these do not, in those texts, normally get the suffix +*lAr*. On the other hand the singular is by no means excluded with the first group and the plural not at all excluded with the second. More work clearly needs to be done on this matter.⁵⁸⁰

In *alku bizni barča utup yegädip* (U IV A 266) ‘surpassing all of us’ the head is a personal pronoun: ‘allness’ is here expressed both by *alku* and *barča*, but *alku* is attributive to *biz* while *barča* is predicative. In *ani alku ökünür biz* (TT IV A76) ‘We repent all of that’ the head is a demonstrative, if I understand it correctly to be qualified by *alku*.

A further quantifying adnominal construction, described in OTWF section 3.106, uses deverbal nouns in *-(X)m: är turumü suv* (DLT) ‘water the depth of a standing man’ from *tur-* ‘to stand’ is construed just like *süñüg batimü kar* (KT E 35 and BQ E 26) ‘lance-deep snow’

⁵⁸⁰ Predicative nominals are generally not put into the plural even when referring to humans, as *ol kızlar kapagēi biz tep tedi. ... kapagēi kirkün biz tedilär* (KP 41,5-42,6) ‘Those girls said “We are doorkeepers.” ... They said “We are female doorkeeper servants.”’

from *bat-* ‘to go under’. *yüz čigin uzunı ığaç* (DKPAMPb 1345) ‘a plank which is a hundred feet long’ shows that lexemes other than *-(X)m* forms were also possible in the construction described there.

We have Orkhon Turkic examples for the addition of approximative *+čA* to adnominal numerals, *äligčä är* ‘about 50 men’ in Tuñ 42 and *yüzčä ärin* ‘with approximately 100 men’ in BQ E37. Cf. further *eki üč kišiligü* ‘with 2 or 3 people’ in BQ E41 and *eki üč biñ sümüz* (Tuñ 14) ‘our two to three thousand soldiers’. In *bökünkičä uzun* (BT V 148) ‘long as on this day’ we find an equative form (see section 3.126 for what precedes the equative suffix) qualifying an adjective.⁵⁸¹

In *sän ölürmiščä ünliglar* ‘as many creatures as you have killed’ (Suv 15,18), *bo bišürmiščä ätläriḡ ... yerlär* (BT XIII 3,53) ‘eat (pl.) up this cooked meat’, *akmiščä kanlarin yalgayur* (BT XIII 3,75) ‘She licks up the blood which comes out’ and *bulmiščä sudurlariḡ šastarlarig idok yarlig üzä aktaru ärür biz* (HTs VII 1021) ‘By holy (i.e. imperial) order we are translating as many *sūtras* and *śāstras* as we can find’ the adnominal quantifying equative subordinates a headless relative clause of the type discussed in section 4.622. Attributive *-gU+čA* expresses accordance, degree or limit: *yakiši uri körgüčä yer* (TT X 512) ‘a place for the *yakša* boy to see (what was happening)’, *ärñäk učiñ sančguča yer oron* (MaitH XV 2r8) ‘a place the size of a hole (*sanč-* ‘to pierce’) one would make by the tip of one’s finger’ or *näčä taplasar, tükägüčä tavar algil* (U III 47,19) ‘Take as much goods as you wish *to the degree of using them up*’; there is another instance of *tükägüčä* in KP 4,1-4.

4.2. Adjunct phrases

Adjunct phrases are distinguished from adjuncts in that the latter are a cluster of parts of speech comprising adverbs, postpositions, conjunctions and particles, whereas the former are sentence parts defined by their syntactic function. Adverbs (discussed in section 3.31) are the part of speech whose task it is to serve as adjunct; adverbs can therefore serve as adjunct phrases as nouns can serve as nominal phrases. Postpositions, on the other hand, are, as such, *heads* of adjunct phrases; a number of them can be used as adverbs by themselves and some postpositional phrases can serve as satellites in nominal phrases.

⁵⁸¹ I take the form *sukiginča* in *ärñäk sukiginča üdtä* (Maitr 197v12 and elsewhere) ‘in the time it takes to snap one’s finger’, i.e. ‘in a moment’ not to consist of the *-gInčA* gerund of *suki-* but to have been formed by transparently adding the possessive and equative suffix to *suki-g*. *-gInčA* was apparently created in the same way (cf. section 3.286) but was clearly already fused in the earliest texts.

As postpositions they cannot be adjunct phrases by *themselves*. Relational nouns, again, can be used by themselves as adjunct phrases only inasmuch as they can also be used as postpositions (as happens with *ara* ‘intervening stretch’) and can dispense with possessive suffixes. Noun phrases in some case forms, e.g. the instrumental, also often serve as adjunct phrases.

Adjunct phrases must be distinguished also from adjunct clauses, discussed in section 4.63 (and subsections). The phrases in the construction found in *äjitä ät’özin* ‘with bowing body’, *külçirä yüzin* ‘with smiling face’, *titräyü ünin* ‘with a shaking voice’, *yaşru köñlin* ‘with secret intentions’, *titräyü* or *kamşayu ät’özin* ‘with a shaking body’, *tälmirä közin* ‘with languishing eyes’, *tikä kulgakın* ‘with cocked ears’ or *yinçürü töpön yükün-* ‘to do obeisance’ seem to me to be adjunct phrases by form but adjunct clauses by meaning: They always have a body part, the body as a whole or an abstract inalienable entity in the instrumental case as kernel and a vowel converb referring to the activity in which that body part etc. is involved used adnominally; what is expressed is, however, something carried out in conjunction with the main activity. See OTWF p.770, note 506 for references to the passages where these phrases are found.

There are a number of adjunct phrases in the sentence *näçädä temin öglänip ötrö äliglärin örö kötürüp ulug ünin ulidılar* (Suv 619,18-20) ‘At some stage, a short while after that they regained their senses, they raised their hands and wailed loudly’. *näçädä* is a temporal indefinite pronoun, *temin* and *ötrö* are temporal adverbs but *ötrö* also serves as postposition, *örö* describes the direction of movement in space and the instrumental case form of the phrase *ulug ün* ‘large voice’ describes manner; *ötrö* and *örö* are petrified converbs. *äliglärin örö kötürüp* might be an adjunct clause (see section 4.631).

Converbs themselves should, of course, also be defined as adjunct phrases when they are not adjunct clauses. Take the sentence *t(ä)ñriniñ ulug küçlüg sarsig arvişi ol yäkig [b]asa tutar* (M III nr.3 r 13-14) ‘The great strong and terrible spell of the god ... holds down that demon’. *bas-a*⁵⁸² ‘pressing’, here translated as ‘down’, merely qualifies the verb and must be considered to be part of the single main clause; the two verbs describe one and the same action.

The following two sentences (MaitH XX 1r2 and 10 respectively) show various types of adjuncts which are syntagms and not single adverbial lexemes, qualify the action and do not represent entities

⁵⁸² Not to be confused with the similarly formed adverb – postposition – relational noun, which has a different meaning.

participating in it: *yer suvlar suv üzäki kemi osoglug altı törlüg täpräyür kamşayurlar* ‘The worlds shake and rock in six ways, like a ship on water’; *kuvrag yigilmışta ken turum ara törtin yïñak ulug tigi çogı ün kügü eştılır* ‘After the congregation assembles, suddenly a big sound and noise is heard from four directions’. There is, first, the noun phrase *altı törlüg* ‘of six types’ unmarked for case, which might also qualify nominal heads but is here used adverbially. Then there are the four phrases *suv üzäki kemi osoglug*, *kuvrag yigilmışta ken*, *törtin yïñak* and *turum ara*, of the type which has been called exocentric, which cannot be used for reference to arguments of propositions. The first of these phrases describes the manner in which the event referred to takes place, as does *altı törlüg*. *törtin yïñak* describes the source from which the sounds referred to in the second sentence are heard, the four points of the compass in fact being understandable as ‘all directions’. *yïñak* is, in fact, a noun; it is so used e.g. in *ozgu kutrulgu yol yïñakıg ol nomta äşidip ...* (Pothe 63), where *ozgu kutrulgu yol yïñak* is ‘the way to salvation’. Cf. the definition *tört yïñak tört bulıñ säkiz yïñak bolur* (TT V A 62) ‘The four directions and the four corners make the eight cardinal points’. The use of *yïñak* in *törtin yïñak* is very similar to that of the postposition *sıñar* dealt with below, which also has nominal uses. *kuvrag yigilmışta ken* and *turum ara* are temporal expressions, the first specifying the point in time in which the main event takes place, the second its (short) duration. *turum ara* is a set phrase signifying ‘immediately, on the spot’, documented in UW 172 b under *ara*, § B e; it could therefore be listed in the lexicon as a unit, if Uygur has no instances of *turum* except in this phrase (but cf. *turum* ‘height while standing’ in the DLT). The phrase does, nevertheless, have a transparent structure, *ara* ‘between, among’ being in Old Turkic primarily used as a postposition. It is, however, also used as an adverb in the phrases *için ara bilış-* ‘to be acquainted with each other’, *ara tur-* and *ara kir-*, both ‘to intercede’,⁵⁸³ and as a relational noun e.g. in U III 13,7-9₂: *k(a)lti yultuzlar arasinta ay [tilgäni] nätäg çoglug yalınl(i)g közünür ärsär ançulayu ymä elig bäg olarnıñ arasinta çoglug yalınl(i)g közünti* ‘The king appeared among them brilliant and resplendent as the moon appears brilliant and resplendent among the stars’. The postposition *ken* ‘after’, which we find in the phrase *kuvrag yigilmışta ken*, can also be used as an adverb signifying ‘afterwards’; similarly the postposition *birlä* ‘with’, which then has the meaning ‘together’. The internal structure of *kuvrag yigilmışta ken* is that of a postpositional

⁵⁸³ ‘Interceding for each other’ is *ara kirış-*, to be bracketed as *(ara kir-)-ış-*. All these phrases are documented in UW 171a under *ara* (I) § A,c.

phrase; as shown by the translation ‘after the congregation assembles’, it can, however, also be considered a clause equivalent: Thus if *-mİštA ken* is classified as a complex gerund suffix; adjunct clauses are discussed in section 4.63 below. The two sentences we looked at show a variety of adjunct phrases and some of the uses to which they are put; they also reveal some of the definition problems to be encountered in trying to describe them.

Many elements have a number of syntactic functions. *adın* ‘different’, below presented as a postposition, could also be regarded as an adjective in all its uses, since its government of nouns follows from its content. The postposition *öñi* is also used adnominally, in the meaning ‘various’; [*isig*] *özün[güz]läрни (?) öñi kapıp eltgäy* (U III 14,4) ‘he will snatch away your lives’ shows *öñi* in adverbial use. *basa basa* is used adverbially, and then signifies ‘gradually’ or (in MaitH XV Nacht r 1r14) ‘continuously’. The overlap between postpositions and relational nouns, which also exists, is documented in section 4.22. Some elements have all three functions, e.g. *ara* discussed above or *tägrä* ‘around’: *tägrä toli* is used adverbially in expressions such as *tägrä toli tägziniür* (Xw 48) ‘they revolve round and round’ or *tägrä toli tururlar ärdilär* (KP 71,4) ‘They were standing round him’; there is an adverbial *tägrä* in *yagimiz tägrä oçok täg ärti* (Tuñ 8) ‘Our enemies were all around (us) like an oven (and we were in the middle like food)’. Instances of the bare stem *tägrä* governing nominals in the nominative are mentioned below; finally we have *tägrä* as auxiliary nominal, e.g. in *täñri burxan tägräsindä* (TT X 349-50). The only thing *tägrä* apparently cannot do is to be used adnominally; for that it receives the converter *+kl*, as in *känt tägräki bodun bokun* (TT X 51) ‘the population in the town’s suburbs’ or, with zero government as in the Tuñ example just quoted, *tägräki tapigčilar* (U II 22,2) ‘the servants surrounding (her)’. In *tägräki birlä yüküntäçilär* (HTs III 942) ‘those praying with (him) who were around (him)’ both *tägrä* and *birlä* get the same governed entity from the context.

Adjunct clauses are, in section 4.63, classified according to meaning. We could have done this also with adjunct phrases and dealt with phrases referring to place, time, circumstance, manner, comparison, aim, participant structure, source or means. Had we done that, we would (as done with the clauses) have had to mention elements such as *tägrä* ‘around; concerning’ or *üzä* ‘above’ vs. agentive ‘by’ under more than one heading: one meaning local, the other abstract.

4.21. Postposition constructions

Adjunct phrases are often construed around postpositions (equivalent to prepositions of some other languages but following the nominals which they govern), a limited set of elements which govern nominals though they are not verbs.⁵⁸⁴ I have called nouns which similarly form adjunct phrases by governing noun phrases relational nouns; these are dealt with in the next section. Proper postpositions are much more similar to adverbs than to nominals in lacking inflexion; when not governing noun phrases they function as adverbs.

Postpositional constructions normally qualify verbs; they can, however, also qualify adjectives or nouns: In *kök kalik birlä täñ tüz* (UigTot 1378) ‘equal to the sky’ a postpositional phrase is governed by an adjectival binome, as English *equal* governs a prepositional phrase in the translation. In *maña täñlig kişi* ‘a person like me’ (TT X 499) a postpositional phrase qualifies a noun. Another difference between these two expressions is that *täñ tüz* opens a slot for a *birlä* phrase in the same sense that the cooperative-reciprocal opens a slot for a *birlä* phrase.

Most of the postpositions govern the nominative (i.e. stem) form of nominals. These are *täg* ‘like, as’,⁵⁸⁵ *birlä* ‘with’ (e.g. *Xormuzta täñri beş täñri birlä ... kälti* ‘The god Ohrmizd came with the fivefold god’ in Xw 2; inscriptional *tatar birlä toki-* ‘to clash with the Mongols’), *üçün* ‘for; because of’ (e.g. *nä üçün* ‘why; what for’, *bursañ kuvrag üçün* ‘for the congregation’ in Mait 71v27),⁵⁸⁶ *utru* (e.g. *Xilimbî yäk utru bardî* ‘He advanced against the demon Hiðimba’ in U II 26,17), *töni* ‘during’ (examples in Zieme 1992) and *tapa* ‘towards’ (e.g. *täñri elig tapa*

⁵⁸⁴ Old Turkic postpositions do not govern adverbs or adverb equivalents; ‘as before’ is therefore *öñräki täg* (BT XIII 8,10-12), not *öñrä täg*.

⁵⁸⁵ And its Oguz counterpart *kepi* mentioned in the DLT (fol.471 *korum kepi* ‘like a boulder’, 243 *kuşlar kepi* ‘like birds’ etc.), < *kep* ‘mould’ + possessive suffix.

⁵⁸⁶ Gabain 1974: 142 (§301) quotes “*barimiy üçün*” from Radloff’s edition of the Yenisey inscriptions; Radloff had transcribed this as *barmay üçün* (with an A which he did not transcribe following the word *üçün*). The passage occurs in E11,3, with Vasil’ev 1983:20 emending away the g¹ (presumably because he was aware that *üçün* does not govern nouns without possessive suffix in the accusative form): Both Kormuşin 1997: 273 and Kurt Wulff in his unpublished edition of this inscription read b¹r¹mg¹ ũčt²ũ y¹l¹k¹I t²ũk²t²I; I accept this especially since the two readings are independent of each other. Understanding the passage is more difficult. Kormuşin takes *tü* to signify ‘kind’ (this meaning being attested several times in Qarakhanid) and thinks that *üç tü yilki* are three kinds of livestock – horses, cows and sheep. He may be nearly right: The phrase may refer to pack, riding and draught animals such as camels, horses and donkeys (cows and sheep are not *yilki*). *üçün*, at any rate, must here be a misreading.

‘towards the divine ruler’ in M III nr.27 r1). Very many examples of *ara* ‘between, among, mutual’ are listed and partly quoted in UW 170-172, which we therefore need not do here. *ikin ara* is in fact often used as *ara* by itself, e.g. in *yig aš ornī bišag [a]š ornī ikin ara* ‘between the place of raw food and of digested food’ (MaitH XV Nachtr 4r24) or *iki ämigi ikin ara* ‘between her two breasts’ (Mait 33r21). *tägrä* is used as a postposition, e.g. in *känt tägräki bodun bokun* (TT X 51-2) ‘the people around the town’: We find the phrase *ätözün tägrä körsär* used in parallel with *ig tapa körsär* in TT I 219-220, signifying ‘if you examine (the oracle) concerning your body’ and ‘concerning an illness’ respectively, i.e. with the same meaning as *tapa*. *yokaru* is normally an adverb, but in TT V A 4-11 we find it to govern nouns in the nominative: *tiz yokaru belkä t(ä)gi suv ulug titir ... bel yokaru köküz äginkä tägi ot ulug tetir ... ägin yokaru saç kidiğinka tägi yel ulug tetir* ‘From the knee upwards till the waist (the element) water is said to dominate... From the waist up till the breast and the shoulder fire is said to dominate ... From the shoulder upward till the edge of the hair (the element) wind is considered to dominate’. In *t(a)mudan yokaru agdokta* (M I 13,15) ‘when they rose up from hell’ *yokaru* can be considered an adverb. *art-ok* ‘more’ can, already in Orkhon Turkic, govern the nominative of quantitative terms: *yarikinta yalmasinta yüz artok okun urti* (KT E33) ‘(They) hit him by his armour and his cloak with more than a hundred arrows’. Similarly in Uygur *siruklar kamağ m[i]ñ beš yüz artok, tawçanlar [ku]žatrilar üç yüz artok; ... ičirtin ünmiş ... iki yüz artok burxan[la]r ...* (HTs VII 1111-1114) ‘The ... poles were all in all more than 1500, the sedan chairs and tents more than 300; more than 200 ... Buddha (figures) which had appeared from inside ...’ or *bir ay artok ačinti* (KP 68,2) ‘They took care of him for more than a month’. *bir tsun artok* (HTs III 975) is ‘more than an inch’. Normally *artok* is an adverb governing the ablatival locative or (e.g. in BT VIII 143) the ablative.

eyin ‘as a result of; according to’ can govern two different case forms with no apparent difference in meaning: We have the nominative in the Manichæan ms. U 122a v4 (edited in Zieme 1969: 198) and TT II,2 26, 27, 35, 46 and 82 (e.g. *öpkä bilig eyin* ‘as a result of wrath’) and in Buddhist *üd eyin* (Suv 596,22), *ayig törö eyin ävril-* (U III 79,4), or *täñri burxan eyin bar-* (TT VIII A 17) ‘to follow the divine Buddha’; the phrase *köñül eyin* ‘to one’s heart’s desire’ is especially common. However, it governs the dative in *nizvanilarka eyin* (Pohti 203, also Manichæan but later), *bo yörukä eyin bol-* (HTsBiogr 188) ‘to accord with this view’, *ayig öglilärkä eyin bol-* (Suv 101,18) and e.g. in TT

VIII A 16, 46, ETŞ 13,24 and 16,43. In TT VI 196 one ms. has *ayig kilinč eyin bar-* where another writes *kilinčka* instead.

kudī governs the nominative in *sälänä kudī* ‘down the Selenga (river)’ in BQ E37 and ŠU E4, but the locative or (more often) the ablative in the rest of Old Turkic. *kudī* comes from *kud-* ‘to pour’ because liquids move downwards, including the river mentioned in this example. The contexts in question thus show the word in its original function, and we do not know whether it retained its government of the nominative once its use was extended to cover downward movement in general.

täg is the postposition which has the closest juncture with the nouns it governs: It is often spelled together with them (see examples below) and even becomes a case suffix with some pronouns (governing the oblique stem and not the accusative form and following synharmonism). *täg* and *üčün* are never used as adverbs nor as relational nouns, and there are some indications that *üčün* may (like *täg*) have had phonically close juncture with what it governs in some Yenisey inscriptions.

There are four postpositions formed with *+IXg* which do not yet appear in inscriptional or in Manichaean Turkic: *tänlig* appears to be exclusively Buddhist while *osoglug*, *yaŋlig* and *tägimlig* are in addition found in Qarakhanid Turkic. *tänlig*, which generally governs the equative, and *tägimlig*, which governs the dative, are dealt with below. *osoglug* and *yaŋlig* govern the nominative, e.g. *taloy ögüz osoglug* ‘similar to the sea’; *siŋirgälir osoglug kilin-* in U I 41, ‘to behave as if one were to swallow somebody’, *nä yaŋlig* ‘in what way’ both in Uyğur (e.g. TT VIII A2) and Qarakhanid. What is peculiar about *osoglug* and *yaŋlig* is that they also govern the pronominal forms formed with the postposition-turned-case-suffix *+tAg*, e.g. *montag yaŋlig* ‘in this way’ frequently in the Suv or in BT XIII 13,111, *mondag osoglug* (TT VIII A37) or *nätäg osoglug* (U III 57,6₁). Being practically synonymous with *täg*, *osoglug* and *yaŋlig* may have come up to strengthen the meaning of *täg* and to make it more explicit. Similarly *tänlig* appears to have emerged because of the need to make quantitative *+čA* more explicit and focussed.

When the postpositions mentioned hitherto govern demonstrative or personal pronouns or the pronoun *käm/kim* ‘who’, the governed pronoun appears in the accusative form, e.g. *munī täg* ‘like this’ (Pohti 104) *bizni täg* (common) ‘like us’, *bizni ara* (M I 10,2), *sizni birlä* ‘with you’ (TT II,1 1) or *kimni üzä* ‘over whom’ (M III 22,11₂, nr.8). *sini üčün* (Mait 77v5) and *sizni üčün* (M III nr.7 I v2, nr.18 v15) ‘for you’,

anı üčün ‘therefore’ (a number of times). We have *olarni üzä* in ms. U 274 v9⁵⁸⁷ and *olarni birlä* in HTs III 388 but *olar ara* in M III nr.32 r5.

The postposition *ara* governs the genitive in *olarniñ ara* ‘among them’ (MaitH XXI 3v5, XXIII 12r6), though it otherwise governs the accusative of pronouns. This may have come up in analogy to the relational noun constructions, where the genitive is the only admissible case for pronouns. Remember that *ara* is originally a noun and that it was also used as relational noun. The demonstrative pronoun appears in the genitive also in the common phrase *anıñ ara* ‘in the meantime’ (in MaitH XX 1v3 and elsewhere). In Qarakhanid Turkic the accusative is replaced by the genitive altogether, e.g. in *mäniñ tapa* ‘towards me’, *anıñ birlä* ‘with him’, *anıñ kepi* ‘like him’ (DLT). This development is echoed by the genitive being used also as alternative oblique base in those sources, as e.g. *säniñdä*, *anıñdin* or even *säniñsiz*. Cf. also already *anıñ utru turdaçı yok* (U IV A283) ‘There is no one to stand against him’.

The same postpositions governing the accusative forms of pronouns also govern the accusative of nominals with 2nd or 3rd person possessive suffix, as *elin ičrä* ‘in their realm’ (M III 19,15), *käntü köñülin ičrä tari-* ‘to plant into their own hearts’ (M III nr.8 VII r3);⁵⁸⁸ *ordolarin ičrä* ‘in their palaces’ (Ms. U 267a I r1 -4 quoted in the n. to BT V 214); *özintäg*, *ortosintäg*, *oronintäg* and *olorgusintäg* (spelled thus in BT V 175-6), *yarokin täg* (M II 8,13); *bir äki atlig yavlakin üčün* ‘because one or two knights were wicked’ or *antagiñin üčün* (KT S8 = BQ N6) ‘because you are like that’, *armakčisin üčün* (KT E6), *tömgäsin üčün* ‘even though they are foolish’ (Mait 2r2),⁵⁸⁹ *yerin tapa* ‘in the direction of his place’ (ŠU S6), *käntü ätözin üzä* (M III nr.8V r4) ‘by his own body’, *zrušč burxan töpösün üzä* (ManUigFrag v3) ‘on the head of the prophet Zarathustra’, *kamaguñuzni üzä* ‘over all of you’ (M III nr.27 r18; for a long time misread), *otın birlä* ‘with their herbs’ (M I 15,6-7), *täñrilär arıñin utru* ‘before the purity of the gods’ (quoted in Zieme 1969: 127), *ay täñri küñin sayu* ‘on every Monday (< moon day)’ (Xw 183).⁵⁹⁰ The very common phrase *äkin / ikin ara* ‘between the two’

⁵⁸⁷ r8 according to Wilkens 2000: 229.

⁵⁸⁸ The same phrase with *ičrä* should be read also in nr.8 IV r15, where the editor writes *köngülin [a]ra tik- tari-*.

⁵⁸⁹ Replaced in the (linguistically) later Hami ms. (Yükünč I 1a6) by *tömgäsi üčün*; cf. Laut 1986: 49 n.2.

⁵⁹⁰ Gabain (1974: 135 and elsewhere) thought that the accusative in these phrases came from the fact that so many of the postpositions originally were converbs (as e.g. the last one mentioned). Another explanation would be that the form was in fact an oblique stem, as found also in a part of the pronouns before some case suffixes. On the

appears to follow the same structure although the second syllable of ‘two’ is not the possessive suffix synchronically; see UW 171-3 for examples. *yüzün utru* in M III nr. 8 VII v9 is an exception, as one would expect **yüzün*. Doerfer 1992 takes this single exception (which stands beside a huge number of cases where the suffix is a normal accusative), the phrase *äkin / ikin ara*, the form *sizintäg* ‘like you’ in ChrManMsFr ManFr r 10⁵⁹¹ and plural personal pronouns which have an intercalary +*Xn*+ in oblique cases as indicating that there was an oblique stem beside an accusative. This is possible but not certain.

In Uyğur it often happens that nominals with 2nd or 3rd person possessive suffix are in the nominative and not the accusative form when governed by postpositions, but in Manichæan texts these instances are a tiny minority: *kälän käyik muyuzi tæg* ‘like the unicorn’s horn’ (T I 105); *töpösi üzä* ‘with his head’ (U II), *täñri elig kuti birlä* (HTs VIII 25) ‘with his divine majesty the king’, *bo montag üküš ädgülärniñ kapigi ücün* (HTs VIII 46) ‘because it is the gate to this much good’, *ogli ücün* (KP 8,5) ‘for his son’, *yiñnü tizigi tæg* (TT X 450) ‘like a row of pearls’. *tašig özi üzä tutsar* ‘if one keeps the stone on oneself’ even appears in a runiform ms., Blatt 17. In E32 I Vasil’ev’s text can be read as *är ärdämi ücün* (as done by Doerfer 1992:99) and this is also what Thomsen and Wulff have.⁵⁹² The Manichæan ms. M III nr. 15 has two instances of this type: *yarlikamiši ücün* ‘because he ordained’ in r 2 and *eligimiz kuti üzä* ‘over his majesty our king’ in v 23;⁵⁹³ the phrases *buyan tüši üzä* and *tiliñiz üzä* appear in a late Manichæan text, in Pohti 376 and Pohti 108 respectively. *ätözün tägrä* ‘concerning your body’ appears in TT I 219, a late text.⁵⁹⁴ In Suv 18,21 *tägrä* appears to govern the nominative of a pronoun: *ol nom ärdini bo tägrä adin yertä yok* ‘That valuable book is not found anywhere else around here’.

Nouns with 1st person possessive suffixes do not have the accusative suffix; e.g. *olortokum ücün* (BQ E 36) ‘as I reigned’, *yavašim birlä* (M II 8,16) ‘with my gentle one’, *öz kazgančim üzä* (KP 12,2) ‘with my own earnings’ or *yüzümüz utru* (TT II,1 6) ‘before our face’.

other hand, the process may also have originated among the postpositions, as some of those case suffixes may hypothetically have originally been postpositions.

⁵⁹¹ This form presumably came about because *tæg* was in the process of becoming a case suffix since the Orkhon inscriptions; cf. *antag, montag, bintägi* etc.

⁵⁹² Kormušin 1997: 115 (1.5) was unable to see this.

⁵⁹³ In both cases the possessive suffix is spelled with two *yods*, but this is a text in Manichæan writing, where *alef* and *yod* are not at all similar.

⁵⁹⁴ *küvrügüni tæg* (TT VIII G70) does not have an aberrant accusative of the possessive suffix but should be read as *küvrüg üni tæg* ‘like the sound of a drum’.

When a genitive of any nominal gets nominalised, it stays in the genitive form when getting governed by a postposition, e.g.: *agür ayig kilinçlarım olarniñ tæg arizun alkinzun* (Suv 139,13) ‘May my grave sins get purified and annihilated like theirs (i.e. the bodhisattvas)’. This is not to be confused with the genitive replacing the accusative of pronominal forms without semantic justification.

Few postpositions govern the accusative of nouns. Gabain 1974 § 278 lists *käčä* ‘(in) crossing’, which governs the names of rivers in the accusative in KT and BQ, among the postpositions; there is no reason to take this converb to be petrified, however, and its use and meaning in no way differs from what a converb of *käč-* should have. *tuta* ‘concerning’ does, however, appear to differ in meaning from what would be a converb of *tut-* ‘to hold’ and may therefore have become a postposition: *munda kirligig tuta sözlämiš ol, kirsizig tuta ärmäz* (Abhi A 30a7) ‘This has here been said concerning the polluted, not concerning the pure’; *näčä adin oronta yarlikasar ymä ... vaynikilig tinliglarig tuta ärür; bo yöriügig tuta ärmäz* (Abhi B 98b7) ‘Even if one preaches elsewhere, this is (done) with respect to converted creatures, not with respect to the present interpretation’. Abhi being a very late text, the emergence of a postposition governing the accusative may be a late development.

tägi ‘till, all the way to’ governs the dative; it is often spelled together with the word preceding it, as in *täñri yeriñätägi* ‘all the way to the land of the gods’. It does not necessarily imply physical movement: *siñiri tamiri süñükiñä tägi közünüp ärtiñü turuk bolup ...* ‘his muscles and veins were visible right down to his bones and (he) had become exceedingly lean’ (U III 35,20). *ogšati* ‘similar to’, a petrified converb derived from *ogša-* ‘to resemble’ which is common in Buddhist texts, could also be a postposition: In *täñridäm yaña[nin]g tumšukinğa ogšati ... säviglig körtlä iki kolin bäk tutup* (U III 24,9) ‘holding fast his two ... lovely and beautiful arms, which resemble the trunk of the divine elephant’, e.g., it would be a synonym of *tæg* or *osoglug. yaraši*, e.g. *igiñä yaraši nom örüntäg* (MaitH Y 268) ‘a religious medicine suitable to their illness’ or *könülkä yaraši oron* (BT VII A361) ‘a place suitable for the soul’, can also be considered a postposition. Similarly *tägimlig* ‘worthy of’, which also governs the dative: Its first part is a semantically not very transparent *-(X)m* derivative from *täg-* ‘to reach’. *eyin* governs the dative beside the nominative; examples are given above.

utru governs the nominative beside being commonly used as an adverb. In *elig bägkä utru yoriyu kälti* (U III 63,6-7) ‘He came walking

towards the king' it may be governing the dative; *elig bāgkā* is less likely to have been governed by *käl-*.

The local and temporal postpositions *üzä* 'over; by', *öjrä* 'before' and *ičrä* 'in, into' can govern both the nominative and the locative: e.g. in *muntada öjrä* 'before this' (U IV A 263) and *ävi on kün öjrä ürküp barmiš* 'Their households are said to have fled ten days earlier'; *kiši oglında üzä* (Orkhon Turkic); *barčada üzäräk* (BT V 171, with the comparative suffix) 'higher than everything (else)' and *on uygur ... üzä ... olorup* 'ruling over the O.U. ...'. The phrase *suv ičrä* appears both in M I 17,14 and 35,17 but signifies 'in' in the first and 'into' in the second passage: *balak suv ičrä yüzärčä* 'as (a) fish swim(s) in the water' vs. *kuyk[a]sin ... suv ičrä kämišmišlär* 'they threw its skin into the water'.⁵⁹⁵ In *iki yarok ordo ičrä olorugma* 'residing in the two palaces of light' (Xw 52) it is the former, in *sagir ičrä älik keyik kirmiš* (IrqB 63) 'a roe deer entered the ring of beaters' the latter. Then we have *ičrä* governing the locative, in *anta ičrä* (M III nr.4 v16) 'inside that'. *asra*, another +rA form, is not attested with the locative; with the nominative we have it in what appears to be a lexicalised phrase: We have *adak asra kil-* 'to subdue' and *adak asra bol-* 'to be subdued' (see both in UW 235a, § B of the entry for *asra*). See section 4.1107 for other syntactic functions of +rA forms. Some +dXn forms govern either the locative, e.g. *kuvragta taštän* 'outside the congregation' (HTs III 802), *iki yašda altin* 'under two years of age' (U I 10, Magier), *käyrädä öjdüin* 'east of Käyrä', or the nominative: *sälänjä kedin* 'west of the Selenga (river)' (inscriptional), *balik taštän* 'outside the town' (KP 1,2), *öjü öjü sögüt altin* (Udayana 30 in *SIAL* 18(2003): 157) 'under different trees'.

tašra and *taštän*, both 'outside', *kesrä* and *basa*, both 'after', and *körö* 'compared to, with respect to' are attested with the locative case: *kop ädgüdä ičrä, kamağ ayğda tašra ärzünlär* (MaitH Y 33) 'May they partake of all good and be free of all evil'; *bir braman [ol] kuvragta taštän turup ...* (HTs III 801) 'a brahman was standing outside (that) company and ...'. *kesrä* appears not to have been used outside the runiform inscriptions, e.g. *anta kesrä* in Tuñ 6, KT, ŠU N 10-12, and (rarely) the Manichæan sources, e.g. *antada kesrä* 'after that' in Xw 138. *basa*, which became a postposition only in Uyğur, appears in the very common phrase *anta ~ antada basa* 'thereupon' and in *munta basa*

⁵⁹⁵ The locative case is used for motion *towards* a goal beside denoting lack of movement when this motion results in the moving object staying in its destination; similarly, the use of *ičrä* with movement may have been licensed when the result was a static situation

‘hereupon’ (BT II 154 and 914, once in Suv) or *montag tep yarlikamišda basa* (Suv 463,11) ‘after having preached with these words’ *olar burxan kutin bulup ärtmištä basa anta ken* (BT II 1330) ‘after they will have reached Budhahood, afterwards, ...’. *körö* appears in proverbs: *altun sarigita körö ešič karasi yeg; yürüü⁵⁹⁶ kümüşdä körö ayak tolosi yeg* (HamTouHou 16,13-14) ‘Better than yellow gold is that the pot should be black; better than white silver is that the bowl should be full’ and *äšidmištä körö körmiš yeg* (ThS III a3) ‘To have seen (something) is better than to have heard (about it)’; it is also attested in the DLT. The (petrified converb and) adverb *ašnu* ‘previous(ly)’ also governs the locative when used as postposition, e.g. *üküş ažunta ašnu* (Arañemi 1 a r13) ‘many existences earlier’; further examples of this are mentioned in UW 243b under *ašnu* § C).

Normally, postpositions which govern the locative in ablative or separative meaning are also (at least occasionally) attested with the ablative. The reason that this does not happen with the three postpositions mentioned last is that *kesrä* appears only in texts where the ablative is exceedingly rare, *öñrä* is normally an adverb and is hardly ever attested as postposition and *basa* (beside its adverbial functions) normally appears with the pronouns *anta* or *munta*.

One of the postpositions governing both the locative and the ablative is *adin* ‘other than’, which is documented in its ablatival function in UW 50a (lower half) for Uygur. It is often used together with *öñi* ‘distinct, different from; except’, e.g. in *muntada adin takı öñi aš ičgü yok* (Suv 610,16) ‘There is no other or different food than this’. For *öñi* cf. further *küntä ayda öñi* (Xw 64) ‘other than sun and moon’; *isig özlärintä öñi üdürdüm* ‘I separated them from their lives’ and *nomta öñi* ‘except by the doctrine’. The ablative itself can also get governed by *öñi*, e.g. in *isig özlärintin öñi adirtim* (Suv 135,17).⁵⁹⁷ With these instances we should raise the question as to whether *öñi* is not phraseologically related to the verb in such a way that the +*dIn* forms are not governed by *öñi* by itself but rather by the verb phrases *öñi üdür-* and *öñi adir-*; the answer is probably negative. *öñi* governs numerals (discussed in section 3.14) in the nominative. *ötgürü* ‘because of’ has the same government pattern (except the feature of *öñi*

⁵⁹⁶ Spelled as YWRWK, as a spelling characteristic; not very likely to have been pronounced as *yürüg* although the loss of the pronominal *n* in *sarig+i+ta* (spelled SRXYT) does make that a possibility.

⁵⁹⁷ The phrase in *antin öñi yolča* in (U I 9,7) could perhaps also be read as *adin öñi*, a common binome to be read also on l.14 of the same page in reference to the same circumstances, also with T for /d/ under voice confusion.

mentioned last): *övkälärintä ötgürü* (U IV A 34) ‘because of their anger’ or *nägüdä ötgürü* (U II 5,14) ‘for what reasons?’. With the ablative: *k]ertgünčintin ötgürü* (Pohti 374) ‘because of their faith’; *bo üčägünüñ kavışmakindin ötgürü* (Suv 52,19) ‘because of the conjunction of these three’, *küçlüg täriñ kertgünč köñüllärindin ötgürü* ‘because of their strong and deep faith’ (ShōAv 112).

Most postpositions which (at least in part determined by dialect and historical development) can govern either the locative or the ablative have temporal meaning: Of *bärü* ‘since; from ... on’ we have the locative in *antada bärü*, *antadata bärü* and *ančada bärü* ‘since then’ or e.g. in *üküş üdtä bärü* (M I 11,17-18) but the ablative in *bolmüšdän bärü* (ms. U 130a v6, in Wilkens 2000: 444); *-mIšda bärü* is attested very well; cf. section 4.633. The sentence *baštän bärü atakka tägi okitüm* (thus instead of *adakka* and *okidim*) ‘I have read it from beginning to end’ is a very late reader’s addition to a Manichaean text in M I 30,24. *ötrö* ‘after, following’ mostly governs the locative: *uktokta ötrö* ‘after having understood’ (MaitH XV 5v21) or *anda ötrö* ‘thereupon’ (Tuñ 16); *nädä ötrö* (M III nr.6 II v 13) signifies ‘why?’. It is also attested with the ablative, however, in *beš törlüg savdan ötrö* ‘as a result of five types of things’ (M III nr.8 V r7-8). We have found ablative instances even for *ken* ‘after’, which is practically always (and very often) attested with the locative: There is *andän ken* ‘thereupon’ in TT VII 28,47, *tüdmaktän ken tugdači nomlarig* ‘after restraining the principles which will emerge’ in Abhi 3597 and 3598. Examples with the locative are *mintä ken* (M I 29,16; 30,17) ‘after me’, *anta ken* (TT II,1 30 and elsewhere) ‘thereafter’, *tör[t] burxanlarta ken* (Pohti 66) ‘after the four prophets’ or *yögülmüšta ken* (MaitH XX 1r10) ‘after having assembled’. *ınaru* is attested with the locative e.g. in *muntada ınaru* ‘from now on’ (M III nr.9 II r9), *bo kündä ınaru* ‘from this day on’ (U III 65,2-3₂ and a number of times elsewhere) but with the ablative in *säkizinč orontän ınaru burxan kutän bulgünčaka tägi* (Suv 237,18) ‘from the eighth position on till one reaches buddhahood’.

The only local postposition which is used both with the locative and the ablative forms (with no apparent semantic difference between the two) appears to be *kudä* ‘down (from)’: We have it with the locative in *kök täñridä kudä* (M III nr.15 r10) ‘down from the blue sky’ but with the ablative in *kalikdan kudä* (M III nr.8 VIII v6-7) ‘down from heavens’, *üstüntän kudä* (M III nr.8 v10) ‘down from above’ and *oronlukdän kudä* ‘down from the throne’ (KP 61,5-6). Above we quoted examples for *kudä* from the runiform inscriptions, where it governs the nominative.

ulatī ‘others in addition to; etc.; including’ governs the locative or the nominative. The head for postpositional phrases formed with this element is the name of a set; what it governs are one or more members of this set. When the governed phrase(s) is / are in the locative, they are members of the phrase as it is conceived but not as it is named; here an example to clarify what I mean: *bir kiši ölüit ölüirmäktä ulatī tokuz karmaputlarīg ... ärtsär* (text quoted in the n. to TT IV A 11) ‘If a person commits murder and the other nine sins’; if the phrase had been in the nominative we would have found the number ten and not the number nine, as the first one would have been presented as being included in the referent of the head: In Buddhism there are ten sins. Cf. further *tilkü böritä ulatī yaviz tñlīglar butarlayu tartip ...* (U III 79,1) ‘fox, wolf and other evil creatures tear it to shreds’. *üztä buzta ulatī üküš tälīm nizvanilar* (Pohti 33) ‘hate and the other numerous passions’ and *azta ulatī nizvanī* (TT IX 22) ‘greed and the other passions’ are Manichæan examples for this construction. *ulatī* can also govern the nominative, e.g. in *az ulatī nizvanilīg ayīglar* (U III 88,4) ‘lust and the other evils of passion’. This is practically identical in content to the last example mentioned with a locative, but there is a difference: In runiform *atī öz apa totok ulatī kamīg atlīg yüzlüg otuz är* ‘thirty (of us), all men of renown, the (ruler’s) nephew Ö. A. *totok* and the others’ (4th Stein ms., l.6), the overall number of men was 30, the head referring to the whole group including the set member(s) mentioned. Other such examples are *bars irpiš böri ulatī yavlak tñlīglar alku tüzärlär* (TT VI 116) ‘Evil creatures such as tiger, panther and wolf will all flee’, *bušī ulatī altī paramit* (Arañemi 1 a r 5) ‘the six virtues including almsgiving’ or *ötrö yay kiš ulatī tört üd adrīlur* (TT VI 324 Var.) ‘Then the four seasons including summer and winter separate’; one could also write ‘the four seasons, i.e. summer, winter etc.’. Functionally, *ulatī* is a marker serving the configuration of noun phrases (cf. section 4.12).⁵⁹⁸

siñar ‘side’ signifies ‘in the direction of’ when it serves as postposition.⁵⁹⁹ It appears to govern the directional *+dXn* form or, less likely, the ablative. We find it throughout Old Turkic: *beridin siñar* ‘in the south’ ŠU E 3 (runiform inscription) and BT V 193, *künbatsikdīn siñar* (BT V 195); *küntugsukdan siñar* (BT V 195); *kün ortod(u)n siñar*; *irdīn siñar*; *yird(i)n siñar* *kī yel*; *kün ortodun siñar*; *birgarudun*

⁵⁹⁸ See Moerlose 1986 for a good account of the meanings and functions of *ulatī*.

⁵⁹⁹ *siñar* is used in BQ E 2 in a sentence where the EDPT translates it as ‘wing (of an army)’. It can later refer to ‘one of a pair’, and also signify ‘half’. This and the uses as postposition can be considered to belong to the same lexeme. In South Siberian Turkic *siñar* went through a process of grammaticalization and became a case suffix.

sīnar ‘from the west; to the east; from the south; to the north; the northern wind; to the south; in the south’ M III 9,4-0,15 (Manichaeon), *koptīn sīnar* ‘in all directions’ Pothi 60 and U III 29,2; *kayutīn sīnar ... antīn sīnar* U II 29,19-21 (Buddhist), *ontun sīnar* ‘in ten directions’ in HTs VI 1528 etc. We also find it with *ič+tin* (TT VII and X) and *taš+dīn* (TT IX 90 and TT X), *iki+dīn*, *tört+tin*, *tokuz* (thus) and *on+tin*. It governs the locative form in *kūn ortoda sīnar* (M III 10,8) and the nominative in *on sīnarkī burxanlar* (TT VIII). *yīnak* ‘point of the compass, direction’ also serves as postposition governing this same form; examples for both the nominal and postpositional use are mentioned in section 4.2; the EDPT quotes examples for the expressions *ōñtūn*, *tagtīn* and *kedīn yīnak*, signifying ‘eastwards’, ‘northwards’ and ‘westwards’ respectively. In *tāñri burxannīñ oñtun yīnak turdī* ‘he stood ... on the right hand side of the divine Buddha’ (TT X 158 as completed by Zieme in his ‘Nachlese’) we see that *yīnak* does not get a possessive suffix even if the phrase is qualified by a genitive.

tāñlig ‘as much as’ (= Turkish *kadar* with nominative) governs the equative of measure; the most common instances are pronominal: *nāčā tāñlig* ‘how much’ (U III 73,2, TT X 345, several times in *Suv* etc.), *munčā tāñlig* ‘this much’ (*Suv* 419,7) and *īnčā tāñlig* (*Suv* 351,16) and *ančā tāñlig* (*Suv* 155,22, 176,6) ‘that much’. Further, *bir padakčā tāñlig nom* ‘as (little as) a single verse from the doctrine’ (U III 29,16).⁶⁰⁰

Postpositions can have abstract (e.g. *üčün*, *täg*, *osoglug*) or concrete (e.g. *kudī*, *tapa* ‘towards’) meanings. Postpositions in abstract use are found to govern not only noun phrases but also clauses (causal and final clauses *üčün*, comparative clauses *täg* and *osoglug*). When governing just nominals and not clauses, *üčün* usually signifies ‘for’; not, however, in the *Xw*: *azu muñ üčün*, *azu bušī bergāli kīzganīp yetī türlüg bušī nomka tükāti berü umadīmiz ārsār* (*Xw* 168) ‘if we were unable to fully give seven types of alms to religion whether *because of* distress (*muñ üčün*) or *because we were too stingy to give*’; *üzā on kat kök asra säkiz kat yer beš tāñri üčün turur* (*Xw* 77) ‘The ten levels of heavens and the eight levels of earth subsist *thanks to / through* the Fivefold God’.

täg is practically synonymous with some of the uses of +čA: In TT VI 336-9 we find *kīši āt’özīn buluglī antag ol kaltī tīrñak üzāki tuprak täg*; *üč yavlak yolka tūsügli ančā ol kaltī bo yertāki tuprakčā*; ... *kertgünč köñüllüg tūnliglar ančā ol kaltī tīrñak üzāki tuprakčā* ‘Those who

⁶⁰⁰ *m[āṇa] tāñlig kīši* cannot be reconstructed in TT X 499 as *tāñlig* does not govern the dative.

acquire a human body are e.g. like (*täg*) soil on one's nail; those who fall into the three evil ways are e.g. like (+*čA*) the soil in this earth; ... creatures with faith are e.g. like (+*čA*) soil on one's nail ...'.

Some postpositions, like *üzä* or *tägrä*, have both concrete and abstract meaning: *tägrä* means either 'around' or 'concerning' (like English 'about'); *üzä* can signify 'over, on' (as in the sentence just quoted or some quoted above) but also governs noun phrases referring to instruments or aspects of activities or states (e.g. *öz kazgančüm üzä ädgü kilinč kilayin* 'I would like to do good deeds by my own merit' in KP 12,3 or *ün ägzig üzä yegädmiš* 'excellent through his voice' in BT II 511) and (in Uygur) to the agent in the passive (see OTWF 692-693).

sayu 'all' appears only in local expressions but deletes the case suffix of the noun phrase it governs; this is explained by etymology, the form presumably coming from the vowel converb of *sa-* 'to count': In *kay sayu bodun sayu* 'to every street and every tribe' or (HTs VIII 69) *buluñ yinäk sayu yaddılar* 'they spread (the teachings) to the corners of the globe' the implicit case suffix is the dative; in *kalmiš süñük yer sayu* (Suv 626,16-17) 'the bones remain everywhere' or *üküş äriš bodun sayu* (Wettkampf 58) 'among very much of the public', the implied case is the locative: The verb governing the postpositional phrase disambiguates these contents.

There are two or perhaps three converb markers consisting of converb + postposition: There is *-A birlä*, which is a well attested analytical temporal converb suffix (cf. section 4.633; *-A* does not have specifically temporal content by itself), and we find a few instances of a sequence *-gAll üčün*, where the meaning of the converb suffix and the postposition are in mutual support (cf. section 4.636). In the first case, *birlä* probably was an adverb also signifying 'at once', which did not govern the vowel converb; in *-gAll üčün*, *üčün* disambiguates, as *-gAll* can also signify 'since'. *turginčara* in Höllen 21, 72 and 78 is likely to be contracted from *turginča ara* and to signify 'as long as they stay (in that hell)'; cf. *turginča için ara biliš-* 'to be acquainted with each other'. Here the postposition would again be strengthening the meaning already found in the converb form. In Abhi 1398-99 there is a similar construction (but with *ekin* between the two words).

täg can govern finite verb forms; e.g. *munuñ tüšämiš tällärin koduru kololar män otguratı ordog karšig kodup tašgaru üngäy täg män* (MaitH XIII 4v7) 'If I deeply meditate on the dreams she dreamt, it looks as if I would definitely abandon the palace and go out', where I have translated the postposition as 'it looks as if'. See section 3.27 for epistemic content and historical connections of this verb phrase.

4.22. Relational noun constructions

Relational nouns are a set of nouns linked to the nominal they govern through an izafet construction, i.e. what I have dealt with as ‘nominal phrase with possessive satellite’ in section 4.121. Within such phrases relational nouns serve as head with possessive suffix; typically, they are in the locative case. In earlier Uygur, nouns governed within such constructions are in the nominative and not in the genitive case, as would have been equally possible if these were normal izafet constructions; governed pronouns, on the other hand, are in the genitive case. With nouns with possessive suffixes we appear to have both possibilities. Governed nominals can also be replaced with zero reference to the context, i.e. disappear; the stable mark of the construction is the possessive suffix added to the relational noun. A number of elements are both postpositions and relational nouns; they will be dealt with further on. Nouns which also serve as postpositions but do not appear in the izafet type of structure are here not classified as relational nouns; this is the case with *yīḡak* ‘direction’, which governs nouns in the +dXn form and does not need the possessive suffix to do so. We first give a list of relational nouns, with a few examples:

The concrete relational nouns denote relative placing or timing, used in the locative case form. Such are *ič* ‘the inside’ (e.g. *äv bark ičintä* ‘in a house’ TT II,1 42), *taštīn* ‘the outside’ (e.g. *sugčēn taštīnīnta* ManBuchFr p.148,5² ‘outside Su-chen’), *öḡ* ‘front; face’ (e.g. *siziḡ öḡüḡüzdä* ‘before you’ M III 24,4₄ nr.9 II), *orto* ‘middle’ and *üsk* ‘presence’ (e.g. *maytri täḡri burxan üskintä* ‘in the presence of the divine Buddha Maitreya’ TT IV B48 or *māniḡ üskümtä* ‘in my presence’ TT X 203); also others, which we mention below as they are also used as postpositions. *öḡ* ‘face’ and *baš* ‘head’ (*bašīnta* e.g. in HTs III 389) are examples for the use of names for body parts as relational nouns. *asra* ‘below’ appears to be used once, in a late text, as relational noun, in *asrasīnta agnalīm* (USp 177,8₂) ‘let us writhe below him’; otherwise it is an adverb (used as a postposition in the phrase *adak asra* ‘subdued, subjected’). *azusīnta* ‘beside, on the side of’ (documented in the UW entry for it) also has the shape of a relational noun; a noun *azu* is attested as *azu+kī* and *azu+čä* (both listed in the UW) and with the meaning ‘from the side’ in *azu+tīn tur-* (MaitH Y 376).⁶⁰¹

⁶⁰¹ The conjunction *azu* ‘or’ does not have quite the same meaning but a semantic bridge would be possible.

Then there are relational nouns in abstract use, as *yol+in+ta* ‘concerning’: *bo borluk yolinta ... akam inim yegänim tagayim ... čam čarim kilmazunlar* (Sa11,13 in SammlUigKontr 2) ‘May my brothers, nephews or uncles ... not raise any objections concerning this vineyard’. Similar instances of *yolinta* appear in other contracts, in Sa16,12, 22,8 and 23,15, WP6,2, 4, 6, 7 and 31, Mi3,12 and Mi27,4. *bilir biz temiš yolinta* (WP 6,31) is ‘concerning it having been said “We are responsible”’.

All other relational nouns in abstract use express different views on causality; e.g. *ugur* ‘time, simultaneity, sake’ which governs the object of the agent’s motive in *az nizvanı ugrinta* ‘for the sake of lust’ (TT II,2 20) or *ogul ugrinta* ‘for the sake of a son’ (MaitH XI 3v16). Sometimes, e.g. [*samtso*] *ačari ugrinta* in HTs III 463, *ugrinta* signifies ‘concerning’. *ugriņa* with dative, not locative, has still a different meaning: *samtso ačari tärkin tegin swö yaratmiš ugrıņa sävinč ötüg bitig iddi* (HTs VII 216) ‘On the occasion of the crown prince having written a preface, the master *tripiřaka* sent a letter of thanks’. Further *tiltag* ‘cause’, *tiltaginta* signifying ‘because of’ (e.g. in HTs VIII 4-5), and *küč* ‘force’, *küčintä* signifying ‘due to’; thus in *ädgü kilinč küčintä* (TT IX 96 and 102) ‘thanks to good deeds’ or *ünüš nomnuņ küčintä* (ETŞ 17,11) ‘due to the *dharma* of ascent’. *tüš* signifies ‘fruit’ but more often ‘consequence’; *tüšintä* ‘as a result of’ appears to function as relational noun a number of times in Pothi.

How do we distinguish between relational nouns and ordinary nouns appearing in nominal phrases, as would be *kišiniņ ävintä* ‘in the man’s house’ or even in *kögmän irintä* ‘north of the Sayan (range)’? The simplest case, when a noun is attested only in the relational noun construction, is quite rare: *üsk* appears to be an example for this. In general, the border is fuzzy and there will certainly be cases where scholars might disagree. The main criteria are meaning and distribution: *küč* ‘force, power’, e.g., does not have the same meaning and is not attested in the same contexts as *küčintä*, which expresses causality. Then there is the principle of the content of relational nouns being more general: ‘inside’, ‘outside’, ‘before’ etc. are more general than ‘north’, not to speak of ‘house’. Any object has an ‘inside’ (and in fact many non-objects as well), but being in the ‘north’ is not a relevant information for many entities, and only persons can have a ‘house’. Relational nouns express basic spatial or logical concepts and this fact reflects on their distribution and use. We do not wish to exclude the possibility that a relational noun can also be a ‘normal’ noun, as clearly happens with names for body parts or, in another way, the highly versatile lexeme *ara*: As Röhrborn points out in UW 170b,

ara is used as a noun in the phrase *iki kaš arasiniñ tuši* ‘the place between the two eyebrows’ in UigTot 668 and 679. That (quite late!) text (832) also has *arasi* appearing in the dative in *iki kaš kavišig arasiña tägip* ‘reaching the place between the two eyebrows’ and in the ablative in *altnišar kolti lenxwaniñ arasintin suvlar kudulup* (ETŞ 20,137) ‘water pours from among 60 myriads of lotuses’: In the vast majority of Old Turkic instances I have noticed, relational nouns appear in the locative.

Several postpositions are used as relational nouns as well, e.g. both *üzä+sin+tä* and *tägrä+sin+dä* in Höllen 35: *üzäsindä [ya]linlayu turur yogun tuluklar tägräsindä tokip anıñ içindä batururlar* ‘They knock around him with the thick cudgels⁶⁰² which keep flaming above him and they submerge him in it (i.e. in the ground with red-hot irons)’. We have explicit nominal government in *täñri burxan tägräsintä* (TT X 349) ‘around the divine Buddha’. The postposition *basa* appears as relational noun e.g. in *elig bäg basasında yoriyu* (U IV A141-2) ‘walking after the king’ or *täñri burxan basasında* (TT X 142-3) ‘after the divine buddha’ and the postposition *utru* ‘opposite, facing’ also in *utruñda ... kaldi* ‘came to meet you’ (TT I 113). The meaning of the adverb *udu* is close to that of *basa*; we find it used as relational noun in *mini ymä siziñ uduñuzta eltü barzun* (U III 49,28) ‘Let him take me along following you.’ *kenindä* is often used adverbially to signify ‘thereafter, in the end’. Numerous examples of *arasında* governing nouns (mostly in the nominative, rarely, e.g. in Suv 492,5, in the genitive) are quoted or mentioned in UW 172-173; one example is *könçin atliğ bāgnin kişisi ... igläp ... ögsüz yatdı. ögsüzi arasinta laylag sözläp ...* (Suv 17,22) ‘The wife of a gentleman called Xiancheng was ill ... and lay unconscious. Between her unconscious phases she spoke incoherently ...’. The use of *ara* as relational noun is likely to be secondary: This use is not found at all in such an extensive early Buddhist text as the Mait, and not in inscriptional or Manichæan sources except perhaps in the late Pothi book as *aras[in]ta* (255).

Occasionally there is contamination between postpositions and relational nouns, as in *beş törlüg tünliqlarınñ ät’özlärin içintä* (BT V 221-2) ‘within the bodies of the five classes of creatures’, where *ät’özlärin* is in the accusative and not in the genitive or the nominative.

⁶⁰² This is a mere conjecture; I take this to be a derivate from *tul-* ‘to strike’ from which another derivate, *tulum* ‘weapon’, is well attested in Qarakhanid Turkic (discussed in OTWF 293).

4.23. Supine constructions

Among the actionality and ability auxiliaries discussed in section 3.251 and 3.253, *är-*, *tur-*, *u-*, *bol-* and *kal-* can govern the *-gAll* form. In this function (though not in the temporal function discussed in section 4.633) can be called ‘supine’ as its uses correspond to those of the Latin supine I (*salutatū venire* ‘to come to greet’) and II (*horribile dictū* ‘terrible to say’); this will be seen below. *-gAll tur-* signifies ‘to be about to (do something)’, which appears to have been the meaning of *-gAll är-* as well; *-gAll kal-* is ‘to be about to do the action but not to have done it as yet’. *-gAll u-* and *-gAll bol-* express ability and possibility respectively; these uses also have a lot to do with a future projection. In general, *-gAll* sequences express future orientation, as in *-gAll ugra-* ‘to intend to do’, while sequences with the other two converbs, e.g. *-U alk-* and *-(X)p alk-* ‘to finish doing’, *-(X)p kod-* and *-U tükät-* ‘to do something exhaustively’, describe how the subjects carry out their ongoing action. *katıglan-* (see next paragraph) and *tur-* are found with both the vowel and the *-gAll* converb, in the first case referring to ongoing, in the second to projected action.

The pragmatic verbs *yarlika-* and *ötün-* (discussed in section 5.3) are, in these functions used only with the vowel converb: *-U yarlika-* is ‘to deign to do, to graciously do’, *-gAll yarlika-*, on the other hand, ‘to order somebody to do’; *-U ötün-* ‘to say respectfully’, *-gAll ötün-*, on the other hand, ‘to beg somebody to do’. Examples for *-gAll ay-* ‘to tell to do’ are given in UW 287b, §1 d in the entry for *ay-*. Note that, in all these cases where a *-gAll* form is followed by a verb of utterance, the two verbs have different subjects; thus e.g. in *šarirliḡ süñükiñä yalḡoklarıḡ täñriläriḡ aḡır ayag tapıḡ udug kilgali nägüliük yarlikadi* (Suv B17.1r8) ‘Why did he order people and gods to honour and revere his relic bones?’ Strangely enough, *-U ötün-* is used also when *ötün-* is used in its lexical meaning ‘to beg’ and not as pragmatic auxiliary in those cases in which the first verb and *ötün-* have the same subject; e.g. *yazokda boşunu ötünür biz* (Xw 101) is ‘We beg to get free of sin’: The vowel converb is here used as supine. This may be a Manichæan (or early) characteristic, however, as the use of *-gAll ötün-* does not necessarily imply different subjects for the two verbs: We have *bargali ötün-* ‘to beg to go’ in HTs VII 1883, a Buddhist text no doubt later than the X^wāstvānift.

We now come to the supine constructions in the narrower sense. The *-gAll* form is, in Uyğur, often the complement of verbs of attitude, intention and expression, in which cases the two verbs always have the same subject: *kälgali tapla-* (TT X 113) ‘to be glad to come’, *bargali*

tapla- (TT X 275) ‘to be glad to go’, *-gAll köñül örit-* ‘to set one’s mind on doing’ (very common), *tüñlagali unama-* (DKPAMPb 1177) ‘not to agree to listen’, *sančgali kilin-* (TT X 359) ‘to set about to stab’, *körkitgali kilin-* ‘to set about to show’, *virxar etgali başla-* ‘to start to build a monastery’, *yarmangali sakin-* ‘to plan to climb’. *üzgali katiglan-* is ‘to exert oneself to break’, *ukgali kataglan-* (MaitH XV 5r30) ‘to strive to understand’ while *tidu katiglan-* with vowel converb signifies ‘to work hard at hindering’: In the first case the breaking or the understanding has not yet taken place; in the second, the hindering is going on. *tur-* ‘to stand (up); to arise’ denotes the expectation of an event when governing the supine (e.g. *ölgali tur-* ‘to be about to die’); with *-(X)p* or the vowel converb it expresses continuing or repeated action (section 3.251). We have *-gAll küsä-* ‘to wish to do’ e.g. in HTs III 925, *-gAll ugra-* ‘to intend to do’, e.g. in *birök ... nä nägü iş işlägali ugrasar ol ugrda ... tep sözläyür ärdi* (U III 54,15) ‘Whenever she intended to commit something, she used to say “...”’; *tinliqlarig ölürgali ugradı* (TT X 35) ‘he intended to kill living beings’. Further examples of this type of phrase are quoted or mentioned in EDPT 91b. There are no final clauses here (as is often the case with *-gAll* forms discussed in section 4.636), because the two verbs cannot be said to constitute two separate clauses and because we saw that the meaning is by no means always final.

In *birök yargali korksar* (Heilk II nr.3 1.4) ‘If one is afraid to break it (a wound?) open, however, ...’ and *buşi bergali kızganıp* (Xw 168) ‘to be (too) stingy to give alms’ the meaning is most clearly not final, as the second verb of the phrase does *not* lead to the realization of the first (and is certainly not temporal); it can most clearly be characterised as supine. There is a similar instance in HTs X 499-504: *samtso açarı pavandın ünüp pavan kedinki suv ögän[tä] káčgali adaki tayip sürčüp yotası ančakya kiršaldı* ‘Master Xuanzang got out from the cell (but) was prevented from crossing the rivulet behind it when his foot slipped and the skin of his shin was scraped a bit’. In these three instances the main verb states what prevents or prevented the subject from carrying out the activity denoted by the supine; cf. English ‘be afraid *to go*’ and ‘be prevented *from going*’.

In *kunčuyarlarka yarangali sakinčın* ‘with the intention of currying favour with women’ (U III 75,10) the *-gAll* form also has supine function: The expression comes from the phrase *-gAll sakin-* attested e.g. in MaitH XI 14r28.

The Old Turkic supine can qualify adjectives, as can its Latin counterpart; e.g.: *tupulgalı uçuz* ‘easy to pierce’ and *üzgali uçuz* ‘easy to break’ in Tuñ I S6 show that this function existed already in Orkhon

Turkic, while *bürtgäli yumşak* (TT X 445) ‘soft to the touch’ appears in a Buddhist text. Cf. *körgäli körklüg* ‘beautiful to see’ in Wettkampf 36-7; a similar expression appears in another Manichæan text, in TT IX 14.⁶⁰³ Instances where a *-gAll* form gets governed by *tägimlig* ‘worthy of’ (which otherwise governs the dative of what the head of the construction is worthy of) are of the same structure: e.g. *töz töpötä tutgali tägimglig* ‘worthy of being carried on the top of one’s head’ (TT IX 16); further examples appeared in TT IX 26 (damaged), DKPAMPb 1112, AmitIst 58 and MaitH X 4v9.

In the sentence *yertinčüdäki kamag użik bilir baxşilarka baxşı bolgali sini [bi]rlä täñäşi użak bilir kişi yok* (MaitH XI 16r13) the supine is again not subordinated to a verb but to *täñäşi* ‘equal’; it signifies ‘There is no literate person able as well as you to become a teacher of all literate teachers on earth’.

4.3. Sentence patterns

The sections 4.31 and 4.32 deal with sentence patterns; another way to analyse sentences, namely looking at the way the speaker chose to arrange and organise what he packs into a sentence, is the topic of section 4.4.

The structure of interrogative sentences is identical to that of assertive ones. Yes / no questions are characterised by the particle *mU*, which is moved around in the sentence to follow the word whose applicability the speaker queries; the sentence structure thus remains unchanged by its presence. Its unmarked position is after the verb; when, however, it appears elsewhere (e.g. *”Xagan mu kisayin” tedim* ‘I said “Should I make him a kaghan?”’ in Tuñ 5), the word it follows is focussed on. The Orkhon inscriptions have an element *gU* which shows that the speaker expects a negative answer; see part V for its use. *ärki* ‘I wonder’ can follow the particle *mU* in Uygur. Disjunctive yes/no questions are construed as in Azeri, with *yok* by itself for indicating the negative alternative: *burxan kutin bulu yarlikayok mu ol azu yok* (HTsTug₂ 3b4) ‘Has he already graciously attained Buddhahood or hasn’t he?’.

Here is a barely embedded indirect question: *anı bilmädi, öñ[räki] ävirgüçilär użikın yöriugin tükäl kiltılar mu ärki tep* (HTs VII 870-2) ‘He did not know whether previous translators had rendered text and

⁶⁰³ This should be read as *körgäli tugıl[ig]* (or *togil[ig]*), with a *+lXg* adjective attested also in Suv 619,22; TT IX 20 is similarly damaged, and the entry ‘*tuğıl*’ in the EDPT is a ghost.

meaning in their completeness'. Other types of questions are asked by using interrogative(-indefinite) pronouns, discussed in section 3.134. Their presence does not change the basic sentence pattern either, although they are not always *in situ* and can also be attracted to the sentence onset. *mU* is generally not used in the same sentence as interrogative pronouns,⁶⁰⁴ but cf. "... *sādirāksiz yigi kilinč[l]arīg üklitip as[ip] sarinü umadın nā turgay mu siz" tep tedi* (Alex 22-23) "Carrying out more and more deeds one after the other, will you be unable to be patient and stop at all?" he said'; I translate *nā* indefinitely and adverbially, as 'at all'.

Classified by predicate there are two basic sentence patterns: The verbal sentence (in section 4.32) has a finite verb as its predicate (i.e. comment) or as part of its predicate. The non-verbal sentence (dealt with in section 4.31) has no such verb.

4.31. Nominal sentence patterns

The most common pattern of nominal sentences is bipartite, one part representing the topic, the other one the comment; e.g. *etigi [ärti]ñü körklä* (HTs III 749) 'Its (i.e. a monastery's) ornamentation is very beautiful'. The copula, which is needed under certain circumstances described below, is not considered to be an essential part in any type of nominal sentence. Beside bipartite nominal sentence types, Old Turkic also has tripartite nominal sentences, which have elements such as *bar* 'there is', *yok* 'there isn't', *yeg* 'better' or *kārgäk* 'necessary' as (part of) their predicate (comment). Certain types of exclamatory sentences have no (explicit or implicit) topic – comment structure; theirs is a single-part pattern.

The copula is a normally and fully inflecting verb (see section 3.29). Copular sentences will nevertheless be discussed in this section, as the copula represents the link between topic and comment and is needed when the predicate (or comment) is a noun (phrase) and marked members of tense / aspect / mood categories are to be expressed. In DLT fol. 198 we read that the Oguz say *tägäl* (not '*tägül*', as 'emended' by the editors) instead of *ärmāz* for negating bipartite nominal sentences.⁶⁰⁵

⁶⁰⁴ The translation of *nāčük ol birlä [to]o wañ vudi atlig xanlar? tñjšgäy mü olar yeg alig üzä?* (HTs VII 128-130) should, e.g., be 'How does he (compare) with the emperors Tang-wang and Wu-di? Will they equal in quality?' and not as translated by the editor.

⁶⁰⁵ Both *tägül* and *tägäl* can come from **täg ol*, one through unrounding, the other through raising; Non-first-syllable /O/ was retained only when followed by /k/.

The following passage in U I 8 (Magier) shows a few different types of what one would consider bipartite nominal sentences: *bo taš ärtiñü agir turur. bo bir yumgak taš, nägülik ol biziñä?* ‘This stone is exceedingly heavy. This (is) one lump of stone, what do we need it for (lit. what for [is] it to us)?’ The first sentence could be defined as verbal although its ‘comment’ is a fully predicative adjective, or it could be defined as nominal considering the fact that *turur* has no lexical content but aspectual content at best; the other two sentences are nominal in every sense; they are tenseless (though especially the third one does refer to the time of speaking). In the first sentence there is a demonstrative as part of the topic. In the second one the topic *bo* ‘this’ points at the referent of *bo taš* ‘this stone’ of the previous sentence; in the third sentence the same topic is referred back to by *ol* ‘that’; *bo* is demonstrative, *ol* anaphoric. Considering *biz* ‘we’ of this third sentence also to be part of what is ‘given’ for both the speaker and the addressee leaves *nägülik* ‘serving as what’ as predicate. This predicate (or rather what the addressee is asked to supply) is neither verbal nor nominal but adverbial; there is no copula in either of these sentences.

Another purely nominal bipartite sentence is *män kololadokum kamagdä ärklig yultuz ärmiš* (1.5-9 in runiform ms. TM 342 = U5) ‘What I have discovered (is that the) stars turn out to be the mightiest’. *ärmiš* is merely the copula of the subordinated sentence, which is the predicate of the whole; there is nothing *explicitly* linking *män kololadokum* to *kamagdä ärklig yultuz ärmiš*.⁶⁰⁶ This sentence is an instance of the most common type of nominal sentences, which has the structure ‘A is B’, whatever the nature of A and B and the content of ‘is’ in any particular case. The first two sentences in the passage quoted in the previous paragraph are of this type.

If the topic is in the 1st or 2nd person, the personal pronoun is made to follow the predicate, presumably becoming a clitic: Nothing else could explain this position, the natural place for the topic being initial position. E.g. *ol kızlar “kapagčï biz” tep tedi ... “kapag čï kirkîn biz” tedilär* (KP 41,5-42,6) ‘Those maidens said “We are doorkeepers” ... “We are doorkeeper servants” they said’. Note that there is no number concord between subject and predicate; *kapagčï* and *kapagčï kirkîn* are

⁶⁰⁶ This fact made Peter Zieme, who recently reedited the text, think that these were two sentences, the first of which he translates as “This is what I have found:”. Since, however, there is no explicit “this is” to serve as predicate of the first sentence either, and since the second sentence is such a predicate, the two stretches have to be linked.

not in the plural. Sometimes pronominal subjects appear both in initial and in post-predicate position; e.g. *siz arok siz; aroklaŋ* (KP 55,4-5) ‘You are tired; take a rest’ or ‘*biz az biz*’*teyin* ‘saying ‘we are few’” in the Tuñ inscription. These might, of course, also be cases of topicalization, which would make ‘As for us, we are few’ the better translation for the last-quoted example.

If the topic is unmarked for person, the sentences with both nominal and verbal predicates *may* end with the pronoun *ol* ‘that’. One presumable source is a topicalising structure; a sentence like *bilgä Tuñokok añig ol* should possibly be translated ‘(As for) the counsellor T., he is wicked’. In some cases, *ol* is neither topic nor comment but seems to function like a copula (as e.g. the 3rd person pronouns in Modern Hebrew); therefore, *ol* may also have been introduced at some early stage to complete the paradigm X *män* / X *sän* / X *ol*. Cases such as *kilmışlar ol* (HTsBiogr 130) or *yaratmışlar ol* (1.132, both ‘they have made ...’) show that copular *ol* is not inflected for number even when the predicate is in the plural. In *ayaların kavşurup katıglamaklıglar, üç at’özkä tägmäkig üzlünçü tüp kilmaklıglar ol* (1.154), this *ol* is shared by two nominalized verbal predicates: The sentence signifies ‘They fold their hands and exert themselves and make the attainment of *trikāya* their ultimate base’.⁶⁰⁷ *tāñri baxšī ärklig ol* (U III 46,1) signifies ‘The divine teacher is mighty’, *bo nišan män Miñ Tamürniñ ol* (USp 1,10) ‘This mark is mine – Miñ Tämür’s’. If, however, the overall meaning was ‘As for X, it is Y’, these translations should be ‘As for the divine teacher, he is mighty’ and ‘As for this mark, it is mine, M.T.’s’ respectively.

In *küsüşüm ol ötüngülük tolp yertinçüg yarotdaçıka* (Suv 372,12) ‘It is my wish to pray to him who enlightens the whole world’ the phrase *küsüşüm ol* could be paraphrased with *küsüyür män* since it governs the small clause around the *-gUIXk* form; *ol* is clearly needed for linking the topic *küsüşüm* to its predicate. In *Kulsabadi xatunli Vipula•andri teginli bolar ikigü mäniñlar ol* ‘(The god Indra said:) ‘Princess Kuli•avat• and prince Vipulacandra, these two, they are both mine’” (U III 27,16) *ol* serves as copula. Reference to the princess and the prince is left-dislocated (see section 4.4); *bolar ikigü* then takes up this reference and ‘mine’ is predicated on that. The second suffix in *mäniñlar* is the mark of number agreement between topic and

⁶⁰⁷ The composite suffix *-mAk+lXg* is dealt with in OTWF pp. 153-155 but not its predicative use which we find in this sentence: Here the meaning appears to be a simple present.

comment, in this case added to a noun phrase consisting of a headless genitive.

Above we quoted the sentence *nägülik ol biziñä?* (U I 8) ‘What do we need it for?’, literally ‘For what (is) it to us?’. This sentence is not an instance of the equational pattern we have dealt with hitherto in this section. Another common way to express ‘need’ is with the modal nominal predicate *kärgäk* ‘(it is) necessary’; the ‘needer’ again appears in the dative case, which is an integral part of the sentence pattern: E.g. *el tutdaçi bäg ärkä süli ašli kertgünçli üçägü täñ kärgäk* (TT VB 106) ‘A ruling nobleman is equally in need of three things: an army, provisions and faith’. A copular verb (see section 3.29) is added if verbal categories demand it or if the sentence is to be subordinated: *añar sizlär kärgäk boltuñuzlar ärsär sizläрни eltgäy ärdi; män kärgäk ärdim äрки.* (U III 69,25) ‘If it had turned out that he needed you (pl.), he would have fetched you; apparently it was me whom he needed’; *maña ... bor kärgäk bolup* (USp 1,2 and similarly often in other economical documents) ‘I needed wine and ...’. In TT VB 52 the needer appears in the nominative: *nom boşgut boşgundaçi tüzünlär ymä nomluğ tayakig ašaguda yegüdä kertgünçlüg elig kärgäk* ‘When *šaikšas* are to enjoy the support of religion, they need (to have) the hand of faith’ (an extended metaphor, ‘support’ for ‘doctrine’, ‘eat’ for ‘enjoy’, ‘hand’ for ‘faith’). To sum up, the pattern consisting of a nominative and (normally) a dative plus, usually, the predicate *kärgäk* generally corresponds to an (indicative) proposition stating that the entity referred to by the dative *needs* the entity referred to by the nominative.

The DLT proverb *sögüt söliñä, kadïñ kasïña* ‘The willow for its sap, the birch for its bark’ consists of two nominal sentences whose predicative dative has a different sort of content, viz. that of purpose.

The ablative can also be predicative, e.g. in *nom keñrölmäki yänä kiš[i] yalngukdïn tetir* (HTs VII 807) ‘The spreading of the doctrine, in turn, comes from persons’.

The predicate *yeg* ‘better’ is bivalent, as in the proverbs *altun sarigita körö ešič karasï yeg; yürüñ kümüsdä körö ayak tolosï yeg* (HamTouHou 16,13-14) ‘Better than yellow gold is that the pot should be black; better than white silver is that the bowl should be full’: It therefore forms tripartite nominal sentences.

We have already twice met the sentence *nägülik ol biziñä?* (U I 8) ‘What do we need it for?’, which shows that sentences with interrogative pronoun do not need a copula. This is so already in Orkhon Turkic *elim amtï kanï* (KT E9) ‘Where is my realm now?’

Then consider the sentence *kayu ärki beš?* (MaitH Y 143) in the following context: *asag tusu külmakä ymä beš türlüg ogrin bolur. kayu ärki beš tep tesär, äñ ilki ...* ‘His bringing benefit (to living beings) takes place in five ways. Which five these are?’⁶⁰⁸ Firstly, ...’. *beš* ‘five’, which takes up the reference of *beš türlüg ogrin*, must be the topic while *kayu* ‘which’, left-dislocated as so often with interrogative pronouns, is comment.

Exclamatory expressions such as *nä ymä tañ, nä ymä tavrak* ‘Oh how surprising, how fast (it is)!’ or *ančama mäñi! ančama ädgü asig tusu! ančama ädgü kut kiv!* (MaitH XI 3v7) ‘Such bliss! Such good favour! Such good luck and blessing!’ are bipartite only in the sense that their implicit topic wholly follows from the situation in which the conversation is couched. The sentence *nä sav ärki t(ä)ñrim* (MaitH XX 1r17), which is used with the meaning ‘What matter might (this) be, my lord?’ differs from nominal interrogative sentences presented in the previous paragraph by also lacking all reference to the topic; its exclamatory nature may explain this ellipsis. Even an address like *eliglär eligi-a* ‘O king of kings!’ (U IV A 103) could be considered to be implicitly bipartite in the sense that it informs the addressee of the speaker’s view of him as ‘king of kings’.

Only a proper name used as vocative, e.g. *a m(a)xas(a)tvī-ya* ‘Oh Mahāsattva!’ (HTs III 779), can be said to be a sentence consisting of a single member, beside of course all types of expressive exclamations: These utterances show no topic – comment structure. Vocative elements are often also interpolated into utterances, e.g. already *türk bodun* ‘the Turk (or ‘united’) nation’ in Orkhon Turkic (KT IE22). Vocative NPs are often linked to imperatives, as in *körüñlär ädgü tünlaglar* ‘See, good creatures!’ in MaitH XX 13v3.

Another type of non-verbal sentence is that construed with *bar* ‘there is’ or *yok* ‘there isn’t’ as predicates. With *bar* we find e.g. *bay ymä bar, yok čigay ymä bar* (KP 6,1) ‘There are both rich and poor people’; with *yok* e.g. *mini üçün ämgäntäci kim ärsär yok* (U IV C 152) ‘There is nobody whatsoever who could suffer for me’. The domain of existence can be supplied in the locative case: *azu bo savimda igid bar gu?* (KT S 10) ‘Or is there anything false in these my words?’ In Uyğur the aorist of *bul-tuk-* ‘to be found’ serves as verbal alternative to *bar* and *yok* as in the following passage: *bar mu munuñ köküzintä*

⁶⁰⁸ *tep tesär* ‘if one says’ has not been translated here: This is a very common strategy for asking rhetorical questions then answered by the author. See section 3.343 for *ärki*.

kuṭrulmaklag urug tarig azu yok mu? bultukar mu munuḡ köḡlintä köküzintä korkinč ayinčlig ädgü töz yiltüz azu bultukmaz mu? (MaitH Y 104-108) ‘Is there in his breast the seed of liberation or isn’t there? Is there to be found in his heart and in his breast the good root of fear (of god) or isn’t there?’⁶⁰⁹

Possessive constructions have a tripartite structure: They comprise the possessor, the possessed and *bar* or *yok*. Possession is predicated by having *bar* (its absence by *yok*) follow the possessed entity with the possessive suffix referring to the possessor: *özüm kutum bar* ‘I myself enjoy divine favour’; *ögrünčün yok* (IrqB) ‘You have no joy’. *muḡar nä ärsär yazok yok* (PañcÖlm 23) ‘He does not have any sins whatsoever’⁶¹⁰ shows that the construction is different when reference to the possessor is not limited to the possessive suffix: The nominal referring to the possessor is in the dative case and the possessed has no possessive suffix. The same possessive dative appears already (as *bodunka*) in the following Orkhon Turkic instance, showing that the construction was not copied from some foreign language: *nä• yerdäki xaganlig bodunka bintägi bar ärsär nä bu•i bar ärtä•i ärmış* (Tuñ 56) ‘If any independent nation were to have one like me, what trouble could it ever have?’ The first instance of *bar* expresses possession in a rather concrete (though not economical), the second in an abstract sense.

The well-attested expression *yidi yokiḡa tägi* (e.g. TT IV B56) ‘till the disappearance (even) of its smell’ clearly comes from a nominalisation of the sentence **yid+i yok* ‘It’s smell is absent’, the second possessive suffix referring back to the entity whose complete disappearance is envisaged. Although they are grammatical predicates in that they alternate (as shown below) with forms of the copula, show possession and for other reasons, *bar* and *yok* are in fact nominals signifying ‘existing’ and ‘non-existing’ on the one hand, ‘existence’ and ‘non-existence’ on the other. The attributive and referential uses can be found in the passage *yok ärmäz äzüük sav sözlädimi[z], yokug bar, barag yok tep tedimiz* (MaitH XX 14r3-4) ‘We have said non-existing (*yok ärmäz*) and mendacious (*äzüük*) things, have presented the non-existing as existing and the existing as non-existing;’ *yok* is here first used adnominally, then nominally. The binomes *bay bar* and *yok čigay* (e.g. KP 6,1) respectively signify ‘rich’ and ‘poor’. *bar* and *yok*

⁶⁰⁹ Note the ellipsis of the nominative in the second part of the disjunctive construction.

⁶¹⁰ ‘whatsoever’ translates *nä ärsär*; see section 3.134 for this expression of generality. Cf. *kim ärsär* in the U IV C152 sentence in the previous paragraph.

can even be topics, as in the proverb *bar bakir, yok altun* (DLT fol. 181) ‘What is present is (like) copper (one cares nought about it), what is absent is (precious like) gold’.

Sentences of existence are transferred away from the present by verbal means; e.g. *yana ymä bar ärdi sikwen atlig nomči açari* (HTs VIII 76) ‘Moreover, there was the preacher and teacher named Qi Xuan’. Both *amtika tägi takı bar ärür* (BT I A₂ 4) ‘It (i.e. a *sūtra*) still exists even till now’ and *inčip amti yertinčüdä bo užak yok ärür* (MaitH XI 15r20) ‘However, this character does not exist on earth at present’ show the adverb *amti*; *är-ür* was apparently joined to *bar* and to *yok* to show that the present in the narrow sense is meant.

In *ädgü kilin•i bar ärip ...* (BT II 1201) ‘(if) he has good deeds (to his favour) and ...’ and *ol äki kiši bar ärsär* ‘since there are those two persons’ we see that *bar* needs the copula to get subordinated. Unlike in Turkish, *bar* and *yok* are not replaced by the converb of the copula in case of subordination; the copula is added to the construction as it is: *kimni• birök kü•i küsüni bar ärip täv kür alı altağı yok ärsär ...* (PañcÖlm 263) ‘Whoever, however, has power (*bar ärip*; but) has no tricks and guiles, ...’.

Expressions like *tolp sansar i[či]ntäki tinl(i)glarig näcä ämgätgülik tolgakguluk erintürgülük busanturguluk islär küdüglär ärsär,...* (TT II,2 41-46) ‘However many matters there may be for which to cause pain and affliction to all the creatures in *samsāra*’ or *üküş azunta ašnu ärinätüiv atlig balıkta ärnem atlig elig xan ärti* (Arañemi 1 a r13) ‘Many generations ago there was a king named Arañemi in the city named Aruñāvati’ show that *är-* by itself was also used for expressing existence.

In the following sentences *är-* expresses possession: *bögü biliglig burxanlarnıñ iki törlüg ät’özläri ärür* (Mait 26A r11) ‘the wise minded Buddhas have two types of bodies’; *sözläşgüñ ärsär* (UigBrief D) ‘if you have anything to discuss’. In *käk birlä katıglıg savlar köñülintä ärmiškä* (BT II 991) the translation can be existential (‘because there are things mixed with hate in one’s heart’) or possessive (‘because one has ... in one’s heart’).

ol, primarily ‘that’ but also widely used as copula, is also found in sentences indicating existence: *ordo balık ked[in tagdın] buluñinta altı bär[ä ...] bir säñräm ol* (HTs III 273) ‘6 miles to the north-west from the capital there is a monastery’; ⁶¹¹ *ol tamuta ymä ülgüsüz üküš çadirlig suvin tolu ulug ešičlär ol* (DKPAMPb 63) ‘Now in that hell there are countlessly numerous large pots full of potash water’.

⁶¹¹ Assuming that the lacuna did not contain anything relevant to this matter.

4.32. Verbal sentence patterns

Verbal sentences, especially sentences with fully or partly lexical verbs, can be analysed as hierarchical structures, in that they consist of noun phrases serving as arguments, of a central verb phrase assigning participant tasks to these arguments and sometimes of adjuncts. The sentence need not include reference to all of its arguments; this reference can very well be supplied by the context without any explicit trace of it appearing in the sentence itself. The lack of such trace is the rule when the reference-supplying context consists of language material; less so when the reference comes from the situation. The tasks carried out by noun phrases within sentences have already been accounted for in section 4.11, where we dealt with the various case functions.

One of the arguments in the verbal sentence will be the subject of the verb. The addressee can be expected to extract reference to the subject, as to any other participant, from the context. All entities retrievable by zero reference are part of (or constitute) the sentence's topic. The subject of the second sentence in *biziñ beş yüz ärän kanča bardı? äsän tägdi mü?* 'Where have our 500 men gone? Have (they) arrived safely?' (KP 53,4-6) is, of course, meant to be supplied from out of the first, without need to even put *tägdi* into the plural.

When there is no explicit reference to the subject and its identity is not made clear from the context either, reference to it is understood to be generic. *öñtün kedin satıgka yulugka barsar bay bolur* (KP 13-14) signifies 'One becomes rich if one goes to the east or to the west to trade'. The question to which this statement is an answer is also couched in terms involving a generic subject, and so are the other answers to the same question when presented to other addressees; the sentence itself would have been identical if there had been zero reference to some subject from the context. Another example: *ol taşıg özi üzä tutsar kopga utgay ... ol taşıg özintä tutsar yat kişi adartu umaz* (Blatt 17-18, 23-24) 'If one keeps that stone on oneself, one will prevail in everything ... If one keeps that stone on oneself, strangers will not be able to harm one'. This is not basically different (though perhaps less widespread among European languages) than when an oblique argument is neither explicit nor implicit, as the object in the sentence *nägülük ölüür sizlär* 'Why do you kill?'; just as the speaker has no specific object in mind in this sentence, he has no specific subject in mind in the previous ones.

In other cases, deverbal noun dummies are used for filling object slots: This, I suspect, is the main reason for the appearance of *öliüt* in *öliüt öliür-* ‘to carry out a massacre’ with the verb just mentioned, and *čašut čašur-* ‘to slander’ (both documented in OTWF 310-11). *yol* in *yol yori-* ‘to travel’ and *nom* in *nom nomla-* ‘to preach’ could have been replaced by more specific terms if the speaker / writer had deemed them necessary or had been able to supply them. The appearance of verbal abstract objects is obligatory when these are to be accompanied by their subjects; the phrases *arslan silkinigin* (or *silkinmäkin*) *silkin-*, *arslan yatgüšün yat-* and *arslan ilinčüsin ilinčülä-* are quoted in OTWF 204. *yol yori-* shows that a real etymological connection is not necessary between the two elements, although alliteration does appear to be the general rule.

Adjuncts, which express, among other matters, when, where, how or why the event referred to by the sentence takes place, are generally not made obligatory by the grammar. They can consist of phrases or clauses. See section 3.3 for adjuncts, section 4.2 for adjunct phrases and section 4.63 for adjunct clauses.

Predication is sometimes shared between a verb and a nominal, which is unmarked for case. There are three types of this:

Firstly, some intransitive verbs are able to govern descriptive predicative adjectives, e.g. *busušlug* in *nä üčün busušlug kältiniz?* ‘Why did you come in sorrow?’ (KP 4,5). Thus also the quantity adjective *alku* in *ädgü törö ädgü kilinč alku kalgay* (TT II,1 21) ‘Good habits and good deeds will all stay’. Similarly, certain transitive verbs also govern adjectives which they predicatively apply to their direct objects, as in *sakinč arig tut* (ChrManMsFr, ChrFr v 12) ‘Keep (your) thoughts pure!’.

Thirdly, a transitive verb can govern two nouns or pronouns as objects; the second noun (in the nominative) here tells us what the first (in the accusative case) is made to turn into: inscriptional *özümün öñrä biña baši itti* ‘Myself he sent (*id-*) forward (as) captain’; Uygur *äki kizin tapig berti* ‘He gave his two daughters (as) tribute’ or *altı azigin ... käyikčikä buši berü* (HTs III 259-60) ‘(The white elephant) gave his six molars to the hunter (as) alms’. A reversal in the order of topic and comment is not excluded; the topic remains evident by being marked with the accusative suffix: *enč äsän kilzun mini* (U II 64,9) ‘May he make me be well and in peace’. We quoted instances with the verbs *id-*, *ber-* and *kil-*; *yarat-* ‘to create’ and *ata-* ‘to nominate’ are also used with two objects.

Participles are adjectives and could therefore, in principle, also be used predicatively. Some of them, the *-dAčI*⁶¹² form in inscriptional Turkic, the aorist, *-yOk* and *-mAyOk*, *-mIš* and *-mAdOk*, *-(mA-)gU* and *-(mA-)gUlXk* forms in the whole of Old Turkic, could serve both as participles and as finite verb forms. The meaning of *-yOk*, *-mAyOk*, *-mIš* and *-mAdOk* is different when they are participles and when they are not, which means that – given the context – confusion between participle and finite form was unlikely. When, however, we e.g. find an aorist form in predicative position, the predicate can *in principle* be understood either as a verbal or as a nominal one: *mäniñ köñülüm näñ ornanmaz* (TT II,1 40) could signify either ‘my heart hasn’t been calming down’ or ‘my heart is a quite unstable one’.⁶¹³ In some such instances the distinction between ‘finite’ and ‘non-finite’ may possibly disappear in main or in subordinate clauses. In the case of the aorist, finite use, which is statistically more common than participial use, will be the hearer / reader’s first (and hence only) choice.

The distinction between verbal and nominal predicates is blurred also through the existence of a well documented hybrid class: There are subordinating pronouns and conjunctions governing infinite subordinate clauses, both with participles and converbs, e.g. *muntada adin takı öñi aš içgü yok kim bo ... ač barsig tirgürgülük* ‘There is here no other different food or drink with which to revive this ... hungry tigress’; *tinlig oğlanı yok kim mäniñ ... kam kadašim bolmadı ärsär* ‘there are no living creatures who did not become my relatives (in previous lives)’. For Old Turkic, where verb forms capable of nominal behaviour possess all verbal categories, one might want to do away with the notion of finiteness and deal only with categorial bundles in word classes.

Unlike many (but not all) languages, 1st and 2nd person verbs forms can also be accompanied by *nominal* subjects, not only pronominal ones. Three Orkhon Turkic examples among many, with the 1st and 2nd persons singular and the 2nd person plural: *ilgärü barigma bardig, kurigaru barigma bardig* (KT E23-24, BQ E20) ‘Those of you who went east departed and those of you who went west departed (as well)’; *yigirmi kün olorup bo taška bo tamka kop Yollug Tegin bitidim* (KT SE) ‘I (but the text contains no apposition), Y. T., wrote all of it on this

⁶¹² There is no evidence that *-mAčI*, which serves as negative counterpart of *-dAčI* in the inscriptions, was used as a participle; in Uyğur we find *-mAdAčI* in participial use. *-dOk* forms, on the other hand, are never found in finite use, though *-mAdOk* is.

⁶¹³ In the second case it might be necessary to end the sentence with *ol* (see section 4.31), as e.g. in *kök tünri yajın kilmişlar ol* (HtsBiogr 130) ‘They have done it in the manner of heavens’.

stone, on this wall, sitting (at it) for 20 days'. *ölügi yurtda yolta yatu kaltaï ärtigiz* (KT N9) '(All these, my mother the queen, my mothers, elder sisters, daughters in law and princesses, who would survive would become female slaves); the dead among you would be left lying in deserted camps and on the road'. The adjective *ölüg* 'dead' is the subject of the 2nd person plural verb phrase *kaltaï ärtigiz*. Here an example from the 4th (runiform) Stein ms. (1.6): *atı öz apa totok ulatı kamıg atlıg yüzlüg otuz är kältimiz* 'thirty of us came, all men of renown, the (ruler's) nephew Ö. A. *totok* and the others'. The best rendering of the content of this Old Turkic sentence into English included a series of appositions, but this does not correspond to its actual structure: That presents 30 men with certain attributes and mentioning one of them, as formal subject of a 1st person plural finite verb.

-mA- negates verb forms. Double negation gives positive meaning, as -mAdOkXm *yok*, or in *tünlüg oğlanı yok kim mäniñ ögüm kañım ... bolmadı ärsär* 'there are no living beings who did not become my parents'. The following negates the copula instead of the topic or the predicate: *alko tünliglar mäniñ yatım ärmäzlär* 'All beings are not foreign to me (= none are my strangers)'. The negativity of a superordinated verb does not extend to a subordinated one; one example among many is *taki kamag kamlar ter(i)läp näñ tırgürmägäy* 'Even all the magicians will, assembling, definitely not bring him back to life'. Therefore, converbs have to be additionally negated: *burxan kutılıg küsüşintä ançakı(y)a ymä tünmatın kilguluk işiñä ... ariti armadı* (U IVA 272) 'Not leaving off a bit in his wish for Buddhahood he did not at all get tired ... of the task he was to carry out'.

4.4. *The organization of information in the sentence*

The second way to analyse a sentence (the first way being what we looked at in section 4.3) is to deal with the flow and organization of information taking place in it. In Old Turkic the most salient means for this purpose is constituent order. The content of sentences in which the same information is organized differently will generally be understood in the same way as far as truth values are concerned.

The order of sentence constituents is in Old Turkic strongly topic – comment oriented in all stages of the language, all styles and text sorts and all putative dialects; other purposes served by constituent order can be iconicity ('first noted first mentioned'), the linking of elements to previous sentences and the forward motion of the plot. When the topic is purely deictic, the relevant pronoun is added *after* the

predicate. Otherwise, the last constituents in a sentence normally belong to the predicate. Moving constituents around so as to arrange them in the topic – comment order is simpler with the nominal sentence than with sentences having a finite verb, which is why we will start with that. An example for a nominal sentence is *ädgü+g ol ärinč* (KT) which, considering the context, can have a translation like ‘That is probably the good you got from it’.⁶¹⁴ Again translated freely, *mäniñ sakinčim ymä antag ok* (HTsBiogr 229) is ‘Now that is what I think’: In both of these cases, the demonstrative is predicate. In exclamative nominal sentences the topic – comment order can be reversed: *amčama ädgü mäni ärür küsämiš küsüšlar kanmakî* (MaitH XV 13r6) ‘What great joy it is when what one had hoped for is fulfilled!’ Non-finite verb forms can also be either topics or comments in nominal sentences, but that will be dealt with further on, as the construction is used for making the verb of a verbal sentence unpredicative.

In the following sentence a nominal clause is made the object of a verb of thinking; stating the clause which is the object of *bil-* is more important to the writer than giving first position to the rather general subject of the whole sentence: *tükäl bilgä täñri burxan yarlikamiš köni kertü nomnuñ fñliqlar bo montag yegin adrokin bilziñlär* (TT X 557-559) ‘May living beings know that the rightful and true doctrine preached by the perfectly wise divine Buddha is so superior and excellent’ or ‘May the living beings know this superiority and excellence of the ...’. This object clause could by itself have been *tükäl bilgä täñri burxan yarlikamiš köni kertü nom ärtiñü yeg adrok ol* (or *ärür*).

Left dislocation topicalises both in nominal and in verbal sentences. In the following nominal sentence the interrogative phrase *nä törlüg kiši* ‘what sort of a person’ is in its normal initial position; however, the topic pushes itself before it for prominence, not without leaving demonstrative *bo* as trace:⁶¹⁵ *bo montag körksüz ... yatagma nä törlüg kiši bo* (ChrManMsFr ManFr r 5) ‘This (person) lying there in such an ugly way, what sort of a person is he?’. Another nominal sentence showing left-dislocation is *kazganč näñ tarig tarimakda ädgü yok* (KP 13,2) ‘As for profit, there is absolutely none better than in agriculture’, the undislocated place of *kazganč* would have been after *ädgü*, its

⁶¹⁴ The +g is a variant of the 2nd person possessive suffix, here referring to the beneficiary of ‘the good’, i.e. the advantage.

⁶¹⁵ In Turkish such trace demonstratives are unstressed. This must have been the case also in Old Turkic, where they are placed after the predicate instead of being in the normal topic position *yat-agma* is a participle representing the subject of the action of ‘lying down’.

attribute. What is important to note is that under such movement no government relationships are changed.

Left dislocation of the topic is rather common also in verbal sentences, where we find two types: Either topic and subject are referentially identical, or the latter is different but in some way related to the former (e.g. by being part of it); the matter has been discussed in Erdal 1998b. Here is an example for topic / subject identity under left dislocation; reference to the topic is effected by the possessive suffix on *är-mäk+i*: *täñrikänimiz uzun özin kalın kutun turkaru adasazan tudasazan ärmäki bolzun ärti* (BT V 516-8) ‘Our majesty, I wish he were to attain a long life, that he were to live full of blessing and that he were continuously free from trouble’.⁶¹⁶ The type with distinct topic and subject is sometimes called ‘double subject construction’. It is found e.g. in inscriptional *karlok tirigi barı türgäška kirti* ‘As for the K., all among them who saved their lives joined the T.’. The sentence *’kögmän yolı bir ärmış, tumış”teyin äšidip ”...” t edim, yerçi tilädim.* (Tuñ 23) ‘As for the Sayan (range), I heard that there was only one way across it and that it was blocked, and said ...’, finally, is another example for the phenomenon. In both examples the topic, *Karlok* or *Kögmän*, is in the basic case form, and reference to it is taken up by the possessive suffixes of *tirig+i bar+i* and *yol+i*. *yolı bir* is a nominal clause with copula, serving as a complex predicate (or ‘comment’), as the sentence *tirigi barı türgäška kirti* serves as complex predicate. The sentence with *barı* reminds us of *tetselar üküši körmädin äšidmätin kaltılar* (HTs VIII 74) ‘The students mostly went on not to see and not to hear’, or ‘As for the students, most of them (*üküş+i*) remained ...’. The most salient ‘relationship’ is the inalienability of body parts, as between the subject and his mouth in the following: *kayu kiši agizintün äyriğ sarsığ sav ünsär ... anta ok täñri burxanığ öp sakınip inča tezün* (DKPAMPb 539) ‘If a person has used harsh and abusive language, let him think of divine Buddha and utter this’. *kayu kiši* is the subject of the main verbs, for which the nominative is normal; by making it precede the conditional clause with *sav* as its subject, the possessive suffix of *agiz+in+tin* serving as only link between the two clauses, we effectively get the situation where the person is not directly to blame for the harsh and abusive language while remaining the topic. In the following Manichæan example (M I nr. 8 VII r2-4) resumptive *ol kiši* is topicalised because it takes up the generalising *kanyu kiši*: *kanyu kiši*

⁶¹⁶ We know that *täñrikänimiz* is not a vocative standing outside the sentence, as it is preceded by the vocative *täñrikänim*. The sentence is followed by another two, which show a similar structure.

kim bo yarokun ärmäk[ig] kántü köñülin içrä tarimış ärsär, ol kiši bälgüsi antag ärür ‘Whatever person has planted this existing with light into his own heart, that person – his characterisation (*bälgü+si*) is as follows:’. In a sentence in Mait XV 10v13 *kamag tünlaglar* (thus) ‘all creatures’ is the topic while *az övkä biligsiz biligläri* ‘their ignorance of lust and anger’ is the subject.

Grammatically redundant pronouns are made to start sentences for contrast against other participants, e.g. Orkhon Turkic *biz az ärtimiz yavüz ärtimiz* ‘As for us, we were few and in a bad state’.

In *ol kim burxan tetir, nom ol ok ärür* (TT VI 418), Buddha manages to become both topic and comment. The sentence says ‘That which (or ‘He who ...’) is called Buddha, the teaching is nothing else but him’ (or ‘that’). I have chosen the ‘nothing else but’ construction to render focussing through the particle *ok*. What we have is the nominal sentence *nom ol ärür*, with both topic and predicate, the nexus getting predicated upon the noun phrase *ol kim burxan tetir*, which consists of a demonstrative qualified by a relative clause. The meaning basically to be conveyed is that Buddha and the teaching are one and the same. The author could therefore have written *burxan nom ärür* or *nom burxan ärür* if he had not intended to stress the import of this identity. However, beside *ok* to underline the status of Buddha as predicate he chose to apply to Buddha left dislocation as well, leaving *ol* as trace in the kernel sentence.

The element *ärsär* is exceedingly common as topicaliser, e.g. *tavgač eli ärsär, mariči atlig uç kädig türk türgeš yer ol* ‘As for China, that is a Turkish, Turgeshian, distant land of the Mleccha sort’; *siz tüdümüg xanlarnıñ töz yültüzda siz ... män ärsär täñri yalavači män* (Wettkampf 53) ‘You are from the root of crowned kings ... As for me, I am a messenger of God’. There is very extensive listing of such instances in §§ 29-33 of the entry *är-* in the UW, pp. 406-407. An example where *tesär* is used for the same purpose is quoted in chapter VI. Both words have survived in Turkic languages as topicalisers to this day.

We stated above that it is not simple to move the finite verb around in the Old Turkic sentence; the reason for this is that finite verb forms have a strong affinity with the position at the end of a sentence. Finite verb forms are, however, moved away from the end for purposes other than topic / comment structure, in the following types:

Imperatives and other verb forms signaling an unusual energy on the mind of the speaker are sometimes left-dislocated: *ögsüz kalmış bo irinč tünlig ämigimin ämip bolzun mäniñ oglum* (PañcÖlm 29) ‘(I’ll) let this poor creature suck my teats and – well then – let it become my child!’; *tal atın”tedim* (Tuñ I N1) “Dive (into it) with (your) horses”

I said'. *otg[urak] kertgünzün bo savag* (TT X 467) 'Let her put all her trust in these words!' In Suv 609,11 the prince who is ready to sacrifice his body for the hungry tigress says: *bulgay ärki biz yeg adrok buyanıg* 'We will maybe (or 'hopefully') attain excellent *punya*'. Great emotion also brings the verb to initial position: *muñ ay muñ ay, yitirmiş män isig sävär amrak atayimin* 'Oh sorrow, oh sorrow, I have lost my dear baby, whom I love warmly' (Suv 623,10); *kalmış süñük yer sayu, içginmiş män känçimin, sävär amrak atayimin* (Suv 626,16-17) 'The bones lie around everywhere, I have lost my baby, my dear chick whom (I) love'. The sentence *aşukmaz mu köñülün*, finally, was written by an old father in a letter he sent to his son in an emotional plea to come for a visit (UigBrief C12); it signifies 'Doesn't your heart yearn (for us)?' but a freer translation in the context could be 'Aren't you homesick?'

A causal relationship between events can bring the verbs to the fore and make them precede subjects: *ymä yegädti y(a)rok kün k(a)rariğ tüniüg alñadturdi ... ymä anta ken [är]ksinür elänür eliglär xanlar k(ä)ntü öz elin içrä* (M III nr.8 III v10-15) 'And the bright day vanquished the dark night and weakened it; ... and thereupon they rule and govern, the kings and rulers, within their own realms'.

Converb phrases connecting with the pre-text can precede the subject when the action is a direct reaction: *munı körüp bodisatv ... ärtiñü korkdi sezinti* (Suv 630,10) 'When he saw this, the *bodhisattva*, ... he became exceedingly frightened ... and worried'; *anı körüp yäklär bägi vayşirvani täñri, yaşlıg közin yığlayu ...* (TT X 296) 'When he saw that, the lord of the demons the god Vaiśrāvana, ... he wept with wet eyes and ...'.

S – O – V is the unmarked order, S being preceded by connectives (such as *anta ötrö* 'thereupon'). Other object positions demand explanations. In the following example, e.g., the locative precedes the subject in order to stress the distance of the two goals: *üstün akaniştavan altın aviş tamu ... yer suvlarda ol yarok yaltrik täğir* 'That bright gleam reaches all the way to the A. above and the Avci-hell ... worlds below'. Objects can also precede the subject when they are topics carried over from the preceding co-text; e.g. *čik bodunug biñam sürä kälti* 'The Č. tribe was driven hither by my military unit'. The accusative is pushed to the first part of the sentence also when something else occupies focus position, e.g. *elig törög agi barim tutar* (KP 9,1) 'Money (*agi barim*) is what keeps the state (*el törö*) going'. In the following Orkhon Turkic example, *üd*, the direct object, is topic; it precedes *täñri*, the subject, which is focus of the utterance: *üd täñri aysar kişi ogli kop ölgäli törömiş* 'Since it is god who determines

timing (*üd*), the sons of men are all born to die.’ The reason for *üd* ‘time’ lacking the accusative suffix might be its genericity; the sentence is uttered in consolation for death. In *örgün anta yaratıtdım, çit anta tokütdim* (ŠU) the unmarked direct objects precede the locatives, which are in focus: ‘It was there that I had my throne (*örgün*) erected and a (border) fence (*çit*) set up’. In *bo buyanag äñ öñrä ävirär biz täñri bögö el bilgä arslan täñri uygur tärkänimiz küñja* and similar sentences in the colophon of MaitH Y, the deflection of *punya* (*buyan ävir-*) is topic, the person to whom it is deflected (in dative case) the relevant new information.

Personal pronouns follow nominal predicates as they follow the verb, presumably lacking stress (as in modern Turkic). This means that the topic follows the comment when this topic is a personal pronoun, instead of preceding it. Hence the placing of a personal pronoun at the end cannot be used as an indication for its being predicative. It is an indication that it is getting cliticised and turning into a grammatical personal marker without any role in the topic-comment structure. The sentence *täñrim, bizni yarlıkaglı buyançi kertü täñri siz siz* (BT V 400-402) is to be translated as ‘My lord, it is you (*siz*) who are the true god of good practices, who commiserate with us’ with ‘you’ as comment. This corresponds to Turkish *sizsiniz*: The first *siz* is comment, the second the trace of the copula. If ‘you’ were a neutral topic we would have **täñrim bizni yarlıkaglı buyançi kertü täñri siz*, while **täñrim siz bizni yarlıkaglı buyançi kertü täñri siz*, with *siz* added in the first position, would mean that the 2nd person is being contrasted with other possible topics.

The position just before the verb serves focussing: In *täñrili yäkli yaroklı karalı ol üdüñ katilti* (Xw 7), e.g., *ol üdüñ* ‘at that time’ is in focus: ‘It was then that gods and demons, light and darkness were mingled’. When the focus position just before the verb is occupied, non-finite elements can be pushed after the verb; this may be the reason for the place of the converb in the following sentence: *tegin kañi xanka inča tep ötündi iglayu: ”..”* ‘Crying, the prince spoke the following words to his father the king: ”..”’ (KP 4,7). For the purpose of focussing, predicative direct objects can be moved *away* from preverbal position also when they have no accusative marking: *uçuğma k[uşlar] kälip tämirliḡ yiti tarmaklar[in] üzä tanču tanču ätimizni üz[üp] eltirlär* (MaitH XX 14r14) ‘Flying birds come and with their iron claws tear away our flesh piece by piece’. The unmarked place of *tanču tanču* would have been adjacent to the verb; the correct

formulation of the process may just be that elements get stressed by being moved from their normal position, whatever it is.

Here three Christian examples for the postponement of the indirect object: *bo ... buyan ädgü kilinčig äñ öñrä ävirär biz ... tört ... täñrilärkä* ‘We transfer the credit for this meritorious deed first of all to the four ... gods’; *ol üdün Xerodes xan inča tep yarlıkadı olarka* (U I Magier 3) ‘Then king Herod decreed the following to them’; *barip yükünäyin añar* (U I Magier 8) ‘let me go and worship him’; *yükünč yökündilär ögmäk alkış ötündilär elig xan m(ä)šixa täñrikä* (U I Magier 20) ‘they worshipped and expressed praises and blessings towards the divine king Messiah’. *pašik sözlägüg ayu yarlıkadıñiz olarka* ‘you graciously admonished them to sing hymns’ (from a Manichæan text) also places the backgrounded indirect object after the verb.

Beside this there is the phenomenon of right dislocation, where a sentence or clause with a demonstrative *in situ* is followed by an apposition to that demonstrative: In the sentence *seni inča sävär män ayadaki yinčü mončok täg* ‘I love you as much as jewels and pearls in one’s hand’ (KP 6,8), *ayadaki yinčü mončok täg* stands in apposition to *inča*. While, in this sentence, *inča* points forwards, *munü* in the following sentence points backwards: *munü körüp bodisatv, montag osoglug ärtökin, ... ärtiñü korkdı sezinti* (Suv 630,10) ‘He saw this, the *bodhisattva*, i.e. that this was the situation, and became exceedingly frightened ... and worried.’ In this second case, both the subject and the apposition giving semantic content to the anaphoric demonstrative are postposed. The reason here, again, is the strong emotional content of the passage (referring as direct object to the state of the prince sacrificing himself). In Zieme’s edition of the Uygur translation of the *devatäsütra*⁶¹⁷ (a2-3) we read: *nä antag äd ol [ag]uta t[aki katıgrak, nä antag] äd ol yalar otta käd örtäyür* etc., signifying ‘What is such a thing that it is stronger than poison? What is such a thing that it flares

⁶¹⁷ ‘Altürkische Fragmente aus dem Devatäsütra’. W. Gantke et al. (eds.), *Religionsbegegnung und Kulturaustausch in Asien. Studien zum Gedenken an Hans-Joachim Klimkeit*. Wiesbaden: Harrassowitz 2002: 226-244. We quote two among four such sentences, the other two being even more fragmentary. The editor’s reconstruction is based on parallelisms, on the answers to these questions (which are also, however, fragmentary) and on the Chinese and Sanskrit versions. The less likely analysis is to consider *nä antag äd ol* to be a complete nominal sentence and *yalar otta käd örtäyür* an asyndetic relative clause, similar to the analysis of the sentence *bo montag körksüz yatagma nä törlüg kiši bo* ‘This (person) lying there in such an ugly way, what sort of a person is he?’ offered at the beginning of this section: That would only have been possible under left dislocation. *yumšakrak* in a10 is an emendation for a word which looks similar but is not understandable.

up stronger than fire? ...'. Then (a10) *nä antag äd ol bñntaduta takì yumšakrak* 'What is such a thing that it is softer than silk?'. We here have three interrogative nominal sentences where the attributes of *äd* are right-dislocated, leaving the cataphoric demonstrative *antag* as trace. The first and third right-dislocated elements are adjectives with satellites while the second one is a relativized sentence with no mark of subordination (as the conjunction *kim* would have been). Parallel mss. instead use other means of text organization, *nä antag äd bar* 'What sort of a thing is there ...' or *nä antag äd ol kim* 'What sort of a thing is it that ...'.

Now take *kišig .. yinik körtä•i, nomug u•uzlada•ilar ü•ün, anñn burxanlar anta tugmaz; kö•ülläri tar, kirläri täri• ü•ün kut bulmüš tüzünlär bo tiltagñn anta barmaz* (HTs V 100-106) 'Because they humiliate people and disparage teaching, that is why Buddhas are not born there; because their mind are narrow and their filth deep, for that reason •ryas who have found blessing do not go there': The anaphoric elements *anñn* and *bo tiltagñn* echo the reference on the expressed causes for further prominence. Similarly in HTs III 665: *män sini nizvani kadgu[larñn] tarkarip arxant kutñn bulturgali, anñ ü•ün sürüp üntürdüm* 'To make you get rid of the passions of sorrow⁶¹⁸ and find arhathood - that is why I drove you away'.

Topics established as such in the text stretch preceding a sentence can be right-dislocated. Take *bo montag asig tusu kildači üçün bo nom ärdini, anñ ol šloklarig tükäl bititti* 'It is because this *sūtra*-jewel does this much good that he (i.e. the Chinese emperor) had those *gāthās* written out in full' in BT I A₂ 19-21. The *sūtra* in question is mentioned (and praised) in 1.4 (*bo kimkoki atlig nom ärdini*), 1.9 (*bo nom ärdini*), 1.14 (*bo kimkoki nom*) and referred to with a zero anaphoric in 1.17 (where the reader has to understand it to be the object of a verb). Then follows the sentence quoted above, where this reference is taken up with a noun phrase, placed in post-predicative position: In a sentence following upon one with zero anaphora, the author chose to take up explicit reference, but without putting the referential noun phrase into a position which establishes topicality.

In '*bar ärsär mäni• azkya ärsär ymä münüm kadagim, ... eri•lär münä•lär*' *tep, ütözdäkimin ärsär ymä, tiltäkimin ärsär ymä, kö•üldäkimin ärsär ymä*' (BT III 543-545) 'He said 'If I have even a bit of sins, ... criticise and chastise them, be they my sins of body, of

⁶¹⁸ I do not think *nizvani kadgu[lar]* is either 'Leidenschaften₂' as translated by Röhrborn or 'äcılar₂' as translated into Turkish by Ölmez; it is unlikely to be a binome as the meanings of the two words are too far apart.

tongue or of heart.” there is right dislocation of three locative satellites to ‘my sins’ (the binome *mün+üm kadag+üm*); these satellites take up the possessive suffix of this latter. Interestingly, the accusative form of the satellites echoes the function of the head as direct object, although that has nominative and not accusative form.

Question pronouns generally appear *in situ*; e.g. *mäniñ kizim kanča baryok ol* (U II 25,21) ‘Where has my daughter gone?’, *biz ikigüda kanyusi küçlügräk biz?* (Wettkampf 43) ‘Who among us two is the stronger?’. In rhetorical questions, e.g. *eliñin törögin käm artatı udaçı ärti* (BQ E19) ‘Who could have harmed your realm and your system?’, *ellig bodun ärtim; elim amtı kanı* (KT E9) ‘I was a nation with a realm; where is my realm now?’, *otsuz suvsuz kaltı uyın, näçük yorıyın* (IrqB 45) ‘How should I manage, how can I live without grass and water?’, *muntada muñadınçıñ nagü bolgay* ‘What could be more wondrous than this?’ (Mait 26A r4). In the following sentence an interrogative pronoun in indefinite use is the sentence’s subject: *kim kayu küsäsär Ketumatı kánttäki ... kutlug tünliglar ara ätüzü olorup aşagalı, birlä olorup mäñilägäli, ol kişi ädgü kilinç kilzun* ‘Whoever wishes to enjoy sitting among the blessed creatures of Ketumatı and to make music, to sit together and be happy, that person should perform good deeds’. It can then happen, as in this example, that it attracts the verb away from clause-final position. Even more so with real interrogatives with 1st or 2nd person subjects: *näkä täzär biz* (Tuñ 38) ‘What are we fleeing from?’, *kämkä elig kazganur män* (KT E9) ‘Whom am I conquering countries for?’, *nä üçün busuşlug kältiñiz?* (KP 4,5) ‘Why did you come (back) saddened?’, *nägülik ölüür sizlär* ‘Why do you kill?’, *nä tusu bolgay* ‘What use will it be?’, *kanča bargalı sakınur siz* ‘Where are you planning to go? In DKPAMPb 840 a child addresses his father with a chain of five rhetorical questions, two of them with *mU* after the verb, two with left dislocation of *wh*^o forms and one (marked by *ärki*) with the pronoun *in situ*; these are: *kanča bardı säniñ burxan kutilig ädgü sakınçıñ? kimni üçün mini montag ämgätgäli buşi bertinç? yarlikançüçi köñülün kanta yitlinip bardı ärki?* ‘Which way did your good thoughts linked to Buddhahood go? For whom have you given me as alms to cause me so much pain? Where did your pity disappear to, I wonder?’. In the following instance, finally, the nominalized topic is pushed out of initial position by an interrogative: *nä tusu bolur* (or: *bulur*) *ol ädgü kün, ol ädgü üd körmişi talulamışi* (TT VI 23) ‘Of what use will it be (to him) that he looked for and found out a suitable day and a suitable hour?’

If the verbal content is not predicative (i.e. not part of the ‘comment’), the sentence can be clefted by putting the verb into non-

finite form (here *äšidtöküm*): In *üküş tälīm nomlarīg äšidtöküm yok ärti ... amtī yügürü äšidtim ... bo nomug* (Suv 670,14) ‘There were many teachings which I had never heard; now I have listened to this teaching (being preached) right before me’ it is the negation which is in focus; the neutral expression would have been *äšidmädim*. In the following sentence the subject is in focus; for this purpose the particle *Ok* is placed after (and the adjective *yalañuz* before) it, and the verb is made into a participle, turning the sentence into a nominal one, whereby the subject appears in the second half of the sentence: *anı biltäçi yalañuz burxanlar ok ärür* (BT I D(14)) ‘It is only the Buddhas who know that’. In the sentence *ol yäknij üstün täñri altın yalñukta kim ärsär küčün tıdtaçi yok* (TT X 104-106) ‘There is nobody, neither among gods above nor among humans below, who restrains the power of that demon’ *yäk*, ‘the demon’, is topic, brought to a position before the subject and thereby separated from its head; *yok* is shown to be the main predicate by the nominalisation of the verb, again changing a verbal to a nominal sentence pattern. In the following passage the clefting serves focussing on the identity of the subject: *kim ärti ärki bıçdaçi ögükkyäm ät’özin? ... kim ärti ärki ölürtäçi ögükkyäm čak sini?* (Suv 626,14-19) ‘Who could it have been who slashed the body of my darling? ... Who was it, I wonder, who killed you of all people?’. *sizni sävmäkimiz montag ol* ‘This is how we love you’ (HTs VII 1880) figures a non-finite verb form to focus on *montag*: The variant with finite verb would presumably have been **sizni montag sävär biz*.

In *yeg ärdöküm ol* (E24,5) ‘That is how I succeeded’ and in *tirig oztum. kältöküm bo* (KP 61,1) ‘I survived alive. Here I am’ it is demonstrative pronouns which get the full predicative weight. A *-dOk* form is topic for a demonstrative also in *Kapgan xagan, Türk Sir bodun yorödökü bu* (Tuñ II N3) ‘This is how K. k. and the Turk (or: ‘united’) Sir people fared’. The following sentences with copula are construed similarly: *kaltı tül tüşäp odunmiş täg tiriltöküm bo ärür* (Suv 16, 15-16) ‘This is how I came back to life, as if, e.g., I had dreamt and woken up’; *yerig tupulup yokaru ünmişi bo ärür* (Suv 644,4) ‘This is how it made a hole in the brown earth and came up’. This construction lived on, with *-dOk*, in Qarakhanid: *oş kaldöküm bo* is, in DLT fol.30 translated as ‘I have just come’: *oş* here makes the presentative element even more explicit. Interestingly, most of the *-dOk* forms are in the 1st person. In a lecture held in Frankfurt in November 2002, E. Skribnik documented this construction, with predicative *bo* or *ol*, from Tuvan and Altay Turkic.

The main clause in the following sentence was clefted to create a focus for the temporal adjunct: *ärtimlig ät’özüm içginsar män, kayu*

kün bolgay muni tæg tükällig kiši ät'özin bulgum? (U II 88-89) signifies 'When I lose my transient body, on which day will it be that I find a perfect human body like this one?' The unclefted version would have been **kayu kün ... kiši ät'özin bulgay män?* Interestingly, the writer's hope is built into the projection participle *bul-gu*.

Definiteness or specificity do not as such appear to be expressed by case marking. That constituents appearing earlier in the sentence tend to be more definite, i.e. better known to speaker and hearer and more within the universe of discourse, is a universal phenomenon and no doubt correct also in this language.

4.5. *The structure of the participant group*

For the representation of relationships between entities participating in an event the language uses a number of different and interacting means: First of all there are the verb bases, each with a typical set of participant characteristics, i.e. what set of nominals they can govern and in which cases. Those governing direct objects are called transitive, those not governing direct objects intransitive, but one would need a much richer set of terms to classify verb bases in this way: Their government of other case forms (e.g. the dative) is also of high grammatical relevance. Moreover, some verb stems are associated with more than one government pattern, sometimes as linked to different meanings; in some of these cases, it can be argued that such a verb stem in fact represents more than one verbal lexeme. Still within the lexicon (and therefore not, strictly speaking, the object of this work but described in OTWF), any intransitive verb stem can, in Old Turkic, be turned to a transitive one by adding one of the seven causative formatives or formative combinations to it.⁶¹⁹ Secondly, the different diathetical suffixes added to the verb (including the causative suffixes) define distinctive grammatical sentence structures, especially if lexicalisation of these derived stems does not lead them to special meanings and away from sentence patterns characteristic for each one of them. Thirdly there are the governed nominals referring to the participants in the action, consisting at least of one word (unless we have zero anaphora pointing to some entity outside the clause as

⁶¹⁹ The various causative suffixes are in complementary distribution for some of the stem shapes as defined phonologically, but not in all cases. They should be treated as separate suffixes both for this reason, and because their grammatical characteristics by no means overlap completely.

defined by the verb in question), which fall into semantic classes on one hand and, on the other hand, are characterised by case forms.

Zero slots can by the addressee be filled either from out of the context or through his world knowledge. See OTWF 785, 795-6 concerning the ellipsis of direct objects because of expected addressee knowledge in the military domain, the verbs *akit-*, *sekrit-* / *sekirt-* and *yor(i)t-* taking ‘horse(s)’ as implicit object and thus being used as intransitive verbs in spite of their causative shape. Similarly, Röhrborn 2000 states that the verbs *çökit-*, *bödit-*, *agrüt-*, *täprät-*, *bälgürt-*, *ürkit-*, *bäliñlät-*, *äñit-*, *tolgat-* and the DLT’s *yilit-*⁶²⁰ are used with the subject’s body or a part of his body as implicit object. In a few cases this ultimately led to relexicalisation as an intransitive verb; in the corpus, the object does, however, resurface either when it has to be qualified by an adjective or for some contextual reason. The problem which we have with ellipsis is that, in the less common cases, it is not clear which lexeme should actually be the understood object: With the sentence *näçükin takı adkantaçi biliglär ... ürkitgäli bäliñlätgäli ugay* quoted by Röhrborn 2000: 270 from HTs, *ätözin* ‘his body’ is unlikely to be the implicit goal, as he thinks; with verbs signifying ‘to frighten’ the object should be less physical.

Passive sentences have verbs formed with *-(X)l-* or, in late Buddhist texts, *-tXl-* or *-tUrXl-*, getting the patient as grammatical subject. They usually lack an explicit agent; in later texts they are sometimes accompanied by a constituent referring to the agent, governed by the postposition *üzä*. See OTWF 691-93 and 699-700 for the syntax of verbs formed with these formatives. The normal earlier way of deriving passive verbs with explicit agent was to add to them the formative *-Xt-* and put this agent into the dative case.

When one of the seven causative formatives is added to transitive bases, we have different constructions depending on what case forms the argument nominals governed by the verb are in; the different possibilities are discussed in OTWF 834-845. The instances involve agents or instigators, targets and, mediating between these, intermediate causees or intermediate agents, whose task may be seen as active (from the point of view of the target) or passive (from the point of view of the instigator).

-(X)š- verbs have two (groups of) participants (in plural) vying or cooperating with each other. They are often accompanied by the phrase

⁶²⁰ This has the secondary meaning ‘to get fever’. Röhrborn 2000: 272 points out a similar development behind Turkish *kızdırma* ‘fever’ and the verb *üşüt-* ‘to catch a cold’. Another such case is Turkish *sıtma* ‘malaria’, which comes from *ıst-t-ma*.

bir ikintiškä ‘one another’, which appears as *bir ikintikä* in MI 9,9 and Maue 1996 44a v6; alternatively, they have one participant vying with (*birlä*) another, the parties being either direct or indirect objects of each other. The content of ‘vying’ is not necessarily linked to the use of *-(X)š-*; cf. *küčümüz bir ikinti birlä sinalim biz* ‘Let us compete with each other in strength’ (Wettkampf 41-43); DreiPrinz 119-120 has no doubt also been correctly completed as *[bir] ikinti birlä*. The cooperating or vying participants in an action are either both subjects, or one party is the subject, carrying out the action *with* or *against* the other. However, even in this latter case and when the subject is singular, Old Turkic (unlike Western European languages) puts the verb in the plural; *inim Köl Tegin birlä sözläšdimiz* (KT E 26), e.g., signifies ‘I discussed the matter with my younger brother Köl Tegin’. One of the original meanings of the *-(X)š-* formative (retained to this day in Kirgiz) may have been the expression of verbal plurality; thus e.g. in *bešinč ay üç yegirmikä kalışdi* ‘on the 13th of the 5th month they made an uprising’ in Tariat S3, referring to the Türk tribes after getting vanquished by the Uygur confederation. See OTWF 578-583 for more details.

Verbs formed with *-(X)n-* are reflexive or middle (in which case they can govern direct objects) or anti-transitive (intransitive derivatives of transitive bases); a number of them can be semantically characterised as having an abstract metaphorical meaning distinct from the concrete meaning of their base. See OTWF 634-639 for details on the syntax and semantics of *-(X)n-* verbs. Verbs formed with the rare and obsolete *-(X)d-* formative all show middle voice while all *-(X)k-* and *-lXn-* verbs (the first discussed in OTWF 650-51, the second in OTWF 641-42) are anti-transitive. Sentences need not have any of these forms to show middle content: *el[ig] bäg ... öziñä olorgu äv etdürti* (HTs III 739), e.g. signifies ‘The king ... had a house made for himself to live in’.

-sXk- forms sentences with the patient (a creature with a will of its own) as subject (like a passive) but (in a few examples) the accusative of something *by* which the subject suffers; see OTWF 705-6. All *-lXz-* verbs (as all *-sXk-* verbs) have transitive bases; they represent the subject as responsible for the action he undergoes, and get the active causee in the dative case; see OTWF 709 for the use of verbs formed with this suffix.

When a subject slot is not filled and no zero anaphor is in sight either, the subject can be ‘any appropriate argument’; ‘somebody’ in the example *tämirlig oligün olimış osuglug* (MaitH XVNachtr 4r25) ‘as if somebody had wrung (them, i.e. foetuses in their mothers’ belly) with an iron wrench’: The verb *oli-* has no explicit subject. It would

have been wrong to translate ‘as if wrung with a ... wrench’ as the verb was not passivized. In section 5.2 we deal with impersonal necessity, where the speaker / writer uses various means for expressing a directive he applies to anybody. The conditional does not need to fill the subject slot either: *tužit täñri yerintäki yil sanin sanasar tükäl tört miñ yil ärti; yalñuk saninča bögsär älig yeti kolti altı yüz tümän yil ärtmiş äriür* (MaitH X 1v10-12) ‘If (one) reckons it by the years of the divine tuşita country 4000 years all in all went by; if (one) sums it up by human reckoning 57 *koñis* and 6 million years have passed’. Using *tep tesär* ‘if one says’ is a very common strategy for asking rhetorical questions then answered by the author himself; ‘one’ here represents a hypothetical interlocutor.

Such non-reference to subjects happens also with finite verb forms, as with *tägir* in the following passage: *ol yolča barip ariti sansardin ozgali bolmaz; kayu üdün bo tüzün yolča barsar temin ök ugramış üriüg amal nirvan balikka tägir* (MaitH Y 328) ‘Going by that way it is quite impossible to get free from *samsāra*; when one takes this righteous way, one reaches straightway the intended eternal peaceful city of *nirvāṇa*’. As Zieme points out in *TDA* 10(2000): 67, alternative readings in Chinese-Uygur bilinguals are often introduced with the words ... *ymä ter* ‘One also says ...’. Further instances where slots opened by finite verbs are left empty are mentioned in section 4.32.

4.6. Clause subordination

The transformation of verbal clauses to sentence constituents is mostly taken care of by morphology, i.e. through the replacement of finite and other predicative verb forms by participles and converbs. These appear to have been the only means available to the language of the inscriptions, beside the use of *te-yin* and *te-p* in the creation of causal and final clauses within a direct speech strategy. In Uygur, however, conjunctions such as *kim* also have important tasks, and that dialect conglomerate makes much use of pronouns such as *kim* ‘who’ (sometimes joined to verb forms in *-sAr*) in subordinating. The predication of a subordinate clause can fill the task of any of the constituents of the main clause except the verb; we shall here deal with these tasks under three headings: adnominal, nominal and adjunct.⁶²¹ All loose forms of juncture are dealt with in section 4.8.

⁶²¹ Sections 4.61, 4.62 and 4.63 thus roughly correspond to the tasks of adjectives, nouns and adverbs. The term ‘adjunct’ has a wider sense than ‘adverbial’, since adjuncts and adjunct constructions can qualify not only verbs but also whole clauses.

4.61. Clauses in adnominal tasks

Old Turkic has basically three different types of attributive relative constructions: left-branching constructions built around participles, right branching ones that are introduced by particles, and relativisation which makes use of correlative pronouns, where the head *can* be *within* the relative clause. The first type, here called synthetical, is described in section 4.611, the second, which we call analytical, in section 4.612. Correlative relativisation is described in section 4.65. The heads which relative clauses qualify refer to constituents (action participants or circumstantials) of these as well as being constituents in the matrix clause; this is why they get deleted from both synthetical and analytical relative clauses: They do not, however, get deleted from the subordinate clauses within the correlative relativisation construction. Finally we have headless relatives (dealt with in section 4.62 with subsections) themselves referring to such participants or circumstantials.

Sometimes the qualifier clause denotes the action as a whole and not one of its participants; in this case it is not a relative clause. When the head is not a participant in the action described by the subordinated verb, nothing gets deleted even though the subordination is effected by synthetical means. Two such simple examples are *ölürmək sakınçin* (TT IV A 29) ‘with the intention of killing’ and *bo nom bititmiş buyan ädgü kilinç* ‘this meritorious deed (consisting of) having had the *sūtra* written down’, which show an infinitive and an action nominal in *-mİš*. In the first of these the action is not meant to be linked to any particular subject; in the second the subject of *bitit-* is the person who commissioned the copyist’s work. In the first case, ‘killing’ is the content of the thought which the word *ölürmək* qualifies, whereas, in the second instance quoted, the ‘having written something’ gets defined as *punya* (= *buyan* = *ädgü kilinç*) or the source of *punya*. Such verbal nominals can also be accompanied by reference to the subject, which is in the nominative in the following instances (both with *-mAk* forms): *bokün{ki} künkä tägi mogočlar otka tapınmak tiltagi bo ärür* ‘this is the reason for the Magi’s worshiping of fire to this day’ (U I 9) or *činäk keginč bermäki nom* ‘the text of Chandaka’s answering’ (a book title in ChrManMsFr 1208). In the following expression, reference to the subject of the subordinated perfect participle can be found in the possessive suffix added to the head of the construction: *anaka ataka yazmışnıñ ayıg kilinčlarımızni* (BT XIII 12,76) ‘our evil deeds (consisting of) having sinned towards mother and father’; unlike

the other examples I have come across, the satellite is linked to the head by the genitive. For the content cf. *čaxšapat simiš tankariğ idmiš yazoklarım* ‘my sins of having broken precepts and having relinquished vows’ (1.46 in the text edited by M. Ölmez in Laut & Ölmez 1998: 267). In *amti köñülündäki nä busuşuñ sakinčünj ärsär mini körmiš sävinčkä irak tarkargil* (TT X 136) ‘Get rid of any sorrow or worry there is in your heart through the joy of having seen me’ the subject of *mini körmiš* (the satellite) is inherited from the main verb, a 2nd person imperative. In TT X 520-521 the reference is explicit in the anaphoric use of the genitive form *anıñ* which also qualifies the head: *anıñ öñrä ažuntaki ... täñri burxan nomın äšidmiš tünlamış ögrätigi üzä bo šlok nom köñülintä kälti* ‘Through his experience (*ögrätigi*) in a previous existence of ... having heard and having listened to (*äšidmiš tünlamış*) the teaching of the divine Buddha, the following doctrinal verse came to his mind’: *yarokın biziärü kälürdi ärsär, biz adrok adrok etip yaratip nomka kigürsüg törö bar ärti* (Xw 167) ‘There was the rule that, whenever he conveyed his light to us, we (in turn) were supposed to prepare and organize it each in its special way and to introduce it to religion’ is an instance where the verbal noun *kigür-süg* (< *kigür-* ‘to introduce’) is accompanied by a nominative subject, *biz*. In *ävirtgäli ötünmiş ötüñiñä* (BT II 114) ‘upon the request of ... to have (the *puñya*) deflected’ the head and the qualifying verbal form happen to be etymologically related; English *request* is able to govern a phrase such as *to have it translated* but in Old Turkic *ötüg* had to be qualified by *ötünmiş*, a form less nounier than *request* to govern the supine in *-gAll*.

In *säñir tüpintä ulug taš üz[ä bur]xan oluru yarlıkamış iz ol* (HTs III 974) ‘On a large rock at the foot of a promontory there is (*ol*) the mark of Buddha having sat there’, *iz* ‘trace’ is not a participant or a circumstantial of the action of Buddha’s sitting but its result. I am not aware that ‘result’ can be expressed as a circumstantial in Old Turkic; if that were possible, this particular *-mIš* clause would also be a relative clause. I take this to be the criterion distinguishing between relativisation and qualification by clauses referring to the action as such, in any case holding for the instances mentioned in the previous paragraph.

Synthetical relative clauses precede their head while analytical relative clauses follow it. In the following example there is, exceptionally, a right-branching synthetical relative clause (with *sözlädäçi* ‘pronouncing’ and *tutdaçi* ‘upholding’): *kim kayu tünliğlar, bo idok darni nomug sözlädäçi tutdaçi, ögüzlärdä köllärdä ulug taluy ögüz içintä suvka kirip yunsarlar, ...* (DhāSū 28) ‘If any creatures reciting and upholding this holy incantation get into rivers, into lakes

or into the sea and wash, ...'. This instance can also be considered an apposition. In the following sentence there is an analytical relative clause introduced by *kim* and following its head: *bar mu ärki antag tünliglar kim bo nom ärdini tiltaginta bo ok közüniür aźunta ädgü tüşkä tägdäçi* (Suv 2,16, the introduction) 'I wonder whether there are such creatures as attain good results (i.e. achieve their goals) right here in this visible world because of this *sūtra* jewel'. What is here being relativised is not a finite verb as generally in analytical relative clauses, but a participle without a copula. This is also rather rare but not as rare as right-branching participles without *kim*. It may not be a coincidence that the forms in both passages are *-dAĕI* participles, as there may have been some reminiscence of *-dAĕI* in finite use, as in Orkhon Turkic.

4.611. Synthetical relative clauses

Old Turkic relative clauses are usually built around participles. However, *ärgürmiš kizil bakir içürmäklig ... tamu* (BT II 468) 'the hell where they give (people) red-hot melted copper to drink' is a synthetical relative construction although one would not call the *-mAk+lXg* form (discussed in OTWF pp. 153-5) a participle. Relative clauses qualify nominals referring to one of the entities involved in the event being described (in the instance just quoted, e.g., the entity is 'place'). We can thus classify them according to the task of the head nominal in this event.

1) Orkhon Turkic examples for relative clauses qualifying the relativised verb's subject are *körüür közüüm* 'my seeing eyes' (KT N 10), *igidmiš xaganıñ* (KT S9) 'the ruler who has taken care of you', *öltäçi bodun* 'the people who were going to perish' (KT E29). Further, Uygur *täpräümäz kamšamaz ornagları oronları* (BT V 189) 'their immobile and unshaking abode' and *sävär in içgünmiš män kändimin, sävär amrak atayimin* (Suv 626, 16-17) 'I have lost my baby, my dear loving chick!'. One would not say that *seeing* in English *my seeing eyes* is a relative clause, though *which see in eyes which see* would qualify as one. Our practice concerning Turkic is to call any attributive participle a relative clause, since the distinction between these and even elaborate relativizations is gradual and fuzzy. In *bir bilgä nom bilir är* (KP 14,3) 'a wise man who knew⁶²² the doctrine' the participle has the object *nom* but the bracketing could also be *(nom bil-)-ir*. With *-yOk* we have e.g. *övkä köñül öritmäyök tünlig*, a creature which never

⁶²² This is how we *have* to translate *bilir* in this sentence and *öltäçi* in the previous one, since the main verbs are in the past tense.

let itself get into an angry frame of mind' (U III 42,13); cf. the common phrase *köñül örit-*. In *üç yäk savin simagli ... tärs azag nomlaglar* (M III nr.12 r3) 'the ... propounders of heretic doctrines, who do not contradict the words of the three demons', the *-(X)gli* participle is negated. *ol törötä yigilmış näcä kişilär ärti ärsär* 'All the people who were assembled at that ceremony ...' (Suv 5,8-9) has a relative clause with *-mİş* qualifying its subject.

2) In *yagİ alkİnmiş yula* (Mait 103v11) 'a beacon whose oil has been consumed' and *közi körmäz kişi* (MaitH XV 8r25) 'a person whose eyes do not see' the possessive suffix added to *yag* 'oil' and to *köz* 'eye', the subjects of the relativised verbs, refers to the heads, showing that they (i.e. *yag* and *köz* respectively) in some way or another 'belong' to these heads (*yula* and *kişi* respectively): These are examples for the *bahuvrīhi* construction with participles in the adnominal predication. The eye is, of course, an inalienable part of a person's body, and oil was a necessary and commonly known ingredient of oil lamps.

3) Participles can also be used for relativization when heads are direct objects. In the following two clauses, the subject *türk bodun* is supplied both from the matrix clause and from the possessive suffixes added to the heads: *türk bodun ellädök elin iĉġİnu İdmİş, xaganladok xaganİn yetürü İdmİş* 'the Türk nation let their realm, which they had created, slip away, and lost their emperor, whom they had crowned' (KT E 6).

When the relative clause is to refer to 1st and 2nd person subjects of the relativised verb, the reference is normally effected by a possessive suffix on the head, e.g. in *aydok isänjüz(i)n tükäti İslädämäz* (M I 10,13) 'we have fully carried out the task you told us to do'. In *künkä ašadokumuz beš täñri yarokİ* 'the light of the fivefold god which we absorb during the day' (Xw 201) however, the subject appears as a possessive suffix on the verb form.

Rarely, early sources use *-mİş* forms also for perfect relativisation: *äcümüz apamİz tutmİş yer suv* (KT E19) 'the territory which our ancestors ruled'. In Manichæan sources this happens only when there is to be no explicit reference to the subject: *etmİş yaratmİş tatİglİg aš* 'a well-prepared and tasteful meal' (runiform ms. TM 342 1 r4-5, KöktüTurf 1056); *sİzlärdä almiš agu xormuzta t(ä)ñrikä atgay m[än]* (M I 19,15) 'I will shoot the poison taken from you at the god Ohrmizd'. In *sözlämäsİg İrinçülüg söz* 'a loathsome expression not to be uttered' (Xw 198) the head is also the direct object of the verb; here

the meaning is not factive but prescriptive, since *-sXg* is a projection participle. The subject of *sözlä-* not being retrievable from the context, we take it that the ‘utterance’ should not, according to the speaker, be uttered by anybody. In the previous sentence, the poison could have been taken (*al-*) by the subject / speaker or by an assistant.

Buddhist Uyğur uses *-mİš* for perfect relativisation also *with* subject. In the following example the subject marking is on the head (as in the *-dOk* instance quoted from M I 10,13 above): *mäniñ kolmiš kut+um bütmäzün* ‘May the blessing for which I prayed not materialize (if ...)’ (T II S 21 a = U 261 v5, a Buddhist fragment with Manichæan punctuation quoted in the n. to BT V 426; there mistranslated). This is presumably in analogy to cases such as *mäniñ ašnuki ažunta kilmış öz kilinč+im* (TT VI 15) ‘my own deed which I committed in a previous life’, where the deed or sin is the subject’s sin. Cf. also *täñri tavgač [elig]niñ yaratmış swösin* (HTs VII 18) ‘(He read out) the preface which the divine Chinese emperor had composed’; the emperor is the author, i.e. the subject of *yarat-*, but one could also say that the preface was ‘his’ preface. In *bo ogul sutmakniñ bermış ašin yep aymış išin kilip ...* (SammlUigKontr Ad3,6) ‘This son (should) eat the food which S. gives (him) and carry out the work which he tells (him to do)’, on the other hand, the food and work are Sutmak’s, in another sense the boy’s.⁶²³ When subjects are in the nominative the head does not necessarily have the possessive suffix: *täñri täñrisi burxan yarlikamış ... idok darni* (TT VI 02) ‘a holy formula decreed by Buddha the god of gods’. There are cases, finally, when the head has no possessive suffix even when the subject is in the genitive case: *ol künki biziñ ašda ölürgüçi ud koyn toñuz başlap tünliglar* (Suv 6,13) ‘creatures, mainly bovines, sheep and pork, which we had intended to slaughter that day at our meal’; *braman burxanlarniñ yarlikamış bir šlok nomug ača yada sözlädi* (U III 36,1) ‘The brahman recited and interpreted the didactic poem which the Buddhas had decreed’.

4) In *ayančaŋ köñülin yüküngü ... kañim mani burxan* (Pohti 2) ‘my father the prophet Mani, to be worshipped with reverence’ the head is the indirect object of the verb *yükün-*.

5) *n(i)gošaklarniñ suyin yazokin öküngü xwastwan(i)vt* (Xw 221, ms. B) ‘The Xw. (with) which the auditors are to repent their sins’; *uzlangu äd* (M I 17₁) ‘the material to carry out one’s craft’ or

⁶²³ Note that reference to the subject of the sentence is deleted from the two relative clauses, where there is zero reference to the indirect object.

alḥadturgu sakīnč ‘meditation by which to weaken (bad influences)’ are instances of relative forms used for qualifying kernels which refer to their instrument. *bo kišiniḡ ätözin yumış suv* (DhāSū 31) signifying ‘the water (with) which this person washed his body’, the head *suv* is the instrument of washing (*yu-*) and not its subject; the person referred to as *bo kiši* is the subject of the superordinate clause.

6) The head is often the place where the action or event described by the adnominal clause takes place. In inscriptional *el tutsuk yer* ‘the place to rule the realm from’ (KT S 4), Manichæan *bo tugar öliür yertinčü yersuv* ‘this world in which one gets born and dies’ (M 126 + M 502m + M 201 quoted in the note to BT V 217) or Buddhist *öliüg kämišgülik ... [ay]iḡ oron ol* (HTs III 721) ‘It is a bad (?) place, (used for depositing corpses) there is no explicit subject, though one might consider the rulers of the Türk empire to be the implicit subject in the first example. In *ötrö olormiš oronintin örü turup ...* ‘Then he stood up from the seat he had been sitting on, and ...’ (TT VI 011) and *käntü öznü• olorur oronin kötürü turur* (BT VII B44) ‘he keeps lifting the seat on which he is himself sitting’ there is reference to the subject in the possessive suffix added to the head. *ymä zruš• [burxan] ärtöki yerdä* ‘at the place where Zarathustra stayed’ (ManUigFr p. 401, 10), on the other hand, has an explicit nominal subject in the nominative; the pronominal reference to this subject is on the verb and not on the head (cf. the expression quoted under (3) from Xw 201). *[ana]nt arxant ... ötrö olormiš orontin turup ...* (HTs III 678) ‘The arhat Ānanda ... then got up from where he had been sitting and ...’ is very similar to the TT VI and BT VII passages just quoted, but shows no anaphoric reference to the subject (Ānanda) either on the *-mIš* form or on the head, as appears to be usual with local heads. In runiform inscriptions the possessive suffix is wholly absent when the reference exists but is made superfluous by the context: *sančdok yer* ‘the place where (we) routed (them)’ (ŠU W7); with a 2nd person subject, *bardok yerdä* ‘in the places where (you) went’ (KT E24 = BQ E20); *täḡri yarlikadi, yañdimiz ... yañdok yolta ymä ölti kök* (Tuñ I S9) ‘God ordered (so, and) we dispersed (them) ... those whom (we) dispersed died right on the road’.

7) In *yanmas yerdä oztumuz* (M III nr.16 v3) ‘We escaped the place of no return’ the head is the source of the activity described by the verb, the place *from* which no creatures come back. *tugmiş atamiz* (BT XIII 5,7-8) ‘our real father’ literally signifies ‘the father from whom we

were born': The father is the source of the event (unless one wants to reduce fathers' task at reproduction to instrumental function).

8) In *ozgu kutrulgu yol* (Pohti 63) 'the way to salvation', *t(ä)ñri yeriñä bargu ... yol* (Pohti 72) 'the way by which to go to the land of gods' and *boşungu yol agtingu şatu* (M III nr.1 IV v14-15) 'the way to freedom and the ladder for rising' the head is the way by which one reaches a certain destination; this is in Old Turkic generally expressed by the equative.

9) The head can refer to the time of the event; with perfect participle: *idok elig uluşug agir basip oronka olormiş tokuz yegirminç yılanta* (DKPAMPb 29-30) 'in the 19th year of his having subdued the divine nation and country (*el uluş*) and of having acceded the throne.' With imperfect participle: *yilim yaşim adirtlig bilmaz üdtä* (HTs VII 331) 'at a time when my age was one in which I did not perceive matters clearly'. The necessitative *-gU* and *-gUlXk* forms qualify terms referring to projected time; e.g. *yula tamturgu künlär* (TT VII 40,112) 'the days on which one is to light a torch' or *amti maña burxan kutin bulguluk üd yagumiş ärür* 'Now the time has come near for me to attain Buddhahood' or 'the time when I should attain Buddhahood is near'. In *bodisavtniñ taloy ögüz içintä ingülük üçünç küzäd üdtä* 'in the third watch, during which the *bodhisattva* is to descend into the ocean' (MaitH XV 6r24), the subject appears with the genitive suffix, not taken up by any 3rd person possessive suffix (the Mait is one of the earliest Buddhist Uygur texts). In the following example in which *-gUlXk* again qualifies *üd*, reference to the subject is handled in still another way: In *ol tünliqlar kalgülük üdintä* 'at the time when those creatures were expected to come' (Suv 19,19) the subject is referred to both by a nominal phrase in the nominative and by the possessive suffix on the head.

In some of the examples quoted, the 'possessive' suffixes added to the heads may be either possessive or agentive. In *aydok isäñaz* 'the task you told us to do', *mäniñ kolmiş kutum* 'the blessing for which I prayed', *ol tünliqlar kalgülük üdintä* 'at the time when those creatures were expected to come', *oronka olormiş tokuz yegirminç yılanta* 'in the 19th year of his having acceded the throne' or *tirilmiş tiltagim* (Suv 5,8) 'the explanation for my resurrection' reference to the subject is effected by possessive suffixes on the head. In *künkä aşadokumuz beş täñri yarokı* 'the light of the fivefold god which we absorb during the day' and *zruş• [burxan] ärtöki yer* 'the place where Zarathustra

stayed', on the other hand, the possessive suffix added to the *-dOk* forms refers back to the subject. Among the modern Turkic languages, Turkish and (in the 1st and 2nd persons) Azeri as well as Tuvan place an agentive possessive suffix onto the end of the relative form (as in the two examples quoted last) while others join it onto the head. Still other Turkic languages (among them again Azeri, though only in the 3rd person) express pronominal subjects by independent pronouns only.

When an adnominal construction has a projection participle as kernel, it can express necessity. With *-gU*: *yula tamturgu künlär* (TT VII 40,112), e.g., is 'the days on which one is to light a torch'. Similarly with the *-sXk / -sXg* form in *sözlämäsığ irinçülüğ söz* 'a loathsome expression not to be uttered' in Xw 198 or in *el tutsuk yer* 'the place to govern (from)' in KT S 4. There is no reference to any particular subject in these examples; the utterance is meant to refer to any. The attributive clauses of these constructions are relative clauses, qualifying time, direct object and place respectively.

There could possibly be nominal, i.e. verbless left-branching relative clauses. One border instance is *kunčuyılar taysılar başlaguči [u]lug kičig kam(a)g bodun* (TT II,1 64) 'the whole nation, both big and small, (with) princesses and princes as (their) leaders': The *-gUČI* form is not a participle but a deverbal noun, which does, however, govern direct objects (see section 3.113); to translate the relative clause as 'led by princesses and princes' would therefore be less correct. Still, if the nominal clause in adnominal position had had a purely nominal (i.e. not deverbal) predicate, the *bahuvrīhi* construction (discussed in section 4.122) would have been used instead. The attributes *bö+kün bar* and *yanan yok* in *bökün bar yanan yok baksız mähüsüz ät'öz* 'the fickle and transient body which is here today and gone tomorrow' (r12 in a Mait colophon edited by Laut in Ölmez & Raschmann 2002: 133) are like verbless relative clauses in consisting, respectively, of the deleted subject *ät'öz* of temporal adjuncts and of the predicates *bar* 'existent' and *yok* 'non-existent'.

4.612. Analytical relative clauses

Post-inscriptional Old Turkic has an additional, right-branching relativisation strategy, using the particle *kim* (rarely *kayu*).

1) In most cases the head of the relativisation serves as subject in the subordinate clause. In the following Christian instance both relative clauses are adjacent to their heads, the first instance preceding the

direct object: *oxšayur sän ... ol ingäkkä kim iraktin üntädi öz buzagusüja kim azip barmiš ärdi* (ChrManMsFr ChrFr r 12-14) ‘You resemble that cow which called from afar to her own calf, which had gone astray’. The instances *ot kim iğaçdan ünüp y(e)nä iğaçag örtäyür ... kişgäç kim kântü ol ok tämirän etilmış ol ... tonnuş biti kim kişinäñ tärisintä ünüp y(e)nä kişinäñ kanin kântü sorar* ‘fire which emanates from wood and again burns wood ... tongs, which are themselves made of iron ... the louse of clothing which comes out of people’s skin and again itself sucks a person’s blood’ are found in one Manichæan source in M I 7-8. Further such *kim* clauses appear in ManUigFr r1, DreiPrinz 91-2 and 111 and M III nr.7 III r11-12. In the following Manichæan sentence (M III nr.6 II r3) both the synthetic and the analytical relative clauses appear inside the main clause: *ol ašanmiş aš kim ol ät özintä kirür ölüür* ‘The eaten food which enters that body dies’. There is another such instance in M III nr.7 I v9-10. Reference to the antecedent need not get deleted when the relative clause is nominal; the postposed *ol* here refers back to ‘place’: *alkatmiş yer kim kamag täñrilärniñ bäk katag täprämaz kamšamaz ornaglari oronlari ol* (BT V 188) ‘the blessed place which is the strong and solid, immobile and unshaking abode of all the gods’.

In the following sentence *kayu* ‘which’ is used as relative pronoun, the head consisting of a binome of participles used nominally: *kim ärdi ärki bo bütün yertincü yer suvdaki alku alplarig utmiş yegädmiş kayu bo yavlak sakinçlig yäknin pavaninta korkinçsiz kirip kälti* (TT X 253) ‘Who might have been the one who overcame all the heroes in this world, who fearlessly entered the bedroom of this evil-thinking demon?’ The reason for the use of *kayu* in this sentence may possibly have been the fact that it starts with interrogative *kim*, and the writer felt that the relative particle might have been mistaken for that.

There is a construction with *yok* ‘there isn’t’ in which the verb appears in the conditional form: *tinlig oglanü yok kim mäniñ ögüm kañim ... bolmadı ärsär* (MaitH X 2r1) ‘(In the whole of *Samsära*) there are no humans unless they be such as became my mother, father ...’, i.e., to put it more simply, all human beings became my mother or my father (in one of their previous existences). Similarly *bo yer üzä näñ andag t(ä)v kür yälvi arviş yok kim ol umasar* (M II 5,10) ‘There is no such trick or magic or incantation as he would not be capable of’; *anta adin tinlig yok kim mäniñ töpömdäki saçlarig tutgali usar* (U IV A 184-6) ‘There is no creature other than that one which would be capable of getting hold of the hairs on my head’. Another example appears in TT IV A 23-24 and additional ones are quoted further on in this section.

In the following Manichæan example (M I 17,8), as well as in Suv 610,17 or 616,3-5, the relative clause is not adjacent to its head but follows the complete main clause; this would be impossible with participial relativisation: *ol azîḡ kim taştan aşka içgükä katlap ärür ... içrâki az birlä katalur, kim erkäkli tişili ät'özintä ärür* 'That lust of yours, which is mixed with external food and drink, ... gets mixed with internal lust, which is present in male and female bodies'. Similarly in TT VI 253, *ötrö bo yertinçüdäki uluşin balikin etä berürlär, kim ayig kilinçlig ... tünliglarig eyär basar* 'Then they (i.e. the rulers, who are in fact *bodhisattvas*) organize their state in this world, which suppresses evil-doing and ... persons', and BT V 175, *täḡri kirkınlarin täḡri ogulanlarin alkamış törütmüş ol, kim ol örginniḡ özin täg ortosin täg ... bolup tururlar* 'He has created the divine maidens and divine youths, who have become as the heart and center ... of that throne'.

ögi kaḡi antag ögük sav sözläyü umaḡay kim ol äräḡ köḡlin yarotsar (M I 15,3) 'His parents will not be able to say any such considerate words as might brighten up that man's soul' is another (Manichæan) example where the relative clause is not adjacent to the head. The subordinated verb is not an aorist, as in the examples quoted in the previous paragraph; it is a conditional form, as in the paragraph before that, where the main clause has the element *yok*: The meaning of the main clause is here similar to that, since what is here denoted is the absence of 'loving words'. This subordinate clause can also be understood as consecutive (section 4.637), then to be translated as '... words so considerate that they could brighten ...'; the translation in Doerfer 1993: 34 is unacceptable.

2) In the examples discussed under 1) the *kim* clause is used for subject qualification. In the following example, however, the head (*ädgü*) is the indirect object of the relativised verb (*tägmä-* 'not to attain'): *täḡri täḡrisi burxanniḡ ädgü öḡli köḡüli tægmiş işi küdügi üzä yok antag ädgü kim tägmägülük* (HtsPar 14 r22) 'Through the activity reached by the benevolence of Buddha the god of gods, there is no such good as one cannot expect to attain.' Note that here, as in the last example mentioned, the antecedent is qualified by *antag* 'such'; unlike that instance, however, this subordinate clause cannot be understood as having consecutive meaning. Thus also in the following instance, in ms. T I D 200 l.18:⁶²⁴ *näḡ antag yer yok kim luşyanta özi tolu yok ärsär*

⁶²⁴ Quoted in the n. to TT V A 23. This is an early text, as it has twice *kanyu+garu* where later texts have *kayu*, twice the *-(X)gII* participle and /z/ is in some cases spelled with two dots.

‘there is no such place that L. himself should be wholly absent (from it)’. In this case the head is the place for which the content of the relative clause is said to hold; other examples of *yok* + relative clauses with the *-sAr* form have already been mentioned.

In *öñ sakiniñ ol ozaki sav yörüglärin kim män sizlärkä ayu bertim* (M III nr.7III, 15,11₁) ‘Remember and think about those previous explanations of matters which I was so nice to tell you’ the *yörüglär* are direct object both of *ö- sakin-* in the main clause and *ay-* in the relative clause. In Windg + U 132c 16-18, another Manichaean source, the head also serves as direct object of the verb (*tep okiyurlar*) in the relative clause: *yil sayu ol ay bälgülüg ärür kim i ğačig kamšatigli ... yeltirär ay tep okiyurlar* ‘Every year there appears that month which they call the windy month (lit. ‘the month in which the wind blows, *yeltir-*), which shakes and ...-es the bushes and trees’. In Windg + U 132c 40, the head *isig suvug* appears in the accusative, the case form which it would have if it were part of the relative clause, and not the nominative, corresponding to its task in the matrix clause: *inča kalti isig suvug, kim tumlig suvka katsar, ötrö içiglikä yaraši säviglig bolur* ‘just as warm water, which one adds to cold water, becomes agreeable to the drinking (person)’.⁶²⁵ A perhaps late note on the reverse of a Sogdian ms.⁶²⁶ reads *bo bitig ärsär el körmišniñ bitig ärür kim m(ä)n kiz čun alt(i)m* ‘As for this text, it is the text of El Körmiš which I, K. Č., have received’; this instance also has the relative clause qualify the direct object of the relativised verb. In Qarakhanid *bo söz kim sän aydiñ bagirsaklig ol* ‘The words you uttered are compassionate’ (QB 3335) the head is also the direct object while, in *bo kün mä kim ädgü atansa kiši* ‘and (*mä*) this day (on which) a good person may be nominated’ (QB 253, again with a conditional) the head has time reference.

The head of the following instance refers to the father of the direct object (*kiz+in*) in the relative clause: *öz kadini yeriñä tägdi, kim kañi xan kizin ädgü ögli teginkä kolmiš ärti* (KP 64,3) ‘He came to the place of his own father-in-law, whose daughter his own father had asked (in marriage) for the Good-Wishing Prince’. The exact relationship

⁶²⁵ Cf. 1.48 in the same text: *inča kalti tumlig suv, kim isig suvka katsar sogitür* ‘just as cold water which, when one adds it to warm water, cools (it)’ (translated rather freely by the editor). Alternately, *kim* may have been introduced in analogy to other sentences in the context; without it, the clause signifies ‘just as, when one adds warm water to cold water, it becomes agreeable ...’.

⁶²⁶ Zieme in a review by Sundermann in *BSOAS* 40(1977):635, reviewing a text collection by McKenzie. Zieme says that the note is late because the second *bitig* appears without possessive suffix; that phenomenon is discussed in section 4.121.

between the two clauses is made clear by the possessive suffix in *kiz̄in*.⁶²⁷

In *antag bar kim ol t̄inlig örtk̄ä örtänmäz* (TT VI 114-5) ‘There is such a thing that that creature is not burned by fire’, finally, the main clause is an instance of the existential construction. The subordinate clause qualifies the pronoun *antag* ‘such a one’ inasmuch as pronouns can get qualified by relative clauses; one could perhaps also consider the *kim* clause to be used in apposition. The similarity of the TT VI 114-5 sentence with the following two, both from other early texts, may be superficial if I understand it correctly: ... *öñj̄ärü k̄älürdil̄är. y[m̄ä] antag bar ärti kim alt̄i, ymä antag bar ärti kim berdi* (DreiPrinz 115-6) ‘they brought (the presents) before him. There were such that he took and such that he gave’;⁶²⁸ *ymä antag bar ädgü ögli ol; antag bar nomug taplagli kişil̄är* (M III Nr.6 Iv11) ‘So there are people who are compassionate and there are people who advocate the (true) doctrine’.

By content, sentences like *ol t̄ängri uris̄i ... tavr̄anu kayut̄in s̄ingar t̄ängril̄är eligi xormuzta t̄ängri ärs̄är, ant̄in s̄ingar yak̄in barip ...* (U II 29, 19-21) ‘that divine boy hurriedly went into the direction in which the god Indra, the king of kings was’, described in section 4.65, contain relative clauses as well, but they use the correlative strategy.

Analytical causal (section 4.635) and consecutive (section 4.637) clauses also get introduced by *kim*, and there are cases (e.g. one in M I 28,21) where relative and causal or consecutive interpretations are both possible; I take causal and consecutive *kim* to come from relative *kim*, in that the implicit motive for introducing relative clauses is often that they justify the content of the main clause.

The particle *kim*, absent from Orkhon Turkic, might come from the interrogative-indefinite pronoun *k̄äm, kimni* etc., whose nominative has the shape *kim* in Uygur. In the following sentence, both a particle and a pronoun reading would be possible, which might show us how the word for ‘who’ might have come to be used for this purpose: *t̄iin sayu ... montag sak̄inč k̄ilsar, alku t̄inliglar bo dyan sak̄inčlig kişig kim k̄örs̄är, burxan̄ig k̄örmiš t̄äg säv̄är taplayur ayayur aḡir̄layurlar* (TT V A 113) ‘If he meditates in this way every night, all creatures, whoever sees (or, with *kim* as relative particle, ‘all creatures who see’) this meditating person, will love, appreciate and honour (him) as if they

⁶²⁷ Note that the ‘daughter’ has to precede the ‘prince’s father’ in the English translation but not in its Uygur counterpart.

⁶²⁸ There is a king both among the guests and among the hosts, so that an exchange of presents would be normal.

had seen Buddha'. In the first reading the subordinate clause stands in apposition; in the second this is a case of the correlative constructions described in section 4.65. Note that the element *kim* is not at the beginning of the clause it serves, since the object *bo dyan sakinčlig kiši+g* precedes it. If this etymology is correct, *kim* might originally have been used exclusively for human antecedents. The idea that the particle *kim* comes from *kim* 'who' gets support from the instance in which *kayu* 'which' is used for relativisation (quoted under (1) above from TT X), as this is also an interrogative-indefinite pronoun. Note that the scope of English relative *which* for antecedents is also narrower than its scope as interrogative pronoun.

4.62. Complement clauses

In Uygur there are different strategies for putting clauses into participant tasks of matrix sentences. Most Old Turkic clauses serving as nominals in participant tasks are headless relative clauses. We will, in what follows, classify headless relative clauses as well as infinitive constructions by the case tasks they fill in the matrix sentence, then make a sub-classification by the function which they have with respect to the subordinated action. Rarely, interrogative-indefinite pronouns are used as heads for such clauses or as relative pronouns, resulting in structures similar to English: *nä ädgü kilinč kilmışın*⁶²⁹ *maña nomlaŋ* (Arañemi 1 a r 9) 'Tell (deferential) me what good deeds he carried out'. This differs in content from both **kilmış ädgü kilinčün maña nomlaŋ* 'Tell me the good deeds that he carried out' (the structure described below in this section) and *nä ädgü kilinč kilmış ärsär (anı) maña nomlaŋ* 'Tell me whatever good deeds he carried out' (the correlative construction expressing a generalising type of relativisation, section 4.65). The subordinate clause in the Arañemi-jātaka represents the object of *kil-* and serves as object of the main clause. In what follows the subordinate clause represents the object of *sakin-* but serves as subject of the main clause, i.e. it refers to the *objects* of the thought of the person serving as *subject* to the main clause: *nä köñülintä sakinmiş alku köñlinčä bolur* (TT VI 108-9) 'What he thought in his heart will all materialize according to his wishes'. In *näčä yaş yaşamışın öyür* 'He remembers how many years he lived' (MaitH XV 2r4) *näčä yaş* serves as object of *yaşa-* and the subordinate clause as a whole serves as object in the main clause. More commonly, Old Turkic relative pronouns demand the *-sAr* form (section 4.65).

⁶²⁹ The editor writes *kilmışig* but the facs. seems to be clear enough.

Subject and object clauses are the most common types of complement clauses, dealt with in sections 4.621 and 4.622 respectively. Here we will mention a few rarer types, representing an indirect object, an instigator (both in the dative case) and a predicate nominal (in the nominative).

Headless relative clauses serving as indirect objects are put into the dative case (of the verb *inan-* in the following sentence): *inanur biz kapiginta kün täñri ornanmiška* (HTs VII 1238) ‘We believe in him at whose gate the sun has installed itself’. In *täñriči män nomči män tegmäkä artizip ...* (Xw) ‘letting oneself get deceived by somebody who says ‘I represent God, I am a preacher’” *te-gmä* (imperfect *-(X)gmA* participle of *te-* ‘to say’) serves as subject of the subordinate clause and, at the same time, as instigator for the superordinated verb *artiz-*. The instigator status, in Old Turkic also signalled by the dative case, cannot be equated either with subject or with object (see section 4.5); it should not be considered an adjunct either, as the instigator is a real participator in the event.

The status of the predicative participle should also be clearly distinguished from that of subject: In *savi yarligi yorigan bolur* (Schwiz 17) ‘He becomes one whose words and orders prevail’ there is zero reference to the subject, and *savi yarligi yorigan* is predicative. Note that the form *yori-gan* is accompanied by its subjects, *sav+i* ‘his word’ and *yarlig+i* ‘his command’, which are linked to the topic by the possessive suffixes.

4.621. Subject clauses

Headless relative clauses can be subjects either of verbal sentences or of nominal ones. In the first, second, fourth and fifth examples to be quoted, e.g., they are subjects of nominal sentences, while they are the subjects of verbal sentences in the third and sixth examples.

The verb form representing the subject of the subordinate clause, with the imperfect or the perfect participle; the subject clause is left-dislocated in the first example, pushed to final position by the *wh*^o form in the second one: *bo montag körksüz yatagma nä törlüg kişi bo* ‘This (person) lying there in such an ugly way, what sort of a person is he?’ (ManErz I 6); *kim ärdi ärki bo bütün yertinçü yer suvdaki alku alplarig utmiş yegädmış* (TT X 253) ‘Who might have been the one who overcame all the heroes in the whole world?’

Then a few headless relatives whose verb form represents the action itself; first an infinitive: *sizni sävmäkimiz montag ol* ‘This is how we love you’ (HTs VII 1880). With projection participles: *tün udisikim kälmedi, küntüz olorsukum kälmedi* ‘I did not feel like sleeping at night

nor like resting during the day' (Tuñ I S5); *ötüg tiläk bulgulukı sarp* 'It is difficult to obtain what one wishes'. With the aorist: *bir ymä äriiri yok ärip* 'nor is there any unity, and ...'. With perfect participle (transferred to final position by interjectional interrogative): *nä tusu bolur* (or: *bulur*) *ol ädgü kün, ol ädgü üd körmişi talulamışi* (TT VI 23) 'Of what use will it be (to him) that he looked for and found out a suitable day and a suitable hour?' In *it ürdöki kuş üni ... äştilmäz* 'No barking of dogs and no voice of birds is heard ...' (M III nr.32 r1) the action nominal is the subject of a passive verb.

The infinite verb forms refer to the direct object of the subordinated verb in *ätözin alku kayu kilmışlarım mandal mudur burxanların işi bolzun; tiling alku keñürü sözlämişlarım ... darni nom padakları bolzun; köñülin alku sakınmiş ömişlarım sakınčsız yaruk yaşuk mani bolzun* (ls. 40-44 in *baxşı ögdisi*, edited by M. Ölmez, Laut & Ölmez 1998: 267) 'May all and any thing which I did (*kil-*) with my body become *maṇḍala*, *mudrā* and the Buddhas' business; may all I speak about (*sözlä-*) in detail become incantations and verses of teaching; may all I think of (*sakin- ö-*) in my heart become untroubled bright pearls'. A further example: *sañv(i)rtak temişi sudur vinay abidaram üč aqlik nomlar tetirlär* (MaitH Y 265) 'The type they call (*te-*) *sañvrti* is considered to consist of the books of *sūtra*, *vinaya*, *abhidharma* and *tripiṭaka*'; the possessive suffix on *temişi* does not refer to the subject of *te-* (that not being referred to, hence left general, here rendered by 'they') but to the mention of *sañvīrtak* in the previous sentence.

Headless relatives referring to objects appear more often to have been formed for the purpose of clefting, where they serve as topics: In *ančulayu ärür mäniñ äştimışim* (TT VI 05 and U II 28,3₁) 'What I have heard is as follows' the topic follows the comment; the non-clefted sentence would have been **ančulayu äşidtim*. We also have the *-dOk* form serving as topic, here with a (rhetorical) interrogative pronoun as comment: *ogrī tep tedökünüz nägü ol* (KP 59,5) 'What is that which you call a thief?' Somewhat similar to the first sentence is *män kololadokum kamagdä ärklig yultuz ärmiş* (1.5-9 in ms. TM 342⁶³⁰) 'What I have discovered is that stars turn out to be the mightiest'. *män* is added for reference to the verb's subject as contrast to the other two persons participating in the dispute, here in the nominative as against the genitive of the first sentence in this paragraph. The comment is itself a full sentence, the object of the verb *kolola-* (as the text which *ančulayu* refers to is the object of *äşit-* in that sentence). All three

⁶³⁰ Now U 5, reedited in P. Zieme, 'A Manichaean-Turkic dispute in runic script', P. Mirecki & J. BeDuhn, *The Light and the Darkness*. Leiden 2001, 209-219.

sentences are nominal, but topic and comment are linked by copulas in the first, by *ol* in the second and by nothing in the runiform sentence, where the comment is itself a sentence.

The sentence *ančama ögmiš alkamiš törü ärür, kim äsirkänčsiz köñlin äd tavar buši bermäk* (MaitH I 12r6) is difficult to analyse though its meaning is clear: ‘What a laudable behaviour it is to give away possessions unselfishly as charity!’. We have *kim* subordinating a non-finite verb form below, in the next paragraph; infinite verb forms are also found among the right-branching relative clauses described in section 4.612. Both *kim* clauses appear to be headless relatives serving as topics to the rest of the sentence, as does the headless relative introduced by *nä* in the previous paragraph.

Analytical headless relative clauses can also serve clefting. When the child *bodhisattva* Maitreya says that all the alphabets he has been presented with are not suitable for the holy scriptures, his bewildered father asks (MaitH XI 15r10): *bo munča törlüg bitiglär użaklar użak sanıña kirmöz ärsärlär, kayu użak ärki kim użak sanıña kirgüci* ‘If all these different sorts of writings and alphabets are not to be considered as alphabets, what, then, are the alphabets which do enter into the category of alphabets?’ The structure of *kayu użak ärki kim użak sanıña kirgüci* is similar to *ogrü tep tedökünüz nägü ol* just quoted, in that both are nominal sentences with an interrogative pronoun as one member and a headless relative clause as the other.

4.622. Object clauses

While subject clauses appear always to have an infinite verbal form as kernel, object clauses either have verbs or lack them. We will first deal with object clauses without verb, then with ones with verb.

With verbless object clauses either the subject or the predicate is put into the accusative case. The former happens in *Maxarit eläg ädgü ögli teginig busuşlug körüp ...* (KP 4,3) ‘King M. saw that the well-meaning prince was sorrowful, and ...’ or in the second part of the following DLT proverb: *yılan kändü ägrisin bilmöz, teve boynin ägri ter* ‘The snake does not know how bent it itself is and calls the camel’s neck ‘bent.’’ Alternately, the predicate is in the accusative: *yer suv ärtimligin, ät’öz ürlüksüzin ukıtu ...* ‘explaining that the earth is transient and the body fickle’; *yer tarın ukıtdı* ‘He explained that the place was (too) small’ (HTs).

The sentences in the following passage are interesting because we know from the context that they are subordinated interrogatives, whence the translation with ‘whether’ and not ‘that’: *amranmak köñüllärintä [...]* *ArIntA ödrülmişlärin, övkä biligsiz köñüllüg*

bolmišlarin, övkä biligsiz biligdä öñi ödrülmišlarin alku ukar (MaitH XV 5v11-15) ‘He understands it all: whether they got rid of lechery, whether they acquired an angry and ignorant mentality (or) whether they got rid of anger and ignorance’. The suffix +lXg in *könüllüg* in the second object clause of the following sentence can be translated with the verb ‘to have’: *nizvanilag bolmišlarin nizvanida öñi arig turug bilgä könüllüglärin adira ukar* (MaitH XV 5v17) ‘He understands exactly whether they have been marred by passion (or) whether they have wise pure hearts free from passion’. Being or not being angry and ignorant and being or not being passionate are disjunctions (although the way they are expressed does not give immediate insight into this fact), whereby the reader may have known that these are in fact subordinated interrogatives and not statements, but *amranmak könüllärintä ... ödrülmišlarin* is not a disjunction; this, then, is a matter we need more evidence for. In all these instances the subjects are referred to by possessive suffixes added to the predicate. Questions can be made objects of verbs of thinking also without incorporation by nominalization; in the following sentence the link is the forward reference of *anı* and the quotative element *tep* following the unchanged question: *anı bilmädi, öñ[räki] ävirgüçilär użikin yörugin tükäl kiltılar mu ärki tep* (HTs VII 870-2) ‘He did not know whether previous translators had rendered text and meaning in their completeness’. The sentences with *tep* quoted below show a bit more incorporation, but see the constructions in section 4.7.

In all the verbless object clauses with predicate in the accusative case quoted above, their topics – *yer suv, ät’öz* and *yer* – were in the nominative. Topics of subordinated accusative predicates can also, however, be in the genitive form: *yertinčünüñ ürlüksüzin bilmiš ukmäš k(ä)rgäk* (BT II 915) ‘One has to have realised that the world is fickle’; *nomlarnıñ čin kertü tözsüzin tüpsüzin adırtlıg bilirlär* (Suv 386,7) ‘They know exactly that *dharmas* are without a real root or base’. A further such instance can be found in TT X 555-559.

There is a wide array of constructions in use when the object clause is verbal. One of these is for the verb of the subordinate clause to be made infinite; in a second type, the subordinate verb is left unchanged but its subject is put into the accusative. The connection can, thirdly, be left implicit.

1) Action nominals and infinitives are put into the accusative to serve as objects of verbs expressing thought, speech or writing; e.g. *tegin alkuñı taplamadı, täk taloy ögüzkä kirmişiğ tapladı* (KP 15,3) ‘The prince didn’t like any (of the other ideas presented to him), he only

liked going out⁶³¹ to the sea'. The reason for using the post-terminal *-mlš* form may be that the prince is not interested in the journey itself but only in its results. In this sentence, the subject of *kir-* is identical with the subject of the main verb, *tapla-*; in the following three instances, the two subjects differ. The subject of such subordinated verbs is usually in the nominative: In *bildi öñräki tüzünlär bilmäyöküg* (HTs VIII 1919) 'He knew what earlier *āryas* did not know' the subordinate clause is a headless relative. Often the subordinate clause refers not to one of the participants but to the action / event as a whole: *ol üdüin kördi Xerodes xan bo mogočlar yanıp adin öñi yolča barmışın* (U I 9, Magier) 'Then king Herod saw that the Magi had returned and gone by a different road'; *buluñ yñqak üstün altın bulganmış tälgänmişin ukup* 'noting that the (world's) four corners as well as (its) top and bottom are in confusion and disorder' (*AoF* MaitH XV 1r11). Note that the *-mlš* form of the last two instances also bears a possessive suffix to refer to the subject. In the following example, however, we find the subject to be in the genitive: *ečisiniñ kälmişin utgurak bilti* (U III 86,18) 'he was sure that his elder brother had arrived'. When the subject is in the genitive, the possessive suffix with the verb form is, of course, normal. TT X 518-519 has been read as *tü[käl] bilgä t(ä)ñri burxan-niğ čankramit k[i]lu yorimišin kördi* 'he saw the perfectly wise divine Buddha carrying out *čankramita*'.⁶³² In the following object clauses the subjects of the subordinated verbs are in the accusative case: *täñri xatunları ymä kántü bägläri täñriläriğ taymişlarin körüp ...* (Mait XV Nachtr 4v29) 'The goddesses, in turn, saw that their husbands the gods had slipped, and ...'; *biz üçägü sizni ... kurug ätözünjüznü ... idalagali kilinmişñjüznü[n] körüp* (HTs III 451) 'we three saw that you had made preparations for pointlessly giving up your body, ...'. *täñriläriğ* could, in principle, have been interpreted as a genitive, because /ŋ/ is quite often spelled as K, but *sizni* can only be the accusative.

In *nä törlüg aš ašamišin ... nä•ä yaš yašamišin öyür* 'He remembers what sorts of food he ate, ... how many years he lived, ...' (MaitH XV 2r4) the subject of the object clauses is, again, here and in the next example, the same as that of the main verb. *nä törlüg aš* and *nä•ä yaš* are the verbs' objects, *nä* and *nä•ä* serving as relative pronouns. *nägü*

⁶³¹ *kir-* for this meaning is a calque on a Chinese expression, as shown by Hamilton in his note.

⁶³² *čankramita* is a walking back and forth in meditation, whence the use of *yori-*. The editor thinks the stretch written NYX after *burxan* is an error for *iğ*, taking this to be an accusative form; it must, however, be a genitive, the final nasal turning oral.

kilmiši•ni sän adra sä•ä yora berdi• (QB 797) ‘You explained to me what you did clearly and in detail’ is very similar, except that *nägü* serves as relative pronoun by itself.

Subject reference can also be taken care of through possessive suffixes appended to *-dOk*: *bo kargantokin, alkantokin, käjräštökin yöntüštökin bilmäz kiši täg sögüščä oyunča sakanur, kântü inča bilmäzlär* ‘They consider this cursing and quarreling of theirs to be just scolding and play, like senseless people, and do not know it for what it is’ (M I 9,16-18); a letter (UigBrief A5) also has *-dOk+* as object: *äsänin [ä]d[gün] ärdökin ešidip* ‘hearing that he is well’. In the sentence *biltimi[z] ukdumuz özümüzün üzütümüzün üzä asra yarokda ... tünärigdä ärtöki[n]* (M III nr.1 IV r9-13) ‘We have realised and understood that our selves and souls are above and below, in light and in dark’ the subject of the subordinated verb is in the accusative case; above we already met object clauses with *-mlš* which had accusative subjects.

In *kältökümün kertgünzün[lär], sizij bägädmäkäñiz(i)n [...] ärklänmäkiñiz(i)n bilzün[lär]* (DreiPrinz 65-67) ‘let them be convinced of my having come and know of your rule and authority’ the infinitive is used in a construction identical with *-dOk+* and in parallelism with it. That the *-dOk+* form is factive seems to follow from the context of this sentence; so do the *-mAk* forms, apparently, since other instances using the infinitive in object clauses also appear to refer to factual circumstances: *sinmakim(i)z buzulmakim(i)znü tükätgäli umadimiz*, ‘We were unable to stop our heartbreaking’ (HTs VII 1916) with affixal pronominal reference to the subject and *samtso açariniñ tavgač xan birlä käliš barış bitig iđışmakın ukıtmak*, ‘the account of the correspondence between Xuanzang and the Chinese emperor’ (HTs VII) with both affixal and nominal subject reference.

In the non-factive domain we have *-Ar* for the imperfective, the *-sXk*, *-gU*, and *-gUlXk* forms for projective predicates. An example with the *-Ar* participle is the following: *bo yeti arıgsız yetäçilärniñ ažuñinta tugarin körüp* ‘he saw that he (the divine boy) would be born in these 7 existences of eaters of impurities’ (U II 32,57). Orkhon Turkic uses *-sXk* as necessitative action nominal: *yañilip ölsükünün ... bunta urtum*, ‘I set down here (how) you will needs err and die (KT S 10); *el tutsukuñun bunta urtum* ‘How you should govern people I have recorded here’ (*tut-sukuñ* here representing projected manner). Where Orkhon Turkic has *-sXk*, most of the rest of Old Turkic has *-gU*: *maytri bodisavtniñ yertünčükä inip ... burxan kufin bulgusın ... ukar mu siz?* ‘Do you ... understand that the *bodhisattva* Maitreya will come down

to earth and attain Buddhahood?'; Note that nominal subjects can here appear either in the nominative or in the genitive.

2) With indirect speech, Old Turkic also has a construction corresponding to the Latin 'accusative + infinitive': It puts the subject of a clause which is to serve as the object of a verb expressing thinking or speaking into the accusative case but leaves the subordinate verb finite; the subordination is effected by the quoting verb *te-*: *darmaguptakī atliġ nomčī ačari baxšimīznī kīyiltī tep āšidip* (HTs VII 1915) '(we) heard that our teacher, the master preacher named Dharmaguptaka died'; *türk bodunug atī küsi yok bolmazun teyin* (KT E 26) 'saying about the Türk nation that its name and fame should not be destroyed';⁶³³ *ol tünliġig ... yanmaksız ävrilmäksiz äriür tep bilgülik ol* (U II 39,100) 'It should be known that there is no turning back for that creature'.

When verbless sentences are incorporated as object clauses, we find ellipsis of the topic: *az teyin nä basinalim* (Tuñ 39) 'Why should we, thinking that (we are) few, be depressed?'. The direct speech sentence corresponding to this content would have been **(biz) az biz* 'We are few'. In section 4.7 we quote a verbless sentence serving as direct speech, also with *biz* as topic, where this topic is not omitted. The writer there has, however, added a reference to the topic in accusative case outside the specimen of direct speech, as we saw above with verbal object sentences.

In the following instances from an early text, the object sentence is marked as such by simply being placed between the subject and the predicate of the main clause; neither its subject nor its predicate are in the accusative but the 1st person which the woman would have used has been replaced by the 3rd person: *kayu işilär kün täġri karnīnta kirür tüšäsär ... kayu işilär tülintä ay täġri graxlar birlä karnīnta kirür tüšä{sä}r*⁶³⁴ ... *kayu işilär tülintä yigit urī yaġa minip k[ar]nīnta kirür tül tüšäsär ...* (MaitH XI 3r17-25) 'If any woman dreams (that) the sun is entering her belly, ... If any woman in her dream dreams (that) the moon together with the planets is entering her belly ... If any woman dreams a dream (that) a young male elephant is mounting (her) and entering her belly ...'. Next consider two object sentences which have

⁶³³ The parallel text in BQ E 20 has the stem form *türk bodun* instead of the accusative. Tekin 1968: 127 (and still Tekin 2003: 107) misunderstands the grammar here, giving this +Xg form as a (the only!) instance of a variant -ig of the genitive suffix.

⁶³⁴ This could also be an instance of haplology and not necessarily an error.

no mark of subordination at all, which are not classical instances of direct speech (q.v. in section 4.7) either: *küçümüz bir ikinti birlä sinalim, biz ikigüdä kanyusî küçlügräk biz* (Wettkampf 42-44) ‘Let us test our strength with one another (to see) which one among us two is the stronger’ has no overt marker of subordination but the question ‘Which one of us two is the stronger one?’ must be subordinated to the proposal made to the addressee for subsequent action. In the following passage, finally, the content of the second sentence is the object of *kördüm* in the first: *ya[rlikan•]u• köül turgurup kördüm, irin• [yar]l(i)g umugsuz inagsiz bo tinliglar montag ämgäklig [a•un]da tüşmiş tururlar* (U II 4,8) ‘Evoking a compassionate state of mind I realised (that) these poor hopeless creatures had fallen into such an (existence) of suffering.’

4.63. Clauses as adjuncts

Adjunct clauses have tasks which are adverbial to a greater or lesser degree: I have classified them as comparative (describing to what the events and actions of the main clause can be compared, what they are like), as temporal, as local, as causal (expressing why or to what purpose events take place), as final (specifying the event aimed at when carrying out the content of the main clause) or as consecutive (detailing the result of the process described in the main clause). They often consist of converbs, sometimes with expansions, in which case no semantic-functional classification may apply: Such cases have been put into the section ‘clauses with contextual converbs’: The semantic relationship between main clause and converb clause may be retrievable from the context or it may remain fuzzy. Some converbs do have specific meanings and functions, however, and are dealt with in the subsections mentioned above.

Circumstantial nominal expressions can be called nominal adjunct clauses if they have their own topic. Such are *közi yüümüglüg olorur ärti* ‘He used to sit with closed eyes’ (HTs VI 2b9) and the third noun phrase in *özi atanmiş, ögrün•ülüg, atî yetiglig kälir* (Irb LV) ‘He comes a famous and joyful man, his horse being led (for him)’; *köz* is the object of *yüm-*, *at* of *yet-*, the possessive suffixes of *közi* and *atî* referring to the subjects of the sentences.

Adjunct clauses can also consist of verbal nominals appearing in the dative, locative, ablative, directive, instrumental or equative cases or getting governed by various postpositions. If adjunct clauses are based on nominal verb forms, the functions of these are sometimes not different from any other nominal used in the case or with the

postposition in question: Their tasks can then be inferred from what their case form or the postposition governing them does when connected with a noun phrase; thus e.g. the *-dIn* form and the *üzä* phrase in the following example: *bo ülüštä Samtso ačari ... čoonanka barmišdin bašlanur, ... ät'öz kodmiš üzä üzülür* 'this section starts with Xuanzang going ... to Č. and ends with his dying'.⁶³⁵ Such sentence parts are not dealt with below, as they are in fact instances of adjunct phrases rather than adjunct clauses. A number of instances for *-mAk+tA* are, e.g., quoted in Schulz 1978: 52-54 with, respectively, temporal, instrumental or final meanings; none of these meanings are explicit in any of the instances quoted, however, and some of them are outright misinterpretations: The meaning of all of them can be summed up as 'locative of the infinitive'. Then take *bulmayokka övkälöp kakip tagka ünüp kükrädi ätnädi* (HTsToa 538-9) 'He (the lion) got angry and cross at not having found them, went up the mountain, roared and made noises': The suffix combination *-mA-yOk+kA* forms causal clauses (as discussed below). The clause around *bulmayokka* could here have a causal meaning; it could, however, also be the case that the dative is governed by *övkälä-* ('to be angry at something') and that *bulmayok* here serves as perfect participle referring to the action: *bulmayokka* could, in other words, be not a causal clause but the indirect object of a verb in the main clause. Similarly the form *-mAyOkkA* in *šilabadrī ačari idmayokiña ayi kodī öpkäsi kälip ...* (HtV 287) has been stated to give a temporal meaning as in 'He (i.e. king Kumāra) got exceedingly furious when master Šilabhadra did not send him (i.e. Xuenzang) off' but in fact we might as well understand 'getting furious at master Š.'s not sending him off' with the dative governed by the verb phrase itself. The percentage of such unclear instances is quite high; this is not a coincidence but is linked to the origin of compounded adjunct clause suffixes, whose meaning did originally consist of the sum of the meanings of their parts. Another common uncertainty concerns the meaning actually to be assigned to adjunct clauses: *ol udči kälmyökkä ävintäki kišilär istäyü ...* (HTsToa 82-84), e.g., can be translated either as 'When that shepherd didn't arrive, his household looked for him ...' or 'As that shepherd didn't arrive, his household looked for him ...'; one has to have enough unequivocal examples before one decides whether a certain clause form has one or more than one central meaning. If one determines a central meaning for a construction, then different ones can be

⁶³⁵ Note that the subjects of the *-mIš* forms here used as action nominals are not referred to by possessive suffixes.

understood as contextual variants: *küyü közädü ačınur agrınur ärkän ... amrakta adrılmak açığ ämgäkkä täginürlär* (Mait 198v1-6) ‘While / Although they guard and take care of them ... they undergo the bitter suffering of getting separated from their dear ones’ was, e.g., by Schulz 1978: 97 stated to have concessive meaning. This reminds us that ‘while’ clauses can also get concessive meaning in English. For a special function of aorist + *ärkän* to be worked out, however, it has to be determined whether this instance is not in this context merely used for an ad hoc rhetorical effect. *-Ur ärkän* is here dealt with in section 4.633 on temporal clauses. The normal way for rendering concessive content is the form *-sAr*, especially when followed by the particle *ymä* (section 4.64). Concessive connotations for the sentence quoted should not, however, be excluded.

In the subsections 4.632-4.637, adjunct clauses are classified by function and meaning and not by form; 4.631 is, however, about semantically fuzzy converbs.

4.631. Clauses with contextual converbs

Contextual converbs are formed with the suffixes *-(X)p*, *-XpAn* and the exceedingly rare *-XpAnXn*, the vowel converb with the allomorphs *-A*, *-I*, *-U* and *-yU* and the negative counterparts of all of these: *-mAtI* (only Orkhon Turkic and very rare), *-mAtIn* and perhaps *-mAksXzXn*. The term ‘contextual converb’ was chosen because the hearer / reader is helped by the context to understand the semantic relationship between the clauses featuring these verb forms and the main clauses to be a temporal, a causal, a circumstantial or e.g. an adversative one or one of mere coupling.

Real vowel converbs, i.e. such that are formed from the verbal stem by the speaker *ad hoc* at the time of utterance or writing (unlike lexicalisations and the like, for which see section 3.286), can show close juncture with one of a set of less lexical verbs or auxiliaries and form with them complex predicates (section 3.25) or they can be quite independent from the syntactic point of view.

sürä ünti (KP 64,7) describes the shepherd’s driving his herd out of the city gates; in this case converb and main action are simultaneous. In the following sentence (in HTs VIII 69) the converb *tuta* is separated from the main verb by adverbs but still describes the same action as that referred to by the superordinated verb, ‘to write’: *bo üç ačarılar ... äšidmiš noml[a]rın tuta öñin öñin bitip keñ yörüg kiltılar* ‘These three teachers pinned down the teachings which (they) heard (from Xuanzang), writing (them) down one by one, and interpreted

them elaborately'. The fixation of Xuanzang's teachings by his disciples is here described in its different aspects; pinning them down, which I have used for rendering the verb *tut-*, is certainly no lesser ingredient than the physical writing (*biti-*). In the following two instances as in the last mentioned one, converb and superordinate verb are not even adjacent: *kičig teginig tiläyü takı tapışmaz ärmiş* 'They had been looking for (*tilä-*) the little prince but had not yet found him'; *kolların örö kötürü ulug ünin iglayu maytri burxan tapa adakinta töpön tüšärlär* 'lifting up (*örö kötür-*) their arms, crying (*igla-*) in a loud voice, they fall down head downwards at Buddha Maitreya's feet, facing him' (describing accompanying behaviour).

The inscriptional sentence *karlok yavlak sakınip täzä bardı* 'The K. had evil thoughts and fled away' shows the typical difference between *-(X)p* and the vowel converb: Often, the former denotes an action by itself, the latter only one aspect of what is described by the finite verb. Longer sequences are also common; here an Orkhon Turkic series of four verbs, three of them with a conjoined vowel converb: *akin binip oplayu tägip san•a idip topulu ünti* (K• E7) 'He mounted (*bin-*) his white horse, attacked (*täg-*) head on (*oplayu*), routed (*san•-*, them) in a whirlwind (*id-*), pierced (their rows, *topul-*) and emerged (*ün-*, on the other side)'.⁶³⁶ In Uygur: *bodisavt tegin bo uluř bodun ayıg kilinčlar kilmışın körüp ärinju busuřlug kadgulug bolup iglayu balikka kirdi* 'The *bodhisattva* prince saw that this nation was committing sins, he became very sad and entered the city *crying*' (KP 3 -4).

No doubt because of such instances, Gabain 1974: 123 states that the most important difference between the vowel converb and the *-(X)p* converb is that the former expresses 'ein Mittel, eine Gleichzeitigkeit', the latter, on the other hand, 'ein zeitliches Vorhergehen'. Above we had quoted the clauses *kolların örö kötürü ... iglayu ...*; practically the same appears with *-(X)p* in *näčädä temin öglänip ötrö äliglärin örö kötürüp ulug ünin ulüdiär* (Suv 619,18-20) 'At some stage a short while after that they regained their senses, then raised their hands and wailed loudly'. Such converbs are semantically unspecific; the sentence just lists the three actions. The reader presumably understands that the raising of hands is a gesture accompanying the crying and wailing, thus expressing simultaneity and manner (against Gabain's statement concerning *-(X)p*). Whether readers expect that all this can accompany the coming back to one's senses or whether they think that lifting one's arms or wailing can take place only after one is in full consciousness can differ from reader to reader depending on their

⁶³⁶ Quoted in Johanson 1992: 202 (approximate translation).

experience in life and is not expressed by the text itself. The clause *karmaputug sip tsuy kiltimiz ärsär* (TT IV A67) ‘If we have broken the precept and have sinned’, quoted in Gabain 1974: 120 as one of the examples for the view that the event referred to by the $-(X)p$ clause precedes the other one, in fact proves exactly the opposite, as breaking precepts does not precede sinning but is simultaneous with it. There is, of course, logical sequencing in the observer’s mind, in the sense that a breach of precepts is more directly observable, a label of sinning being attached to the act by the cultural system. Similarly two parallel $-(X)p$ clauses can refer to an act of saying and to its content: *agičilarka ayip üküš altun bertürüp* (HTs IV 603) can be translated either as ‘he talked to the treasurers and had them give (him) a lot of guilders ...’ or ‘he told the treasurers to give (him) a lot of guilders ...’; the latter may be preferable if one remembers that *ay-* is ‘to say’ and not ‘to speak’. What is clear is that the verb forms *ayip* and *bertürüp* differ in denotation but not in reference, referring to the same event. Some similar instances with *ay-* are mentioned in OTWF 803 under *ertür-* and UW 287b under *ay-*, §1d. There is, however, a statement which probably *can* be made concerning anteriority and posteriority in this connection: In a chain of $-(X)p$ forms, a subsequent instance, one to the right of another $-(X)p$ form in Latin script, is unlikely to temporally precede the content of the first-uttered or first-written $-(X)p$ form. Rather than being a grammatical rule, this is a consequence of the iconic principle: Where grammar does not determine the order of elements, the speaker is likely to let his enumeration follow in a manner mimicking reality: Instances such as *o[guz] bodun tokuz tatar birlä terilip kälti* (BQ E34) ‘The Oguz people got together (*teril-*) with the Tokuz Tatar and came (against us)’, *ol savig äšidip tün udisikim kälmädi, küntüz olorsukum kälmädi* (Tuñ 12) ‘Upon hearing (*äšid-*) that information I no longer felt like sleeping at night or sitting down during the day’ or *ol tašig kötürüp ol kudug içintä kämištilär* (U I 8,9-10, Christian) ‘They lifted (*kötür-*) that stone and threw it into the well’ show the anteriority of the event recounted in the $-(X)p$ clause; further such examples are quoted in Schulz 1978: 139. Instances such as *inčip ärdämin baturup bo yertinčü yer suvda kamag tinliglar ara yoriyur ärtilär* (TT VI 352-3) ‘They used to live on this earth among all creatures, hiding their virtues’ are, on the other hand, to be interpreted in such a way that main and $-(X)p$ verb refer to simultaneous events; further examples are quoted in Schulz §162 (pp.139-140). *sinidin ketip näčük ugay män* (U III 48,11) can best be translated as ‘How will I manage *if* I leave you?’, but ‘*when* I leave you’ is also a possibility. ‘Leaving’ cl early has to

precede here, as the question of ‘managing’ arises only as a result of that.

Vowel converbs which are syntactically independent do not differ from other converbs in getting their own objects, in not being adjacent to the superordinated verb and in referring to events which are often not simultaneous with the main event: In a runiform inscription (ŠU E4), e.g., the first verb (*käč-*) in the sentence *bän säläjä käčä udu yoridim* ‘I crossed over the Selenga and marched after them’⁶³⁷ has its own object and probably refers to an event preceding the main event. The content of the vowel converb and that of the superordinated verb can well refer to differing activities, events or processes, as in *ača suvsamak* ‘to be hungry and thirsty’ (U II,1 37) with the verbs *ač-* ‘to be hungry’ and *suvsä-* ‘to be thirsty’; morphosyntactic subordination is here coupled with semantic and pragmatic coordination.

Some independent vowel converbs describe the means or the way by which the main action is accomplished: *bir kemi säyökün tuta üntüm* ‘I got out holding on to a piece of the ship(wreck)’ (KP 54,6). The getting hold of the piece of wood or even the holding on to it (both of which are denoted by *tut-*) certainly preceded the getting out (*ün-*) of the sea or out of danger, led to the latter and made it possible. Note that ‘means’ is not among the contents dealt with in sections 4.632-7. In the following sentences the vowel converbs also refer to the means necessary for the main action to take place (for which Turkish often uses *-(y)ArAk*): *bo ... tñlğlar birök burxan körkin körü kurtulgu ärsär* (U II 17,26) ‘If, however, these creatures are to be saved by seeing an appearance of Buddha, ...’; *tñlğlarğ ütläyü äriğläyü alp kutgarguluk üčün anñ tñğri tñğrisi burxan ... tñlğniğ köñülin yavalturup [...] özkä içğärürlär* (DKPAMPb 113-4) ‘Since it is difficult to save the creatures by giving them advice and admonishment (*ütlä- äriğlä-*), that is why Buddha, the god of gods, softens creatures’ hearts ... and welcomes them’.⁶³⁸

It even happens (rarely) that the subject of a vowel converb and of the main verb are different, if the former is not of an agentive nature; in the following sentence it is the tip of the sun: *yarñ tağda küñ burni tuga bo ... tñlğ ... čarñ idalagay* (MaitH XIII 1r12) ‘Tomorrow at

⁶³⁷ Quoted by Schulz 1978: 157. The sentence there quoted after this one is misunderstood by him and contains no vowel converb.

⁶³⁸ In one case the suffix *-mAkIḡA* is also used with instrumental meaning (mentioned in section 4.633 because other *-mAkIḡA* clauses have temporal meaning). This may be the meaning of some *-mAk üzä* phrases as well. We have not devoted a subsection of section 4.63 to this content, as most clauses with such meaning are constructed around contextual converbs.

sunrise, when the tip of the sun appears, this ... creature will give up its ... bun'; cf. the similar use of *taṅ ata kāli* 'at sunrise' in MaitH XV 10r11.⁶³⁹ Note that both subjects are in the nominative case. In the other extreme we have cases such as *āvriḷā āvriḷmāgū tāg otgurak sav* (MaitH XIII 8r9), which appears to signify 'resolute words which are both interpretable and uninterpretable'; here the -A suffix would merely signify that the suffix -gU is meant to apply for the positive base as well.⁶⁴⁰

Two questions have been intensively discussed concerning the -(X)p converb, especially in Schulz 1978: 128-147 and in several publications by Johanson, e.g. Johanson 1995: One is its aspectual and taxis value, the other is the question whether it represents coordination or subordination. We have already stated that -(X)p is unmarked as to its taxis and aspect values.⁶⁴¹ The second question depends on how one defines coordination and subordination. Concerning content, -(X)p clauses may be subordinated, meaning that they describe the activity referred to in the superordinated verb or verb phrase or verb phrase + dependencies, or they may be coordinated, especially when the -(X)p phrase itself refers to an independent event appearing in a chain of equivalent events. In Sanskrit or Mongolian one gets tales consisting of a long chain of converb clauses, often with alternating subjects, with one single finite verb at the end of the tale. Such unlimited coordination of -(X)p clauses is not quite possible in Old Turkic, as their subjects normally have to be identical with those of the verb to which they are subordinated; with this limitation (adhered to nearly fully), -(X)p expressions are very well capable of reflecting chains of coordinated events. Formally, however, such converbs clearly *are* subordinated, as they share most of their grammatical categories with some other, superordinated verb and inherit them from it; the only categories expressed by -(X)p forms themselves are diathesis and negation.

⁶³⁹ Turkish *geç-e* and *kal-a* in *beşi on geçe* 'ten past five' and *beşe on kala* 'ten to five' are also petrified converbs having their own subject (*saat* 'watch, clock; hour').

⁶⁴⁰ The normal converb vowel of -(X)l- verbs is /U/ and not /A/. This might therefore actually be a scribe's error (intending to write the next word and stopping after he wrongly wrote an *alef*). The phenomenon for which this is taken to be an example is rare at best.

⁶⁴¹ The construction consisting of *nā* with -(X)p converb, sometimes followed by the particle *Ok*, refers to events immediately preceding the main action; it is discussed in section 4.633 above, among the temporal clauses. This is a distinct construction which has no bearing on our view of the functions of -(X)p.

In *sözlägälir ärkän bo yükünčüg sözlöp bo darnig sözlüzünlär* (Suv 129,21-22) ‘When they are about to recite it (i.e. the spell), let them (first) recite this blessing and (then) this spell’ it is clear from the meaning of *-gAllr* as ‘about to be doing something’ on the one hand, from the iconic order of the *-(X)p* form preceding the main verb on the other hand, that the recitation of the blessing, expressed by the *-(X)p* verb, is to precede the recitation of the spell. The semantic relationship between the *-(X)p* clause and the main clause can also be made explicit by particles. In a sentence from HTs V discussed in Zieme 1992a: 352 and on p.5 of Röhrborn’s edition of HTs VIII, e.g., the relationship is adversative, as *inčip yana* expresses this meaning: *öz użıklarî ymä änätkäkčäsîg ök ärip inč[ip] yana ančakya täğsilür* ‘Their own letters are just like the Indian ones but they still differ (from them) a little bit.’ The meaning ‘but’ should not be assigned to the converb, which does not exclude it but does not support it either.

When the main verb is negated, the scope of the negation does not (unlike Turkish) usually include *-(X)p* converbs linked to it. There is such a sentence in KT E27; here is another one: *kamag kamlar terlöp näh tirgürmägäy* (M I 15,8-9) ‘All the magicians will come together (but) will be quite unable to bring him back to life’. Further examples are quoted in Schulz 1978: 128-129. In the following sentence the scope of the negation does include an *-(X)pAn* converb (which had been thought to be more independent than the *-(X)p* converb); the reason may be that *te-p* and *te-pän* are quotation particles rather than converbs: *kertü ärklig küčlüg täñri tepän kertkünmädimiz ärsär* (Xw 56) ‘If we did not believe in the true, mighty and strong god, ...’.

Subjects of *-(X)p* converbs are normally identical to those of the superordinated verb. In the following example, the subject (hair roots) is different, but is still inalienably linked to the main subject and bears a possessive suffix referring back to that subject: *ol täñri urisî ol ünug äşidip korkup ürküp balingläp tü tüpläri yokaru turup ...* (U II 29, 17-18) ‘that divine son heard that voice, got frightened and panicked, his hair roots stood up upright and ...’ Similarly with *könül* ‘heart’, *agazimtakî tatağlar* ‘the tastes in my mouth’ and *köz* ‘eye’ in the following examples: *bo körünč körüp könülün yazılt[i] mu?* (Ms. Mz 708 r 29-30 quoted in *UAJb* 16:295) ‘Did your heart stray seeing this pageant?’, *agazimtakî tatağlar barča yitlinip artokrak açig bolup kün täñri yarokî közümtä ariti közünmäz* (VIII 37,30-33) ‘The tastes in my mouth have all disappeared and have become exceedingly bitter and no sunlight appears to my eyes any more’: *tü tüpläri, könül* and *köz* are all inalienably linked to the main subject; ‘the sun’ is not but ‘seeing’ is. In the following example the converb and the main verb have objects

in common, one being an inalienable part of the other (though not marked with possessive suffix): *munī iki köz täglärip sančayin* (KP 57,5) ‘Let me blind this person (*munī*), stabbing out both his eyes (*köz*)’; both predicates, stabbing and blinding, apply to both the person and his eyes. Note that the converb clause is introduced *inside* the main clause. *ig*, the subject in the following sentence, also has no possessive suffix: *ämti karidi iglädi ig tägip montag körksüz bolup yatur* ‘Now he has grown old and fallen ill, illness has befallen (him), having become ugly he lies there as you see him’ (ChrManMsFr ManFr r 12); ‘illness’, of course, is inalienable as it does not exist without its victims.

Another group of *-(X)p* verbs which have their own subject are those referring to weather and other environmental features, as in *buluñ yınak kararip körgäli bilgäli bolmadi* (Suv 630,20-21) ‘The corners (of the world) got dark and it became impossible to see or recognise anything’.

oza [kä]lmiš süsin köl tegin agitip toñra bir uguş alpagut ärig toña tegin yogınta ägirip ölürtümüz (KT N7) ‘Köl Tegin roused his army, which had come in flight, we encircled a group of Toñra knights at the funeral ceremony of prince Toña and killed (them)’ is interesting: There is referential – though not grammatical – identity between Köl Tegin with his army (*süsi*) and ‘us’, the party which the author of the inscription identifies as his own, throughout the text.⁶⁴² *agı barım* in KP 7,5 is not inalienable: *küniñä ayıña munčulayu berip aglıktaki agı barım azkına kalti* ‘He gave (alms away) in this way day by day and month by month and (of) the riches in the storehouse there remained just a little amount’. Riches are, of course, low on the agentivity scale. The connection between ‘giving out’ (*ber-* with ‘riches’ as implicit object) and the paucity of the remaining riches (*agı barım*) is that what is the object of the subordinated verb is the subject of the main one. Here, finally, is the only real exception I have come across; the *-(X)p* verb *yarlika-* has a wholly different subject from the main verb; the two subjects are fully agentive: *täñri burxan bo nom yarlig yarlikap*

⁶⁴² The conjecture for the lacuna and the reading in general are supported by a similar passage in BQ E 31; see footn. 59 above for the reading *alpagut*. Johanson 1992: 205 misquotes and misinterprets the sentence (*tegin* is fully visible; *agit-* is spelled with *t*¹ and not *d*¹ and does not signify ‘schlu g in die Flucht’). The subject of *agit-* must clearly be plural (and not Köl Tegin by himself) as a single person cannot encircle anybody. A sentence from ChrManMsFr ManFr v 9, which Johanson there quotes from Schulz 1978 as a further example, does not, in fact, show subject difference between *-(X)p* clauses and their superordinated clause: The two converb clauses are there dependant on a temporal clause ending in *-sAr*; it is normal for that to have a subject differing from the main subject.

kamag kalin kuvrag ... ärtiñü ögrünčülüg sävinčlig bolu täginip köñülläri köküläri bilgä biligläri yarodı yaşudı (TT VI 456-458) ‘The god Buddha preached this teaching, (then) the whole numerous community ... became exceedingly joyful and their hearts, breasts and wisdom shone brightly’. The scribes of two among the nine mss. extant for this passage wrote *yarlikadokta* ‘when he preached’ instead of *yarlikap*, apparently finding the latter verb unacceptable in this passage.

Among the few examples of *-mAtI* clauses appearing in the runiform inscriptions, the following do not refer to distinct actions of their own but rather to negative reformulations of what is stated in the main clause: *säkiz oguz tokuz tatar kalmati*⁶⁴³ *kälti* (ŠU E3) ‘the eight Oguz (tribes) and the nine Tatar (tribes) did not stay away (*kalmati*) but came’; *tün udimati küntüz olormati ... esig küčüg bertim ök* (Tuñ 52) ‘Not sleeping by night and not resting by day I constantly gave my services (to the ruler)’. The most likely translation of *bunča esig küčüg bertökgärü sakinmati türk bodun öläreyin urugsiratayin ter ärmiš* (KT E10) is similar: ‘They (i.e. the Chinese) used to say “Let us kill and exterminate the Turk nation”, not taking into consideration (*sakinmati*) that (we i.e. the Chinese) gave (them i.e. the Turks) so much service’.⁶⁴⁴ The meaning of Orkhon Turkic *-mAtIn* appears to have been more of the preparative type (like Turkish *-(y)ArAk*): *igidmiš xaganıñin savin almatin yer sayu bardig* (KT S9) ‘Not taking (*almatin*) the advice of your ruler, who nourished you, you went everywhere’. The Turks’ migrations appear to have been perceived as the *result* of their intransigence towards their king.

In Uyghur, negative converb clauses with contextually determined functions are construed around *-mAtIn*: *tuymatin tuzakka ilinmiš* (IrqB

⁶⁴³ If this were the past tense form it would have been spelled with *d*¹, presumably implying [ð]; *kälti* is spelled with *t*¹ because the alveolar is there preceded by *ll*; see section 2.409.

⁶⁴⁴ The subject of both *sakinmati* and *ter ärmiš* is the Chinese. Gabain 1974: 124-5, 180 translates the sentence as ‘weil sie so viel Arbeit und Kraft nicht widmen wollten, sagte er: “Ich will ...” and adds: Hier liegt keine zeitliche, sondern eine logische, ursächliche Aufeinanderfolge vor und dazu ein Subjektwechsel.’ Schulz 1978: 179 corrects this: ‘Gemeint ist: “weil sie (die Türken) aber nicht daran dachten, ihre Arbeitskraft (den Chinesen) zur Verfügung zu stellen, sagte er ...”’. This is an unlikely way to understand the sentence, as Orkhon Turkic had the *-dOk+In üčün* construction for forming causal clauses (see section 4.635) and there is no indication that *-mAtI* could be used in this way. Nor do the instances for *-mAtIn* support Gabain’s interpretation, as the subjects of this form are also either identical with that of the main verb or linked to it in some metonymous way.

LXI) ‘he was inadvertently caught in a snare’ or ‘as he did not notice (*tuy-*) anything, he ...’. In the following instance the converb form is quite independent both by content and syntax: *kız yalğan tep kertgünmätin teginkä inča tep tedi* (KPFragmA 12-13) ‘The girl didn’t believe (*kertgün-*) him, thinking it was a lie, and spoke to the prince as follows:’; *ol ämgäkig särü umadin ögsüz bolurlar* (Höllen 121-122) ‘Being unable to bear that suffering they lose consciousness.’ Schulz 1978: 174 lists these two (and a lot more) as instances of *-mAtIn* with causal ‘function’. The sentences can, indeed, be translated with causal meaning for the converb form, but they can also be translated the way I have done it; it was the author’s choice not to make any such meaning explicit and we cannot do it in his stead. There is, of course, an *implicit* causal meaning here. In *yanmışta oğlanlarımni bulmatin yalañuz älvirgü täg bolur män* (BT XIII 2,47) ‘If I do not find my children when I come back, all alone I would get insane’ the meaning of the *-mAtIn* form is outright conditional, since the sentence refers to a mere possibility.

It does not happen very often that the subjects of *-mAtIn* forms differ from the main subjects and when they do differ the two nominal phrases are generally linked with the possessive suffix. We have, e.g., *agisi barimi ... ämgänmätin ükün kirür* (TT VI 101-102) ‘His wealth comes in heaps without him ... working for it’. ‘wealth’ is, of course, an entity which is very low on the agentivity scale;⁶⁴⁵ the growth of wealth is a process in which the owner of that wealth is certainly the central personality, whether he is an active agent in this process or whether (as described in the sentence quoted) he is inactive. The possessed is here the subject of the main clause. The same is true in the following examples: *ikiläyü tamuda tüšmätin alku ayig kilinčlig tüdglari barča sızip öčüp ...* (BT II 374-377) ‘they will not again fall into hell and all their hindrances (consisting of) sins will (instead) all melt away and die down’. In the next example the relational entity (*ät kü bulunč alinč* ‘fame and income’) does not bear any possessive suffix: *yertinčüg asigig tilämätin ät kü bulunč alinč özin ök kälip kamağka ayaguluk čiltägülük bolğaylar* (Suv 195,19-22) ‘Not striving (*tilä-mätin*) for material matters or for profit, fame and income will come (*käl-*) to them by themselves, and they will be honoured by all’. Here, finally, is an example in which the possessed inalienable entity (*ün* ‘voice’) is the subject of the negative subordinate clause: *tilädilär teginiğ yğlayu sığtayu busanu, ünläri idi sönmädin* (Suv 637,5-7)

⁶⁴⁵ Above we found that the same binome *agi barim* happens also to be the object of an *-(X)p* converb where the main verb has a different subject.

‘Crying, wailing and sad they searched for the prince, their voices not dying down even for a moment’. Numerous further Uygur examples for *-mAtIn* are quoted in Schulz 1978: 171-177: In none of those instances does the *-mAtIn* form have its own fully agentive and personalized subject.

The suffix sequence *-mAk+sXz+Xn*, with the instrumental of the privative suffix, forms another contextual converb. The subject of this form is normally identical with that of the main clause, and it never makes use of a possessive suffix to refer to it: *ilinmäksizin dyan olorguluk ol* (ETŞ 8,15) ‘One must sit in meditation without attaching oneself to anything’, *tünlä küntüz armaksizin sönmäksizin bişrunup ...* (Suv 211,5-6) ‘exercising day and night, without getting tired and without flagging’, *tünmaksizin sönmäksizin katıglanu ...* (BT II 389-390) ‘striving without resting and without flagging’ are some examples. Additional examples appear in Suv 235,10 (*yermäksizin yalkmäksizin*), 367,19 and 61 and BT ID160. The *-mAksXz* formation is dealt with in OTWF 396-400; it is verblike in freely governing noun phrases. In one instance quoted there, two *-mAksXz* forms have one instrumental suffix in common, as *azlanmaksiz äsirkänmäksizin* (ShōAgon 3, p.207,10) ‘greedlessly and ungrudgingly’. This instance shows that *-mAksXzXn* cannot be a replacement of *-mAtIn*, as the three elements going into the sequence do not appear to have fused. *-mAksXzXn* was in use in relatively late texts only.

4.632. Comparative clauses

The clauses described here introduce states of affair which the writer presents as being similar to the situation referred to in the main clause. We first deal with morphological constructions used for this purpose, then turn to cases where this content is expressed by a non-finite verb form governed by a postposition, then to clauses where such content is introduced by a conjunction and finally mention an instance with what seems to be a relative pronoun.

The equative suffix is very often added to the aorist in Manichæan texts; *ančulayu amrar ärti sizni tüzügü, anasın b[alası]*⁶⁴⁶ *oglanı sävärčä* (Pothei 98-99) ‘they all loved you as children love their mother’ has the same content of manner comparison as shown by nouns with +čA. This construction with the aorist is found already in Orkhon Turkic, e.g. *üzä t[...]* *kövürgäsi ätärčä* (BQ W 3-4) ‘as when the drum⁶⁴⁷ of ... resounds above’. In a relatively late Buddhist text we find *talim kara kuš garudı taloy otrasınta čaparčä* (BT III 1000) ‘as the rapacious eagle Garuda beats his wings in the middle of the ocean’; a further example is attested in BT III 993-4. Comparative clauses are often introduced by *kaltı*, e.g. *kaltı ... yarok ay täñri yaşuyu bälğürä yarlıkarčä* (M III nr.15 v13-14) ‘as e.g. the bright moon graciously appears shining’; *kaltı elig oglı teginig av(i)rtalar äligintä igidürčä* (M III nr.7II r4-6) ‘as e.g. a king nurtures his son the prince through nannies’ or, in a slightly different construction, *inča kaltı är kim yel küçinä tolkukug ürärčä* (Windg 22-24) ‘as e.g. a man who blows a bellows by the power of the wind’. In Buddhist texts, *kaltı burxanlarig tapınur udunurčä* (TT VI 145) ‘as when they e.g. worship the Buddhas’ or *kaltı lenxwa sayu tüün tütarčä* (KP 38,5) ‘as if, e.g., smoke rose from each lotus’. Numerous Manichæan examples with and without *kaltı* are listed in Zieme 1969: 120-121. Zieme also mentions a few Buddhist instances in a note; cf. further Schulz 1978: 86.

Whereas *-ArčA* compares manner, Uygur instances of *-mİščA* compare degree and quantity: *mañ mañ sayu adakların irklämiščä bo közünür aždındakı kutı kivi asilur* (Suv 419,11-13) ‘The more he treads step by step with his feet, the more his happiness in this visible world grows’. Further examples are quoted in Schulz 1978: 87-89. *küci yetmişčä* ‘as best he can’ and similar expressions for other persons are attested in Suv 387,23-388,2, TT VA 67-68, BT VIIA 435-447 and U III 71,5₂-6₂. *-mİščA* (and *-gUčA*) forms are also found in adnominal use and express number, degree or quantity; see section 4.124.

In the proverb *tünlä bulit örtänsä ävlük urı kældürmiščä bolur, tañda bulit örtänsä ävkä yagi kirmiščä bolur* ‘When the clouds redden at night it is as though one’s wife gave birth to a male son; when they burn in the dawn it is as though the enemy entered the house’ (DLT

⁶⁴⁶ The editors Bang & Gabain and Clark propose *b[abasin]* but *baba* ‘father’ is not attested in Old Turkic; I take the nominative *bala* to be parallel to *oglan*.

⁶⁴⁷ This translation is tentative: ‘drum’ is *kövriig* in Old Turkic (< **kävriig*, attested in this shape in 14th century Ottoman) but *ke’ürge / kö’ürge* in Mongolian. If the proposed rendering which, of course, accords with the meaning of the verb, is chosen, then we would here have a variant very close to what we find in Mongolian.

fol.131) the form appears to be related neither to degree or quantity nor to postterminality; the meaning is possibly related to the reportive use of *-mIš*, as this is a proverb about omens.

In the examples quoted, *+čA* was joined to a participle with explicit subject. We also find a construction with verbal nominals referring to situations: *biz su körmišdäkičä äs(ä)n tükäl turur biz* (UigBrief C6) ‘We are well as when one has seen happiness’; *ataları ölmıştäkičä siğtaşgay* (BT III 1029-1030) ‘They will cry as if their fathers had died’, literally, ‘as one in a situation after his father’s death’. The construction itself does not need verb forms: *tirig+dä+ki+čä* ‘as when one is alive’ would not be called a clause.

When *+čA* is joined to a *-dOK* form of a verb of speech with suffix reference to its subject, it expresses accordance; both *aydokinča kertü bolur arti* ‘it used to come true in accordance with what he said’ (M III nr.13, I v3) and *y(a)rlikadok[u]mča* ‘according to my command’ (unpublished ms. U 311 bv4, Wilkens 103) appear in Manichæan sources.

kaltı alp är čäriğkä täğir täğ isig özümün äsirkänčsizin titip idalap (Suv 395,4-10) ‘giving up my life ungrudgingly, as, e.g., a valiant man goes to the army’ is construed with the postposition *täg* instead of with *+čA*. In the following Orkhon Turkic sentence *täg* governs two negated aorist forms: *körür közüüm körmüz täğ, bilir biligim bilmüz täğ boltı* (KT N10) ‘My (normally) seeing eyes seemed to have lost their sight and my (otherwise) thinking mind seemed to have lost its senses’. With *-mIš* we have e.g. *kamgak kántirkä tayaklığın köntülmiş täğ* (HTs VII 1975) ‘as when the *kamgak* plant gets upright by leaning upon hemp’; *burxanig körmiş täğ sävär taplayur ayayur agırlayurlar* (TT V A 113) ‘they love, appreciate and honour (him) as if they had seen Buddha’; *amtü män yüräkimin tartmış täğ ogulumün äsirkänčsiz köñülin titip idalap buşı berür män* (DKPAMPb 820) ‘I now give up my son as if I had been tearing (out) my heart (but) with ungrudging mind, and give him away as alms’. *-mIš täğ* appears also in HTs III 421-3. There is an important difference between *-mIščA* and *-mIš täğ*: *-mIščA* compares degree and quantity whereas *-mIš täğ* compares the events themselves.

-mAyOk täğ is the negative counterpart of *-mIš täğ*, in *saņa utruntači kişilär ančulayu bolur kaltı ... işi küdügi bütmäyök täğ* ‘persons opposed to you will fare like somebody who ... and his business did not succeed’ (TT I 51) and *anča täñlig ärdilär kaltı labay ütintä tört taloy ügüz kidiğın bütürü körü umayok täğ* (HTs VII 531) ‘They were like persons who had not quite been able to see the shores of the four

seas in the hole of a shell'.⁶⁴⁸ A bit more is said below about the correlative structures used in these sentences.

We have a projection participle in *kilmagu tæg nä nägü iš* (U III 54,15), some action the like of which one isn't supposed to do'.

In *yig aš bišag aš ornü ikin ara sikilip tämirliḡ oligin olimiš osuglug tokuz ay on kün ämgäk körürlär* (MaitH XV Nachtr 4r25) we have the *-mIš* participle governed by the postposition *osugulug* 'as, like, as if, in the manner of': 'They get squeezed between the places of raw food and digested food and suffer during nine (moon) months and ten days, as if somebody⁶⁴⁹ had wrung them with an iron wrench'. *osuglug* governs the aorist in *isig öz alimčulari birlä turušur osuglug turur* (Suv 18,13) 'It seems as if he is struggling with his angels of death' or in *üč miḡ ulug miḡ yertinčü yer suv täpräyür osuglug közünti* (TT X 139) '3000 great thousand-worlds appeared as if shaking'. The semi-predicative verbs *tur-* and *közün-* here share their predicative status with the *osuglug* phrases.

Analogy can be expressed also by the particle *kaltü* or the conjunction *näčük* linked to clauses with verbs in the conditional form; e.g., with both of these together: *kaltü näčük ... alku ulug bodisatvlar burxan kutiḡa katıḡlantoklarinta tsuy irinčü ... kilinčlarin kšanti čamxuy kilip nätäg arıtdılar alkınturtılar ärsär, ančulayu mäniḡ ymä tsuy irinčü ... kilinčlarim olarniḡ tæg arizun alkinzun* (Suv 139,6-14) 'Just as all the great *bodhisattvas* got absolution from their sins when they were striving towards buddhadom and as they cleansed and cancelled them, e.g., so may also my sins get cleansed away and disappear as theirs'. That sentence and the following both have *ančulayu* and *ymä* in the main clause: *inča kaltü kiši eligi bar ärsär ärdinilig otrugka tägsär köñül eyin ärdini ävdigäli uyur, ... ančulayu ymä kim birök kärtgünči bar ärsär burxanlıḡ ärdnilig otrugka kirip kutrulmak tüšlüḡ ärdini algalı uyur* (TT VB 90-95) 'Just as, e.g., if somebody has hands and reaches the Jewel Island, he can collect jewels to his heart's desire, for instance, so anybody who has faith can, in turn, get to Buddha's Jewel Island and obtain the jewel whose fruit is freedom'. Correlative sentences with *nätäg* (otherwise dealt with in section 4.65) can also have comparative

⁶⁴⁸ The editor, Röhrborn, points out that the Chinese source refers to the inability to scoop up the waters of all the oceans. 'scooping up' is *küri-*, but cf. *kürp* for *küri-p* in BT III 226. The copyist must have mistaken this verb for *kör-* 'to see' and then taken over *üt* 'hole' from the analogy following this one in the text, which refers to the inability to see the domains of the seven planets through a hole.

⁶⁴⁹ The editors unnecessarily 'emend' *olimiš* to *olimniš*, giving a passive translation as "als ob sie mit einer eisernen Schnur (?) umwunden (?) wären".

content: *nätäg ... ävirgäylär ärsär, ančulayu ok ... ävirä täginür män* (Suv 171,16) ‘As they will deflect (their good deeds for the benefit of others), just in that way do I presume to deflect (my good deeds)’.

4.633. Temporal clauses

Temporal clauses give information about the time framework of the main clause by linking it to some subordinated event; they state whether the ‘main’ event is simultaneous with, preceding or following the subordinated event, whether it precedes or follows it by an interval perceived to be small or not particularly small etc.; they also give information about its flow in time.

There is a great number of forms and verbal phrases expressing various temporal relationships, which will be dealt with one by one below. Before that, we might mention the semantic relationship between contextual converbs and superordinated verbs, which often has a temporal component: As shown in section 4.631, events expressed by the former often precede those referred to in the latter. Especially with vowel converbs in close juncture, the two actions can be simultaneous: *sürä ünti* in KP 64,7, e.g., describes the shepherd’s driving (*sür-*) his herd out of the city gates, going out (*ün-*) himself. Main and subordinate actions are here carried out by the same subject. Meteorological entities can appear as subjects of vowel converbs to form temporal clauses specifying time: *yarın, tañta, kün burni tuga* (MaitH XIII 1r12) signifies ‘in the morning, at dawn, when the tip of the sun appears’ and *tañ ata kälî* (MaitH XV 10r11) ‘when dawn comes’.

By meaning, the most unmarked way to construct a temporal clause is to add *-dOk+dA* to the stem of its verb. This is quite common in the whole of Old Turkic and signifies ‘when’; e.g. *kañim xagan uçdokda* (KT E 30, BQ E 13-14) ‘when my father the khan departed’ or *üzä kök täñri asra yagiz yer kilintokda* (KT E1) ‘when the sky came into existence above and the brown earth below’ with explicit nominal subject. It also (like the dative form in Orkhon Turkic) often has the possessive suffix before the case suffix, referring to the verb’s subject: e.g. in *tütsüg yidin tuydokumuzda* ‘when we feel the smell of the incense’ (Suv 424,18). In DreiPrinz 54 the reconstitution *ävril[dök]ümtä* must be correct as only *-dOk* would give a rounded possessive suffix. Both nominal and pronominal reference is found in *äçim xagan eli kamşag boltokinta ... izgil bodun birlä süñüşdümüz* (KT N3) ‘At a time when the realm of my father the *xagan* had become shaky ... we fought against the I. nation’. A Manichæan example is *bo yer suv on kat kök*

täñri y(a)rat(d)okta añar oxşayur ärti (M I 14,14-16) ‘When he created this world (and) the ten-fold sky it was similar to that’. Here is an example for identity of subjects in the main and the subordinate clause: *yakin tägdöktä ... täñri burxan adakinta bagirin suna yatip inča tep tedilär* (TT X 172-176) ‘When they had gotten close they ... prostrated themselves before divine Buddha stretching forth their breasts and spoke as follows:’. The form can be joined by the particle *Ok*: *yad ellig toyin atin äšidöktä ök ät’özüm köñülüm bütürü ögirip sävinip ...* (HTsBiogr 295) ‘Just hearing the name of the foreign monk, my body and heart get full of joy and ...’. Another instance of *-dOkdA Ok* is quoted below, among the examples for *-mAzkAn*. Many additional, mostly Buddhist examples for *-dOk+dA* constructions can be found in Eraslan 1980: 70-71 and Schulz 1978: 57-68.

The locative is temporal also when it governs the projection participle in *-gU*: *tinliglarig kutgarguda*, e.g., signifies ‘when one goes about saving living creatures’, *ädgüli ayigli kilinčlarniñ tüsläri täggüdä* (BT II 925-928) ‘when (in the future) the retribution for good and bad deeds arrives’, *bo nomug okiguda* (Suv 33,21-22) ‘when *intending* to read this *sūtra*’. With this construction the subjects of the main and of the subordinate clause are distinct. The *-gUdA* sequence does not appear ever to get a possessive suffix to refer to its subject; indeed instances with explicit subject are rare. Implicit subjects of main and subordinate clause can be identical, as happens with the instances quoted, or different.

Temporal datives (discussed in section 4.1104) are common in the Orkhon inscriptions: Nominals in the dative case serve as temporal adjuncts. In the following example, however, the adjunct includes topic and comment: *köl tegin yeti otuz yaşına karlok bodun ... yagi bolti* (KT N1) ‘When K.T. was 27 years old the K. people turned hostile’. This, then, is a nominal clause as temporal adjunct. The sequence *-dOk* + possessive suffix referring to subject + dative is found only in Orkhon Turkic, possibly with the same temporal meaning: *olordokuma ... türk bağlär bodun ögirip sävinip* (BQ E2) ‘when I was enthroned, the Turk lords and people rejoiced’ (*-dOk* form representing action); a similar phrase appears also in BQ N9. Another possibility is that the dative was here governed by *ögir- sävin-*, giving the meaning ‘they rejoiced at my being enthroned’ or ‘seeing that I was enthroned, they rejoiced’: The BQ passage is damaged and the dative could there also have been governed by a verb or a biverb lost in the lacuna.

Uygur has a different type of temporal clause using the dative: *-mAk* with possessive and dative suffixes in instrumental or temporal use.

The infinitive phrase *üč ay ärtmäkiŋä* (U II 22,22-24) ‘after 3 months had passed’, e.g., specifies *after* what stretch in time the action referred to in the main clause took place. Similar clauses with *ärtmäkiŋä* are attested in U III 82,6-10, HTs IV 620-622 and Suv 393,19-23; cf. *ür keč bolmakıŋa* ‘when a lot of time had gone bye’ in HTs IV 93-95. The Orkhon Turkic clause *köl tegin yeti otuz yaşıŋa* quoted in the previous paragraph should possibly also be understood in this sense, i.e. ‘after K.T. became 27 years old’. When *-mAkInA* forms are not accompanied by time expressions, as is the case with the attested instances, they may convey the ‘means’ employed towards a goal: *käntü öziŋ katıglanmakıŋa köñülin yüräkin važır tög kilip alku bizni barča utup yegädip biznidä öñrä burxan kutin bultači boltı* (U IV A 265-268) ‘Through his own exertion he made his heart as (hard as) *vajra*, surpassed all of us and has become destined for buddhahood before us’. Such instrumental content is otherwise expressed by *-(X)p* converbs.

The composite suffix *-mİš+dA* is not attested in Orkhon Turkic but is rather common in Uygur. Clauses formed with it generally refer to events preceding the superordinated event: *antada ötrö ür keč üdlär ärtmištä pratikabut dentarnıŋ ät’özin luolar luo ordosıŋa eltdilär* (Mait 196r20-23) ‘After that, when a long time had passed, the dragons carried the body of the *pratyekabuddha* monk to the dragons’ castle’; *ötrö ol braxmadatı elig tiši bars birlä yazınmišta adın bir tinlig tiši bars karnınta tugum ažuŋ tutdı* (U III 63,12-15) ‘Then, after the king Brahmadata had sinned with the tigress, an aberrant creature found life in the tigress’es belly’; *tıngalı olormišta äŋ ulugı tegin iki iniläriŋä inča tep tedi* (Suv 608,15-17) ‘When they sat down to rest, the eldest prince said to his two younger brothers:’. In the examples quoted, the subjects of the main and subordinate clauses were distinct. *min vap-xua ... kitaydın kälmištä bo ämig iki kata okıyu tögintim* (M I 29,9-14, Manichæan) ‘I V., ..., endeavoured to recite this healant twice after having gotten back from China’ shows subject identity in main and subordinate clause; in another postterminal instance in TT X 537 the subjects of the main and the subordinate clauses are also identical, and in both examples the pronoun ‘I’ is explicit in the subordinate clause as well. In the sentence *kumradın ketmišdä bermädi* (NestTü 662.6-7, Christian) ‘When (I) left the monastery (he) didn’t give (me the wine either)’, the two subjects are different and understood to be so only from the context. In MaitH Y 202, on the other hand, we have a form with possessive suffix although there is explicit nominal reference to the subject, which is that of the main clause as well: *kayu üdün biligsiz*

virutak elig bāg kapilavastu baliktakī śakilarig ölürüp yok yodun kilmışinta ... altı kızlarig bulun alip kislanti artı ‘Upon⁶⁵⁰ killing and annihilating *śākyas* in the city of Kapilavastu, the senseless king Virūḍhaka had taken six ... girls as prisoners and married them’.

In the following sentence, the *-mIštA* form, itself marked for reference to its subject beside being accompanied by a pronoun, does not refer to an event preceding the main event: *biz anātkäkdin kälmişimizdä sintu ögüz suvin kăčär ärkän bir yük nom suvda kalti artı* (HTs VII 2045-6) ‘When we were on our way from India, while crossing the waters of the Indus river, a load of holy books had gotten lost in the water’. The ‘normal’ taxis value of *-mIštA* cannot, then, be taken for granted; tense appears here to have overruled it.

The locative of the aorist gives the meaning ‘while’, i.e. an overlapping of the course of two events: *ülgüsüz sansöz yüz miñ tümän finliglar uguşi üküş tälim ačig tarka ämgäkig täginürdä öyü sakınu konşi im bodisatvög birök atasar öji üdrülürär adadin* (BuddhGed 55-58) ‘If, however, the multitude of countless 100,000s of myriads of living beings remember the *bodhisattva* Guanyin and call upon him while they experience (*täginürdä*) lots of bitter suffering, he will get rid of the trouble’. With subject of the temporal clause distinct from that of the main clause and expressed by a possessive suffix: *män inčip ... täñridäm vişaylig mänilärig ... täginürümtä inča tep ün äşidilti* (U II 30,28-33) ‘While I was in this way ... experiencing divine sense pleasures ..., I heard a voice saying the following:’. *bo äşäk barirta kälirtä taş tägil bolsar* (RH13 in SammlUigKontr 2) appears to signify ‘If this donkey gets lost while coming an going’. Further such instances are quoted in Schulz 1978: 55-56.

Nominal forms of verbs referring to the action can also get governed by postpositions, which mostly have temporal tasks. *-mIštA bärü*, e.g., signifies ‘since’, e.g. in *yer täñri törömiştä bärü* ‘since the time when earth and sky came into existence’ (KP 5,8), *-mIštA ken* ‘after’, e.g. *kuvrag yigilmışta ken* (MaitH XX 1r10) ‘after the community assembles’. The former phrase appears as *-mIš+dIn bärü* e.g. in HTs VII 619. In Orkhon Turkic we have *-dOkdA kesrä* in this meaning: *yagru kondokda kesrä añig bilig anta öyür ärmış* (KT S5) ‘After they (i.e. the Turks) had settled near them they (the Chinese) were straightway thinking bad thoughts’. Manichæan texts have *-dOkdA bärü* and *-dOkdA ken: sans(i)z tümän yıl bolti sizintä adr(i)ltokda bärü*

⁶⁵⁰ The editors’ translation of this as “als” instead of ‘nachdem’ is unjustified.

(M I 10,5) ‘Innumerable myriads of years have passed since we got separated from you!’; *on čaxšap(i)t tudokumuzda bärü* ‘since we kept the ten commandments’ (Xw 148). With *ken* we have *täjri mani burxan täjri yeriñärü bardokinta ken* ‘after the divine prophet Mani went to the abode of gods’ (M I 12,14). The adverb *ašnu* ‘earlier, before’ also has a rare use as postposition; see section 4.21. In constructions like *täjür böšük boltokta ašnu ädgü kün körürlär* ‘Before they become relatives by marriage they search for an auspicious day’ (TT VI 310) it becomes the head of a temporal clause. A ms. variant of this passage has *boltokta ašnuča* instead of *boltokta ašnu*; another example for *-dOktA ašnuča* is quoted in UW 244a under §B). These may either be cases of *ašnu+ča* used as postposition, as we read in the UW, or the suffix *+čA* may have been added to the whole temporal clause. In *kačan tapig udug kilguluk törösin ärtürtökdä ötrö astup ičintä bəklädilär* (Suv 627,19-20) ‘After they had at some stage finished the ceremony of doing obeisance, they fastened it (i.e. the relic) inside the *stüpa*’ *ötrö* either governs the *-dOktA* form or is an adverb, but there may not be any content difference between these two options of analysis. The clause is introduced by *kačan*, which is basically not a conjunction but an indefinite temporal pronoun signifying ‘at a certain point’; cf. *ögsüz bolup yertä kamilti. kačan ögläntökdä* (DKPAMPb 131) ‘He lost his senses and fell to the ground. When, at some stage, he came back to his senses, ...’.

sayu is an unusual postposition in that it unites local or temporal content with the meaning ‘every’. Its use with a verb form gives temporal meaning in TT I 119-120, as would happen if the form were in the locative case: *täprätök sayu iş küdkün tapınča; olortok sayu oron yurt ögünčä* ‘Every time (you) move, your work and your business are according to your wish; every time you settle down, the place and camp are according to mind’; further examples appear in TT I 137-138.

The construction consisting of the vowel converb followed by the postposition *birlä* refers to an event preceding the event of the main clause by a very short time interval: *öz äriglig oronlarindin turu birlä* ‘the moment they had gotten up from where they had been sleeping’ (Maue 1996: 93); *elig bäg katuni birlä ikägü äšidü birlä bo savig ögsirädilär* (Suv 639,18) ‘the moment the king and his wife heard this matter they fainted’. Further examples appear in Suv 640,22, HTs VII 1212, VIII 40 etc. The immediacy of the subsequent event can be stressed by *ök*, as in *inčip igläyü birlä ök ... ölüp barti* (Suv 4,17) ‘Then, a short while after he got ill he ...died away’. Then we have *nä*

opening such clauses: *nä ünä birlä ök ... tiril-* (Suv 16,13-16) ‘the moment (I) got out, I ... came back to life’ or *nä bo irü bälgülär bolu birlä ök, ötrö ... bolti* (Suv 381,8) ‘Immediately after these signs appeared, there happened ...’. In the last instance, *birlä ök* is followed by *ötrö* and it can also be followed by *anta*. Cf., finally, *anagam kutin bulmiš kiši ... öñlüg täñri yerintä tugar. nä tuga birlä ök arxant kutin bulup ...* (MaitH Y 446) ‘The person who has attained the status of *anägāmin* ... gets born in the Divine Country of Appearances. The moment he gets born he attains arhathood and ...’. I assume that *birlä* does not, in this construction, govern the converb. Rather, the converb itself is probably here in temporal use, as in the previous paragraph, and *birlä* is an adverb here signifying ‘at once’.

Clauses with the *-(X)p* converb are used in a construction with similar meaning, where the clause starts with *nä* ‘what’: *nä anı uluğı mahabalı tegin köriüp inča tep tedi* (Suv 609,23-610,2) ‘When the oldest prince, Mahābala, saw this, he spoke as follows:’. With *Ok*: *tokuz älig šlok sözlädi. nä sözläyü tükädip ök ünüp yorip bardı* (BT I A₁ 11) ‘He recited 49 *gāthās*. The moment he had finished reciting, he got up and walked away’; *nä anı köriüp ök ät’özlärin ol süñük üzä kämišip ... kamiltılar* (Suv 619,16-18) ‘The moment they saw that, they threw themselves on those bones and ... collapsed’. *nä* sometimes appears also at the beginning of vowel converb + *birlä* clauses and temporal *-sAr* clauses.

The petrified participles *är-kli* (runiform inscriptions) and *är-kän* (the rest of Old Turkic) can be defined as postposed conjunctions. *ärkli* is joined to the aorist to form clauses describing some circumstance within which the event in the main clause is couched: *anča olorur ärkli oguzduntan küräg kälti* (Tuñ 8) ‘While (we were) living in that manner, there came a deserter from the side of the Oguz’; *kečä ay batar ärkli süñüşdüm* ‘I fought at night, when the moon had set’ (ŠU E1); *tug tašıkar ärkli yälmä äri kälti* ‘The banner being out, there came a man from the vanguard’ (ŠU E5); *karlok bodun (buñsuz) ärür barur ärkli yağı boltı* (KT N1 & BQ E29) ‘the K. people, while living without worries, (unexpectedly) turned hostile’.⁶⁵¹ This last mentioned (double)

⁶⁵¹ The word *buñsuz* has been put into brackets as it does not appear in the KT but only in the BQ inscription, which is a bit later; the passages refer to the same events. *ärür barur ärkli* is clearly a set expression, which is not transparent offhand: Its interpretation has to be guessed from the context and has been understood in different ways by different scholars. The guess ‘living without worries’ is based on the assumption that the meaning of the expression is roughly equivalent to that of *buñsuz*.

instance is the only one among the ones we have where the subject of the construction is the same as that of the main verb; our interpretation may therefore be wrong: Those living without worries (and hence surprised by the Karlok transformation) may be the Türk; what prevents this interpretation is the position of the words *karlok bodun* before the *ärkli* clause. *olor-*, *bat-* and *tašik-* are initial-transformative verbs, denoting both the beginning of a state of affairs ('sit down', 'set' and 'go out') and the continuing situation ('sit', '(of the moon) be invisible' and 'be out'). In these constructions denoting concomitant circumstances, it is not the initial but the intraterminal state which is selected; this is also what we have in the *ärür barur ärkli* clause. In KT N1/BQ E29 and Tuñ 8, the two Orkhon Turkic examples, the subordinated activity precedes the event described in the main clause and is interrupted by it; in the other two, however, the ŠU (Uygur Steppe Empire inscription) examples, there is no such interruption.

ärkän, the Uygur counterpart of *ärkli*, is rather rare in Manichæan sources. It can govern nominal clauses, e.g. in Manichæan *yer täñri yok ärkän* (Xw 133-4) 'when land and sky (did) not exist'. Instances of *ärkän* with nominal clauses appear also in QB 1493, 2055 and 4851. The clause *siz änätkäkdä* 'You are in India' is governed in the following sentence: *siz änätkäkdä ärkän bo ačari uz[a]ti sizni birlä sözläšip ...* (HTs VII 1815-16) 'While you were in India, this teacher had a long conversation with you'. *ärkän* governs a locative also in *karanta ärkän yig oglin tüšürtümüz* (MaitH XX 14r27) 'We aborted their unripe child while (it) was in the belly (*karin*)'. This sentence can show us how the passage of *ärkän* from being a *-gAn* participle of the copula *är-* to becoming a temporal conjunction could have taken place: Interpreting *är-gän* as a participle we could have translated 'We aborted their unripe child *which* was in the belly', which would have been perfectly appropriate as well for the context.

Normally, however, *ärkän* governs the aorist (as *ärkli* does). In a Manichæan text (Xw 159-160) we have *alkanur ärkän köñlümüzni sakinčimizni täñrigärü tutmadımız ärsär* 'if, while praising God, we did not keep our heart and thoughts directed towards him'. Here is one Buddhist example: *yana biz änätkäktin kälmišimizdä sindu ögüz suvün kăčär ärkän bir yük nom suvda kaldı ärdi* (HTs VII 2047) 'Moreover while we were crossing the Indus river on our way back home from

Tekin 1968: 270, 276 is probably wrong in taking the expression to be attributive in KT but not in BQ and translating the passage as 'became an enemy who began to behave freely and fearlessly' in the former case, as the texts are parallel and the meaning of *buñsuz* 'without worries' has to be taken into consideration.

India, one load of treatises was lost in the water'. In the first sentence mentioned, the subjects of main and subordinate clause are the same, while they differ in the second sentence. In *inčip igläyü birlä ök sav söz kodup tutar kapar ärkän ölüp bardı* (Suv 4,17-19) 'Having just gotten ill he lost the power of speech and, while catching up, he suddenly died away' *ärkän* governs a biverb, i.e. two near-synonymous verbs used together for expressivity. Numerous additional Buddhist examples are quoted in Schulz 1978: 94-101; here is one introduced by *kaltı: kaltı balık kapagda olorur ärkän xan udčisi beš yüz ud sürä ünti* (KP 64-65) 'As he (the protagonist of the story) was, in that way, sitting by the city gate, the king's shepherd came out driving 500 heads of cattle'.

Here is an example for the sequence *-gAllr ärkän: bo törtägü ünüp bargalır ärkän ... bitig kaldi* (HTsToa 1472) 'when these four were about to leave for their journey, there came a letter ...'; another example is quoted above at the end of section 3.285.

-mAz ärkän appears to be quite rare; e.g.: *män näñ kilmaz ärkän, mün yazoklar idišin ... adırtlıg bilmaz üddä ärür ärkän anam xatundın adrilip bir azunlug busuš kadgu köñülümkä sapilip ...* (HTsPar 19v26-20r11) 'While I wasn't doing anything, while I was at a stage when I did not clearly ... know the vessel of sins, I was separated from my lady mother, sorrow for a whole life was grafted in my heart and ...'.

The rather common construction with *-mAzkAn* is not, by meaning, the negative counterpart of aorist + *ärkän*, as it does not supply the main clause with a temporal framework during which the main action took place (as *-mAz ärkän* does). In most examples it appears together with the particle *takı*, giving the meaning 'not yet': *säñräñ takı bütmäzkän, etä başladokta ok ... täñridäm ordolar bälgülüg boltı* (Mait 52r19-22) 'When the monastery was not yet ready, when they just had begun to construct it, ... there appeared divine palaces'. *-mAzkAn* may have been formed with the particle *kAn* discussed in section 3.341 among the emphatic particles (note that it correlates with *Ok* in the example just quoted). The problem with this is that *-mAz* would only be made adverbial through the addition of *kAn* while the elements referred to in section 3.341 as bases of *kAn* are adverbial in the first place. There are further examples for *takı V-mAzkAn* e.g. in HTsToa 203-204 and 433-437, UigSünd 44-46 (thrice 'as long as ... not'), U II 87,60-62, Suv 4,3-8, 6,21-7,2 and 623,1-8, HTsPar 13r13-15. One example without *takı* appears in IrqB XXI. Here is another one, with its subject distinct from the subject of the main clause: *kün täñri tugmazkan ol ok äv içindä olorup kara öñlög ašlarıg ašanzun* (Suv 362,4-7) 'Let him sit in that same house before sunrise and eat dark-coloured food'.

-gInčA has two different meanings, depending on whether the base verb is of the type which needs to have passed a critical point to be considered to have been realised, or whether it gets realised without a critical point: In the first case it signifies ‘until’, in the second case ‘as long as’, stressing the parallelism of temporal extension between main and subordinate verb. Without a critical point we have, e.g. *küči yetginčä darni sözlämiš kargäk* (TT V A 73-74) ‘One should recite the spell as long as one is able to’; *katig kertgünčlüg bolmaginča oňargalı bolmaz* (HTsPar 16r5) ‘As long as one is devoid of strong faith one cannot get well’. Note that both main and subordinated clauses of the instances quoted have generalised subjects. Other instances with *-mAgInčA* appear in HTsPar 16r2 and Suv 392,15.

With verbs which denote actions having a critical point, *-gInčA* signifies ‘until’; e.g. *ančakatägi turmagay män täñrim kalti siznidin burxan qutıña alkış bulmaginča* ‘I will not stand up, my lord, as long as I do not receive from you the prophesy of buddhadom’ with the subject of the subordinate clause the same as that of the main clause. *inčgä sokup lalap bakır ešičtä sargarginča kagurup künčit yagıña bulgap ...* (Heilk I 172-174) ‘crush it finely, roast it in a copper pot till it gets yellow, roll it in sesame oil ...’ or *äšäkni berginčä bo yer(i)mni yezün* (RH13,14-15 in SammlUigKontr 2) ‘Till (I) give the donkey back, he (i.e. the lender) may live off this land of mine’ has an *implicit* subordinated subject differing from the main one, *män kälginčä ävig barkig uz tutgıl* (U III 81,18) ‘Keep house well until I come’ an *explicit* subordinated subject (in the nominative) differing from the main subject. The meaning of *yanginča* (BT XIII 2,43) ‘till I come back’ is very similar to this last instance.

-gAll (for which see also section 3.286) can have either a temporal or a final meaning (section 4.636); the final use of *-gAll* forms shades off into that of a supine (section 4.23). The *-sAr* form is another one having a temporal meaning beside its conditional one, but it is easy to see how these two meanings could have been related historically. Concerning *-gAll* no connection seems apparent between the different uses. In its temporal meaning, the *-gAll* form presents circumstances described in a main clause as taking place *since* the ones referred to in a converbial clause, the so-called atemporal meaning: *Türk xagan olorgalı ... taloy ögüzkä tägmiš yok ärmiš* ‘It is said that nobody reached ... the ocean since a Turk *xagan* was enthroned’ is Orkhon Turkic (Tuñ 18). In Uygur, temporal *-gAll* is limited to Buddhist texts; Manichæan sources

do not have it. Most instances, as the following two, have *bol-* in the main clause: *adrilgali yirilgäli äri äri [ür] keč bolti* (HTs VII 2064) ‘Bye and bye it has become a long time since (we) parted’; *änüklägäli yeti kün bolmiš* (Suv 610,2-3) ‘It turns out that she (the tigress) bore her cubs seven days ago’. More examples are discussed in Schulz 1978: 108-113. Schulz also quotes an instance from QB 5685, the only example for temporal *-gAll* he found in that text, where the main clause has *käč-* in one ms. but *bol-*, as in Uygur, in the other two mss.. Temporal *-gAll* appears to have been replaced at least partially by analytical converb equivalents such as *-mİšda bärü* and *-dOkda bärü*; the fact that *-gAll* forms are also found in final and supine use must have helped this process.

Clauses with *-sAr* with no interrogative pronouns, whose central meaning is conditional, are also sometimes purely temporal; the suffix itself can then be translated as ‘when’: *ötürükyä koltgučılar kälsär agičılarig bulmaz ärti. bergü bulmatin koltgučılar yiglayu barsar tegin ymä iglayu kalir ärti* (KP 10,3-6) ‘When, a short while later, the beggars came, they (or rather he, the prince) wouldn’t find the treasurers; when he couldn’t find anything to give and the beggars (subordinated subject in the nominative) went away crying, the prince would stay behind, also crying’. Another example for inability in the main clause appears in U I 8: *mogočlar ol tašig alip öz ätözläri kötürü umatilar. yilkika yütürsär yilki kötürü umati* ‘The magi took that stone but weren’t themselves able to carry it. When they (implicit subject different from the subject of the main clause) loaded it on a horse the horse couldn’t carry it (either).’ The temporal meaning can be most clearly made out if the event referred to is situated in the past, as in the quoted examples. Otherwise the distinction between temporality and condition can get blurred,⁶⁵² e.g.: *ölürgäli elitsärlär mañrayur üntäyür* (M III nr. 14 v1) ‘When / If they (subordinated subject differing from main subject) lead it (i.e. the sheep) to slaughter it bleats and calls out’; *kañ kazgansar oglı ücün temäz mü?* ‘When / If a father has earnings, doesn’t he consider it to be for his son?’ (KP 8,3). The Orkhon Turkic sentence *üd täñri aysar kiši oglı kop ölgäli törümiš* can signify ‘The sons of men are all born to die when god sets the time’ but a conditional meaning like ‘Since it is god who determines timing, the sons of men are all born to die’ cannot be excluded. For the following instance a conditional interpretation seems excluded: *nipur etigin*

⁶⁵² As German *wenn* ‘if’ is historically the same as *wann* ‘when’ and English *when*.

etiglig adakin mañ[l]ap yorisar oyun küg arasinta aya yap[ünip ...] yaraşi yoriyur (TT X 440) ‘When she walks treading with her feet adorned with jewels, she walks harmoniously, with dance and song, clapping her hands’. Unlike the previous examples, the subject of the subordinate clause is here identical with that of the main clause. In all the examples quoted, the subordinate verb phrase consists of a simple -sAr form; in none of them is there an analytical phrase consisting of a verb form together with *är-sär*.

Indefinite temporal pronouns are often coupled with a temporal interpretation: *kačan ölüm yagı kalsär tolp ät’özin üditip sasitip ...* (TT X 547) ‘When, at some stage (= *kačan*), the enemy death comes, it makes her whole body stink ...’; *kačan ol mogoçlar büdilximka tägdilär ärsär ol yultuz täprämädin şük turdi* ‘When, eventually, those Magi (subordinated subject in the nominative) reached Bethlehem, ...’ (U I 6, Magi). In DLT fol.54 we find a temporal -sA form with *kalı*: *kışka etin*⁶⁵³ *kalsä kalı kutlug yay* ‘Prepare (intransitive *et-in-*) for winter when blessed summer comes’. *näçädä* can also be used with temporal -sAr clauses: *näçädä ölsär* ‘when, at some time, he dies, ...’ (U III 43,19); with similar content and grammatical shape but much more elaborately TT X 539. The best translation for *näçädä birök* with -sAr verb appears to be ‘anytime when’, e.g. *näçädä birök ... balikka kalsär, ... aşnuça män çigayniñ kiyinta käl[r] ärdi* (HTs 83) ‘Anytime when he came to town, however, he first used to come to the alley of poor me’; *näçädä birök bo tütrüm täriñ yörüglüg nom ärdini yitlinsär batsar, ötrö ançada ... köni nomlar kertü yörüglär ymä barça yitlingäylär batgaylar* (Suv 197,17). These elements are not conjunctions but add some vague temporal content. When, however, *kačan* is used with a finite verb form, it obviously is the subordinating element, as in *kačan eçisiniñ [käl]mişin utgurak bilti, anta [ok...] kântkä barti* (U III 86,18) ‘When he got certain news that his elder brother had arrived, he immediately went to the town (of Benares)’.

Above we saw temporal clauses starting with *nä* ‘what’ and containing either the vowel converb followed by the postposition *birlä* or by *birlä ök*, or the -(X)p converb, sometimes also followed by *Ok*. Temporal -sAr clauses can also open with *nä*: *nä ölsärlär anta ok ün eştülür, ‘tiriliñlär, tiriliñlär’ tep* (MaitH XXV 3v15 + Mait Taf 81v31) ‘The moment they die, a voice is immediately heard saying ‘Get back to life, get back to life!’ Like the other two constructions starting with

⁶⁵³ Unnecessarily changed to ‘*anun*’ by the editors.

nä, this one as well gives the meaning of the main action following immediately upon the subordinated one. The construction cannot get misunderstood for the ones described in section 4.65 (where the subordinate clause also starts with an interrogative-indefinite pronoun and has a *-sAr* form), because there the reference of the interrogative-indefinite pronoun is taken up by a demonstrative in the main clause (which doesn't happen here).⁶⁵⁴ *nä körsär* in HTs III 776 signifies 'When he suddenly looked up, there was ...'.

In the second Christian text (r 15) in ChrManMsFr, the meaning 'when' is expressed by *näçük* and a finite form: *näçük ešidti ol buzagu [...] öginiñ ünin, [tär]kin yügürüp kälti [ö]giñärü* 'When that calf heard its mother's voice, it immediately came running towards its mother'. The next two instances, which appear in a different Christian text, show *näçükin* instead of *näçük* and use it with the conditional: *näçükin bulsar sizlär ... maña işitdürünlär ... ol mogoçlar näçükin urišlimentin ünüp bardılar ärsär ol yultuz ymä olarni birlä barir ärdi* (U I 6,2-6) 'When you find (him) ... tell me (about it) ... when those Magi left Jerusalem that star was still proceeding together with them'. The temporal use of *näçük(in)* may be limited to the Christian sources, as this element otherwise signifies 'how', 'as' or even 'why'.

We do also find correlative pairs of pronouns with temporal meaning, but these pronouns are in adverbial case forms or appear in phrases with temporal meaning. The sentence *näçä yügürür ärti ança kusar yarsiyur ärti* (M I 7,12-13) 'As he was running, so was he vomiting and feeling disgust' describes the action of running as taking place in parallel to the other two. This also is a temporal relationship, as the vomiting and disgust are not the result of the running; unless the translation should be 'The more he ran the more he vomited and felt disgusted' (which seems unlikely). The link between the two sentences is secured by the correlative pair *näçä ... ança*. The following sentence also shows an interrogative-indefinite pronoun, *kayu üd+ün* 'in whatever time', in the temporal clause and a demonstrative pronoun in the main clause: *kayu üdün män beš törlüg ulug tülüg kördüm ärti, antada bärü ... olorgali küsâyür ärtim* (MaitH XI 4v18) 'When I had seen the 5 sorts of great dreams, since then was I wishing to sit ...'.⁶⁵⁵ Here, however, the two pronouns are not in correlation; the subordinate clause is construed so as to supply a static time frame, but the main clause takes up the time

⁶⁵⁴ Beside the fact that *nä* cannot be the object of *ölsärlär* because the verb is intransitive and cannot be its subject because this latter is shown to be plural.

⁶⁵⁵ Another temporal clause starting with *kayu üdün* is quoted earlier in this section, in the paragraph dealing with *-mšdA*.

referred to in that subordinate clause as a point, the starting point of a situation existing since that previous time and the time of the story. The normal way to correlate interrogative and demonstrative pronouns is with *-sAr*; in MaitH Y 286-302 we have several pairs of such temporal sentences: *näčäkä tägi bo sansar içintä tugmiš tinliglar ... tört tugumlug kisag taŋagta kisilur taŋilur ärsärlar, ančaka tägi utun tetirlär. ... kayu üdün säkiz türlüg tüziin yollug yarok yula köküzlärintä bälgürsär, ... ol üdün temin ök tüziin tetirlär* ‘As long as creatures born in this *samsāra* ... are squeezed in and fettered by the tongs and fetters of the four (types of) birth, so long are they considered to be shameless. ... When the beacon of the eightfold righteous way appears in their breast, ... only at that point in time are they considered to be righteous’. The correlative pair *ančakatägi ... näčäkätägi*⁶⁵⁶ also appears in a temporal clause signifying ‘as long as’ e.g. in MaitH XV 3r27-8; in MaitH Y 316 we find *kayu üdün ... temin ök*.

4.634. Local clauses

While temporal clauses constitute a rich and complex system, there hardly are any local adjunct clauses. The reason may be that temporal relationships are normally linked to events whereas place is more often described with phrases not involving verbs; local relative clauses are very common.

There are rare Uygur instances of local clauses built around a correlation of interrogative-indefinite and demonstrative pronouns governed by the postpositions *siŋar* or *yïŋak*: *ol tängri urisi ... tavrānu kayutün siŋar tängrilär eligi xormuzta tängri ärsär, antin siŋar yakın barip ... adaklarinta töpösi üzä yükünüp ...* (U II 29, 19-21) ‘that divine boy hurriedly went into the direction in which the king Indra, the king of kings was, bowed to him by putting his head on the ground before his feet and ...’. The subordinated verb is conditional in the previous example but indicative in the following one: *kayutün yïŋak ayagka tägimlig burxan bolur ärti, antin yïŋak ...* (TT X 83-85) ‘In whatever direction the venerable Buddha_i happened to be, in that direction (he_j told him_k to go and do obeisance to him_i)’. Both of these instances describe the target of motion described in the main clause.

⁶⁵⁶ Both spelled as one word, although *tägi* is, of course, a postposition governing the dative form of these pronouns.

4.635. Causal clauses

The speaker/writer had several means at his disposal for constructing clauses supplying causes: the infinitive in the ablative, perfect participles in the instrumental or in the dative or governed by *üčün* or further analytical means. *üčün* signifies ‘because’ with factive verbal nominals such as *-mİš* and *-dOk* but ‘so as to, in order to’ with non-factive ones such as *-gAllr* or *-gU*; these latter are discussed in the section on final clauses, which follows the present one. With nominal clauses it usually signifies ‘because’ but can also sometimes give final meaning. In these constructions *üčün* subordinates predicative relationships joining comments to (sometimes implicit) topics.

Here, then, are a few examples with factive nominal clauses: *ol elig burxan kutiŋa kataglanur bodisavt üčün* (Araŋemi 1 a r 14) ‘because that king was a *bodhisattva* striving for buddhahood’. In *maxakašy(a)p arxantag ayagka tägimlig üčün täŋri täŋrisi šakimun burxan ornıŋa olgurti yarlikadı* (Mait 170r7) ‘The god of gods the Buddha Śākyamuni seated the *arhat* Mahakašyapa on his (own) seat because he was worthy of honour’ the clause subordinated by *üčün* is the nominal clause **maxakašyap arxant ayagka tägimlig üriür*; its topic is deleted because it appears in the main clause. Further examples appear in HTs V 100-106 (twice), BT I A₂ 19-21 (all quoted elsewhere in this book). The construction existed already in Orkhon Turkic, as in *kutum ülügüm bar üčün* ‘since I had fortune and good luck’ (BQ E23) and *bägläri bodunı tüzsüz üčün* ‘because the lords and the people were in disaccord’ (BQ E6). Laut 1986: 49 n.2 makes likely that *tömgäsin üčün* (Mait 2r2) signifies ‘even though they are foolish’; here the meaning would not be causal, then, but concessive. Note that constructions with *-sAr* can also have concessive meaning beside the more usual conditional one. Although *tömgäsin* is a noun form, what is here governed by *üčün* is not this word by itself but the word as predicated upon ‘they’, referred to by the possessive suffix. When the topic of a clause subordinated by *üčün* is the 1st or 2nd person, this is also expressed by a possessive suffix, as in *yavlakıŋın üčün* (KT) ‘because you are bad’. In *tinliŋlarıg ütläyü äriŋläyü alp kutgarguluk üčün* ‘because it is difficult to save living beings through advice and admonishment’ (DKPAMPb 115) *üčün*, governs a small clause (see section 3.284) under *-gUlXk*.

In Orkhon Turkic the *-dOk* + possessive suffix in the accusative + *üčün* construction is causal, e.g. *bilmädökin üčün, biziŋä yaŋiltokın yazıntokın üčün xaganı ölti* (BQ E16) ‘Their ruler died on account of their ignorance and because they erred and sinned towards us’; *täŋri*

yarlikadokin üçün (KT S9) ‘by the grace of God’. In Uygur we find e.g. *o[l sakinčig] sakintoklari üçün ayag kilinčlari üstälür* (MaitH XX Endblatt r10) ‘Their sins increase because they think that [thought]’. In the negative form e.g. *körmädökin üçün* ‘because he didn’t see’ (Manichæan ms. Mz 372 r6 in Wilkens 2000: 136); *] arig turug üçün tamuka [...] barsar ymä aşayı artama[do]k üçün maytri burxan birlä [tušu]p tamuluk ät’özintin ozar* (Mait 220 r6) ‘Because he is pure he will, even though he may go to hell, meet the Buddha Maitreya and, as his data are not deteriorated, he will be saved from his hellbound body’. Note that *artamadok* and *yarlikadokin* in the KT S9 example are both accompanied by explicit subjects, but that the former has a possessive suffix referring to the subject whereas *artamadok* doesn’t; this may be a dialect characteristic or it may simply be due to the fact that *āsāya* is not an individualized entity like *täjri*.

In Buddhist sources the post-terminal *-mİš üçün* construction is more common than *-dOk üçün*, e.g. *kalmış buyroklar ymä üküš ažunlarda ... ögüg kañig tapınmış udunmış üçün, burxan körkin etip virxar yerin sipirmiş üçün, nom ešidip nom bitig bitimiš üçün, ton ätük aš ičgü bušü bermiş üçün ... arxantlar bolurlar* (Mait 50 r1-8) ‘And the remaining commanders become *arhats* because, through many existences, they honoured and obeyed mother and father, adorned the effigy of Buddha and swept the ground in chapels, listened to the teaching and wrote down doctrinal texts and gave away clothes and shoes, food and drink as alms.’ With possessive suffix referring to the subject, e.g. *öjädmišin üçün* ‘since he had recovered’ (Yos 125).

The present participle *-dAčI* in a causal clause: *bo montag asig tusu kildačü üçün bo nom ärdini, anin ol šloklarig tükäl bititti* (BT I A₂ 20) ‘It is because this jewel of a text does this much good that he (the emperor) had those *gāthās* written out in full’. The aorist also belongs to the group of participles supplying causes (and not to the group expressing intention) although the state of affairs referred to with that form did not yet actually have to have taken place at the time of the utterance: *arkiš barir üçün* (UigBrief B) signifies ‘because a caravan is going (there)’; i.e. the caravan is in planning or in preparation but has not left as yet. Cf. *körmäzi üçün ... at öñ mäjizig adirtlayu körü umaz* (MaitH XV 8r26) ‘because he is blind he cannot distinguish objects and appearances’.

In Manichæan sources there are a few instances where the instrumental form added to *-dOk* with possessive suffix supplies reasons for the main clause, e.g. *azgurdokin* ‘because he led (our senses) astray’ (Xw 19) or *üzüti ozakı özkä ämgäntökin, ... kop yerdä*

ačig ämgäk körtökin ymä irinč kiši oğli ... atayurlar (M I 9,3-8) ‘because their soul suffered in their previous life, because they suffered bitter torments everywhere they call them ... poor sons of men’. The construction corresponds to *-dOkin üčün* in Orkhon Turkic and *-mİš üčün* in later Uygur, which were dealt with above.

The suffix combination *-mİš+kA* is used for causal constructions in Buddhist texts: *käk birlä katıglıg savlar köñülintä ärmiškä näñ bo savlarıg bulgalı umazlar* (BT II 990-992) ‘As there are matters mingled with hate in their heart, they are quite unable to attain these things’; *män samtso açarı birlä keč tuşmiška burxan nomın şazinın keñürtü umadıñ* (HTs VII 1295) ‘As I met master Xuanzang at a late stage (in my life), I was not able to spread Buddha’s teaching and practice’. In all such instances⁶⁵⁷ the subordinate clause precedes the main clause. The content of the causal clause can be taken up by *anın* and/or by some equivalent phrase in the main clause: *alku nomlarıg barčanı könisinčä ukmiška, könisinčä tuymiška könisinčä körmiškä anın bo anvant tıltagın män täñrilär uruñutı ... tep atım täginür* (Suv 540,17-23) ‘As I have correctly understood, correctly felt and correctly seen all *dharmas*, therefore, by this reason has my name been determined as “the gods’ general”’. Subjects of such forms are, where they are explicit, expressed either by nominals in the nominative, by possessive suffixes in the verb form or within a genitive construction (on account of *-mİš* being a perfect participle), having reference to the subject both in the genitive and in the possessive suffix of the verb form; the latter e.g. *tört maxarač täñrilärniñ küyü közädü tutmişlarıña* (MaitH XI 4v10) ‘as the four *mahārāja*-deities hold (him) under their protection’. Subjects of main and subordinate clauses can be either different or the same.

The negative counterpart of *-mİš+kA* is *-mA-yOk+kA* which, in turn, is not attested without *-mA-*: *män xwentsonuñ küčüm takı kälı täginmäyökkä ... ötüg bitig kilip ... İdu tägintimiz* (HTsPek 89 r 5-11) ‘As my, Xuanzang’s, powers have not yet been restored, ... we endeavoured to prepare a petition and send it’. *-mAyOk+kA* is attested either with subject in the nominative or with the subject appearing as genitive qualifier of the head (a perfect participle) together with reference to him in a possessive suffix. The subject of the form may be the same as that of the main clause, or the two may differ. There may also be a generalised subject, as in *täñrikä yagiş ayi[k] bermäyökkä*

⁶⁵⁷ See further examples in Schulz 1978: 39-47; a few of the *-mİš+kA* clauses which he considers to be temporal can be interpreted as causal as well; since causal meaning is undebated for most of the clauses having this suffix, this is the meaning to be understood in all uncertain instances. See section 4.633 for the dative in temporal clauses.

baš[in] közin agrütur ‘When one does not offer sacrifices or vows to (a) god, it hurts one’s head and eyes’ (TT VII 25r1). In this last example the *-yOk* form could, of course, also be taken to be a headless relative clause referring to the subject, giving ‘People who don’t offer ... get pains in their head and eyes’.⁶⁵⁸

-mAk+tIn supplies reasons for matters recounted in the main clause: *öñün körkün täprämäkiñ bolmamaktin ... ögdi yükün č yaratgali kim tetingäy* (ETŞ 160,74-77) ‘In view of the fact that you have neither appearance nor motion, who would dare to write a *stotra* (on you)?’. *bilgä bilig paramitig ögmäkindin, birlä tugmüš buyan üzä bo tñliqlar bilgä bilig paramitlig kăčig üzä birtämläti ol kidiğda tärk tünzunlar* (ETŞ 160,82-85) ‘As a result of my praise for the virtue of wisdom, may the *punya* which arises therewith serve to get these creatures over the ford of the virtue of wisdom quickly and once and for all to peace on the other bank (i.e. *nirvāṇa*)’. With possessive suffix referring to the subject and a negative verb form: *bo kamağ öñi öñi nomlarniñ tüzülmäkindin, öñi bolmamakindin, činzu tegmä ärtöktäg činkertü tözünäñ idi öñi ärmäz* (Suv 383,22-384,1) ‘Because all these different *dharmas* are parallel and not different, their so-being true root called *činzu* is not different at all’. The following verse has a nominal ablative, two ablatives of *-mAk* and one of *-dOk* all expressing ‘reasons’: *adrok säčmä sukančig yeg tözlügüñtin / atlig küliug tetriüm tärin bolmakinğdin / alp tuyguluk oñarguluk ärdökinğdin / alko körmäk kör{mä}mäktin säčilür siz* (ETŞ 15,62-65) ‘You are special because you have a ... root ..., because you are ... deep, because feeling and comprehending you is hard (and) ... because you see everything and nothing.’

The causal meaning can be taken up by the instrumental *anin* in the main clause, as in the following example, where *üčün* governs a verbless clause with implicit topic: *bo montag üküš ädgülärniñ kapigi üčün, anin ... samtso ačari tavgač tulinčä agtardi* (HTs VIII 46) ‘Because (it is) the gate of so many good things, therefore ... the master *tripitaka* translated (it) into Chinese’. *nä üčün bilmäzlär tep tesär, kim ol ... kertü töz sözlägülüksüz nomlaguluksuz üčün, anin ani bilmäzlär* (Suv 386-387) ‘If one asks why they do not know it, it is because the ... true root is unstatable and unteachable’, that is why they don’t know it’. With causal ablative: *tugsar ymä yalñukta kišilärniñ yerintä, yeg ayaglig bolmaktin, anin täñri tep tetirlär* (Suv 550,17-21)

⁶⁵⁸ This latter is the translation proposed for the sentence by Röhrborn 2000: 269.

‘Even though they are born among humans and in people’s country, they are considered to be gods because they are eminently venerable’.

The causal clause is introduced by *kim* in the Suv example in the last paragraph as in the following sentence: *kertü yol oruk(k)a ögrünčün täginiñ, kim sizlär ani üçün okitmiş boltuñuzlar* (M III nr.7 III r4) ‘Experience the true road with joy, as you have been called for (or ‘because of’) that’. In this last example the causal cause has no *üčün*, perhaps because there already is one *üčün* within the clause. Thus the whole subordinating task is borne by the conjunction *kim* in this case. Similarly in *ančama kutlug bo üd kolo ... takı kutlug bo yer oron kim bodhisattlar bo koloda bo yer oronta ... ulag sapag nomug sakintılar* ‘This time and this place are (so) blessed because the *bodhisattvas* have thought about the law of causation at this time and place!’ (MaitH XV 6r5; there is another such sentence in 6v6). The author is here linking a state (blessedness) with an event, but the direction of inference is not clear: It may be that the time and place are blessed *because* of the mental-theological achievement of the *bodhisattvas*, or the writer may be giving his *justification* for stating that they are blessed. However, consecutive clauses (section 4.637) are also introduced by *kim*; the second clause may be consecutive and not causal if the writer is stating that the *bodhisattvas* perceived the chain of cause and effect *as a result of* the blessedness of that particular time and place.

The sentence quoted above from M III nr.7 III could also have been translated with relative *kim*, as ‘Experience the true road with joy, you who have been invited for that purpose’. The following sentence is translated with a relative subordinate clause in UW 122a: *ymä yegädmäk utmak bolzun maña agdok karı petkäči mar išoyazd maxistak üzä, kim ymä ulug amranmakın agır küsüşün bitidim* (M I 28,21) “... der ich [dieses Buch] mit großer Verehrung und mit gewaltigem Eifer geschrieben habe”. The clause could, however, be causal as well: ‘May I, the worthless old scribe, prevail everlastingly through his holiness the *maxistak* I., since I have written it with great love and serious effort’.

In Orkhon Turkic direct speech subordinated by *te-yin* ‘saying’ can in fact introduce a causal clause: *arkış idmaz teyin sülädim* (BQ E25) ‘I campaigned (against them) because they were not sending (tribute) caravans’ (lit. ‘saying “he is not sending caravans”’); another such instance, also with an aorist, appears in BQ E39. Not far from this meaning is a sentence in Tuñ 24: *añar ayitip bir atlig barmış teyin ol yolun yorisar unč tedim* ‘I asked him; since (*teyin* ‘saying’) a rider had gone (there) it will be possible (for us) to go by that way, I said.’ Other

Orkhon Turkic clauses subordinated by *teyin* (which all have volitional form) are all final.

4.636. Final clauses

In section 4.633 we saw that the form in *-gAll* has a temporal meaning, sometimes called ‘abtemporal’ (of stating that what is referred to in the main clause happened *since* the events of the *-gAll* clause). The other important function of *-gAll* converbs is in final clauses, which state that the content of the converbial clause is the aim of the action referred to in the main clause. Such clauses usually have the same subject as the main clause, e.g. in *süjar süsi ävig barkig yulgalı bardı, süjar süsi süjüşgäli kälti* (BQ E 32) ‘Half of their army went to plunder the houses, half their army came to fight (against us)’; the phrase *süjüşgäli käl-* appears also in *sizläрни birlä süjüşgäli kälyök män* (U IV 82) ‘I have come to fight against you’ and *yäkkä süjüşgäli kälti* ‘he came to fight the devil(s)’ (Xw 3). Cf. further *aşagalı olormişlar* (M I 35,14-15) ‘They sat down to have a meal’ and *ölgäli yat-* ‘to lie down to die’. In *anandaşiri atlig toyinka amtiki nomlarnıñ tamgasın oyturgalı aña kärgäklig yeväkin anı barça tükäl anutup* (BT XIII 45.2.11) ‘(he) prepared all implements necessary in order to commission the carving of the printing blocks of the present books by the monk named Anandaśrī’ the instigator of the carving is also the person making the preparations (*anut-*). Main and *-gAll* clause agent identity holds for 20 Manichæan examples collected in Zieme 1969: 163-4 and more than 15 Buddhist ones collected in Schulz 1978: 114-115. The function of *-gAll* thus corresponds to that of the English infinitive; I would not (thinking, e.g., of Latin *dicere*) for this reason call this form an ‘infinitive’, however, as in Nevskaya 2002.

Rarely, final clauses with differing subject can appear as complements, e.g. *bizni sini algalı iddi* ‘He sent us to fetch you’; in *kavişgäli id-* in HTs IV 968-969 and *tilägäli id-* in Suv 636,10-12 the subject of the *-gAll* verb also differs from that of *id-*. Our interpretation of Tuñ 27 depends on whether there as well *-gAll* can have a subject different from the main verb: The sentence can be read either as *aşagalı tüşürtümüz* ‘We had (them) dismount to have (their) meal’ or as *sanagalı tüşürtümüz* ‘We had (them) dismount to count (them)’. For the first interpretation there would be two different agents (those who tell others to dismount and the eaters), though in fact the agents wouldn’t have been wholly distinct because the commanders would also dismount and eat.

In section 4.23 I dealt with complex verbal phrases incorporating the *-gAll* form but showing no final or temporal content nor expressing such categories as actionality, ability, politeness etc.; those involving the verb *sakin-*, also mentioned there, are border cases: With *yarmangali sakin-* ‘to plan to climb’, e.g., the climbing could be considered to be the aim of the planning, as going is the aim of the begging in *bargali ötüin-* ‘to beg to go’ (HTs VII 1883). If a phrase like this is nominalised we get *kim kayu är kunčuyularka yarangali sakinčün yirlap taxšurup bitig bititsär, ...* (U III 75,10) ‘Whichever man sings and writes verses and has letters written with the intention of currying favour with women, ...’. *sakinč* is a verbal noun and pleasing women is described as being the objective of the thought of the putative subject being evoked here.

When *üčün* governs clauses with nominal predicates it usually has causal meaning. However, the example *ögi kañi kutluglar üčün ävirt-* (BT II 114 and elsewhere in that text) is in its context to be understood, I think, as ‘to have (it) translated (or: to have *punya* deflected) so that his parents would be blessed’, i.e. with final force.

The meaning of the sequence *-gAll üčün* seems to be similar to that of *-gAll* by itself: *ančakya ögläntürgäli üčün bir ulug sögüt üzä agtünip butüklerin yalpürgakların sip alip ol balik üzä ürtüp köšigä kilip ...* (Suv 601,22-602,2) ‘so as to bring them (the fish) back a bit to their senses he climbed a big tree and broke and took its branches and leaves and spread them out above the fish, created a shade (over them)’, *tinliqların köñüllärin korkitgali üčün* (Mait 113r6) ‘in order to frighten creatures’ hearts’ or *tag säñirin yemirgäli üčün ulug toyin ät’özün bälgürtüip ...* (Mait 60 r 4-8) ‘so as to shatter the promontory he brought forth the figure of a large monk and ...’.

Both by appearance and by meaning, *-gAll üčün* is very similar to the equally common phrase with *-gAllr üčün*, in such examples as *elig bägkä ät’özün sävitgäli üčün* (U III 54,17) ‘so as to get herself (physically) loved by the king’, *bramanka altun yartmak bergäli üčün* ‘so as to give gold coins to the brahman’ (U III 68,29) or *katig katgi ... köñüllüg tinliqlarig yavalturgäli üčün* (Mait fol.171r4-10) ‘in order to subdue creatures with a hard heart’. Other uses of *-gAllr* and its possible origin are discussed in section 3.285. In Mait 132r13 the longer and the shorter converb alternate: *täñri täñrisi burxan [... may]trinij ädgüsin ärdämin [ü]küš tinliqlarka üdintä ačgali [...] bälgürtgäli üčün, sansiz tümän tinliqlarka burxan kutiña ulug küsüš turgurali üčün, köp kalin tinliqlarka (thus?) tüzün maytri bodisavt birlä sokušturali üčün ...* ‘in order to put open and show ... in order to

evoke a yearning towards Buddhahood ... in order to make ... meet righteous *bodhisattva* Maitreya'. *-gAll(r) üčün* may have been created to make the final content of the clauses explicit; *-gAll* is clearly not explicit, as it also has a number of other functions and meanings.

The equally non-factive *-gU+kA* (Uyghur and Qarakhanid) signifies 'so as to (do or obtain something)', giving a final meaning to the clause built around it. While *-gAll* and the other means with final content discussed hitherto practically always have the subject of the main and subordinate clauses identical, subjects of *-gUkA* mostly differ from those of the main clause. With no subject expressed or referred to we find, e.g.: *anin ... bo stupug etär män änätkäk čä nom urguka* (HTs VII 1773) 'Therefore I erect this temple for placing Indian books into it'. With subject in the nominative: *altun öñlög yarok yaltriklig kopta kötrülmiş bo nom ärdinig üzäliksiz on küčlög ugrayu ukitu nomladim sizlär kamag törtägü uzatı küyü közädü tutguka* (Suv 451,19-452,2) 'This Suvarṇaprabhāsottamasūtra I, the one with the unsurpassable ten powers, have taught and preached especially so that all four of you would keep and guard it for a long time'. As *-gU* is a projection participle suffix, the agent of the (here negative) *-gU+kA* form can also be introduced through a genitive construction: *arig braman ugušiniñ ariti üzülmägüsiñä adirtlig odgurak äzrua täñri ök küč berti* (BT III 183-185) 'It was clearly and obviously the god Brahma himself⁶⁵⁹ who gave the power so that the pure Brahmin caste would in no way be cut off'. In the following instance the context would appear to indicate that the agent of the main clause and of *-gUkA* should be one and the same: *abavapur atlig nirvanlig balikka kirgükä äñ baštinki yeti kirk köñül öritgäylär* (BT III 445-448) 'So as to enter the *nirvāna* city called Abhavapura they will call forth the 37 very first attitudes'.

In the following passage *-gUkA* and *-gU üčün* are used in parallel manner: *kalisiz nizvanilarig alkguka, kalisiz biligsiz biligig tarkargu üčün nätäg aşaylig adroklari ärsär tünliqlarka nomlayu yarlikazun* (BT VIII B 34-36) 'In order to get the passions completely destroyed, in order to get ignorance completely removed, may he deign to preach to living beings any sorts of *āśāya* characteristics he possesses'. *sizni körgü üč[ün]* 'in order to see you' in Pothi 96 seems to be another instance of this latter construction.

Here is an instance of *-gUlXk üčün*: *bo säkiz ulug örtlüg tamular agir tsuylug yazoklug tünliqlarka kiy(i)n kizgut ... kilguluk üčün bälgülüg*

⁶⁵⁹ Thus if we read *ök*. Another possibility is to read *ög* and translate 'give sense and power'.

bolmiš ärürlär (Mait 81v3, MaitH XXV 3r21) ‘These eight great fiery hells have come into existence for carrying out punishment ... to creatures with grave sins’.

tep ‘saying’ subordinates not only direct speech and content of thought (as discussed in section 4.7) but also intentions, thus being a conjunction for final clauses: *maytri burxanka tušalim tep bir maytri suu bāzātdimiz* ‘We have had the Maitreya prologue embellished in the hope of meeting (or ‘so as to meet’) Buddha Maitreya’. With the *tep* clause to the right of the main clause we have *bo iki yegirmi törliüg törösüz uзақlar bitigläriḡ ol biligsiz ünliḡlar tutarlar, adasüz tudasüz ärälim tep* (TT VI 260) ‘Those ignorant creatures observe these twelve types of untraditional texts and writings hoping to keep away from harm’ or *üzäki yarok täñrilär yarliḡıña kuđi inärlär, kamaḡ budunka öḡläri täḡ kañları täḡ bolzun tep* (TT VI 253) ‘Following the word of the bright gods above they come down, so as to be for the whole people like their mother and father’. Another instance with *-zUn* appears in MaitH XX 14r25. Note that the TT VI 260 sentence is more of a stretch of direct speech in that its verb is in the 1st person plural, reflecting the subjects’ speech; the 3rd person singular of TT VI 260 is a mark of subordination as it would have given the wrong meaning if it had been uttered by the subjects.

Very similar final clauses were already formed in Orkhon Turkic with *teyin*; here is one among the examples: *bodunug igidäyin teyin yirigaru oguz bodun tapa, ilgärü kitan tatbi bodun tapa, birigärü tavgac tapa ulug sü eki yegirmi sülädim ...* (KT E28, BQ E23) ‘In order to feed the people I raided against the Oguz people in the north, the Kitan and Tatbi peoples in the east and the Chinese in the south’. Orkhon Turkic also already has an example of *tep* in this function: *anı añütayin tep sülädim* ‘I campaigned in order to intimidate him’ (BQ E41). All the Orkhon Turkic examples for this construction (see the index of Tekin 1968) have volitional verb forms in the subordinate verb; this appears to be so also in Uygur. Orkhon Turkic *teyin* governing an aorist gives causal meaning.

Final clauses can also be subordinated by *kim*. We find two constructions here, depending on whether the content is indicative or not. If the speaker does not express the wish that the result may take place, this resultant situation is expressed with the conditional: *adgüg ayigig ymä kertgünmiš kargäk, kim ken ökünmäsär* (TT VI 199) ‘One must also believe in good and bad, so that one is not sorry afterwards’; *ymä öḡi ka•i antag öḡäk sav sözläyü umagay kim ol ärn(i)• kö•lin*

*yarotsar*⁶⁶⁰ (M I 15,3) ‘Moreover his parents will not be able to say such considerate words as would enlighten that man’s heart’. The speaker may also wish the content of one of two projected situations to materialize so that the content of the second (which he equally hopes for) may also come true. We find that this content is expressed by linking two volitional clauses: *ol tülñü• tüšün adartlayu beri•lär kim kamag yal•uklar ešidzünlär* (MaitH XI 3r4) ‘Please give (pl.) details on the portent of that dream so that all humans may hear (it)’. With the polite 3rd person imperative used for the 2nd person we have *bo kutsuz kovı tinliqlar üçün tärs biligin ayıg kilinčün ketärmäk alin čavišin yarlıkazun, täğrim, kim ukzun bilzünlär* (TT VI 20-21) ‘May he, my lord, for the sake of these unhappy and wretched creatures tell us the means to remove their heresies and sins so that they may understand and know’. The following, in an address to Buddha, is similar (it also appears in the same text, TT VI), but both the main and the subordinate clauses get the preterite of the copula (presumably for politeness’ sake): *amtü, täğrim, bo montag tärs tätrü biliglig tinliqlarka köni yol orok körtgürü bergäy ärti, kim köni yolča, köni biligčä yorizunlar ärti, tärs tätrü törö kodzunlar ärti* (TT VI 237-8) ‘I wish you would now, my lord, graciously show such perversely thinking creatures the right way, so that they would walk along the right road and according to the right set of mind and should give up perverse teachings’.

Afrin •or, the Manichæan poet, used morphological instead of syntactic means to present the same content: He also linked two volitional clauses but put the 3rd person imperative form of the first into the instrumental case, using what I take to be the blends *yarlıkazunin* (the same verb as found in the TT VI instance just quoted) and *berzünin*. The passage has already been quoted and commented upon in section 3.231 above.

4.637. Consecutive clauses

Consecutive clauses, with which the speaker describes the result of the main clause or its justification, are generally construed analytically, with the conjunction *kim*. Orkhon Turkic does not have this conjunction; it might have had other means for forming consecutive clauses, but no such clauses happen to be attested in those sources. *kim* is also (among other tasks) used for introducing causal clauses; section 4.635 quoted a sentence whose subordinate clause could be interpreted either as causal or as consecutive. In *nä muğ tak boltı kim antag täğri täg ärdni täg ögükünjüzni ölüm yeriğä idur siz!* (KP 24,1-4) ‘What

⁶⁶⁰ Archaically spelled YR’WTSR .

calamity has taken place that you are sending such a jewel-like, god-like darling of yours to a place of death!’ the superordinate clause is a rhetorical question.

In the following sentence the *kim* clause is also consecutive and has a structure similar to the one just quoted: *nä kargäk bolti kim anča ämgänip bo yerkä kältiñiz?* ‘What necessity arose that you went to the trouble to come to this place?’ (KP 47,3). Thus also in *bo ünliğlar nä ayig kilinč kilmışlar ärki, kim bo montag azunta tugup ...* ‘What sin are these creatures said to have committed, that they were born into such an existence and ...?’ (MaitH XX 1v20) and *kimlär ärki bolar? nä a[yi]g kilinč kiltılar ärki, kim montag yürük yarilinčig ämgäk tolgak täginürlär?* (MaitH XXV 2v21) ‘Who might these be? What sin might they have committed, that they experience such heart-rending suffering?’. The main and subordinate clauses of these two Mait examples have their subjects in common, so that one can see how they could have evolved from relative clauses with *kim*.

I have come across one instance of what I take to be a synthetic consecutive clause; its verb has the converb suffix *-gAll*, which is otherwise used with final or temporal meaning or as supine: In *kimni ücün mini montag ämgätgäli buşı bertiy?* (DKPAMPb 840) ‘For whom have you given me as alms to cause me so much pain?’ I take *mini montag ämgät-* to be not the aim but the result of the main action; this is what the context seems to demand.

4.64. Conditional and concessive sentences

The conditional construction uses the converb ending in *-sAr* in the subordinate clause,⁶⁶¹ other sorts of causal relations being equally expressed by converbial means. It signifies ‘if’, e.g. in *agi barim alkinsar el törö näcük tutar biz* ‘If the treasures were used up, how would we uphold the state?’ (KP 9,2); *ol altun tagka tägsär siz, kök lenxwa körgäy siz* ‘If you reach that golden mountain you will see blue lotuses’ (KP 38,1). Contextual converbs can occasionally have conditional meaning, e.g. *yanmišta oganlarimni bulmatin yalañuz älvirgü täg bolur män* (BT XIII 2,47) ‘If I do not find find my children when I come back, all alone I would get insane’. One could, of course, have translated as ‘Not finding my children ... I would get insane’, but the

⁶⁶¹ Ellipse of the main clause is possible, e.g. in *sakınu täginsär biz* ‘If we presume to think (about it)’: This comes to introduce a train of reasoning in HTs VII 231. A highly common ellipse occurs with *nä ücün tep tesär*, literally ‘If one says “Why?”’: This is used as when one says, in English ‘Why? Because ...’ as a rhetorical figure.

meaning remains conditional. In *kim ayig kilinčliqlar bo nomug arvišig nomlagli nomčig örlätgäli sakinč sakinsar, bo arvišig sözläzün* (TT VI 374) ‘If any wrongdoers have the intention of annoying the teacher preaching this teaching and spell, let him pronounce this spell’ the subject of the protasis is qualified by the indefinite human pronoun *kim*.

The *-sAr* form can also signify ‘seeing that’ (or ‘inasmuch as’), e.g. *täñri basmasar, yer tälinmäsär, türk bodun, eliñin törögün kām artatı udači ärti?* (KT IE22) ‘Seeing that the sky has not pressed down (upon you and) the earth has not opened (beneath you), oh Turk nation, who could have been able to destroy your land and your government?’ Similarly in Buddhist Mait XV 10r6:⁶⁶² *ayagka tägimlig maytri bodisavt ... özi t(a)ršanč(a)riti ärsär ymä yiti sikiz bilgä biligin ulag sapig nomug tetrü körüp ...* ‘In as much as he is himself a *daršanacarita* (one who has attained insight), the venerable *bodhisattva* Maitreya with his sharp wisdom also sees clearly the rule of causation and ...’. In such sentences the truth of the protasis is presupposed.

Sometimes we come across concessive use, such content being made explicit only by the meaning of the lexemes used and by the pragmatic demands of the context; e.g. with *bošgunsarlar tñjlasarlar* in *bo inmelun šastr ärsär ärtiñü täriñ alp tüpkärgülük ärür; yinčgä yörügin kim bar ärsär tetiglär keñ biligliglär bošgunsarlar tñjlasarlar üküšin bilü umazlar* (HTs VIII 155) ‘As for this Ying ming lun *śāstra*, it is exceedingly profound and hard to fathom; *even if* any of the clever and broad-minded people study it or listen to it, they cannot understand most of its subtle definitions.’ With *ymä* ‘also’ the meaning can be a bit different: *savı az ärsär ymä tözüg keñürtdäči ärür* (HTs VIII 37) ‘*Although* its words are few, it is an exposition of the (central) principle’. The following sentence, with *u-ma-* in the main clause as in the previous HTs example and with an indefinite pronoun in the conditional clause, is clearly also concessive: *ymä näčä otači otin birlä kalsär anı otayu umagay* (M I 15,7) ‘Even if any number of doctors come with their herbs they will be unable to cure him’. Qarakhanid *näčä mä* compares with *ymä näčä* of the Manichæan example: *näčä mä ulisa* (QB 1371) ‘however much he howls’; *näčä mä oprak kädök ärsä, yagmurka yarar* (DLT fol.461) ‘However shabby and worn it (a cloak) may be, it is useful against rain’. Schinkewitsch 1926: 77 quotes a number of concessive clauses introduced by *näčä mä* from Rabgūzī. There is no need to make ‘concessive clauses’ into a special

⁶⁶² The doubts expressed by the editors in footn.39 to the translation of the text are groundless; there is no problem around this use of the conditional form.

grammatical class in Uygur, (as done e.g. by Ş. Tekin 1965: 49-50), as there are no clear-cut formal means of expression put to use for this purpose, and as ‘although’, ‘even if’, ‘seeing that’, ‘inasmuch as’ etc. are distinguished mainly by context. Still, as e.g. Ş. Tekin’s examples in the passage mentioned show, *-sAr ymä* is a *fairly* dependable sign of concessive use in Uygur, while concessive clauses appear to have often been introduced by *näčä mä* in Muslim sources. What is common to all these contents is that the subordinate clause spells out a presupposition.

-sAr forms can also introduce temporal clauses, as documented in section 4.633. This is generally the case when the context allows only a factive interpretation. In other cases, some of them quoted in that section, both a temporal and a conditional interpretation of the clauses is possible, and the difference seems to be blurred. Here is one such sentence allowing both interpretations: *turmiš törö ol: bo kunčuylarniñ bägi yakın bolmasar amranmak nizvani olarni artokrak örlätür* ‘It is an established rule: When / Whenever / If the husbands of these women are away, the passion of lechery excites them a lot’ (U III 81,25).

Conditional clauses are sometimes introduced by *apam* ‘now’⁶⁶³ (*apañ* in Qarakhanid), *kačan* ‘at some point in time’, *kaltı* ‘if, for instance’ or (only Uygur) *birök* ‘however’. Sometimes we find the elements *kali* or *k(a)ltı* opening conditional clauses; *kaltı* appears to signify ‘for one’ in *kaltı birök altun tilgänlig çakravart eliglär xanlar näčäkä tägi yertinçüdü [ärsärlär, ančaka tägi] yeti ärdiniläri ymä yitlinmäzlär yokadmazlar. kačan birök çakravart elig kača küylgüča ärsär, ötrö yeti ärdiniläri ymä özin ök yitlinürlär yokadurlar* (Suv 395,12-17) ‘As long as, for one, the golden wheeled *çakravartin* kings are on earth, their seven diamonds will not disappear; if, however, a *çakravartin* king should, at any time, be about to go and die, then his seven diamonds will also by themselves be annihilated’. The following passages have more than one of these particles: *apam birök bo ät’özümün titsär män, ötrö ... barčani titmiš idalamış bolur män* (Suv 614,15) ‘Now if I should give up this body of mine, however, I would then have given up and renounced everything’; Here is a conditional sentence with *kali* from DLT fol.548: *kälsä kali katıglik, ärtär teyü tirängil* ‘If hardships should come, say it will pass and be steadfast’.

The second sentence of the Suv passage just quoted has the construction (*birök*) ... *-gUčA ärsär* ‘if it gets to the point that ... happens’, cf. also *birök tükäl [bilgü]čä ukguča ärsär* (HTs VIII 156)

⁶⁶³ Not as the time adverb but corresponding to the English particle which is its homophone; German *nun*. Nevertheless *apam* may come from *ap+am*, < **am* ‘now’.

‘In case, however, one should reach the level of knowing (it) and understanding it fully ...’. In Suv 533,15 the Skt. Petersburg ms. has *uksarlar* where an (older) Berlin ms. writes *uk-u u-guča ärsärlär*. Cf. further: *birök ol küsämış küsüši kanmaguča ärsär ikiläyü yana ašnuki töröçä külsun; kačan küsüši kanguča ärsär ...* (Suv 362,14) ‘In case his wish should not attain fulfillment, however, let him carry out the mentioned procedures again; if, at some point, it turns out that his wish does reach fulfillment ...’; *bodisatvlar mahasatvlar munčulayu bilgüçä ärsärlär ...* (Suv 204,2) ‘Insofar as the *bodhisattvas* and *mahastvas* are as knowledgeable as this, ...’.⁶⁶⁴

In the instances mentioned above, there was either *-sAr* added to verbal stems or *ärsär* added to nominals or to the *-gUčA* form. *-sAr* is aspectually unmarked; complex forms are used for specification. If the event being referred to precedes the moment of speaking or the time of the main event, *ärsär* is added to a *-dI* form: *amrak oglum ölti ärsär munuñ yüzin ymä körmäyin* (KP 67,7) ‘If my dear son has died, let me not see the face of this (other) one’. The aorist followed by *ärsär* brings an outlook for the future: *yarlıg bolmaz ärsär bo yerdä yatayin* (KP 19,7) ‘If no command should be forthcoming, let me lie down in this place’; *yok ärsär* instead of *bolmaz ärsär* would have concerned the speaker’s present. With the following instance the speaker is applying to a sort of oracle: *yanturu öz ulušum[ka] barip adasız äsän tägür ärsär män, bo xualig psak bod[isatv]niñ idok elgintä turzun* (HTs III 919) ‘If I am to return to my own country and arrive there safe and sound, may this wreath cling to the *bodhisattva* (statue)’s holy hand’. Numerous examples for *-mİš ärsär* are mentioned in UW 403b (§19e of the entry), e.g. *abidarim täñri burxan yarlıkamış ärmäsär* (Abhi A 84a11) ‘If the divine Buddha had not created *abhidharma*, ...’. The negative counterpart of *-mİš* is *-mAdOk*: *köz ärklig artamadok ärsär* (Abhi B 64a12) ‘If the sense of sight has not gotten impaired, ...’.

When the condition is unreal, the main verb has to be followed by *är-ti*; the subordinate clause normally shows *-dI ärsär* (or other appropriate persons of the preterite form):⁶⁶⁵ *birök añar sizlär kargäk boltuñuzlar ärsär sizlärni eltgäy ärdi* (U III 69,25) ‘If it had turned out

⁶⁶⁴ Another example for *-gUčA ärsär* is attested in HTs III 713. The Suv uses the construction with *är-* in 376,4 and 14, with *äšid-* in 86,13 and 99,19, with *sözlä-* in 537,5, with *bol-* in 376,8, with *tug-* in 374,17, 19 and 22, with *ornangali u-* in 462,6, with *yadil-* in 91,21 and with *yolat-* in 87,22. Cf. also UW 407a.

⁶⁶⁵ In Turkish *-sA idi* or Rabgūzī’s *-sA ärdi* (documented by Schinkewitsch 1926: 93 § 148) unreal conditions are instead expressed by the conditional of the lexical verb and the preterite of the copula.

that he needed you (pl.), he would have fetched you (but in fact it was me whom he snatched away)'. A sentence with *-mAdI ärsär* in the subordinate clause and *-mAdIIAr ärti* in the main clause appears in MaitH I 1v7-12. A further unreal sentence, with *bulmadılar ärsär* and *bolgay ärti*, is quoted in UW 405a. In the following the main clause contains a 3rd person imperative, because the speaker would have liked the proposition to come true: *äliti kälmiš azokı alkanmadı ärsär, yersuvda uzun yašadı ärsär üküš ögrünçü mänü sizni birlä körzün ärti* (M III nr.5 r9-12) 'If the provisions which he brought along had not been used up, if he had lived a long life on earth, he would have enjoyed a lot of happiness together with you (but unfortunately he died)'. The sentence can be unreal even if the subordinate verb is not preterite, if the then operative condition is still considered to be valid at the time of speaking: *kutlug bodis(a)vtlar ärmäsär bo yerkä näñ tägmägäy ärti* (KP 45,3-5) 'If he weren't a blessed *bodhisattva* he would not have been able to reach this place at all (but in fact he did)'. Three further instances with the same sets of verb phrases are quoted in UW 404-5 (§23a of the entry). This holds already, with the forms *kazganmasar*, in Orkhon Turkic Tuñ 59: *Elteriš xagan kazganmasar, yok ärti ärsär, bän özüüm bilgä Tuñokok kazganmasar bän yok ärtim ärsär, Kapgan xagan Türk Sir bodun yerintä bod ymä bodun yemä kiši yemä idi yok ärtäçi ärti* 'If Elteriš kagan were not victorious, if he had perished, if I myself, the wise Tuñokok, were not victorious, if I had perished, there would not have remained any nation or tribe or person in the place of the Türk Sir nation'. The unrealised future in the past appears in the main clauses of all such sentences in Orkhon Turkic and Uygur.

If the subject of a *-sAr* form is evident from the context, it may not be overtly expressed at all, e.g. the second sentence in *esän tükäl täggäy siz. inçip kayu kün burxan kuñin bulsar, meni titmäñ* (KP 40,7) 'You will arrive safe and sound. If (you) thereupon some day attain Buddhahood, do not forsake me'. Uygur *-sAr* forms with no explicit subject can also have a general agent, 'one' in English: *tužit täñri yerintäki yıl sanın sanasar ... tört miñ yıl ärti* 'if one reckons by the years of the Tušita country of the gods 4000 years ... have passed'; *tiši kišiniñ yılın sanagu ärsär bisaminni başlap sanagu ol* (TT VII nr.12,3) 'If one is to count the years of a female person (i.e. for astrological purposes) one must count by starting from Vaiśravaṇa'. There is an important difference between generic reference, which applies to 'anyone', and general reference, which applies to 'everyone', as described in the next section; the first remains unexpressed while generalised reference is expressed by indefinite pronouns. In Blatt 14-

18 and 27-28 we have both gapping and *käm* ‘whoever’: *kaltı yürüñ taşag⁶⁶⁶ alsar, kizilsig suv yünsär ol taşig özi üzä tutsar kopka utgay ... taşig suvi yaşıl bolsar käm özintä tutsar agulug kurt koñuz adartu umaz* ‘If one takes the white stone, for instance, and there emerges a reddish liquid and one keeps that stone on oneself one will prevail at everything. ...If the liquid of the stone should be green, whoever keeps it with himself, poisonous worms and beetles will not be able to endanger him’. In the second sentence a conditional clause and the correlative type of sentence described in the next section appear in parallel, making a fitting link between this and that one.

If the speaker wants the addressee to make the content of the protasis come true, he can – as in many other languages – put it into the imperative mood, thereby making a merely implicit condition: *bir äki atlig yavlakın üçün kara bodunum öltüñ yetdiñ; yana içik, ölmäçi yetmäçi sän* (ŠU E5) ‘Because of the wickedness of one or two knights you perished, o my people; submit again and (if you do that) you will neither die nor perish’. The standard conditional formulation would have been **yana içiksär (sän), ölmäçi yetmäçi sän*. The meaning of the following sentence, with *näçä* but without the conditional form, is close to being concessive: *bo mamika kizniñ ät’özi ymä bäksiz mäñsüz ol, näçä ymä körtlä körki mäñizi ol* (TT X 545) ‘Now the body of this girl Mamika is as weak and transient as her shape and appearance is beautiful.’ This is a way of saying that her body is transient *although* she is beautiful. *tömgäsin üçün* in Mait 2r2 (*tömgäsi üçün* in parallel MaitH Y 11a6) is by the context shown to signify ‘even though they are foolish’ and not ‘because they are foolish’. If this is not an error on the part of the writer, it shows that matters which are ‘not a hindrance’ could also be represented by the causal postposition.

4.65. Correlative relativisation

Uyğur (like many other Turkic languages) has a two-clause sentence pattern in which the subordinate clause contains or consists of an interrogative-indefinite pronoun and a verb form in *-sAr*, to which there is explicit (demonstrative) or implicit resumptive reference in the main clause. Constructions consisting of an indefinite pronoun + *ärsär* with no correlate, as in *özlüg ölüriüp kimkä ärsär ädgü kilu umaz* (U IV C122-3) ‘One cannot do good to anybody by killing living beings’ are discussed in section 3.134 (on interrogative-indefinite pronouns).

⁶⁶⁶ Accusative suffix with vowel lowered by the /g/; see section 2.402.

The construction has two distinct uses: In what appears to have been the primary use, the pronoun serves as a variable argument, the content of the main clause being understood to apply for any value of that variable. It would be wrong to speak of a relative pronoun in such cases, as that would obscure the indefinite – generalising meaning of this element. The resulting content is equivalent to generalising relativisation. In the second use, the variable has only one value, referred to by the demonstrative of the main clause. The adverbial use of indefinite – demonstrative correlations, e.g. when the subordinate clause has *näčä* here meaning ‘in the measure that’, are again a different matter, dealt with last in this section.

A simple example for the first use mentioned above is Qarakhanid *tavar kimniġ*⁶⁶⁷ *üklisä bāglik aġar kargäyür* ‘Whoever acquires much wealth, being a *bāg* befits him’. The variable is the possessor of the subject (*tavar* ‘wealth’) in the subordinate clause but the dative object in the main clause; *kimniġ* and *aġar* are correlated. The main proposition is said to hold for whatever person’s fortune grows (*ükli-*). The content can also be translated into a conditional construction: ‘If anybody acquires much wealth, it befits him to become a *bāg*’. Similarly in *talkan kimniġ bolsa aġar bākmäs katar* (DLT fol. 221) ‘He who has roasted barley mixes it with syrup’. Here the main and subordinate clauses share the subject in English though not in Qarakhanid: In the sentence as it stands, *aġar* refers back not to *kimniġ* but to *talkan*. Uyğur: *kimniġ tamari yogun bolsar kanagi yeñil* (TT VII 42,3) ‘If somebody has thick veins, it is easy to let his blood’ and *kimdä birök kertgünč bar ärsär ol kiši temin čin kiši tetir* (TT V B 112-113) ‘Whoever possesses faith, however, that person is straightway called a true person’. An instance of a correlation *kimniġ ... anıñ* appears in TT X 273-274. *kimkä* is attested in a correlative sentence in U III 76,16. Interestingly, the majority of the instances with oblique indefinite pronouns in the conditional clause of this construction are construed around *kim* ‘who’ and not any other interrogative-indefinite pronoun, no doubt because of the saliency of humans above other entities.

In the examples quoted, the indefinite pronoun was in the genitive, the locative or the dative case. Normally, it is in the nominative case and (perhaps for that reason) often appears at the beginning of the subordinate clause; this is not surprising as this relative element of the subordinate clause is normally also the subject of the main clause: *kim*

⁶⁶⁷ Dissimilated from *kimniġ*, the genitive form, as happens in the DLT.

ölüt ölürgüçi ärsär, ol ayig kilinč tüšin kántü özi aşayur (U IV C 119-121) ‘Whoever is a murderer, he will himself suffer the result of that sin’. *birök* ‘however’ is used also here, e.g. *kim birök täñri burxannañ bir p(a)dakča täñlig nom bilir ärsär, ol kälip elig bägkä sözlüzün* (U III 29,16) ‘However, let anybody who knows even as little as one line of the divine Buddha’s teaching come and tell it to the king’. In *kim mintä ken okisar mini atayu yarlikasunlar* (M I 29,16-30,18) ‘May whoever recites it after me graciously evoke my name’ the plural form of the main verb reflects the assumption that the text will be recited by more than one person; there is no resumptive pronoun here, this plural suffix in fact taking care of anaphoric reference. Cf. *taloy ögüzkä kirür sizlär. kim ölüm adaka korksar yoriñlar* (KP 32,3), which signifies ‘You are entering the ocean. If anyone (of you) is afraid of death or danger, you may leave’; or: ‘Any one (of you) who is afraid of death or danger may leave’.

With *kayu* we have e.g. *kayu korkinčsiz yïñak ärsär ol yïñakta turkaru bizni uduzup eltdiñ* (U IV C 83) ‘Whichever was the fearless direction, in that direction did you always lead us’; the word *kayu* in this example is not adnominal but the predicate of a downgraded nominal sentence whose topic is *korkinčsiz yïñak*.

In the examples quoted, the variable consisted of the interrogative-indefinite pronoun by itself; it may also be a noun phrase containing such a pronoun (*nägü sakinč* and *nä busuš* in the following two examples): *nägü sakinč sakinsar sän, bütmäz* (TT VII 28,4) ‘Whatever plans you are considering, they will not materialize’;. In *amti köñlündäki nä busušñ sakinčñ ärsär ... irak tarkargil* (TT X 136) ‘Get rid of any sorrow or worry there is in your heart ...’ we have the verb *är-* here expressing existence. Note that there was no resumptive pronoun in the main clause in these examples.⁶⁶⁸ With an adnominal indefinite pronoun and a correlate in the main clause, e.g. *kayu kiši ög kañ köñlin bertsär, ol tñlig tamuluk bolur* (KP 9,5) ‘Any person who breaks the heart of his parents, that creature becomes a candidate for hell’. When the speaker assumes that more than one entity answers the description he gives, he can take up reference to them in the plural in his subsequent text (as already in two previously quoted examples for this construction): *kim yerçi suvçi kämiçi bar ärsär, ymä kälzün, teginig äsän tükäl kälürzünlär* (KP 23,4-7) ‘Whatever guides, pilots or seamen there are, let them come, then, and bring the prince back safe and

⁶⁶⁸ Therefore, *ol* in the U IV example just quoted need not be resumptive with reference to the murderer but could also qualify the phrase *ayig kilinč*.

sound'. This construction has been called the 'internally headed strategy' of relativization, as the antecedent appears within the relative and not within the main clause.

Generalising indefinite-interrogative pronouns can be combined in parallel manner: *kayu näčä ulug eliglärkä xanlarka yazmiš ölümčilär ärsär ... kayu näčä ačmak suvsamak ämgäkin alaçurmiš kogšamiš tinliqlar ärsär ...* (Suv 117,4 – 118,4) 'Whichever and as many as there are people condemned to death for having sinned towards kings and rulers, ... creatures exhausted and weakened through the suffering of hunger and thirst ...'; *kim kayu är ... bitig bititsär, ... kenki ažunlarda tuga täglök bolur* (U III 75,10) 'Whoever, whichever man ... gets letters written ..., he will be born blind in subsequent lives'.

In the following example (also with two indefinite pronouns but here not used adnominally, and an imperative in the main clause) the resumptive element is again not just a pronoun but the near-pronominal phrase *ol kiši*: *kim kayu küsäsär Ketumati kättäki ... kutlug tinliqlar ara ätizü olorup ašagalı, birlä olorup mänilägäli, ol kiši ädgü kilinč kilzun* (Mait) 'Whoever wishes to enjoy sitting among the blessed creatures of Ketumatī and to make music, to sit together and be happy, that person should perform good deeds'. In a sentence in Manichæan M III nr. 8 VII r2-4 the generalising *kanyu* (thus!) *kiši kim* is again taken up by resumptive *ol kiši*; note that *ol kiši* is, through left dislocation, kept in the nominative instead of the genitive case which it would be in by its task in the main clause: *kanyu kiši kim bo yarokun ärmäk[ig] k(ä)ntü köñülin içrä tarimiš ärsär, ol kiši b(ä)lgüsi antag ärür*: 'Any (*kanyu*) person who (*kim*) has planted inside his own heart this existence with light, that person's mark is as follows'. Uygur and English structures are here identical.

When the resumptive pronoun is replaced or accompanied by some word signifying 'all', the reference is no longer a variable as it covers the group as a whole. In such instances the pronoun of the subordinate clause is not placed in the beginning: *tolp sansar i[či]ntäki tinl(i)glarig näčä ämgätgülük tolgakguluk erintürgülük busanturguluk işlär küdüglär ärsär, barča öpkä bilig [i]y(i)n tätrülmäktin töröyür bälgürär* (TT II,2 41-46) 'However many matters there may be for which to cause pain and affliction to all the creatures⁶⁶⁹ in *samsāra*, all (of them) come into existence and appear as a consequence of perversion by

⁶⁶⁹ Note that this part of the subordinate clause appears before the correlative pronoun, as in the example from U III just quoted; *näčä* has, I think, been brought forward to stress the verbs *ämgät-* *tolgat-* etc..

anger'. Note that the previous sentence had *barča* instead of a resumptive pronoun; in the following sentence, the two appear together: *anī koriūp kamaḡ kaṣi kadaṣi baṣlap kim ol törödä yigilmış näčä kiṣilär arti ärsär olar barča korkup bāliṅlāp irak täzdilär kačtilar* (Suv 5,8) 'Seeing that, whatever persons there were, foremost among them all his family, who had assembled at that ceremony, they all got very frightened and fled far away'. *kim* 'who' here serves as relative pronoun in addition to *näčä*; I consider such *kim* to be the bridge for the emergence of *kim* as relative conjunction, documented in section 4.612. There we quoted the sentence *tün sayu ... montag sakinč kilsar alku tünliḡlar bo dyan sakinčliḡ kiṣiḡ kim körsär burxanḡ körmış täg sävär taplayur ayayur aḡirlayurlar* 'If he meditates in this way every night, all creatures who see this meditating person will love, appreciate and honour (him) as if they had seen Buddha' (TT V A 113). If this is understood to be generalising, the translation is 'all creatures, whoever sees this meditating person, ...'; the resumptive pronoun (translated as 'him') is implicit.

In the following example, where *kayutin siḡar* 'which direction' and *antün siḡar* 'that direction' are in correlation, we find the secondary use to which the construction is put (referred to in the beginning of this section): *ol täḡri urisi ... tavrānu kayutin siḡar täḡrilär eligi xormuzta täḡri ärsär, antün siḡar yakin barip ... adaklarinta töpösi üzä yükünüp ... inča tep sözlädi* (U II 29, 19-21) 'that divine boy hurriedly went into the direction in which the king Indra, the king of kings was, bowed to him by putting his head on the ground before his feet and said the following:'. By content, the noun 'direction' is qualified by the clause 'in which Buddha, the king of kings was'; Buddha was in a specific place and there is no variable as in other examples quoted in this section.

With *näčä* and *nätäg* the subordinate clause is adverbial and no longer has any affinity with relativisation: *näčä bo ... täḡrilär täḡri katunları ... üd ärtürürlär ärsär, näčä näčä kṣan üdlär ärtsär, anča anča ... täḡri mäḡiläri ärtär barir* (Mait 103v4-10 = MaitH X 1r14) 'In the measure that these ... gods and goddesses spend time ..., and ... the moments pass, in that same measure do their ... divine pleasures gradually get lost'; *kaḡi xan öḡi katun ... oḡliḡa näčä aytsar nāḡ kiginč bermädök* 'However much his father the king and his mother the queen asked their son, he gave no answer at all' (ChristManMsFr Man v11); this last has concessive content. *nätäg* is about manner and not about quantity: *nätäg taplasar inča kilsun* (U III 46,1-2) 'Let him do as he likes'; *nätäg siz yarlikasar siz, antag ok kilu täḡinäyin* (MaitH XXV

3r7) ‘I will venture to act in whatever way you order (me) to’. The content and form of a sentence in U III 47,11 is very similar to the last one. *nätäg* clauses can also be comparative (cf. the end of section 4.632). In section 4.634 we deal with the correlative pairs *näčäkä tägi ... ančaka tägi* and *kayu üdün ... ol üdün*; these form temporal sentences which are also rather unlike relativization.

The first clause in the following sentence appears to be a correlative construction with no *-sAr* form: *yertinčüdüki näčä ulug yañi künlär bar, näñ bo yañi kün birlä az ülüščäkiyä* [(ms. T III MQ 62 = U 5088 quoted in the note to BT V 438) ‘Whatever there are of great New Days in this world, by no means do they [have] even the slightest part [in common] with this New Day’. The clauses *kim yerçi suvçi kämiçi bar ärsär* (KP 23,4), *kim bar ärsär tetiglär keñ biligliglär* (HTs VIII 155) and *kimdä birök kertgünč bar ärsär* (TT V B 112-113) quoted above show the sequence *bar ärsär*; nevertheless the BT V instance with *bar* alone need not be an error: In the previous section I quoted a concessive sentence with *näčä* also lacking the *-sAr* form.

4.7. Direct speech

The most wide-spread procedure for quoting speech or thought is to have the unchanged content followed by the verb *te-* ‘to say’, by the quotative element *te-p* (corresponding by both origin and function to Turkish *diye*) or by both: *kim “taloyka barayin” tesär kiriñlär* (KP 22,2) ‘If anybody says ‘I’d like to go to sea”, (then) go (pl.)!’; *öz biligsiz tärs kilinčün bilmäz ukmaz kim mäniñ ašnukü ažunta kilmiş öz kilinčüm mäni inča ämgätür tep* (TT VI 15) ‘They do not know and understand their own ignorant and wrong actions so as to say ‘My own action which I committed in a previous existence makes me suffer this much’; *“sän näčük oztuñ” tep tesär “bir kämi šiyokin tuta üntüm” tep tedi* (KP 54,4) ‘When he said ‘How did you save yourself?’ he (i.e. the other one) said ‘I got out by holding on to a piece of the ship(wreck)’’. *qaltı in yaroklı karalı kaltı katılmış ... tepän biltimiz* (Xw 137) ‘We know how light and darkness were mixed’ is also an interrogative element; the passage Xw 134-138, finally, has three instances of the phrase *tepän biltimiz* subordinating a number of instances of the interrogatives *nä* ‘how’, *nädä ötrö* ‘for what reason’ and *kim* ‘who’.

The use of inscriptional *te-* did not differ from Uygur usage. Where Uygur has *te-p*, runiform inscriptions have *te-yin*, formed with a different converb suffix; both are used together with verbs of hearing,

saying or thinking such as *äšid-*, *bil-*, *sakin-* or *te-* itself. In the following instance from Tuñ I W2-3 the quotation is preceded by *anča* ‘thus’ referring to it and by the verb of saying: *täñri anča temiš ärinč: xan bertim ...* ‘The heavens presumably spoke as follows: ‘I gave you a king ...’.’ *anča* refers to direct speech both anaphorically and cataphorically in Tuñ I S5: *anta ötrüi kaganima ötiüntüm; anča ötiüntüm: “... .” anča ötiüntüm.* ‘Thereupon I addressed my king; this is how I addressed (him): “... .” This is how I addressed (him).’ In *anta añig kiši anča boşgurur ärmış: “... .” tep anča boşgurur ärmış* (KT S7 = BQ N5) ‘There, evil people used to advise (them) as follows: “... .” Speaking thus they used to advise (them).’ *savi antag* ‘His speech (was) to this effect’ is a cataphoric phrase used several times in the Tuñ inscription. In the following instance of direct speech the topic *biz* is a postclitic to the predicate: *käntü özümüzni küntä ayda öñi biz tedimiz ärsär* (Xw) ‘If we said about ourselves “We are not related to sun and moon”. ...’. *käntü özümüzni* is part of the matrix clause, put into the accusative case as done with subjects of verbal sentences dealt with as indirect speech (section 4.622).

The following Manichæan passage shows several interwoven quotation strategies: “*š(i)mnug näcükleti ölürdi*” *tep sezik aytar inča keginč bergil: “š(i)mnu öz tilin täğsürüp kamağ yäklärkä inča tep tanuklayu sav berdi: ‘sizlärdä almış agu xormuzta täñrikä atgay män ...’ tedi. ...*” (M I 19,10-20,2) ‘If somebody puts to you the question: ‘How did he (i.e. Ohrmizd) kill the Devil?’ give the following answer: ‘Changing his own words, the devil made the following confession to all the demons: ‘I will shoot the poison which I got from you at the god Hormuzta ...’ he said. ...’ In the first case *tep* is followed not by *te-* but by the verb phrase *sezik ayt-* also denoting speech: It signifies ‘to ask a question’. In the second case (which includes the third and is of a type we have not mentioned hitherto) the quotation is preceded by the cataphoric demonstrative *inča* and another verb phrase denoting speech while, in the third, it is preceded by *inča tep* and a third verb phrase denoting speech (*tanuklayu sav ber-* ‘to confess’) and followed by *tedi*. Here is another involved instance; it has three tiers of quotation one within the other: *samtso açari sözlädi: “vibakida sözläyür: ‘«kün täñri nägü üçün çambudvip uluşug täğzinü yorir» tep tesär keginč berür: «karañku kararigğ tarkargu üçün täğzinü yorir»’ tep. mäniñ ‘barayin’ tep sakinmakim ymä bo yöriügkä eyin bolgu üçün sakinur män” tep tedi* (HTsBiogr 181-189) ‘Xuanzang said: “In the Vimalakīrtinirdeśasūtra it says: «If one says ‘For what purposes does the sun circumvent the world?’ the answer is ‘It circumvents it to dispell the dark blackness.’»

My upholding of my intention to go is also so as to accord with this view.” The following is an instance of a yes/no question incorporated both by a cataphoric demonstrative and *tep*: *anı bilmädi, öñ[räki] ävirgüçilär üzikün yörügün tükäl kiltılar mu ärki tep* (HTs VII 870-2) ‘He did not know whether previous translators had rendered text and meaning in their completeness’.

Direct speech can also be used as a nominal attribute within a noun phrase, provided the head is a deverbal noun denoting thought or speech, as in *tašra yoriyur teyin kü ešidip* (KT E12) ‘Hearing the rumour that he had marched out’; the converb may here have been used adnominally. In Buddhist TT VB 3 there is a sentence in which a complex expression subordinated by *tep* is adnominal to *yörüg* ‘interpretation’. *ätözläriñä asiglig likzir tep bitig bitiyür* (TT VI 257) signifies ‘They write that for them useful book called “calendar”’ shows *tep* in a naming function.

teyin / tep can be absent: *‘kim kayu ... iglig agriglig ämgäklig tünl(i)glar bar ärsär olarni ymä enç kilayin’ sakinçin oron oron sayu kazu yoriyur ärkän* (Suv 603,5-8) ‘roaming around at all places with the intention of putting at their ease whatever diseased and suffering creatures there are’.⁶⁷⁰ In BT VII B41-48 there is a passage in which *sakinmak* ‘imagining’ is immediately preceded by a sentence with *tünliglar* ‘creatures’ as subject and predicates ending in *kötürü turur* ‘keep holding up’, *içgärü turur* ‘keep introducing’ and *bütürü turur* ‘keep carrying out’, as content of thought.

Rarely, we find the content of speech subordinated by the particle *kim*: *ötündilär kim kälürmiš ärdilär üç törlüg közünç* ‘They said they had brought three types of present’ (U I 6,14, Magier, a Christian text); *äšidü yarlıkazun eçim-a, kim mäniñ bo ätözümün esirkägüm idi kälmez* (Suv 608,23) ‘Hear please, dear brother, that I do not wish to spare this body of mine’.⁶⁷¹ In both examples, the object clauses which were the objects of the verbs *ötün-* ‘to say respectfully’ and *äšidü yarlika-* ‘to deign to listen’ followed the main clause. Old Turkic does not appear to subordinate any other type of object clauses with *kim*.

To sum up the means for direct quotation in Uygur: *te-* and *tep* are always preceded by either the quotation itself or by a demonstrative referring to it; *te-* can be preceded by *tep*. Other verb phrases denoting

⁶⁷⁰ *sakinç+in* is in the instrumental case; that there should be the possessive before the case suffix does not seem too likely.

⁶⁷¹ The Qarakhanid sentence *elig aydı kim sen nägü ol atıñ* (QB 583) ‘The king said “Who are you, what is your name?”’ was, by the editor, wrongly taken to be another case of subordination by *kim*.

oral communication have *tep* to follow it or a demonstrative pronoun or, rarely, the particle *kim* to precede it in order to govern direct speech. Another rare possibility is to have an abstract denoting ‘thought’ follow its content without any sign of subordination. The most common way to quote direct speech is by merely having it followed by the sequence *tep te-*. Indirect speech, i.e. quoted speech or thought incorporated into its context, is dealt with in section 4.622 on object clauses.

In Turkic languages, the strategy of direct speech is not used only for quoting; there is no actual quoting e.g. in *yarokli karali kalti katilmis̄ ... tepän biltimiz* (Xw 135-6) ‘we know how light and darkness were mixed’ or, probably *kim ‘ta loyka barayin’ tesär kiriqlär* (KP 22,2), which can also be translated as ‘Anybody who would like to go to sea is invited to do so’. Instances like *yel kilayin tesär* ‘If one wishes to bring forth wind, ...’ in 1.64 of Zieme’s *Wetterzauber* text are common in all sorts of Uygur manuals. We also already quoted a sentence in which something formulated as direct speech renders the subject’s intention: *‘kim kayu ... iglig agriglig ämgäklig tinl(i)glar bar ärsär olarni ymä enč kilayin’ sakinčün* (Suv 603,5-8) ‘with the intention of putting at their ease whatever diseased and suffering creatures there are’. In section 4.636 we dealt with sentences which, as objects of *teyin* and *tep*, have the content of final clauses; in section 4.635 we quoted an Orkhon Turkic causal clause introduced by *teyin*. Uygur *tep* and inscriptional *teyin* had such extended adjunct uses as ‘in order to’, ‘for the purpose of’ or even ‘because’; Orkhon Turkic instances are listed in Tekin 1968: 380-382. Especially worth noting is the sentence *beriyä čugay yiš t̄w̄g²l̄t̄(w)n² yazı konayin tesär türk bodun ölsüküg* (KT S7 and BQ N5) ‘If you intend to settle the Shi-hui mountain forest and the T. plain, oh Turk people, you might die’, where I have translated *te-* with ‘to intend’. It is not that the converbs *tep* and *teyin* became conjunctions for various tasks but rather that the quotation strategy was put to such wide use.

4.8. Coordination and text syntax

The text syntax of the Orkhon inscriptions is discussed in Subaşı Uzun 1995, to which the reader is herewith referred. We cannot deal with the matter in any detailed or systematic manner here (especially because our corpus is much vaster), but have selected a few topics.

Coordination is not necessarily explicit at any syntactic level: From adjectives to paragraphs, everything can be linked by merely being listed, the wider semantic and syntactic context serving as

concatenator: *təŋrilär təŋri katunları* ‘gods and goddesses’; *ogulta kizta amrak* ‘dearer than son and daughter’; *äki ogluma yavgu šad at bertim* ‘I gave my two sons the titles ‘yavgu’ and ‘šad’ (respectively)’; *kulum küŋüm bodun* ‘the nation (consisting of) my male and female slaves’ (ŠU S9). Implicit coordination can well be contrastive: *oglum savı ädgü yavlak bälgürginčä* (KP 63,3) is ‘till news (from) my son turn out to be good (or) bad’; *bilip bilmätin* (Xw 150) ‘knowingly (or) unknowingly’ is a disjunction. In *[ka]tığ tıgrak bürtgäli yumšak iki ämiğläri* (TT X 445) ‘her two breasts, firm (but) soft to touch’ the adjectives *katığ* and *tıgrak* are in obvious semantic opposition to *yumšak*. Sequences are sometimes conventional, as *tüniün küniün* ‘by night and day’, or binomes such as *yer suv* ‘the material world’ or *kam kadašim* ‘my family’ (with inflectional elements repeated). Biverbs such as *sävä amrayu* ‘loving’ are just as common. Finite verbs follow each other in Xw 3-4, sharing subject and circumstantials: *Xormuzta təŋri beš təŋri birlä ... yäkkä süŋüšgäli kälti enti* ‘The god Zerwan descended (*enti*) and came (*kälti*) together with the Fivefold God to fight the Devil’. Whole clauses sharing only the subject can also be coordinated asyndetically, as shown in the following example: *nom nomlayu ... ät’öz ürlüksüzin ukitu inča tep yarlikar* ‘preaching the doctrine, explaining the body’s transience, he says the following’. In the following passage two sentences are linked by sharing subjects and the suffix *+lAr* referring to them: *kim yerçi suvči kämiçi bar ärsär, ymä kälzün, teginig äsän tükäl kälürzünlär* (KP 23,4-7) ‘Whatever guides, pilots and seamen there are, let them come, then, and bring the prince back safe and sound’.

Apposition is also a kind of coordination, e.g. among four noun phrases in *okiyur män sirigini kut təŋrisin, küsämiš küsüşimin kanturdač[ig] kilmüş işimin bütürdäčig* (U I 33) ‘I call upon Šrī, the goddess of happiness, who fulfills what I hoped for and brings to completion what I do’. The attested accusatives as well as the fact that the *-dAčI* forms are postposed and not preposed shows that these latter are headless relative clauses apposed in coordination. Pronouns and proper names can appear in apposition: *bo nišan män Miŋ Tämürniŋ ol* ‘This mark is mine – Miŋ Tämür’s (USp 1,10); *y[arlı]kančuči köŋül öritip män irinč finli[g]ka kšanti berü yarlikazun* (DKPAMPb 1271) ‘May he have pity and forgive me poor creature’. Note that group inflection applies also here, so that the case suffixes are, in these two examples, appended only to the appositions.

Often, however, coordination is explicit. Between noun phrases we have inflectional coordination with *+II* (cf. section 3.123), coordination

by repeated particles as in *kün ymä tün ymä* ‘both by day and by night’ or *bägläri ymä bodunü ymä* ‘both their aristocracy and their common people’, or by repeated conjunctions, such as *ap ... ap* ‘both ... and’ or *azu ... azu* ‘either ... or’ (section 3.33); by postposing *ulati*, as in *koy lagzin ulati tinliglarig* ‘living creatures (such as) sheep, pigs etc.’ (section 4.21). In relatively late texts collective numerals are added after enumeration: *udči buka äsän ikägü* appears, e.g., in SammlUigKontr Sa11,6, 8 and 12 signifying ‘Udči and Buka Äsän’; the text documents their collective purchase of land. Sa26 documents the sale by a father and by his two sons of their son and younger brother into slavery; the sellers are mentioned (6-7) as *atası kutlug tämür, akası är tugmiš akası toktamiš üčägü* ‘his father Kutlug Tämür, his elder brother Är Tugmiš and his elder brother Toktamiš’.

In Uygur and Qarakhanid, *taki* can mean ‘and’ or ‘moreover’; as such it mostly joins larger units such as sentences. Conjunctions such as *taki* and *yana* precede the first sentence constituent. When sentences are coordinated with *ymä*, that particle is often placed after the first constituent (e.g. *ol ymä nirvan mänjisi* ‘that nirvana bliss, in turn, ...’), although it can also precede the whole sentences. In the following instance, the stretch starting with *taki ymä* sums up, as it were, all that precedes (various farmers, hunters etc., then): *amarı tinliglar čaxrı äñirär yün äñirär kentir äñirär, böz batatu kars tokiyur, taki ymä adrok uzlar kántü kántü uz işin işläyür* (KP 2,5) ‘Many people make thread of wool or hemp,⁶⁷² weave cloth of linen or wool and, (in general,) various professionals carry out each his special profession’.

Another way to coordinate parallel syntactic structures is to have them share elements: *yuyka ärkli topolgalı uçuz ärmiš, yinçgä ärklik üzgäli uçuz* ‘that which is thin is easy to pierce, they say, that which is slim easy to break’ (Tuñ). Shared elements are often bound morphemes, e.g. the possessive suffix in this sentence: *tamuda ... tugmiš taki ymä ... beš yol içintä ... tugmišin öyür sakınur* ‘So he remembers that he was born in hell, ... that he was, moreover, born in the five walks’ (MaitH XV 1v23-25). In the following instance the finite verbs share the plural marker: *yer suvlar suv üzäki kemi osuglug altı törlüg täpräyür kamšayurlar* (MaitH XX 1r2) ‘The worlds shake and rock in six ways, like a ship on water’. Sequences of clauses with the *-(X)p* converb can sometimes be considered to be coordinated from the func-

⁶⁷² Among the three objects of *äñirär*, the first is a loan from Indo-Iranian related to Skt. *cakra* and denoting a ‘spinning wheel’ while the others denote types of thread.

tional point of view, when $-(X)p$ has no content of itself beside its joining function, but in fact merely represents the choice to subordinate.

On the other hand, mere juxtaposition can also mean semantic subordination, as in the following instance from a quite early text: *ya[rlikanč]učī köñül turgurup kördüm, irinč [yar]l(i)g umugsuz inagsız bo tñnıglar montag ämgäklıg [...]dA tüšmiš tururlar (U II 4,8)* ‘Evoking a compassionate state of mind I realised (that) these poor and hopeless creatures had fallen into such an (existence) of suffering’. What follows *kör-düm* ‘I saw’ with no sign of subordination is in fact clearly the implicit object of this verb. The preposed sentence *antag ugrı boltı* in the following passage serves as an asyndetic temporal clause: *antag ugrı boltı yana ymä isig özlärintä öñi üdürdüm ... antag ugrı boltı ol ok tñnıglarnıñ isig kanların içtim (Mait 33r18-23)* ‘There were also times (when) I killed them / ... drank their warm blood’ = ‘At times I ...’. The same content is expressed with an $-(X)p$ clause in *antag ugrı bolup bo üçägüdä birisin birisin titgülük idalaguluk kızıgi kalsär ... (TT VB 107)* ‘If it happens that one has to give up these three one by one, ...’. Note that the subordinate clause is the second one in the U II example, but the first one in the Mait example.

Cohesion is a universal phenomenon, presupposed by users of any language; it is cohesion that makes the reader see that the pairs of sentences in the U II and Mait passages just quoted have subordinative content. In Old Turkic, this presupposition makes possible (and even demands) recourse to zero anaphora, clause patterns not demanding the explicit filling of argument slots either within a sentence or among sentences: In *šimnug utup isig özin idip ... üç ay köni adištıt üzä tuta yarlıkadokta* ‘when he graciously defeated Māra, did away with his life and ... held him under control throughout three months’, e.g., ‘he’, ‘his’ and ‘him’ have no explicit counterpart in the Uygur clause. A plural form as in *täñri yerintin tayarlar* ‘they slip down from the divine land’ at least makes the subject identifiable by number although used without explicit anaphoric, but that $+lAr$ is not obligatory either. Demonstrative pronouns are generally not used when reference follows from the context. In TT X 520-521 we do find an example of a demonstrative referring explicitly to the subject of the previous sentence in the anaphoric use of the genitive form *anıñ* which also qualifies the head: *täñri burxannıñ⁶⁷³ çankramit kilu yorimišin kördi. anta ok anıñ öñrä*

⁶⁷³ The suffix is spelled as NYQ.

ažuntaki ... tñri burxan nomn äšidmiš tiñlamiš ögrätigi üzä bo šlok nom köñülintä kälti ‘He saw that the divine Buddha was walking back and forth in meditation. Immediately, through *his* experience in a previous existence of ... having heard and having listened to the teaching of the divine Buddha, the following doctrinal verse came to his mind.’ Anaphoric demonstratives are not barred, then. *käntü* can also get used anaphorically: *yana ol ok yäklär içkäklär yegädürlär tilitag bolurlar käntülärni üzä elänürlär* (TT VI 267 f.) ‘Again those same demons prevail; (they, i.e. the ignorants) are the cause and (they, i.e. the demons) rule over *them* (i.e. over the ignorants)’.

Anaphoricity is achieved also by the repetition of nominals: *xan bertim, xaniñin kodup içiktiñ* (Tuñ 2-3) ‘I gave you a *king* (but) you abandoned your *king* and submitted (to the Chinese);’ *türk bodun tavgačka körür ärti ... türk bodun xaniñ bolmayin tavgačka adrilti* (Tuñ 1-2) ‘*The Turk nation* was dependent on *China*; being without a king, *the Turk nation* separated from *China*’.

Cohesion can be additionally stressed by anaphoric and cataphoric elements, by taking up lexemes from the co-text and by other means: *ančip* (a pro-verb), *anta ötrö* (e.g. in Mait 26A r4) or *anta ken* ‘thereupon’, starting sentences, link them to the previous ones. *inča* is a cataphoric, *anča* an anaphoric pro-adverb or pro-adjective: *inča sakinč sakinur*, for instance, signifies ‘He thinks the following thoughts:’. Also for the purpose of cohesion, a segment like *ani ešidip* ‘hearing that’ can be placed before mention of the subject of *ešid-* (i.e. cataphorically). The following is a rhetorically motivated lexical topic chain, coherence being strengthened through the particle *ymä*: *ürüg amil n i r v a n ta öñi mänjülüğ m ä ñ i bultukmaz. ol ymä nirvan mänisi n o m ta öñi bulgali bolmaz. nomug ymä burxan lar da öñi ... nomladači bultukmaz. mäniñ ymä burxan kutiña ... kut kolmüšim bar* ‘There exists no eternal bliss other than peaceful *n i r v ā ñ a*. That nirvāna bliss, in turn, cannot be attained other than by religion. Now there are no preachers of religion other than the Buddha. And I have been praying for buddhahood’. *burxan kuti* is not in initial position in the last sentence because ‘I’ is the general topic (note that the genitive *mäniñ* gets separated from its head) and because the chain is thereby closed.

The Orkhon inscriptions have a special method of cohesion, whereby preceding sentences are summed up in *-(X)p* clauses: *elig anča tutmüš ärinč. elig tutup ...* ‘This is how they appear to have governed the country. Governing the country, they ...’; *anča tep tavgač xaganka yaği bolmüš. yaği bolup ...* ‘With such words they opposed the Chinese emperor. Even though opposing him, ...’. Another form of summary

turns up in *käyik yeyü tavişgan yeyü olorur ärtimiz. ... anča olorur ärkli ...* (Tuñ I S1) ‘We used to live eating venison and hares’ ... While living in this way ...’. Mait XV 13r12 has the vowel converb instead: *ötrö otgurak katag köñlin örgünintin kudi enti. enä inča tep sav sözläyür* ‘Then, in a clear and resolute mood, he descended from the throne. Descending he speaks the following words:’.

In the sentence *ikinti aźunta ok mu täginür azu bo aźunta ymä mü täginmäki bar?* ‘Is it in the second birth that one attains it, or does attainment take place in this same birth?’ the double *mU* after the elements asked about and the particle *ymä* link the two sentences. *ok* after *aźunta* and the de-finitisation of the second verb also serve in conjunction (though by varying the means!) to make sure that the verb is not thought to be the predicate in either sentence.

A characteristic trait are demonstratives pointing at previous segments of the sentences themselves. Most conspicuous is *anta* ‘there’ taking up locative expressions of the same sentence especially in the runiform inscriptions of the Uygur steppe empire.

In Uygur the contents of a stretch of direct speech incorporated in the sentence are often again pointed at, e.g. in *”...” tep munilayu tutuzdi* ‘He admonished him saying ”...”’, with *munilayu* ‘thus’. Cf. *anča boşgurur ärmış: “... .” tep anča boşgurur ärmış* in KT S7 = BQ K5.

In what follows, the final meaning of *-gAll* is taken up by *anī üčün*: *män sini nizvanī kadgu ... tarkariṗ arxant kutin bulturgali anī üčün sürüp üntürdüm* ‘I had you banished to make you get rid of the sorrows of passion and to find *arhathood*’. The content of converbs and converbial phrases is often taken up by *anin*, the instrumental form of the pronoun; we find e.g. *basut berü y(a)rlikamakları üzä, anin ...* (HTs X 256) ‘by their giving support, thereby’, *bilgäli ukğali yarayur üčün, anin ...* (TT VI 383 var.) ‘because it helps to know and to understand, therefore’, *küyü küzätü tägintökümüz üčün, anin ...* (Suv 401,9) ‘because we have undertaken to guard (this earth), therefore’, *alp kutgarguluk üčün, anin täñri täñrisi burxan ... tñlignñ köñülin yavalturup ...* ‘because (they are) difficult to save, that is why Buddha, the god of gods ... softens a creature’s heart ...’ (DKPAMPb 115). Another passage with such anaphorics is *kişig ... yinik körtäci, nomug uçzladaçilar üčün, anin burxanlar anta tugmaz; köñülläri tar, kirläri täriñ üčün kut bulmıñ tüzünlär bo tiltagin anta barmaz* (HTs V 100-106) ‘Because they humiliate people and disparage teaching, that is why Buddhas are not born there; because their minds are narrow and their filth deep, that is why *āryas* who have found blessing do not go there’; it clearly shows that the construction is meant to add

prominence to the causal phrases preposed. The matter is dealt with in Schulz 1978: 115-117. *-(X)p anin* is found a number of times in the DLT, quoted in Johanson 1988: 146. In IrqB 35 we can read (and understand!) the text either as *urupanin* or as *urup anin*. The sequence may have led to the form *-(X)pAnIn*, as explained in section 3.286.

One domain where sentence-internal reference is extremely common is within conditional constructions and even more in the correlative sentences also using the *-sAr* form: Reference can there be taken up by demonstratives, by reflexives, by personal pronouns, by nominals with anaphoric possessive suffix like *üküş+in* ‘most of it (acc.)’ or by phrases such as *olar barça* ‘all of those’, *ol taşig* ‘that stone (acc.)’ or *antin siğar* ‘in that direction’; see sections 4.64 and 4.65 for details. What is interesting is that there can be anaphoric reference in the main clause even to generalised arguments, as are expressed by ‘one’ in English but left unexpressed in Old Turkic; cf. the following two instances: *yıdlamış yidiğ alku inça ötkürü usar, ol tınlig ät’özi yipar yügmäk burxan ät’özi bolur* (TT VI 172-3) ‘If one can perceive all smelled scents in this way, then that creature’s (i.e. the perceiving creature’s) body will become the body of the Buddha (named) ‘Concentration of Perfume’; *turkaru köni kertü yoriğın yorisar ol temin kişika sanur* (TT VI 33-4) ‘If one (Ø) continuously lives a honest and correct life, one (*ol*) will straightway be considered a human being’.

Cohesion can depend on a combination of subtle factors. Take the stretch *küçümüz bir ikinti birlä sinalim, biz ikigüdä kanyusi küçlügräk biz* (Wettkampf 41-44): This signifies ‘Let us test our strength with each other, (to see) who of us two is the stronger’, but the words ‘to see’ are just implicit. How do we know that the two sentences belong together? They share the lexeme *küç* ‘strength’ in both sentences assigned to the 1st person plural, and the information that this 1st person plural consists of two individuals. The first sentence is a sort of paraphrase of the second, since the question ‘Who of us two is the stronger?’ can best be answered after the test proposed in the first question.

Cohesion may also be absent: Consider the sentence *kayu üdün män beş törlüg ulug tülüg kördüm ärti, antada bärü ... olorgali küsâyür ärtim* (MaitH XI 4v18) ‘When I had seen the 5 sorts of great dreams, from that time on I had the wish to sit ...’. The pronominal phrases *kayu üdün* and *antada bärü* are not in correlation: The subordinate clause is construed so as supply a static time frame, but the main clause takes up the time referred to in that subordinate clause as the starting point of a state of affairs existing since that previous time and the time of the main event.

Sentence interpolations are not rare; e.g.: *yinčgä yörügin kim bar ärsär tetiglar keñ biligliglar boşgunsarlar tıñlasarlar üküşin bilü umazlar* (HTs VIII 153) ‘Even if clever and broad-minded persons – whoever there is – study and listen to its subtle definitions, they cannot understand most of it’; or perhaps one should translate: ‘If any clever and broad-minded persons study ...’ or ‘Even if persons who study it are clever and broad-minded – whoever there is – they won’t be able to ...’. The structure of the Old Turkic sentence, at any rate, is such that *kim bar ärsär* is interpolated. There are, in fact, several interpolations already in the Orkhon inscriptions. The most normal interpolation, so to speak, is the vocative address: *täñri basmasar, yer tälinmäsär, türk bodun, eliñin törögün käm artatı udači ärti?* (KT IE22) ‘As long as the sky did not press down (upon you and) the earth did not open (beneath you), oh Turk nation, who could have been able to destroy your land and your government?’ Here are another two interpolations, in direct speech, which are in fact different accounts of the same utterance: *añarı sülämäsär kačanıñ*⁶⁷⁴ *ärsär ol bizni* – [*xaganı alp ärmış, aygjučisi bilgä ärmış* – *kačanıñ ärsär ölürtäči kök* (Tuñ 20-21), *yörımasar bizni* – *xaganı alp ärmış, aygjučisi bilgä ärmış* – *kačanıñ ärsär bizni ölürtäči kök* (Tuñ 29-30) ‘If we do not fight them / If we do not march out, they will – their ruler is said to be valiant, their advisor wise – whatever happens, they will definitely kill us’. The first passage has the expression *kačanıñ ärsär* both before and after the interpolation, while the second passage has the object *bizni* both before and after it; the first passage refers to the subject of the result clause through the pronoun *ol* already before the interpolation. These are typical means for taking care of coherence to bridge the cut caused by the interpolation.

The interpolation of ls. 42-43 in a late *baxşı ögdisi* edited by M. Ölmez (Laut & Ölmez 1998: 267) has its parallel in English: *tılın alku keyürü sözlämişlärim küsüşüm ol darnı nom padakları bolzun* ‘May all I speak about in detail become – I hope – incantations and verses of teaching’. The enveloping sentence is here, in fact, an asyndetic object of the hope referred to in the interpolation.

⁶⁷⁴ See section 3.134 for this element.

CHAPTER FIVE

PRAGMATICS AND MODALITY

Pragmatics deals with speech acts and with the use to which language is put in interpersonal relationships. Normally one would not expect to find much information on pragmatics in sources from a dead language spoken in a society about which we know so little, especially when the vast majority of these sources is translated from other languages and deals with religious matters. The fact is, however, that the corpus includes many (religiously motivated) narrative texts containing numerous instances of direct speech. These show such oral characteristics as vocatives and interjections, a freer word order, situation-bound deictics, repetition, rhetorical questions and so forth; cf. *körüñlär körüñlär ... kač yañliğ körtlä kač yañliğ sävigliğ ärür* 'See, see ... in how many ways he is pretty, in how many ways lovely!'. Another characteristic of speech is the use of endearment in *+kIñA*, which can draw the noun phrases of whole passages into its tenor; it not only refers to entities 'loved' or 'pitied' by the speaker but also often signals affection for the addressee and his/her world: See section 3.111 above and OTWF section 2.1. When referring to the speaker himself, *+kIñA* expresses humility as a means of politeness. Private letters which are, in our corpus, mostly addressed to family members, are very interesting in this respect.

Some important speech acts have to do with the communication of the speaker's volition to his addressees and with what he thinks the addressees should be doing without presenting himself as the motive of the projected action; we will deal with these two types of speech acts in sections 5.1 and 5.2 respectively. Section 5.3 deals with politeness and the way the speaker positions himself in society. Getting people to do things is not, of course, the only use to which language can be put. One use is egocentric; it has to do with crying out one's feelings. This does not mean that one does not, when shouting out, disregard other people's hearing one's utterances; only that one is not, at the moment, being cooperative. One speech act which is strongly addressee-oriented but still highly non-cooperative is cursing. Other language uses do involve addressees fully, e.g. trying to catch people's attention in the first place, trying to get information out of them or arguing with them. For still

others like promising, apologizing or naming, the language may not have evolved distinctive means.

Exclamations are discussed in section 3.4. They sometimes bear phonic marks of their function, as when the DLT writes *äsiz* (a noun which served as base to the verb *äsirkä-*) as *ässiz* and defines it as ‘a word of sighing at a loss’. The DLT is, in general, a good source for interjections. Dankoff & Kelly 1985: 273 list, among other categories, interjections, vocative particles, calls to animals (different calls for making kids, dogs, foals, falcons or puppies come, for inciting asses to leap females, for making them walk on when they stumble or for making them stop, for inciting oxen to drink, for inciting or restraining horses or for making them stale, for making camels kneel, for inciting rams to butt etc.). Using insults and words of abuse (listed there on p.274) is a different speech act than any of these. Dankoff & Kelly 1985: 273 also list onomatopoeica and animal sounds.

The interrogative pronoun *nä* ‘what’ introduces exclamatory sentences as in *bo nä ämgäklig yer ärmiš!* ‘What a place of suffering this turns out to be!’ (KP 4,8), *nä ymä taḡ, nä ymä tavrak* ‘Oh how surprising, how fast!’ or *nä taḡlančig* ‘How wonderful!’ (HTs III 945). *nä ymä* of the instance just quoted becomes *nä mä* in the DLT: *nä mä ädgü kiši ol* ‘How good that person is!’, *nä mä yavuz näḡ ol bo* ‘How bad this thing is!’ (fol.539 *ol* clearly used as copula). The sentence *körüñlär körüñlär ... kač yaḡliḡ körtlä kač yaḡliḡ säviglig ärür* ‘See, see ... in how many ways he is pretty, in how many ways lovely!’ shows how exclamatory interrogatives may have emerged from some type of analytical object clause. The exclamatory use of interrogatives should not be confused with rhetorical questions as in *muntada ymä muḡadünčig nägü bolgay?* (Mait 26A r3-4) ‘What could be more wondrous than this?’. In neither case does the speaker expect any new information from the addressee. The rhetorical question is a question to which the speaker (thinks he) knows the answer; exclamatory interrogatives, however, constitute no question at all: Note that *nä* in *nä ymä taḡ!* is not translated as ‘what’ but as ‘how’.

Demonstrative *anča ymä* and its contraction *ančama* do the same as exclamative *nä*: *ančama mäḡi! ančama ädgü asig tusu! ančama ädgü kut kiv!* (MaitH XI 3v7) ‘Such happiness! Such good favour! Such good luck and blessing!’ Further exclamatory examples with *ančama* ‘So ...!’ are quoted in § A,b of the UW entry for *ančama*. The following sentence is a rhetorical question with *mU* in which there is an exclamatory demonstrative: *anča ymä čoglug yalünliḡ közünmüz mü?*

(TT X 254) ‘Doesn’t he look so very splendid?’. Most instances quoted here with interrogatives or demonstratives have the particle *ymä* > *mA* following them.

Trying to catch somebody’s attention is a different speech act from addressing by using a vocative somebody who knows he is the addressee. The interjection for calling somebody whose name one does not know is *ay*, as in *ay, kim sän?* (U I 41,5) ‘Hey, who are you?’. If one does know the name of the person whose attention one is trying to catch, one can, e.g., say *a m(a)xas(a)tvī-ya* (HTs III 779) ‘O Mahāsattva’. If one is addressing somebody who knows he is the addressee, one uses only postposed (*y*)*a*, as in *yalḥuklarniḡ arslani eliglār bäglärniḡ kut täḡrisi-a* (U IV A 55) ‘Oh lion of humans, god of fortune of kings and lords!’, an address to a king. Beside *ay*, the DLT also mentions *kī* (the base of *kikīr-* to ‘call out to somebody’) and *ač* as vocative particles; *kī* is still used in Anatolia for calling people from afar.

Cursing is a distinct speech act: Its primary use presumably was negative influence on a person’s fate by magical verbal means, but, said in a person’s face, it might always have been used also as a simple provocation. A Manichæan passage shows us an embedded curse, using a distinctive suffix: *bir äkintikā karganurlar alkanurlar takī ... okišurlar “yok yodun boluḡur ... otkā örtänkā töpön tüšünür ...” tep söḡüşürlär* (M I 9,11-14) ‘They curse each other and shout at each other, abusing each other by saying “Get destroyed! Fall into fire and flames with your head downwards!”’. This is a curse addressed to the speaker’s adversary; 3rd person imperatives were presumably used for cursing absent persons. *toploka tol* (DLT fol.217) also appears to curse the addressee, although Kāšḡarī translates it as “May the grave be filled with him”, since *tol* is a 2nd person and not a 3rd person imperative.⁶⁷⁵ Cf. further *süprük* ‘Go as sweepings without anybody caring about them’ (DLT fol.382): This appears to be the imperative of an otherwise unattested *-(X)k-* derivate from *süprü-* ‘to sweep’.⁶⁷⁶

⁶⁷⁵ *tol-* can have either the receptacle to be filled as subject, or the substance to fill the receptacle; this is unlike English, where ‘to fill’ is used both of the filling agent and of the filling substance. One can translate Kāšḡarī’s sentence as ‘Get crammed into the grave’. *toploka* is presumably a simplification of *toplok+ka*, from *toplok* ‘cracks in the ground’ (DLT fol. 235).

⁶⁷⁶ This formation is dealt with in OTWF section 7.24; there is no justification for Dankoff & Kelly’s changing the form to ‘*süprül*’.

Questions are asked by using interrogative-indefinite pronouns or the interrogative particle *mU*, whose functioning is discussed in sections 3.343 and 4.3; note that Old Turkic interrogative sentences do not have patterns of their own but follow those of positive sentences. In section 4.4 we ask whether interrogative pronouns appear *in situ* or whether they tend to initial position. Section 3.134 deals with the interrogative pronouns themselves. Questions formed with *mU* expect answers equivalent to English ‘Yes’ or ‘No’, though there are no such sentence answers in Old Turkic proper; the DLT mentions *ävät* and a few variants of that for ‘yes’. Nor are there any pro-verbs such as ‘I do’ or ‘She doesn’t’: The answer (which is, of course, a different speech act) then has to be a part-echo of the question, often the predicate by itself. In DLT fol. 197 we read, e.g., that the answer to *käräk mü* ‘Is it necessary?’ is *käräk* ‘Yes it is’.

The Orkhon Turkic interrogative particle *gU* signals that the speaker expects or prepares a negative answer: *azu bo savimda igid bar gu* (KT S10, BQ N8) signifies ‘Or is there a lie in what I said?’; *Türk matī bodun bäglär, bödkä körügmä bäglär gü yañiltaçı siz* (KT S11) ‘Oh strong (?) Turk nation and lords, oh lords who have shown allegiance till now, will you fail?’

Interrogative sentences either solicit answers, or they are rhetorical questions (which are either left for the addressee to answer for and to himself or supplied with an answer by the speaker). The pronoun *kanī* ‘where?’ is often (though not exclusively) used in rhetorical questions; in that case it does not expect local information as an answer but elicits the realization on the part of the addressee that the entity upon which *kanī* is predicated is missing or absent: *ellig bodun ärtim; elim amtī kanī? ... xaganlig bodun ärtim; xaganim amtī kanī?* (KT E9) ‘I was a nation with a state; where is my state now? ... I was a nation with a ruler; where is my ruler now?’. *kanī* is used in this way also in QB 1384: *kanī? kim kutuldi ölümdin kaçıp?* ‘Who fled death and was saved? Where is he?’ The QB has nearly 70 instances of this element; many of those are rhetorical, others do ask for answers, as a DLT example seems to do. In HTs V 4,15 (edition of Tuguševa) the king Śīlāditya asks king Kumara: *ya Kumari elig, Tavgač t[oyin] kanī?* ‘Oh king Kumara, where is the Chinese monk?’ and is then surprised to hear that the person he asked about has not come. This is not rhetorical either.

Here is a rhetorical question from a letter (UigBrief C7) written in what seems to be close to spoken language; the interpolation found in it

also testifies to this: *s(ä)n mini, karî atañni tesär sän – yol yer kördünj – kälip köriüşüp barsar sän n(ä)gü bolur* ‘As for me, your old father – you’ve seen roads and places – how would it be if you came for a while and we saw each other?’ The two conditional forms in this stretch do not express conditions either; one is a topicaliser and the second serves the rhetorical purpose of the sentence. Now consider *aniñ savin tiñlaguçi kişilär barça inča tep teyürlär*: “*bu kutsuz tinlignij savin nägülük kertgünür sizlär? nägü sözläsär barça äzügläyür*” *tep*. (DKPAMPb 271) ‘People who listen to his words all say the following: “Why do you believe the words of this wretched creature? Whatever he says, it’s all lies!” Here the motive for uttering the rhetorical question is supplied straightway. Interrogative pronouns also serve exclamatory function: In KP 5,1, the (sad) Good Prince says (among other things): *näglük tugdum män* ‘Why was I born, I?’. Here the postverbal pronoun is redundant in content and grammar but takes up reference to the topic; hence its post-predicative position. It is as if he had asked: ‘Why did I, of all people, have to see this?’ In *anča ymä çoglug yalınlig közünmüz mü?* (TT X 254) ‘Doesn’t he look so very splendid?’, finally, the expected answer is ‘Yes, he does.’

To contradict a view held by the addressee, one adds *ärmüz* to a proposition (here with aorist), otherwise leaving it unchanged (here with an aorist): *burun til ätöz ärklig alir ärmüz iraktaki adkangug* (AbhiB 77b13) ‘It is not correct that the senses of the nose, the tongue or the body perceive distant sense objects’. When asking the addressee to agree to a proposition he holds, the speaker adds *ärmüz mü* ‘isn’t it?’ to it. *anča ymä katig kinig sav sözlädi ärmüz mü?* (DKPAMPb 362) ‘Now that really is a strong-willed thing he said, isn’t it?’ or ‘Isn’t that a ... thing he said!’ and *täpräncäsiz boltum ärmüz mü* (Suv 626,19) are rhetorical questions; *ärmüz mü* applies to the sentence as a whole. There are further instances of *-di ärmüz mü* in HTs VII 121 and 127.

Käşgarî (fol.168) shows some anthropolinguistic observation ability when suggesting that one should, when reading out the Coran among crude Turks and their women, muffle the reading of verses containing the words *sikkîn*, *yumsik*, *ixtilāq* or (among the Oguz) the interrogative particle *am*: “For”, he explains, “they do not understand the meaning but consider that the sounds of the words mean what they understand by them in their own language (i.e. *sik* ‘the male member’, *tilak* ‘clitoris’ and *am* ‘vulva’ in the Oguz dialect respectively); so they commit a sin

by laughing at them”. Collectively laughing at unintended obscenities is clearly a pragmatic universal.

5.1. *The communication of speaker’s volition*

In Old Turkic, the means used for expressing epistemic mood do not coincide with those used for volitional mood; we therefore separate the two topics and have dealt with epistemic mood in section 3.27; these two are, we think, semantically as well as pragmatically quite distinct matters. Volitional mood is usually conveyed with the forms of the volitional paradigm (q.v. in section 3.231) if the speaker’s wishes, orders or entreaties are to be transmitted to the addressee or to a third party. Other topics to be discussed in this section are the expressions of hope and exhortation, the asking of permission, the expression of readiness to carry out an action and the like.

The volitional content most commonly expressed is that of the speaker telling the addressee(s) to carry out (or, if the form is negative, not to carry out) some action; in the singular, this is normally expressed by the singular 2nd person imperative form consisting of the simple stem. The form is often accompanied by the synharmonous particle *gIl*, as described in section 3.344. In many Uygur texts (though not yet in Orkhon Turkic), the ‘plural’ form in *-(X)η* is used only for polite address to the singular, *-(X)ηlAr* being used for the plural (polite or familiar): E.g., Mait XV 12v11f. has *tur-uη, tavran-iη, sakin-iη, idala-η* ‘stand up ... hurry up ... consider ... abandon’, said in an address to a king; the same passage has *odunuηlar* ‘wake up’ said to a multitude.

Occasionally a future form is used for expressing a firm injunction: *ötrö kañi xan yarliġkamadi*, “*barmagay sîn*” *tep tedi* (KP 19,3) ‘Then his father the king did not permit (it); he said ‘You will not go!’’.

The content of the following utterances is linked to a hope: *közin körgäy ärki biz xanimizniη xaniniη nomlug tilgän küniηä muntakya ävirmišin* (HTs VII 1241) ‘We might see with our eyes that the lord of our lord right here turns the wheel of *dharma* every day’; *bulgay ärki biz yeg adrok buyaniġ* (Suv 609,11) ‘We will maybe (or ‘hopefully’) attain excellent *punya*’. The sentences themselves need not, however, actually have expressed that hope; they could be statements about the future, meant to serve as encouragement.⁶⁷⁷ This is what Gabain might have been thinking of when she said that *-gAy* can be used as optative. However, some of the instances of *-gAy + ärki* listed in UW 436b (§ III

⁶⁷⁷ In Judaism (where the coming of the Messiah is traditionally always expected in the nearest future) the use of such expressions is (also) quite normal.

p of the entry *ärki*) express apprehension: *inča bolmazun ol ärdin biziñä ada tuda kalgäy ärki* (U III 56,3) ‘I hope no harm comes to us from that man’; *bušanip işimiz [...] bütgäy ärki tep sezinti* (HTsTug 67,12) ‘He was worried, saying [how could] our matter succeed’. It might therefore be more correct to say that *-gAy ärki* expresses emotional involvement beside its epistemological content.

-gAy ärdi expresses volitive content in a rather indirect tone: *amtü, täñrim, bo montag tärs tätrü biliglig tünliqlarka köni yol orok körtgürü bergäy ärti, kim köni yolča ... yorizunlar ärti* (TT VI 237) ‘I wish you would now, my lord, graciously show such perversely thinking creatures the right way, so that they would walk along the right road’. This is addressed by a *bodhisattva* to Buddha and the tone is accordingly polite, as shown, among other things, by the use of the 3rd person for the 2nd and by the addition of *ärti*. Similarly in an address to the Chinese emperor: *münlüg kadaglig ötügümin äšidü yarlikap bügü köñül üzä titrämäkimin bili yarlikagay ärdi* (HTs VII 770) ‘May you deign to listen to my deficient and failing appeal and, by metaphysical spirituality, deign to know my trembling’.

Using the 1st person singular volitional form, the speaker proposes to the addressee to participate in his wish for an action he would himself like to carry out (or not to carry out if the verb is negative): The translation of *barayin* (KP 19,1) as ‘Let me go!’ after all consists of an invitation to the addressee to permit the speaker to carry out the action of going. In *nätäg siz yarlikasar siz, antag ok kilu täginäyin* (MaitH XXV 3r7) ‘I will venture to act in whatever way you order (me) to’ the speaker’s volition can better be characterised as a readiness to act. When the speaker happens to be Buddha, as in the following example, the purport of the volitive form becomes practically identical with that of the future tense; in the following sentence this form thus appears together with *muna*, which here asks for the addressee’s attention to an event which is about to take place: *muna amtü män ... magat eldäki tünliqlarniñ isig öz korkinčlarin kalisiz tarkarayin* (TT X 125-130 as completed by Zieme in his ‘Nachlese’ to the text), perhaps to be translated as ‘See how I intend to ... do away completely with the fear which the creatures of the land of Magadha feel concerning their life’. Another instance of *muna* with an *-(A)yIn* form appears in TT X 199-201.

As a sign of politeness, the 3rd person imperative form can be used for addressing the 2nd person: *bo kutsuz kovü tünliqlar üçün tärs biligin ayig kilinčün ketärmäk alin čavišin yarlikazun, täñrim, kim ukzun bilzünlär* (TT VI 20-21) ‘May he, my lord, for the sake of these unhappy and

wretched creatures tell us the means to remove their heresies and sins so that they may understand and know'. Further examples of this can be found in TT X 19 and 179 (both again *yarlikazun*) or U III 83,18. In the sentence *bodisatv tegin kaṇi kanta bo yarlig ešidip* “*yarlig bolzun, tidmazun barayin*” *tep ötünti* (KP 19,1) ‘When the *bodhisattva* prince heard this order from the king his father, he addressed (him) saying ‘May there be an order (that) he may not hold (me) back (but) let me go!’. *yarlig bolzun* may have been broadly equivalent to ‘Please!’.

The following passage shows two different uses of the 3rd person imperative with no person reference; they are linked by implicit causality: *näṇ käyikig ölü[rüp] ätin yemäzün, bizni osuglug ämgäkkä ymä tägmäzün* (MaitH XX 13r9-13) ‘One should by no means kill wild animals and eat their meat (so that) one does not get to suffer as we do’. Only the first sentence is prescriptive on the part of the speaker; the second one should more strictly correspond to the wishes of the addressee than of the speaker, who is already in hell. The following passage is similar, but here the first sentence expresses impersonal mood (section 5.2): *turkaru aš ičgü inča kolosinča ašanmak kärgäk, nüzvanılar küçlüg bolmazun, ät özkä ada kilmazun* (M III nr.6, 12,3-5₂) ‘It is necessary to have one’s meals thus, at the right times, lest the vices get strong and harm the body’.

In pronominal questions coupled with mood, it is the addressee’s wish that is solicited; e.g. *kayu balikta tugayin?* ‘In which town should I be (re)born?’. *amrak ögüküm köḡlin näčük bärtäyin män?* (KP 9,7) signifies ‘How should I break my darling’s heart?’; this is what the speaker expects the addressees’ demands to boil down to.⁶⁷⁸ 2nd person imperatives do not appear in questions.

Particles such as *gll* and (in Kāśgārī’s language) *čU* lend special urgency to imperatives; see section 3.344 for examples. *gll* is very common but is rarely used with negated forms. In HTs III 673, the future form *bol-gay* ‘It will become’ is used as a modal particle: “*sän amtī bolgay az[an] üzä agtünip sudur [agi]likig nomlagil*” *tep tedi* ‘(Mahākāśyapa) said “Would you please⁶⁷⁹ now get up to the pulpit and preach the *sūtra* treasury?”’ *bolgay*, which here serves as translation of

⁶⁷⁸ The context is that the prince would like the king to give everything in the state treasury away as alms, and the treasurers have been expressing their worries about the imminent bankruptcy of the state. This is thus not a rhetorical question.

⁶⁷⁹ The English particle *please* also, after all, comes from a modal phrase like ‘if it please you’, still used without truncation in French *s’il te / vous plaît*. German *bitte* presumably elliptically stands for ‘(ich) bitte (dich / Sie)’. Concerning the use of *bol-* cf. Turkish *olur* expressing consent.

a Chinese particle used in imperial commands, is no doubt truncated from *yeg bolgay* ‘It will be better’ (or ‘quite good’) used asyndetically: Cf. *yeg bolgay ärti [...]**p yep yorilim ärti* (Maitr 110v8) ‘It would have been better (if) we had lived enjoying ...!’. The use of *yorilim ärti* and not **yoridimiz ärsär* (as in the translation) shows that the whole sentence *yeg bolgay ärti* had already become downgraded to particle status.

ärti is added to the 1st and 3rd person volitional forms to express unreal wishes: *yersuvda uzun yašadi ärsär üküš ögrünčü mänü sizni birlä körzün ärti, üzütlüg ädgü kilinčün tükätzün ärti, tašt(i)n süjar k(a)m(a)g tüzünlär [birlä] kut kiv bulu yorizun ärti* (M III nr.5 r10-15) ‘Had he lived for a long time on earth⁶⁸⁰ he would have seen a lot of happiness together with you, he would have completed his spiritual good actions, in the public domain he would have lived finding happiness together with all righteous people (but suddenly he died)’. In *körmäyin ärti muni täg ulug ačg ämgäkig* (Suv 626,7) ‘I wish I had not seen such great and bitter suffering’ the wish is shown to be unreal by the context, the speaker having just witnessed much suffering. An instance with the 1st person plural volitional form and *ärti* is quoted in the previous paragraph from Mait 110v8. QB 1539 also has *-sUn ärti* expressing an unreal wish, in parallel to *-sA käräk ärdi* telling the reader what, in spite of reality, would have been the more appropriate course of events: *käräk ärdi bilgä tirilsä kutun / kamug ölsün ärdi biligsiz utun*; ‘It would have been better to let the wise live on and be blessed; were it only that all the foolish and shameless would die!’.

Compounding the 1st and 3rd persons imperative with *ärti* can also give real wishes a more polite expression: In the sentence *täñrikänimiz uzun özin kalin kutun turkaru adasazan tudasazan ärmäki bolzun ärti* (BT V 516-8) ‘Our majesty, I wish he were to attain a long life, that he were to live full of blessing and that he were continuously free from trouble’ the wish is certainly not meant to be unreal, especially since it stands in parallelism with *berzünlär* (515) and *bolzun* (519, 522); rather, the motive for *ärti* is clearly politeness, the added content being something like ‘if it were possible’. The reason why the construction is not used in the other three cases in the passage must be that their topics are not identical with the addressee; there the angels are asked to help him as well as the inner status of his realm in one case, its outer realm in the other. A similar sentence in a Buddhist text is *maytri burxan bizni körzün ärti* (MaitH XXI 2r10) ‘If only Buddha Maitreya would see

⁶⁸⁰ This is the way the unreal condition is construed; see also section 4.64.

us!'; this hope is uttered by creatures living in hell, so that politeness and deference cannot be distinguished from the irreality of the wish as presumably felt by the speakers. Sinning creatures in MaitrH XXIII 9v4-6 express the hope that Buddha Maitreya may not see them committing their sin by using the verb phrases *körmäzin ärdi* and *ukmazun ärdi* while in XXI 3v14-16 they express the hope that they will see Buddha Maitreya with the clause *maytri burxanag körälim ärti* and that the community will not see them by using the form *körmäzünlär ärdi*. Further examples can be found in UW 405, § 24 of the entry for *är-*; *ärti* remains in the singular also when the lexical verb is plural.

The analytical form *-mAk+I bolzun* has optative meaning; it expresses a prayer for the person referred to in the possessive suffix: There are a number of Manichæan instances in M III nr.15 r20-24, BT V 524 or BT V 490 (*yadilmakî bolzun* 'may it spread'). *burxan kutilig* (thus!) *küsüşläri kanmakî bolzun* (DKPAMPb 486) 'may their wishes in connection with Buddhahood get fulfilled' is Buddhist, as are instances in HTs VII 757 and twice Pfahl III 26-27: Two of these have the shape *-mAk+lArI bolzun*. With the 2nd person plural we have *mänikä tägmäkiñizlär bolzun* (Hochzeit 28) 'May you attain happiness!', with the 1st *biz kamagun anta burxan kutiña alkış bulmakimiz bolzun* (MaitH Y 53) 'May we all at that point obtain blessing for attaining buddhahood!' Note that the nominal referring to the persons whom the prayer is to benefit stays in the nominative.

Giving an example for the versatile element *kalî*, DLT fol.548 brings the sentence *sän kalî barsa sän* and translated it as 'If only you had come!'. By this translation, this appears to be a way in which unreal wishes are expressed in Qarakhanid. This use presumably comes from rhetorical questions of the type *kačsa kalî kurtulur* (DLT fol.383) 'How can he escape from it by fleeing?'.

When the same verb is used in the conditional and then in the imperative, the speaker signals that he does not mind or care if the action is carried out; e.g. *barsar bargil* (KP 30,6) 'Go if you want to'. Rabgüzî has this same construction (see Schinkewitsch 1926: 78 § 121); we also have it in a variety of modern Turkic languages.

As auxiliary, *kör-* 'to see' expresses a conscious effort to carry out the action described in the lexical verb (section 3.252). Its imperative is used with exhortative content: *yelü kör* 'See to it that you ride fast!' (Tuñ 26); *saklanu körgil* 'Make sure that you take care!' (TT X 426).

The use of *yämü* as defined in DLT fol.455⁶⁸¹ shows it asking the addressee for confirmation and consent concerning the action he is being asked to do: *sän bargil yämü* ‘You will go, won’t you?’, according to Kāšgarī this is a particle meaning “Did you accept these words and memorize them in order to do what you were told?”.

Injunctions and entreaties can be linked with promises, which are then put into the future; the following is from a runiform inscription from the Uygur Steppe Empire: *yana ičik, ölmäči yetmäči sän* (ŠU E5) ‘submit again and (if you do that) you will neither die nor perish’. Similarly in a source from the Mongol period (see details in footn. 186): *tört yïñakdïn bo nom ärdiniğ keñürü yada beriñlär; ogulnuñ kizniñ ulagï sapïgi üzülmägäy* (49-53): ‘Be so nice as to spread this doctrine jewel in all four directions (and) the chain of (your) offspring will not stop’.

Old Turkic mood can be subordinated; in the following instance, e.g., we find it in a postposed relative clause with consecutive content: *anïn amtï kamağ bursañ kuvragdïn iki toyïn ötünü teginür män, kim küntämäk mäniñ ävimtä ašanzunlar* (Mait fr. quoted in the n. to TT I 160) ‘Therefore I now politely invite two monks from all communities, who may come and have meals every day at my home’. This is akin to final clauses (section 4.636), which can also have sentences with *-zUn* forms subordinated by *kim*.

5.2. The communication of impersonal necessity

Analytical means are available for impersonal mood, which expresses an obligation not presented as being the speaker’s wish. Among them we find the very common verb phrase in *-mİš käreğäk*; e.g. *bilgä yalñuk oglï bo nomug işidgäli ulug küsüš öritmiš käreğäk* (MaitH XV 6r21) ‘A wise person should have developed a strong wish to listen to this doctrine’. With a pronominal subject: *sän ymä amtï köñülünin idmiš käreğäk* ‘You should now let your heart roam’ (U III 82,21-2). Sometimes *-mİš* has a possessive suffix referring to such a subject: *anïn män anta ašun tutmišim käreğäk* ‘therefore I should get born there’. And sometimes the proposition is meant to apply for any (unexpressed) subject: *kirlärin tapčalarin yumış aritmiš käreğäk* ‘One needs to have

⁶⁸¹ I follow Atalay’s reading. Dankoff & Kelly read ‘*yamu*’. Kāšgarī adds: “Its root is the word *ye* which is a particle meaning ‘yes’; the *mīm* and the *wāw* are the interrogative” (i.e. *mü*). This must be equal to Turkish *emi*, which has initial stress as befits a word whose second part is *ml*, and exactly the same meaning as defined by Kāšgarī. *e ~ ye* is also the first part of *ävät ~ äwät ~ yämät* ‘yes’, with an emphatic particle discussed in section 3.341.

washed away and cleaned its dirt and filth' (Suv 142,1). While *-mİš käreäk* may be describing what states one should strive to have attained the content of *-gU käreäk* may be describing what one should strive for: *bo iki törlüg ädgül[ärkä tükäl]lig bolgu käreäk* (Suv 23,7) 'One should be equipped with these two sorts of virtues'. The QB instead has *käreäk* with the *-sA* form and subject pronoun in the nominative case (examples in Hacıeminoğlu 1996: 94).

The necessity expressed by *-gU ol* is impersonal in two senses: Firstly the speaker does not explicitly say that he himself wants the content of the proposition to take place (as he would with an imperative); secondly there is no explicit or implicit reference to a subject: *kraša älgindä tutup munı sözlägi ol* (ZweisprFr r 2) 'One must hold the monk's dress in one's hand and pronounce the following:' or *turuş tütüştä saklangu ol; äd yol tilämäktä ičangu ol* (TT I 196-7) 'One should be careful in strife; one should take care when pursuing possessions or luck'; further examples appear in BT I D 317-320 (one of them as *körmägi ol* 'one should not divine'). In late texts *-gU ol* can be contracted to *-gUl*:⁶⁸² ETŞ 20,225 has *sakingu ol*, e.g., while the parallel passage in 231 writes *sakingul*. The form *sakingul* should be read also in Suv 27,15 as determined by Zieme in his reedition, against '*-gIl*' in the Radloff-Malov and Kaya editions; cf. *sakingu ol* in Suv 25,13. The form is common in medical texts, where it signifies 'one should ...', with e.g. 17 examples in Heilk II,1 alone.

-gU ärür (as in *kirgi ärür* 'one must enter' in StabUig 155,31) and *-gU ärmöz* (as in *kakigu ärmöz* 'one must not be angry' in Suv 443,9) have the same meaning as *-gU ol*. These are, however, also used with explicit subjects, together with the same content of anonymously motivated necessity: *bilgä yalñuk ogli täñri mänisiñä ymä artok yapışgu ärmöz* (MaitH XV 5r13) 'Nor should a wise human being attach itself too much to divine pleasures', e.g., has a subject in the nominative; cf. also *käntü özlärinjä asig tusu bolgu ärsär ymä* (Suv 230,4) 'although it is meant to be useful for themselves'.

är-di can be added to *-mİš*, *-mAk* or *-sXk* forms with *käreäk* or to *-gU* with or without *käreäk* for two purposes: Either the speaker speaks of a necessity in the *past* without renouncing his claim as far as the present is concerned. Another possibility is of the speaker to express an *irreal*

⁶⁸² Zieme 1969 n.267 still thought that this was a variant of the 2nd person imperative particle *gIl* and may actually be right concerning some very late texts: The sentence *kälip körişüp bargul* in a letter which has several Middle Turkic characteristics (Brieffr C9) is certainly very directly addressed to one person and *can* be translated as 'Come, let us see each other (and then) go (back again)'.

wish concerning an event which could have taken place at his moment of speaking but hasn't, possibly regretting that it hasn't done so but not considering a realisation in the future as relevant. We first deal with the first possibility and come back to unreal wishes below: In the following example from a letter on the Silk Road the *-gU* form receives a possessive suffix to refer to the subject and the nominal subject appears in the genitive: *kutsiniñ ... bergüsi ärti. bermädi, män ötädim. säkiz on beš [kar]s män berdim. ... bo munča kars kutsida algu ol* (HamTouHou 34,11) 'K. should have given ... (for scissors); he didn't give it (and) I paid it: I gave 85 (pieces of) woolen cloth. ... This much woolen cloth should be taken from K.'. Further examples appear in confessions; in the Manichæan Xw with *-mAk* and *-sXk*: *on čaxšap(i)t tudokumuzta bärü üč agzin, üč köñülün, üč älgin bir kamag özün tükäti tutmak kärgäk ärti* (150) 'Since we observe 10 commandments it was our obligation to observe fully three by the mouth, three by the heart, three by the hand and one by the whole person'; *arig bačag bačap täñrikä ančolasik kärgäk ärti* (177) 'It was necessary to observe a pure fast and to dedicate it to god'; *suyumuzni yazokumuzni boşuyu ötünmäk kärgäk ärti* (185) 'It was necessary to pray for forgiveness for our sins'. In a Buddhist confession (*-gU* with and without *kärgäk*: *bilingümüz ukungumuz kärgäk ärdi, isig amrak özümüzni idalamışımız kärgäk ärti, adnagunuñ isig özin üzmägümüz⁶⁸³ ärti, adin tñlig oğlanin örlätmägümüz ämgätmägümüz kärgäk ärti* (UigSün 5-8) 'We should have been aware of ourselves, given up our dear life, not have ended the lives of others and not have angered or caused pain to other living beings'. Such sentences are followed by prayers for forgiveness *in case* the confessant carried out such deeds. These are not, therefore unreal wishes. *käräk ärdi sän mä munü ukxa sän* (QB 658) signifies 'It was necessary (not 'it would have been necessary') for you as well to understand this'; this does not express an outdated necessity but is the QB construction *-sA käräk* transferred into the past.

With *-gUlXk är-* the necessity holds for the object of the verb and not its subject: *titgülik ök ärür* (TT VIII D37) is 'It definitely has to be given up'. This construction is apparently shared by the category of 'ability' (section 3.253) and volitive modality.

The modal content of *-gU* is also made unreal by preterite forms of *är-*, e.g. in QB 1089: *mäniñ kälkimä aydım ärdi saña / köñül bamagu ärdiñ*

⁶⁸³ The editor wrote "Nach *üzmägümüz* scheint *k(ä)rgäk* zu fehlen"; in view of the variation in the modal phrases and *bergüsi ärti* in the letter quoted above, any such addition seems unnecessary.

ämdi maṇa ‘I had told you my (fickle and inconstant) nature; you should not now have fastened your heart to me’.

5.3. *The reflexion of social structure*

Verbal communication reflects social as well as personal and spiritual hierarchies. This is expressed by honorifics such as *kut* when used for addressing humans, e.g. *kaṇ im kuti* ‘my honoured father’ in KP 4,4; or, when a letter is addressed to *pr(a)tyadivači ačari adakiṇa* (HTs VII 2063) ‘to the feet of master Prajñādhvaja’.⁶⁸⁴ Another example is the expression *nomlug ät’özüñüz* ‘your (pl.) *dharma* body’, used for referring to the addressee in HTs VII 2080 in the same letter, which is not loan-translated from the Chinese original. *täṇrim*, literally ‘my god’, happens to have received pragmatic specialisation together with the possessive suffix: It signifies ‘Your majesty!’ when used in direct address, or sometimes in deferential reference to an absent person. This is not a case of lexicalisation, however, since contexts such as *mäniñ t(ä)ṇrim, alpim, bāgräkim* ‘My god, my hero, my noble one!’ (M II 7,8) with the genitive of the 1st person pronoun show that the connection with the speaker was definitely kept up.

In the verbal domain deference is expressed by auxiliaries such as *yarli(g)ka-*, approximate translation ‘to graciously do something’. The original meaning of *yarlika-* was ‘to pity, commiserate’, whence metonymy leads to deferential meaning when referring to actions of subjects in high position whom one honours or just wants to be polite to. The reason for its specialization to speech with meanings such as ‘to order’ or ‘to say’ is no doubt the fact that absolute rulers acted through their words. *yarlika-* is exceedingly common; here just two examples: *atayu yarlikazunlar* (M I 29,16; 30,17-18) ‘may they please call out (my) name’ or *alkiš bašik sözlägüg, ... amv(a)rd(i)šn kilip yigüngug ayu y(a)rlikadiñüz olarka* (Poṭhi 226-7) ‘Thou hast commanded them to say blessings and hymns, ... to concentrate their mind and meditate’.

In the following clause *yarlika-* is added to a nominal predicate, as a polite replacement for the copula: *tükäl bilgä täṇri [täṇris]i burxan bo yertinčü[dä äs]än yarlikar ärkän ...* (HTs III 601) ‘While the perfectly wise Buddha, god of gods, graciously was in good health in this world, ...’; a further such example occurs in HTs VII 1057. Governing a place name in the dative, without a lexical verb or a predicative adjective, *yarlika-* signifies ‘to come to a certain place’ (the way *buyur-* can be

⁶⁸⁴ Röhrborn emends this to ‘Prajñādeva’.

used in Turkish): *onunç ayin lagkika yarlikadi* (HTs VII 936) ‘On the 10th month he came to Luo-yang’.

The humility counterpart of *yarlika-* ‘to say’ is *ötün-*, literally ‘to pray, submit a petition’; its humility counterpart in the sense of ‘doing graciously’ is *tägin-* ‘to take the liberty to do’. *ötün-* and *tägin-* are used for marking speech and action respectively, of the individual who has an inferior status. The auxiliary *ötün-* appears e.g. in *kältöküm bo tep ötünti* ‘He said ‘These are (the circumstances of) my coming’ (KP 61,2). In *[subu]di ... ötünti ayütdi [ät]özlüg savig köñüldä kilmamakig* (BT I F 47) ‘Subhüti ... begged to ask about the non-creation of bodily matters in the heart’ both verbs are finite. *tägin-* appears e.g. in *bo ämig iki kata okiyu tägintim* (M I 29,9-14, Manichæan) ‘I endeavoured to recite this healant twice’ or *ötüg bitig kilip ... üdu tägintimiz* (HTsPek 89r11) ‘we have humbly prepared a petition and sent it’. In *kamag bursañ kuvragdin iki toyin ötünü täginür män* (Mait fr. quoted in the n. to TT I 160) ‘I venture to invite two monks from all communities’ we find the two politeness verbs combined. Occasionally, the construction is different: *[b]o kutlug küniüg küsüslüg täginür ärtimiz* (M III nr.15, 34,13) ‘We have been humbly wishing for this blessed day’. See section 3.25 for similar constructions with the vowel converb.

The sentence *tükäl Tämür tü-kyä çizindim koyn yil onunç ay beş otuzka şaçu balikta* (AvadShōg XI b5) signifies ‘I the lowly slave T. have written down all of it; the 25th of the 10th month, the year of the sheep, in the city of Sh.’: *tü* is a loan from Chinese, reflecting the old pronunciation of Chinese *nu* ‘slave’; therefore *tü-kyä*, with the so-called diminutive suffix, is approximately ‘lowly slave’. This is one example for self-depreciation found in Uyghur texts; further examples of *+k(I)yA* in the service of modesty appear in OTWF 50.

Politeness is not, of course, necessarily a matter of social (or other) positioning. Another indication of deference is the use of the 3rd person for the addressee; e.g. in the following address to a brother, where it appears together with the verb *yarlika-* and vocative particle (*y)a*: *äşidü yarlikazun eçim-a, kim ...* ‘Please hear, dear brother, that ...’ (Suv 608,23). Similarly, among the same brothers: *azkya öñrä yoriyu turzunlar; män una basa yetdim* (Suv 615,14) ‘Please walk on a bit; I will have reached you in a moment!’. See TT X 19 and 179 and U III 36,9 for further examples. The sentence *täñrikänimiz uzun özin kalın kutun turkaru adasazan tudasazan ärmäki bolzun ärti* (BT V 516-8) ‘Our majesty, I wish he were to attain a long life, that he were to live full of blessing and that he were continuously free from trouble’ again shows the 3rd person, beside, of course, the title *täñrikän* and the unreal

form of the imperative where a very real wish is obviously being expressed (as shown by the context). With the polite 3rd person imperative used for the 2nd person we have *bo kutsuz kovî tînlîglar üçün târs biligin ayîg kilinçin ketärmäk alin çavişin yarlıkazun, täñrim, kim ukzun bilzünlär* (TT VI 20-21) ‘May he, my lord, for the sake of these unhappy and wretched creatures tell us the means to remove their heresies and sins so that they may understand and know’. The following, in an address to Buddha from the same text, is similar: *amtü, täñrim, bo montag târs tätrü biliglig tînlîglarka köni yol orok körtgürü bergäy ärti, kim köni yolça, köni biligçä yorizunlar ärti, târs tätrü törö kodzunlar ärti täñrim* (TT VI 237-8) ‘I wish you would now, my Lord, graciously show such perversely thinking creatures the right way, so that they would walk along the right road, according to the right set of mind and should give up perverse teachings, my Lord’. The repeated use of *täñri+m* ‘my god’ as vocative, the 3rd person reference to the addressee and the addition of *är-ti* to both the main and the subordinate clauses are all for politeness’ sake. The sentence *bäğim teğin nätäg yarlıkasar ol yarligäg bütürğäli anuk turur män* (U III 47,11) ‘However my master the prince commands, I stand ready to carry out that command’ is addressed to the prince mentioned in it; we see that the 3rd person is used for the 2nd person out of politeness also in the indicative. The most wide-spread sign of politeness is the use of the plural in the 2nd person pronoun (*siz* instead of *sän*) when referring to the addressee, and in 2nd person verb forms with the addressee as subject. Thus the father of the good-thinking prince (KP 4,6) asks his son: *amrak oglum, nä üçün busuşlug kältiñiz* ‘My dear son, why have you come in sadness?’. The plural polite counterpart of this form would have been *kältiñizlär*. Similarly in the imperative, *käliñ* can be used politely for the singular, *käliñlär* for the plural. In *anvamîg yutuzluk al(i)nîñ* ‘Take yourself A. as wife!’ (M III 14,4₁) the addressee is also, of course, singular. In rare cases honorific plurality even applies to nouns, as *kutlug bodis(a)vt+lar ärmäsär bo yerkä näñ tägmägäy ärti* (KP 45,3-5) ‘If he weren’t a blessed *bodhisattva* he would not have been able to reach this place at all’, said of a single person.

CHAPTER SIX

NOTES ON THE LEXICON

The lexicon reflects the occupations of speakers and writers as well as their spiritual world. While the runiform inscriptions of the steppe empires have numerous horse colour terms, for instance, Uygur texts written by monks abound in religious terminology. While much of this latter terminology is borrowed, there also are numerous copy coinings: *tuyunmiš*, e.g., means ‘enlightened’ and thus corresponds to *buddha*, its Sanskrit source, and *tuyunmak* is equivalent to Sanskrit *bodhi* or ‘enlightenment’. Scholars working on Uygur sources have been much interested in religious terminology; the fact that such a great portion of extant texts is religious makes a thorough understanding of this terminology essential for understanding them. With time, other semantic domains will also have to be looked at in greater detail; Ingeborg Hauenschild’s work on animal and plant terminology (e.g. Hauenschild 2003) can here serve as model. Dankoff & Kelly 1985: 247-274 have classified all the lexemes found in the DLT into semantic domains and subdomains. Their overall domains are nature (with subdomains such as astronomy, weather, time, light and dark, land features and many more), animals and plants, daily life, society, spiritual life, human characteristics, activities and miscellaneous actions, the senses, abstractions and miscellaneous relationships, particles (including, among other things, a very rich collection of onomatopoeics). With this they took the first steps in research into lexical fields. Many entries in the UW constitute valuable and rich material for lexical research into Uygur, but it has as yet managed to cover only a small part of the lexicon of that largest part of Old Turkic. What we can here offer are only a few remarks on some lexicon-related matters.

When dialects differ in the lexical domain, this is by no means in all cases linked to different living conditions or to different cultures; here is one example for what I mean: *sezik* ‘doubt’ (together with *seziksiz* ‘doubtless, undoubtedly’) is highly common in Buddhist texts but not in Manichæan ones; it was also borrowed into Mongolian. Manichæan sources have *sezinč* (and *sezinčsiz*) instead (documented in OTWF 279-80). Both lexemes are, of course, derivatives from *sez(i)-* ‘to have an apprehension’, but speakers of different dialects happen to have made different choices concerning the formative to use for this particular

content. Similarly, ‘beautiful’ is only *körtlä* in Manichæan texts but either *körtlä* or *körklä* in Buddhist ones, both forms ultimately coming from *kör-* ‘to see’. An example from the verbal domain is *alkan-*, which is used beside its synonym *alka-* ‘to call out invocations (both in cursing and praying for somebody)’ in Manichæan texts, while Buddhist texts only have *alka-* (cf. OTWF 587-8).

One characteristic of the Old Turkic lexicon is the significant number of set expressions such as or *ara kir-* ‘to intercede’, which consist of a noun and a verb. We have set combinations with Turkic as well as with foreign nominals, e.g. *asig tusu kil-* ‘to benefit somebody’ and *kšanti kil-* ‘to confess’. Orkhon Turkic *xagan olor-*, literally ‘to sit (as) king’, signifies ‘to rule’. *šük tur-* ‘to stay quiet’ comes from an onomatopoeia. Another phrase with an intransitive verb is *tuš bol-* ‘to meet’, which (unlike *šük tur-* and *xagan olor-*) governs direct objects. Such instances are all lexicalised: Free object incorporation is not found in Old Turkic. One well-known domain for lexical phrases are the euphemisms and circumlocutions used for ‘dying’, *kärgäk bol-*, *täñri bol-* ‘to become divine’ or *yok bol-* in Orkhon Turkic or *ätöz kod-* ‘lay down one’s body’ in Uyğur (U III 80,6); *uč-* ‘to fly (off)’ or *uča bar-* ‘to fly off’ were also used with this meaning. Orkhon Turkic *kärgäk bol-* is a euphemism, but Uyğur apparently still has it only in its literal meaning, ‘to become needed’. The QB is particularly rich in loan-translated expressions copied from Persian.

Set expressions should be distinguished from internal object constructions such as *yol yori-* ‘to travel’ (e.g. in MaitH XX 13r16), the common *nom nomla-* ‘to preach’ or *ant antik-* ‘to swear an oath’; *yol*, *nom* and *ant* in these examples appear as dummy objects where no other explicit objects are to be mentioned. What is interesting about the last-mentioned phrase is that *+(X)k-* verbs (dealt with in OTWF section 5.44) are otherwise all intransitive, so that *ant* is unlikely to be filling an object slot. Though the conditioning for the appearance of such dummy objects is syntactic, their choice is phraseological. *ölüt ölür-* ‘to carry out a massacre’ and *čašut čašur-* ‘to slander’ (OTWF 310-11) are another type of *figura etymologica*, as syntagms consisting of etymologically related words are called, in which the etymological connection is certain but more opaque.

On the other hand it happens that certain implied objects are left implicit, such as *sekirt-* ‘let (one’s horse) jump’, *yügürt-* ‘let (one’s horse) run’ or the cases presented in Röhrborn 2000. In Tuñ 35 *tañ ün-tür-ü* is ‘making (the army) get up at dawn’.

A quite conspicuous feature of the lexicon are binomes and biverbs: Numerous lexemes are used in fixed two-word sequences to render a single notion. They are either synonyms, as inscriptional *kü sorug* ‘fame’, Uygur *aš azuk* ‘food’ (examples quoted or mentioned in UW 327), *öč kāk* ‘revenge’ (and *öč kāk al-* ‘take revenge’), *töz yiltiz* ‘root’ or, in legal language, *čam čarim* ‘objections’; more rarely, they are determinative sequences as *isig öz* ‘life’, literally ‘warm core’. Thirdly, they can be complementary antonyms, as *yer suv* ‘country; the earth, the material world’.⁶⁸⁵ This last is not fused morphologically, as we find e.g. the accusative *yerig suvug* in BT V 213. The joined spelling of the expression in TT X 371 is, nevertheless, iconic for lexical fusion. *tsuy erinčü* ‘sin’ is an example for a different matter to look out for when dealing with binomes: The first element is of foreign (Chinese), the second of Turkic origin. Examples for adjective couples are *tütrüm täriñ* ‘profound’ and *bay baramlig* ‘wealthy’, while *yarok yaltrik* ‘gleam(y), bright(ness)’ is used both nominally and adjectivally. All three show the strong tendency to alliteration, found also in *aš azuk* and *čam čarim*. *ärt- bar-* ‘to pass’, *säv- amra-* ‘to like’, *oz- kutral-* ‘to be saved’ and *ter- kuvrat-* ‘to assemble’ are examples for biverbs. The last three biverbs show the other strong tendency of placing the longer term second; this tendency can be observed also in *bay barimlig*, *aš azuk* and *čam čarim*. In *ka kadaš* ‘kinsmen’, *yaviz yavlak* ‘bad’, *yul yulak* ‘springs’, *yüz yüzägü* or *yok yodun kil-* ‘to annihilate’ the two elements are etymologically related. The last four instances as well as *yadagin yaliñin* ‘barefoot and naked’, *yanlok yazok* ‘erroneous’ (< *yaz- yajil-*, where the longer element comes second), *yakin yaguk* ‘near’, *yaro- yašu-* ‘to gleam’, *yayil- yaykal-* ‘to shake and rock’, *yitlin- yokad-* ‘to disappear’, *yumšak yavaš* ‘gentle’, *yunčig yaviz* ‘evil’ all show the particularly common alliteration with /y/.

Alliteration is the instrument of rote rhyme, which dominates poetic structures both in Buddhist and Manichæan verse: Words do not rhyme at the end of stanzas but at their beginning, in the manner of the alliterating couples mentioned. For rote rhyme, however, not only the consonant is important, as in binomes and biverbs, but also the vowel in the alliterating syllable; couples like *yitlin-* and *yokad-* would therefore be of no use for rote-rhyme. The Old Turkic rote-rhyme appears to have been visual and not auditive: *o* can rhyme with *u*, *ö* with *ü*, *i* with *ı* and

⁶⁸⁵ N. Sims Williams has, in different publications, pointed out that this corresponds to binomes in Bactrian, Khotanese and Mongolian which signify ‘irrigated land, landed property’. Mongolic *yajar usu* appears (e.g. in the Secret History and in Ordos) to have the same sacral meaning *yer suv* has in Turkic.

e and the like. Zieme 1991 is the most authoritative and exhaustive treatment of this topic.

External influences on the lexicon came mainly from Chinese, Sogdian, Sanskrit⁶⁸⁶ and Tokharian. Qarakhanid borrowed from Arabic, Persian and other Iranian languages. The vast majority of lexemes copied from other languages is nominal. Both the Qarakhanids and the Uyghurs made great efforts to translate foreign ideas, in many respects well surpassing copy coinings in modern Turkic languages.

Loan translation is a domain which would benefit much from further exploration; it occurs, e.g., when we find *kil-inč* ‘deed’ translating Skt. *karma* because that comes from the root *kṛ* ‘to do’. There are numerous such cases, e.g. the verb *süz-ül-* ‘to have faith’ which is calqued on Skt. *pra-√sad* ‘to settle down’ > ‘to become limpid (because this happens after impurities settle in a liquid)’ > ‘to attain peace, faith’. *ädgün barmiš* (Warnke 195) is copied from Skt. *sugata* consisting of *su* ‘well’ and the perfect participle *gata* from the root *gam* ‘to go’. Uyghur has the adverbial instrumental *ädgü+n* and the perfect participle *bar-miš+lar* ‘the ones who walked’. We also have many cases where a calque takes place in a particular context but has not been adopted by the language as a whole. Cf. the passive verb stem form *yorï-l-* from intransitive *yorï-*, which was created to translate the Skt. medio-passive *caryate* in Kinkashō A,d because the root *car* is a synonym of *yorï-*. Maue 1989 deals specifically with loan translations from Sanskrit in Sanskrit-Uyghur bilingual Brāhmī texts, where Sanskrit has a preverb. In some cases which he mentions, such as *anubadhñāti = eyin ulalur* ‘is joined’ or *vairāgya = öñi bodolmak* ‘lack of passion’ the connection seems clear. In others which he mentions, such as *birgärü yägil-* ‘to gather (intr.)’, *örö kötör-* ‘to lift up’ or *örö tur-* ‘to stand up’ the fact of copying is not so evident. The author says that *tur-* is also used for the meaning ‘to stand up’, but it is a fact that Old Uyghur *tur-* was a highly polysemic verb which *was* in need for specification. The question of what is copied and what is not, what is copied ad hoc and what has become a naturalised collocation in most cases needs more elaborate and detailed study before one can make such statements. The same holds for Röhrborn 1983, an important paper on this matter, and for Laut 2003, the most recent contribution in this domain: In the great majority of cases, the expressions Laut mentions (divided into “Lehn-schöpfungen”, “Lehnbedeutungen”, “Lehnbildungen / Lehnübersetz-

⁶⁸⁶ The numerous Sanskrit loans normally reflect the Buddhist culture of the Uyghurs and were borrowed through Tokharian, Sogdian or even Chinese but Zieme 2003 has pointed out a number of loans in different semantic domains.

ungen” and ‘Lehnübert ragung’) are indeed clearly calques. Are we sure, however, that the Old Turks needed a Sanskrit source to think of *ayig kilinč* as ‘sin’ or *ämgak* as ‘suffering’? These and numerous other terms were of course conceived of by Buddhists within the Buddhist way of looking at the world, but that would be true of practically every concept.

In Erdal 1982 and in greater elaboration in OTWF section 2.91 we mentioned that the metaphorical use to which Uygur +*IXg* is put (see section 4.122) was probably copied from Tokharian, the ultimate source being Sanskrit. Pinault 2003: 47-53 studies this phenomenon by comparing the Mait passages in which the corresponding Tokharian suffix appears with the Uygur translations of these passages. He also points out that Khotanese also has a suffix secondarily put exactly to this use, thus showing that the phenomenon is truly areal.

Semantic shift within Old Turkic is another domain to be explored. It takes place e.g. in the words *yaman*, *ayig* and *yaviz* which, beside signifying ‘bad’, also got to be used to mean ‘very’ (e.g. BT V 372). Another common phenomenon involving semantic shift is the movement of both nominal and verbal lexemes from concrete to abstract meaning.

The study of Old Turkic phraseology should, of course, go beyond the lexeme collocations dealt with above. One common instance for a whole sentence used phraseologically is the expression *taki nä ayitmiş kargäk* + accusative, which literally signifies ‘What more is there to ask about (obj.)’; here are two examples among many: *täñri täñrisi burxan irig yavgan köñüllüg yäk içgäknij köñülin ymä tüzün yavaš kilu yarlıkadi; taki nä ayitmiş kargäk kiši azunin bulmiş yalñuklarig* (TT X 15) ‘Buddha, the god of gods, has graciously softened the hearts of coarse and evil *yakšas* and *bhūtas*; the more so (or ‘not to speak of’) persons who have attained human existence’; *birök yüz öñi öñi anı tög bäglär bolsarlar, muntada bolup utgalı yegädgäli uguluk [är]mäzlär, taki nä ayitmiş kargäk yalñuz bir, kalmašapađi eligig* (U III 9,22) ‘Even if there would be 100 separate lords like him they would not be able to be present and manage to vanquish (me), not to speak of one king Kalmāšapāda alone’.

What needs to be explored beyond phraseology are formulas characterising typical forms of texts, such as fables on one end of the spectrum, medical recipes or legal contracts on its other end; nor has there yet been any systematic study of Uygur religious formalisms and their degree of dependence on specific foreign models. Text linguistic methods have been applied only to the Orkhon inscriptions (but not e.g.

to the inscriptions of the Uygur Steppe Empire which follow these to a large extent). Let me here only mention a single Buddhist feature, the opening sentence of each of the chapters of the *Maitrisimit*, a text describing the coming of the last Buddha, which runs as follows: *amtī bo nomlug savīg ... +dA ukmiš kǎrgäk* ‘Now this *dharma* matter should be imagined in (place)’; this localises the content of the chapters in particular places in the holy geography of Buddhist scripture. Practically the same formulation is found also in the beginning of the *avadāna* text edited in TT X (lines 31-33): *amtī bo savīg magat ulušta ... bilmiš ukmiš kǎrgäk* ‘Now this matter should be known and imagined (to have taken place) in the land of Magadha’.

Research on such and other pre-formulated units of Old Turkic language must be left to a different study.

BIBLIOGRAPHY

This bibliography includes all work I have found which describes and discusses the Old Turkic language. Publications of Old Turkic texts, writings which deal with the content of these texts or papers only trying to further their interpretation without making statements on the language as such have not been mentioned here, although the indirect contribution of these latter to our understanding of the language is, of course, highly valuable. Nor has general work on Turkic languages and their reconstructed prehistory been included, unless specific passages relevant to our topics are quoted in the present book. Adam et al., 2000 is an excellent bibliography covering all research relating to the early Turks though not quite complete concerning linguistic matters. Old Turkic sources are referred to in the same way as in the OTWF, taking over the abbreviations of the UW whenever available. The fact that the publication of the UW fascicles has been disconnected in recent years has meant that I have had to resort to practically full references when quoting out of relatively recent text editions; any future editions of the present work should use standardized quotation for all texts, assuming that publication of the UW continues or that a list for text naming is agreed upon in some other way.

TITLE ABBREVIATIONS

- ABAW *Abhandlungen der Preussischen Akademie der Wissenschaften*
AO *Acta Orientalia*
AoF *Altorientalische Forschungen*
AOH *Acta Orientalia Hungarica*
BSOAS *Bulletin of the School of Oriental and African Studies*
CAJ *Central Asiatic Journal*
DLT See: Dankoff & Kelly 1982-85.
EDPT See: Clauson 1972.
JA *Journal Asiatique*
JSFOu *Journal de la Société Finno-Ougrienne*
JTS *Journal of Turkish Studies. Türklük Bilgisi Araştırmaları*
KCSA *Körösi Csoma Archivum*
KSz *Keleti Szemle*
MATK *Milletler arası (or Milletlerarası) Türkoloji Kongresi*
MSOS, WS *Mitteilungen des Seminars für Orientalische Sprachen, Westasiatische Studien*
MSFOu *Mémoires de la Société Finno-Ougrienne*
MT *Materialia Turcica*
OLZ *Orientalistische Literaturzeitung*
OS *Orientalia Suecana*
OTWF See: Erdal 1991.
PhTF I See: Denny et al. 1959.
QB See: Arat 1947.
SA *Sov'etskaja Arxeologija*
SBAW *Sitzungsberichte der Preussischen Akademie der Wissenschaften*
SEdDTF See: *Sprachwissenschaftliche Ergebnisse der deutschen Turfan-Forschung.*
SIAL *Studies on the Inner Asian Languages*

- SOF *Studia Orientalia, edidit Societas Orientalia Fennica*
ST *Sov'etskaja Tjurkologija*
TDA *Türk Dilleri Araştırmaları*
TDAD *Türk Dilleri Araştırmaları Dizisi*
TDAYB *Türk Dili Araştırmaları Yıllığı Belleten*
TDED *İstanbul Üniversitesi Edebiyat Fakültesi Türk Dili ve Edebiyatı Dergisi*
TL *Turkic Languages*
TMEN See: Doerfer 1963-75
TS *Tjurkologičeskij Sbornik*
UAJb *Uralaltaische Jahrbücher*
UAJb N.F. *Uralaltaische Jahrbücher, Neue Folge*
UW See: Röhrborn 1977 ff.
VdSUA *Veröffentlichungen der Societas Uralo-Altaica*
VJa *Voprosy Jazykoznanija*
WZKM *Wiener Zeitschrift für die Kunde des Morgenlandes*
ZDMG *Zeitschrift der Deutschen Morgenländischen Gesellschaft*

BIBLIOGRAPHY

- Abduraxmanov, G.A. 1967: *Issledovanie po starotjurkskomu sintaksisu (XI vek)* (Moskva: Nauka).
- Adam, V., Laut, J.P., Weiss, A. 2000: *Bibliographie alttürkischer Studien. Ausgewählt und chronologisch angeordnet. Nebst einem Anhang: Alphabetisches Siglenverzeichnis zu Klaus Röhrborn: Uigurisches Wörterbuch, Lieferung 1-6 (1977-1998)* (Wiesbaden: Harrassowitz) Orientalistik Bibliographien und Dokumentation 9.
- Adams, B.S. 1981: A feature of the izafet in the Orhon inscriptions. *TDAYB* 1978-79: 33-38.
- Ajdarov, G. 1966: *Jazyk orxonskogo pamjatnika Bil'ge-kagana* (Alma-Ata).
- 1966a: Nekotoryje elementy, obščije dlja orxonskoj pis'mennosti i živyx oguzskix jazykov. *Türk Dilläri Dialektologijasy Mäsäläläri / Voprosy Dialektologii Tjurkskix Jazykov* 4: 135-141.
- 1969: Orxon öskertkišteri tilindegi kömekçi sözder. M.B. Balakaev et al., eds., *Issledovanija po Tjurkologii* (Alma Ata: Nauka).
- 1971: *Jazyk orxonskix pamjatnikov drevnetjurkskoj pis'mennosti VIII. veka* (Alma-Ata: Akademija Nauk Kazaxskoj SSSR).
- Aksan, D. 1979: Eski Türk yazı dilinin yaşıyla ilgili yeni araştırmalar. I. *MATK* 379-387.
- Alyılmaz, C. 2000: Bilge Tonyukuk yazıtları üzerine birkaç düzeltme. *TDA* 10: 103-112.
- Amanžolov, A.S. 1959: Ob upravlenii proizvodnyx glagol'nyx osnov v jazyke drevnetjurkskix pamjatnikov. *Voprosy kazaxskogo jazykoznanija* (Alma Ata) 145-161.
- 1963: K voprosu ob upravlenii analitičeskix glagolov v drevnetjurkskix jazykax. *Filologičeskij Sbornik, I (Stat'ji aspirantov i soiskatelej)* (Alma Ata) 165-177.
- 1969: *Glagol'noe upravlenie v jazyke drevnetjurkskoj pis'mennosti* (Moskva).
- 1970: K voprosu o sootvetstvii s || š v drevnetjurkskix dialektax. *Issledovanija po ujugurskomu jazyku*, vol.2 (Alma-Ata) 167-169.
- Anderson, G. D.S. 2002: Auxiliary verb constructions on Old Turkic and Altai-Sayan Turkic. Unpublished lecture held at the Frankfurt VATEC-Symposium September 2002.
- Arat, R. R. 1940-42: Uygurlarda istilahlara dair. *Türkiyat Mecmuası* 7-8: 56-81.
- 1947: *Kutadgu Bilig. I. Metin* (Istanbul: Milli Eğitim Basımevi).
- 1963: Über die Orientations-Bezeichnungen im Türkischen. D. Sinor, ed., *Aspects of Altaic Civilization. Proceedings of the 5th Meeting of the P.I.A.C. held at Indiana University, June 4-9, 1962* (Greenwood: Westport) 177-195. Indiana University Publications. Uralic and Altaic Series 23.
- 1979: *Kutadgu Bilig. 3. İndeks* (Ankara).
- Ata, A. 2002: *Harezmi – Altın Ordu Türkçesi* (Istanbul) TDAD 36.
- Axmetov, M.A. 1969: *Glagol v jazyke orxono-jenisejskix pamjatnikov* (Moskva).
- Bang, W. 1909: Zu den köktürkischen Inschriften und den türkischen Turfan-Fragmenten. *WZKM*: 413-419.
- 1915: Zur Kritik und Erklärung der Berliner uigurischen Turfanfragmente. *SBAW* 39: 623-635.
- 1917: *Vom Köktürkischen zum Osmanischen. Vorarbeiten zu einer vergleichenden Grammatik des Türkischen. 1. Mitteilung: Über das türkische*

- Interrogativpronomen* (Berlin: Verlag der Königlichen Akademie der Wissenschaften).
- 1917a: Turcica. *Orientalistische Studien. Fritz Hommel zum 60. Geburtstag am 31. Juli 1914 gewidmet von Freunden, Kollegen und Schülern*. Bd. 2. Leipzig 1918. (Mitteilungen der Vorderasiatischen Gesellschaft 22 (1917))
- 1918: Zu den türkischen Zeitbestimmungen. *Türán* 1: 91-96.
- 1919: *Vom Köktürkischen zum Osmanischen. Vorarbeiten zu einer vergleichenden Grammatik des Türkischen. 2. Mitteilung: Über einige schallnachahmende Verba. 3. Mitteilung: Das Formans -yu bei Verben auf -a usw.* (Berlin: Verlag der Königlichen Akademie der Wissenschaften).
- 1923: Das negative Verbum der Türksprachen. *SBAW* 17: 114-131.
- 1925: Turkologische Briefe aus dem Berliner Ungarischen Institut. 3. Brief: Vorläufiges über die Herkunft des türk. Ablativs. *Ungarische Jahrbücher* V: 392-410.
- 1927: Turkologische Briefe aus dem Berliner Ungarischen Institut. 4. Brief: Das privative Suffix *-siz*. *Ungarische Jahrbücher* VII: 36-45.
- & Gabain, A.v. 1931: Analytischer Index. *SBAW*, 461-517.
- Barutçu, S. 1992: Eski Türkçe *kaltu* ve *nelük* kelimeleri üzerine. *Türkoloji Dergisi* 10: 71-76.
- Barutçu Özönder, S. 2001: Türkçe enklitik edatlar üzerine: çl/çU. *KÖK Araştırmalar* 3: 75-86.
- Batmanov, I.A. ed. 1959: *Jazyk jenijskix pamjatnikov drevnetjurkskoj pis'mennosti* (Frunze).
- 1964: Sledy govorov v jazyke pamjatnikov orxono-jenijskoj pis'mennosti. *Problemy Tjurkologii i Istorii Vostokovedenija* (Kazan: Kazanskij ordena trudovogo krasnogo знамени gosudarstvennyj universitet) 116-125.
- 1968: [No title]. *Voprosy Kategorii Vremeni i Naklonenija v Tjurkskix Jazykax (Materialy Soveščanija)*. Baku: Elm, 194-197.
- 1971: *Drevnije Tjurkskije Dialekty i ix Otraženije v Sovremenyx Jazykax* (Frunze).
- Bazin, L. 1991: *Les systèmes chronologiques dans le monde turc ancien* (Budapest: Akadémiai Kiadó).
- L. Bazin & P. Zieme, eds., 2000 : *De Dunhuang à Istanbul. Hommage à James Russell Hamilton* (Turnhout: Brepols) Silk Road Studies 5.
- Benzing, J. 1940: Tschuwaschische Forschungen (I). Das Possessivsuffix der dritten Person. *ZDMG* 49: 251-267.
- 1952: Der Aorist im Türkischen. *UJb* 24: 130-132.
- 1980: Review of Tekin 1968. *ZDMG* 130: 116-120.
- Blagova, G.F. 1977: Problemy lingvističeskogo izučenija srednevekovyx tjurkskix tekstov (O metodike izučenija. O sootnošenii istorii pis'menno-literaturnogo jazyka i istoričeskoj grammatiki. O periodizacii istorii staropis'mennogo jazyka). *ST* 1977: 27-50.
- Borovkova, T.A. 1966: O gubnyx soglasnyx v "Divānu Lugāt-it-Turk" Maxmūda Kāšgarī. *TS* 1966: 24-27.
- Brands, H.W. 1973: *Studien zum Wortbestand der Türksprachen. Lexikalische Differenzierung, Semasiologie, Sprachgeschichte*. (Leiden)
- Brendemoen, B. ed. 1991: *Altaica Osloensia. Proceedings from the 32nd Meeting of the P.I.A.C. Oslo, June 12-16, 1989* (Oslo: Universitetsforlaget).
- Bretfeld S. & J. Wilkens eds. 2003: *Indien und Zentralasien. Sprach- und Kulturkontakt. Vorträge des Göttinger Symposions vom 7. bis 10. Mai 2001* (Wiesbaden: Harrassowitz).

- Brockelmann, C. 1919: Maḥmūd al Kāšgharī's Darstellung des türkischen Verbalbaus. *KSz*, 29-49.
- 1921: Maḥmūd al Kāšgharī über die Sprachen und die Stämme der Türken im 11. Jahrhundert. *KCsA* I, 26-40.
- 1928: *Mitteltürkischer Wortschatz nach Maḥmūd al-Kāšgharī's Dīvān Lugāt at-Turk* (Budapest) Bibliotheca Orientalis Hungarica 1.
- 1954: *Osttürkische Grammatik der islamischen Literatursprachen Mittelasiens* (Leiden: Brill).
- Caferoğlu, A. 1934: *Uygur Sözlüğü* (Istanbul: Burhaneddin Matbaası).
- 1968: *Eski Uygur Türkçesi Sözlüğü* (Istanbul: Edebiyat Fakültesi Basımevi).
- 1969: *Türk Dili Tarihi*, I (Istanbul).
- Clark, L.V. 1977: Mongol elements in Old Turkic? *JSFOu* 75: 110-168.
- 1996: The early Turkic and Sarig Yugur counting systems. Emmerick et al., 17-49.
- Clauson, Sir G. 1957: The Turkish Y and related sounds. *Studia Altaica. Festschrift für Nikolaus Poppe zum 60. Geburtstag am 8. August 1957* (Wiesbaden: Harrassowitz) Ural-altaische Bibliothek 5.
- 1959: The Turkish numerals. *Journal of the Royal Asiatic Society* 19-31.
- 1961: The initial labial sounds in the Turkish languages. *BSOAS* 24: 298-306.
- 1962: *Turkish and Mongolian Studies* (London: The Royal Asiatic Society of Great Britain and Ireland).
- 1966: Three notes on Early Turkish. *TDAYB* 1-18.
- 1970: The origin of the Turkish "Runic" alphabet. *AO* 32: 51-76.
- 1972: *An Etymological Dictionary of Pre-Thirteenth-Century Turkish* (Oxford: Clarendon). Referred to as EDPT.
- 1975: The foreign elements in early Turkish. L. Ligeti ed., *Researches in Altaic Languages. Papers read at the 14th Meeting of the P.I.A.C. held in Szeged, August ... 1971*. Budapest (Bibliotheca Orientalis Hungarica 20), 43-49.
- Çağatay, S. 1940-41: Uygurcada hendiadyoinlar. *Türk Dili ve Edebiyatı Araştırmaları* 1940/41: 97-144. (= S. Schakir)
- 1943: Uygurca ve Eski Osmanlıca'da instrumental °n. *Dil ve Tarih-Coğrafya Fakültesi Dergisi* I,3.
- 1943a: Uygur yazı dili. *Dil ve Tarih-Coğrafya Fakültesi Dergisi* I,5.
- Dankoff, R. 1983: Yūsuf Khāss Hājib, *Wisdom of Royal Glory (Kutadgu Bilig). A Turko-Islamic Mirror for Princes*. Transl., ... by Robert Dankoff (Chicago: University of Chicago Press).
- & Kelly, J. eds. & translators, 1982, 1984, 1985: *Compendium of the Turkic Dialects*, by Maḥmūd al-Kāšgharī. (Duxbury, Mass.: Harvard University Printing Office) 3 vols. Sources of Oriental Languages & Literatures 7, Turkish Sources VII.
- Deny, J., et al. eds., 1959: *Philologiae Turcicae Fundamenta, I* (Aquis Matiacis: Steiner).
- Doerfer, G. 1963-75: *Türkische und mongolische Elemente im Neupersischen*, vols. I-IV (Wiesbaden: Steiner) Akademie der Wissenschaften und der Literatur, Veröffentlichungen der orientalischen Kommission 19.
- 1971: Bemerkungen zur Methodik der türkischen Lautlehre. *OLZ* 66: 325-344.
- 1975-76: Proto-Turkic: Reconstruction Problems. *TDAYB* 1975-76: 1-59.
- 1975-76a: Das Vorosmanische (Die Entwicklung der oghusischen Sprachen von den Orchoninschriften bis zu Sultan Veled). *TDAYB* 1975-76:81-131.
- 1977: Zu Türkisch *bana* ‚mir‘ *sana* ‚dir‘. *CAJ* 21: 208-214.

- 1980: K voprosu o drevnetjurkskom ĭ- ~ yĭ-. *Problemy sovremennoj tjurkologii. Materialy II vsesojuznoj tjurkologičeskij konferencii 27-29 sentjabrja 1976 g.* (Alma Ata): 379-385.
- 1981-82: Zum Vokalismus nichtester Silben im Alttürkischen. *WZKM* 73: 47-87 and 74: 103-128.
- 1981-82a: Materialien zu türk. *h-* (I) & (II). *UAJb* N.F. 1: 93-141 & 2: 138-168.
- 1982: Nomenverba in Türkischen. *Studia Turcologica Memoriae Alexii Bombaci Dicata.* (Napoli) 101-114.
- 1983: Die Lanze und der alttürkische Genitiv. *IV. MATK.* Istanbul.
- 1987: Eine sonderbare Stelle bei Maḥmūd al-Kāšgarī. *CAJ* 31: 199-208.
- 1988: *Grammatik des Chaladsch* (Wiesbaden: Harrassowitz) *Turcologica* 4.
- 1990: Zum sogenannten Akkusativ vor Postpositionen. Géza Bethlenfalvy et al., eds., *Altaic religious beliefs and practices. Proceedings of the 33rd Meeting of the PIAC* (Budapest) 97-101.
- 1991: Bemerkungen zur chronologischen Klassifikation des älteren Türkischen. *AoF* 18: 170-186.
- 1993: *Versuch einer linguistischen Datierung älterer osttürkischer Texte* (Wiesbaden: Harrassowitz) *Turcologica* 14.
- 1993a: Bemerkungen zur Transkription des Runentürkischen. *Journal of Turcology* 1: 7-22.
- 1993b: The older Mongolian layer in Ancient Turkic. *TDA* 3: 79-86.
- 1994: Zu inschrifttürkisch *ē/e*. *UAJb* 13: 108-132.
- 1995: Zu alttürkisch *ĭ- ~ yĭ-*. *TDA* 5: 12-18 (translation of Doerfer 1980).
- 1995a: Review of T. Tekin, *Irak Bitig. The Book of Omens.* (Wiesbaden: Harrassowitz, *Turcologica* 18) 1993. *CAJ* 39: 327-328.
- Džumagulov, Č. 1971: *Jazyk siro-tjurkskix (nestorjanskix) pamjatnikov Kirgizii* (Frunze: Ilim).
- Duran, S. 1956: Türkçede cihet ve mekân gösteren ek ve sözler. *TDAYB* 1-110.
- Ehlers, G. 1983: Notabilia zur alttürkischen Oberstufenzählung. *UAJb* N.F. 3: 81-87.
- 1998: Zum Topos der Vollzähligkeit. Laut & Ölmez 1998, 73-82.
- Emmerick, R. E. & Röna-Tas, A. 1992: The Turkish-Khotanese wordlist revisited. *CAJ* 36: 199-241.
- et al., eds. 1996: *Turfan, Khotan und Dunhuang. Vorträge der Tagung „Annemarie v. Gabain und die Turfanforschung“, veranstaltet von der Berlin-Brandenburgischen Akademie der Wissenschaften in Berlin 9.-12. 12. 1994.* (Berlin: Akademie Verlag).
- Eraslan, K. 1980: *Eski Türkçede İsim-Füller* (Istanbul: İ.Ü. Edebiyat Fakültesi).
- 2000: Eski Türkçede yönelme (dativ) hâli ekinin yapı, fonksiyon ve ifadeleri. *TDED* XXIX: 67-70
- Ercilasun, A. B. 1984: *Kutadgu Bilig grameri. Fiil* (Ankara) Gazi Eğitim Fakültesi 3.
- Erdal, M. 1976: *Voice and Case in Old Turkish.* Unpublished Ph.D. Dissertation (Jerusalem) 2 vols.
- 1979: The chronological classification of Old Turkish texts. *CAJ* 23: 151-175.
- 1979a: Die Morphemfuge im Alttürkischen. *WZKM* 71: 83-114.
- 1979b: Die Konverb- und Aoristendungen im Alttürkischen. *UAJb* 51: 104-126.
- 1982: Ein Bericht über zwei Projekte zur alttürkischen Grammatik. *UAJb*, N.F. 2: 277-280. (Summary of a lecture held at the symposium 'Neue Ergebnisse der Zentralasien-Forschung', Hamburg, 1981).
- 1984: The Turkish Yarkand documents. *BSOAS* XLVII: 260-301.
- 1985: Variable forms in the Qutadgu Bilig. In: *Istanbul ... 1985: V. MATK. I. Türk Dili*, 1. Istanbul, 79-88.

- 1986: Constraints on poetic licence in the *Qutadgu Bilig*: The converb and aorist vowels. *Türk Dili ve Edebiyatı Dergisi* 24: 205–214.
- 1988: The Turkic Nagy-Szent-Miklós inscription in Greek letters. *AOH* XLII: 221–234.
- 1991: *Old Turkic Word Formation*. Wiesbaden: Harrassowitz (Turcologica 9). 2 vols.
- 1991a: An Altaic particle *gU? ~ !*. Brendemoen 1991, 125–139.
- 1993: *Die Sprache der wolgalbolgarischen Inschriften*. Wiesbaden: Harrassowitz (Turcologica 13).
- 1994: Review of: Mark Kirchner, *Phonologie des Kasachischen*, vols. 1–2, Wiesbaden, 1992. *Oriens* 34: 553–557.
- 1996: Zum alttürkischen Vokalsystem. Emmerick et al., 67–82.
- 1997: Review of: Lars Johanson, *Strukturelle Faktoren in türkischen Sprachkontakten*, Stuttgart, 1992. *Mediterranean Language Review* 9–10: 227–234.
- 1997a: Further notes on the Irk Bitig. *TL* 1: 63–100.
- 1998: Mongolische Verbalbildung in ostsibirischen Türkisprachen?. I.A. Nevskaja, ed., *Šorskaja Filologija i sravnitel'no-sopostavitel'nyje Issledovanija*, Vyp. 1. Novosibirsk, 63–76.
- 1998a: Old Turkic. Johanson & Csató 138–157.
- 1998b: 'Topic, subject and possessive compounds'. Johanson, L., ed., *The Mainz Meeting. Proceedings of the 7th International Conference on Turkish Linguistics August 3-6 1994* (Wiesbaden: Harrassowitz) 75–84.
- 2002: On the frontness opposition in loanwords in Old Uygur. *Papers in Honour of Professor Masahiro Shogaito on his 60th Birthday = SIAL* XVII: 3–23.
- 2002a: Anmerkungen zu den Jenissei-Inschriften. Ölmez & Raschmann 51–73.
- & Schönig, C. 1990: Früh türkisch *bo* oder *bu*?. *UAJb N.F.* 9: 131–136.
- & Tezcan, S., ed., 1995: *Beläk bitig. Sprachstudien für Gerhard Doerfer zum 75. Geburtstag* (Wiesbaden: Harrassowitz) Turcologica 23.
- Foy, K. 1900: Türkische Vocalstudien, besonders das Köktürkische und das Osmanische betreffend. *MSOS, WS*: 180–217.
- 1904: Die Sprache der türkischen Turfan-Fragmente in manichäischer Schrift I. *SBAW*, 1389–1403. (Reprinted in *SEddTF* III 503–517.)
- Gabain, A.v. 1940: 'Die Natur des Prädikats in den Türkisprachen'. *KCSA* III: 84–94.
- 1940a: 'Die Verbform °n im Uigurischen'. *Annali del R. Istituto Superiore Orientale di Napoli, N.S.*, 1: 299–303.
- 1941: *Alttürkische Grammatik* (Wiesbaden: Harrassowitz). Revisions appeared in 1950 and 1974.
- 1950: 'Die Pronomina im Alttürkischen.' *ZDMG* 100: 581–591.
- 1950a: 'Über Ortsbezeichnungen im Alttürkischen.' *SOF* 14/5.
- 1952: 'Zur Geschichte der türkischen Vokalharmonie'. *UAJb* 24,1–2, 49–104.
- 1954: 'Alttürkische Datierungsformen'. *UAJb* 27: 191–203.
- 1957: 'Die Bindevokale in den alttürkischen Brähmī-Texten'. Z. V. Togan, ed., *Proceedings of the 22nd Congress of Orientalists, held in Istanbul September 15th to 22nd 1951*, vol. II: Communications (Leiden: Brill) 401–408.
- 1959: Das Alttürkische. *PhTF* I: 21–45.
- 1962: Vom Sinn symbolischer Farbenbezeichnung. *AOH* 15: 111–117.
- 1964: Die Schreiber der alt-türkischen Brähmī-Texte. *SOF* 28/5: 3–11.
- 1970: Primäre und sekundäre Kasus im Alttürkischen. Jakobson, R. & Kawamoto, Sh., eds., *Studies in General and Oriental Linguistics*. Presented to Shirô Hattori on the occasion of his 60th Birthday. (Tokyo) 131–137.
- 1974: *Alttürkische Grammatik*. 3. Aufl. (Wiesbaden: Harrassowitz).

- 1979: *Einführung in die Zentralasienkunde* (Darmstadt: Wissenschaftliche Buchgesellschaft).
- 1982: Review of Johanson 1979. *CAJ* 26: 145-147.
- 2002: Ein uigurischer Maitreya-Text aus der Sammlung Tachibana (aus dem Nachlaß herausgegeben von Peter Zieme)'. Berlin-Brandenburgische Akademie der Wissenschaften. *Berichte und Abhandlungen* 9: 225-246
- Grønbech, K. 1936: *Der türkische Sprachbau*. (Kopenhagen: Levin & Munksgaard).
- 1955: Bemerkungen über das alttürkische Verbum. *ZDMG* 105: 69-70.
- Grønbech, V. 1902: *Forstudier til tyrkisk Lydhistorie* (København).
- Hacıeminoğlu, N. 1996: *Karahanlı Türkçesi Grameri* (Ankara: TDK Yayınları).
- Hamilton, J.R., 1977: Nasales instables en turc khotanais du X^e siècle. *BSOAS* 40: 508-521.
- Hanser, O. 1975: Türkische Nebensätze in der Form direkter Rede. *Turcica* 7: 20-31.
- Hauenschild, I. 2003: *Die Tierbezeichnungen bei Mahmud al-Kaschgari. Eine Untersuchung aus sprach- und kulturhistorischer Sicht* (Wiesbaden: Harrassowitz) *Turcologica* 53.
- Hazai, G. & Zieme, P. 1970: Zu einigen Fragen der Bearbeitung türkischer Sprachdenkmäler. *Proceedings of the XIth meeting of the PIAC in Hørsholm, Denmark ... 1968. AO* 32: 125-140.
- Hesche, W. 2001: Die Postposition *şıjaru* ‚nach‘ in den Orchon-Inschriften. *TDA* 11: 33-74.
- 2002: Die Himmelsrichtungen im SW-Türkischen. *MT* 23: 53-80.
- Hitch, D. 1983: A Brāhmī-Manichaean hybrid script. *Orientalia Lovaniensia Periodica* 14: 293-312.
- 1989: Old Turkic ‘b’ and ‘p’. K. Sagaster, ed., *Religious and Lay Symbolism in the Altaic World and other papers. (27th PIAC, Walberberg 1984)* (Wiesbaden: Harrassowitz) 130-146.
- Hovdhaugen, E. 1971: Turkish words in Khotanese texts. A linguistic analysis. *Norsk Tidsskrift for Sprogvidenskab* 24: 163-209.
- 1974: The relationship between the two Orkhon inscriptions. *AO* 36: 55-82.
- 1979: The structure and origin of the Turkish runic alphabet. *I. MATK (İstanbul, 15-20. X. 1973). Tebliğler. 2. Türk Dili ve Edebiyatı* (Istanbul: İstanbul Üniversitesi Edebiyat Fakültesi Türkiyat Enstitüsü) 470-478.
- Janhunen, J. & Rybatzki, V., eds. 1999: *Writing in the Altaic World* (Helsinki) *Studia Orientalia ... Finnish Oriental Society* 87.
- Johanson, L. 1974: Zur Syntax der alttürkischen Kausativa. *ZDMG, Suppl. II*, 529-540. (Reprinted in L. Johanson, *Linguistische Beiträge zur Gesamtturkologie*. Budapest 1991, 198-209).
- 1975: Some remarks on Turkic "Hypotaxis". *UAJb* 47: 104-118.
- 1976: Das tschuwaschische Aoristthema. *OS* 23-24 (1974/75): 106-158.
- 1979: *Alttürkisch als dissimilierende Sprache*. Akademie d. Wissenschaften und d. Literatur. Abhandlungen der Geistes- und sozialwiss. Klasse Nr. 2 (Wiesbaden).
- 1981: Review of Röhrborn 1977 ff. *AO* 42: 121-124.
- 1986: Reproduktion, Widerstand und Anpassung: zur lautlichen Iranisierung im Türkischen. Schmitt, R. & Skjærvø, P.O., eds., *Studia Grammatica Iranica. Festschrift für Helmut Humbach* (München).
- 1988: On the renewal and reinterpretation of ‘instrumental’ gerunds in Turkic. *Oriens* 31: 136-153.
- 1991: On syllabic frontness oppositions in Turkic. *Varia Eurasistica. Festschrift für Professor András Róna-Tas* (Szeged) 77-94.
- 1992: Periodische Kettensätze im Türkischen. *WZKM* 82: 201-211.

- 1993: Graphie und Phonologie im Türkischen: Probleme der Lautharmonie. Werner, O., ed., *Probleme der Graphie* (Tübingen) 83-94. *ScriptOralia* 57.
- 1993a: Zur Anpassung von Lehnelementen im Türkischen. Laut, J.P. & Röhrborn, K., eds., *Sprach- und Kulturkontakte der türkischen Völker. Materialien der zweiten Deutschen Turkologen-Konferenz, Rauischholzhausen, 13.-16. Juli 1990* (Wiesbaden: Harrassowitz) 93-102. *VdSUA* 37.
- 1994: Funktion, Kompetenz und Etymon. Bemerkungen zu einer ostalttürkischen Wortbildungslehre. *CAJ* 38/2: 155-178. Refers to Erdal 1991.
- 1995: On Turkic converb clauses. Haspelmath, M. & König, E., eds., *Converbs in Cross-Linguistic perspective. Structure and Meaning of Adverbial Verb Forms – Adverbial Participles, Gerunds* – (Berlin: Mouton de Gruyter) 313-347.
- 1996: On Bulgarian and Turkic indirectives. N. Boretzky et al. eds., *Areale, Kontakte, Dialekte. Sprache und ihre Dynamik in mehrsprachigen Situationen* (Bochum: Brockmeyer) 84-94. *Bochum-Essener Beiträge zur Sprachwandel-forschung* 24.
- 1998: The history of Turkic. Johanson and Csató, 81-125.
- 2000: Turkic indirectives. L. Johanson & B. Utas eds., *Evidentials. Turkic, Iranian and Neighbouring Languages* (Berlin: Mouton de Gruyter): 61-87.
- 2001: Vom Alttürkischen zu den modernen Türksprachen. M. Haspelmath et al. eds., *Language Typology and Language Universals. An International Handbook*. Vol. 2 (Berlin: Walter de Gruyter): 1719-1742.
- 2003: Nouns and adjectives in South Siberian Turkic. Ms. 32p; in print.
- & Csató É. A., eds. 1998: *The Turkic Languages* (London: Routledge).
- Kayra, O. K. 1994: Orhun abidelerinde sıfatlar, sıfat tamlamaları ve bunlara bağlı bazı açıklamalar. *Türk Dünyası Araştırmaları* 92: 38-52.
- Kelly, J. M. 1972-73: Remarks on Kāšgari's phonology I-II. *UAJb* 44: 179-193 & 45: 144-162.
- Klaproth, J. 1820: *Abhandlung über die Sprache und Schrift der Uiguren* (Paris).
- Kljaštornyj, S.G. & Livšic V.A. 1972: The Sogdian inscription of Bugut revised. *AOH* 26: 69-102, 8 pls.
- Kljaštornyj, S.G. et al. eds. 1976: *Turkologica . K semidesjatiletiju akademika A.H. Kononov* (Leningrad: Nauka).
- Knüppel, M., 2001: „Unregelmäßige“ Getrennschreibung der uigurischen Schrift in manichäisch-türkischen Texten. *TDA* 11: 171-185.
- 2002: Zu -'’/ -ww/ -yy in manichäisch-türkischen Texten. *MT* 23: 45-52.
- Kobešavidze, I.N., 1972: K xarakteristike grafiki i fonemnogo sostava jazyka orxono-jenisejskix nadpisej. *ST* 1972,2: 69-102.
- 1972a: Razgraničnije sfer glagol'nogo slovoobrazovanija i slovoizmenenija v jazyke orxono-jenisejskix nadpisej. *ST* 1972,5: 91-95.
- Kondrat'ev, V.G. 1961: Materialy k xarakteristike deepričastij i formy na -duq v jazyke pamjatnikov tjurkskoj runičeskoj pis'mennosti. *Jazyki Narodov Vostoka* (= Učeniye Zapiski Leningradskogo Universiteta, Ser. Vostokovedčeskix Nauk, vyp. 12) 126-138.
- 1970: *Očerki grammatiki drevnetjurkskogo jazyka* (Leningrad: Izdatel'stvo Leningradskogo Universiteta).
- 1973: Ob otnošenii jazyka pamjatnikov orxono-jenisejskoj pis'mennosti k jazyku drevneujgurskix pamjatnikov. *ST* 1973,3: 23-27.
- 1981: *Grammatičeskij stroj jazyka pamjatnikov drevnetjurkskoj pis'mennosti VIII-XI vv.* (Leningrad: Izdatel'stvo Leningradskogo Universiteta).
- Kononov, A.N. 1980: *Grammatika jazyka tjurkskix runičeskix pamjatnikov VII-IX vv.* (Leningrad: Nauka).

- Korkmaz, Z. 1962: Türkçede ok/ök kuvvetlendirme (Intensivum) edatı üzerine. *TDAYB* 1961: 13-29.
- Kormuşin, I.V. 1975: K osnovnym ponjatijam tjurkskoj runičeskoj paleografii. *ST* 1975,2: 25-47.
- 1976: O passivnom značenii kauzativnyx glagolov. Kljaštornyj et al., eds., 89-93.
- 1997: *Tjurkskie jenisejskie epitafii. Teksty i issledovanija* (Moskva: Nauka).
- Kowalski, T. 1949: De la nature du causatif et du passif dans les langues turques. *RO* 15: 430-438.
- Kuznecov, P.I. 1971: Bessojuznyje pridatočnyje predloženiya s formoj na -duk v pamjatnikax orxono-jenisejskoj pis'mennosti. *ST* 1971,4: 62-67.
- Kyzlasov, L.R. 1960: Novaja datirovka jenisejskoj pis'mennosti. *SA* 1960,3: 93-120.
- 1965: O datirovke pamjatnikov jenisejskoj pis'mennosti. *SA* 1965,3: 38-49.
- Kyzlasov, I.L. 2002: *Pamjatniki runičeskoj pis'mennosti Gornogo Altaja (Učebnoe posobie)*. Čast' pervaja: Pamjatniki jenisejskogo pis'ma (Gorno-Altajsk: RAN – Institut Arxeologii, et al.)
- Laut, J. P. 1983: Review of Johanson 1979. *MT* 9: 166-167.
- 1985: Betrachtungen zur uigurischen „Maitrisimit“. Ein präklassischer Text?. *Istanbul ... 1985: V. MATK. I. Türk Dili*, 1 (Istanbul), 171-176.
- 1986: *Der frühe türkische Buddhismus und seine literarischen Denkmäler* (Harrassowitz: Wiesbaden) VdSUA 21.
- 1987: Das „präklassische“ Stratum in der alttürkischen buddhistischen Literatur. T. Tekin et al., ed., 25-34.
- 1992: Errata und Corrigenda in alttürkischen Handschriften in sogdo-ugurischer Schrift. *AoF* 19: 133-154.
- 2002: Gedanken zum alttürkischen Stabreim. Ölmez & Raschmann, 129-138.
- 2002a: Die zehn Gebote auf Alttürkisch: Betrachtungen zur *Daśakarmapathāvadānamālā*. *SLAL* 17: 61-76.
- 2003: Methoden und Möglichkeiten der Wiedergabe von indisch-buddhistischen Termini im Alttürkischen. Bretfeld & Wilkens, 13-24.
- & Ölmez, M. eds., 1998: *Bahşı Ögdisi. Festschrift für Klaus Röhrborn anlässlich seines 60. Geburtstags. 60. Doğum Yılı Dolayısıyla Klaus Röhrborn Armağanı* (Freiburg, Istanbul: Simurg).
- le Coq, A. v. 1919: Kurze Einführung in die uigurische Schriftkunde. *MSOS, WS*, 93-109 (reprint in *SEddTF* III, 519-537).
- Li, Yong-Sōng, 1997: Kutadgu Bilig'de gözden kaçan iki sontakı: kötü ve sayu üzerine. *TDA* 7: 233-260.
- Ligeti, L. 1971: A propos du “Rapport sur les rois demeurant dans le Nord”. *Études tibétaines dédiées à Marcelle Lalou* (Paris), 188ff.
- Mansuroğlu, M. 1957: Das geschlossene *e* im karachanidischen Türkisch. *UJb* 29: 215-223.
- 1959: ‘Das Karakhanidische’. *PhTF* I 87-112.
- Matsui, D. 2000: Unification of weights and measures by the Mongol empire as seen in the Uigur and Mongol documents. Paper presented at the conference *Turfan Revisited: The First Century of Research into the Arts and Culture of the Silk Road*, Berlin.
- Maue, D. 1983: Zu den Dentalen im Brāhmī-Uigurischen. Röhrborn & Veenker, eds., 54-64.
- 1984: Vorläufige Bemerkungen zu den Gutturalgraphemen in der alttürkischen Brāhmī. *UJb N.F.* 4: 90-96.
- 1989: Sanskrit-Komposita mit präpositionalem Vorderglied in uigurischen Übersetzungstexten. Wagner, E. & Röhrborn, K., *Kaškül. Festschrift zum 25.*

- Jahrestag der Wiederbegründung des Instituts für Orientalistik am der Justus-Liebig-Universität Giessen (Wiesbaden)* 52-55.
- 1996: *Altürkische Handschriften. Teil 1. Dokumente in Brāhmī und tibetischer Schrift. Beschrieben und herausgegeben von D.M.* (Stuttgart: Steiner) Verzeichnis der Orientalischen Handschriften in Deutschland XIII 9.
- 2002: *Altbekanntes und Neues: Bruchstücke des uigurischen Almanachs von 1277/78. Papers in Honour of Professor Masahiro Shogaito on his 60th Birthday = SIAL XVII: 77-115.*
- & Röhrborn, K. 1984-85: Ein "buddhistischer Katechismus" in alttürkischer Sprache und tibetischer Schrift I-II. *ZDMG* 134/2: 286-313 and 135/1: 68-91.
- Menges, K.H. 1980: Zur Phonologie, Wortbildung und Etymologie des Ujgurischen an Hand des neuen Ujgurischen Wörterbuchs von Klaus Köhrborn. *Anthropos* 75: 65-86.
- Meyer, I.R. 1965: Bemerkungen über Vokal- und Schriftsystem des Runentürkischen. *AO* 29: 183-202.
- Moerloose, E. 1980: Sanskrit loan words in Uighur. *JTS* 4: 61-78.
- 1986: Uighur *ulati*. *AoF* 18: 123-133.
- Moriyasu, T. 1980: 'La nouvelle interprétation des mots Hor et Ho-yo-hor dans le manuscrit Pelliot tibétain 1283'. *AOH* 34: 171-184.
- 1990: L'origine du bouddhisme chez les Turcs et l'apparition des textes bouddhiques en Turc ancien. *Documents et archives provenant de l'Asie Centrale. Actes du Colloque franco-japonais ... 4-8 octobre 1988* (Kyoto: Association Franco-Japonaise des Études Orientales) 147-165. A Japanese version of this paper appeared in *Shigakuzasshi* 98,4 (1989): 1-35.
- 1995: Notes on Uighur Documents. *The Memoirs of the Toyo Bunko* 53: 67-108.
- Munkácsi, B. 1918/9: Review of W. Bang's 'Vom Köktürkischen zum Osmanischen'. *KSz* 18: 124-142.
- Müller, F.W.K., 1891: Zur Frage über den Ursprung der uigurisch-mongolisch-mandžu'schen Schrift. *WZKM* 5: 182-184.
- Nadeljaev, V.M., 1963: Čtenie orxono-jenisejskogo znaka ñ i etimologija imeni Ton'ukuka. *Tjurkologičeskie Issledovanija* (Moskva: Izd. Akad. Nauk) 197-213.
- Nadeljaev, V.M. et al. 1969: *Drevnetjurkskij Slovar'*. (Leningrad: Nauka).
- Nasilov, D.M. 1960: K voprosu o perifrastičeskix sposobax glagola v drevnetjurkskix jazykax. *VJa* 3: 93-97.
- 1960a : K voprosu o modal'nyx slovox ärinč, ärki i ärkän v drevnetjurkskix jazykax. *Ališer Navoj Nomidagi Samarkand Davlat Universitetining Asarlari. Uzbek Tilšunosligi Kafedrası*. Jangi Serija 102: 127-132.
- 1960b : O nekotoryx složnyx glagol'nyx formax v drevnetjurkskix jazykax. *Ališer Navoj Nomidagi Samarkand Davlat Universitetining Asarlari. Uzbek Tilšunosligi Kafedrası*. Jangi Serija 102 : 133-143.
- 1961: Yenisey ve Orxun yadgerlikleridegi revišdaš kategoriyasī. *Özbek Tili ve Edebiyati Mäsäläläri* 1: 48-53.
- 1963: *Struktura vremen indikativa v drevneujgurskom jazyke (po pamjatnikam ujgurskogo pis'ma)*. Avtoreferat dissertacii (Moskva).
- 1964: Neskol'ko zamečanij o modal'nyx časticax irgi i irgin. *Učonyje Zapiski* 11: 318-324.
- 1966: Prošedšee vremja na -jük/-juq v drevneujgurskom jazyke i ego refleksy v sovremenix jazykax. *TS* (Moskva) 92-104.
- 1968: [No title]. *Voprosy Kategorii Vremeni i Naklonenija v Tjurkskix Jazykax (Materialy Soveščanija)* (Baku: Elm) 203-206.

- 1976: Konstrukcii -a turur v drevneujgurskom jazyke. *Sibirskij TS. Sbornik Naučnyx Trudov*, 42-48.
- 1976a: Pamjatniki drevnetjurkskoj pis'mennosti (orxono-jenisejskie i drevne-ujgurskie) v otečestvennyx tjurkologičeskix issledovanijax poslednix let (Obzor lingvističeskix publikacij 1969-1974 gg.). *ST* 1976/1: 82-101.
- Nasilov, V.M. 1958: Imena v ujugurskom jazyke. *Voprosy jazyka i literatury stran vostoka* (Moskva: Institut Meždunarodnyx otnošenija) 5-30.
- 1961: *Jazyk orxono-jenisejskix pamjatnikov* (Moskva).
- 1963: *Drevne-ujgurskij jazyk* (Moskva: AN SSSR).
- Nauta, A. 1969: Review of Tekin 1968. *CAJ* 13: 308-311.
- Németh, J. 1939: Zur Kenntnis des geschlossenen e im Türkischen. *KCSA I, Supplement*, 515-531.
- Nevskaya, I.A. 2002: The syntax of Old Turkic converbs. Unpubl. lecture held at the Frankfurt VATEC-Symposium September 2002.
- Nigmatov, X.G. 1971: Otymennoe osnovobrazovanie tjurkskogo glagola v XI veke. *ST* 1971,3: 31-42.
- 1973: Zalogi glagola v vostočno-tjurkskom jazyke XI-XII vekov. *ST* 1973,1: 46-61.
- 1975: Semantičeskaja i sintaksičeskaja funkcii padežej v jazyke vostočno tjurkskix pamjatnikov XI-XII vekov. *ST* 1975,4: 23-36.
- 1975a: Sintaksičeskaja suščnost' form prinadležnosti v jazyke vostočno tjurkskix pamjatnikov XI-XII vv. *ST* 1975,5: 21-26.
- Orkun, H.N. 1936-1941: *Eski Türk Yazutları*, vols. 1-4.
- Ölmez, M. 1997/98: Review of Erdal 1991. *UAJb N.F.* 15: 282-283.
- Ölmez, M. & S.-C. Raschmann ed. 2002: *Splitter aus der Gegend von Turfan. Festschrift für Peter Zieme anlässlich seines 60. Geburtstags* (Istanbul • Berlin) TDAD 35.
- Pinault, G.-J. 2003: Contacts linguistiques en Asie Centrale à la lumière des textes tokhariens. *Bretfeld & Wilkens*, 45-83.
- Poppe, N. 1966: On some Turkic nominal phrases and compound nouns?. *Reşid Rahmeti Arat için* (Ankara) Türk Kültürünü Araştırma Enstitüsü 19, seri I, sayı A 2, 372-379.
- Pritsak, O. 1961: Die Herkunft der Allophone und Allomorphe im Türkischen. *UAJb* 33: 142-145.
- 1963: Das Alttürkische. *Handbuch der Orientalistik*, 1. Abt., Bd.5, Abschn. 1 (Leiden: Brill).
- 1964: Zum Parallelismus im Alttürkischen. (Helsinki) *SOF* 28/6.
- 1980: Turkology and the comparative study of the Altaic languages. The system of the Old Runic script. *JTS* 4: 83-100.
- Radloff, W. 1897: *Grammatische Skizze der alttürkischen Inschriften* (St. Petersburg).
- 1909-12: Alttürkische Studien I-VI. *Izvestija Imperatorskoj Akademii Nauk* 6/3: 1213-1220, 6/4: 217-228 and 1025-1036, 6/5: 305-326 and 427-452 and 6/6: 747-778.
- 1987: *Die alttürkischen Inschriften der Mongolei*. Bd. 1: Enthält die Lieferungen 1-3 (Reprint Osnabrück: Zeller).
- Räsänen, M. 1932: Beiträge zur Frage der türkischen Vokalharmonie. *JSFOu* XLV,3 : 1-10.
- 1949: *Materialien zur Lautgeschichte der türkischen Sprachen* (Helsinki). *SOF* 15.
- 1957: *Materialien zur Morphologie der türkischen Sprachen* (Helsinki). *SOF* 21.
- Röhrborn, K. 1972: Kausativ und Passiv im Uigurischen. *CAJ* 16: 70-77.
- 1977-1998: *Uigurisches Wörterbuch. Sprachmaterial der vorislamischen türkischen Texte aus Zentralasien* (Wiesbaden: Steiner) Lfg. 1-6.

- 1981: Zum Wanderweg des altindischen Lehngutes im Alttürkischen'. H. R. Roemer & A. Noth eds., *Studien zur Geschichte und Kultur des Vorderen Orients. Festschrift für Bertold Spuler zum siebzigsten Geburtstag*. (Leiden: Brill) 337-343.
- 1983: Zu einem dialekt-differenzierenden Lautübergang im Alttürkischen. *MT* 7/8 (1981/82): 295-305.
- 1983a: Syntaktisches Verhalten der indischen Fremdwörter im Alttürkischen. Röhrborn & Veenker eds., 103-112.
- 1983b: Syntax der alttürkischen Metapher. *MT* 6 (1980): 1-11.
- 1983c: Gruppenflexion und Kompositum im Türkischen. Sagaster, K. & Weiers, M. eds., *Documenta Barbarorum. Festschrift für Walther Heissig zum 70. Geburtstag* (Wiesbaden), 317-323.
- 1987: Neue Forschungen zur Syntax des Alttürkischen. T. Tekin et al. ed., 45-50.
- 1988: Zur Darstellung der Gutturale in den indischen Fremdwörtern des Uigurischen. *CAJ* 32/3-4: 232-243.
- 1993: Zum Grenzbereich zwischen Nomen und Verb im Türkischen. *TDA* 3 (= M. Ölmez ed., *Talat Tekin Armağanı. 65. Doğum yılı dolayısıyla meslektaşları ve öğrencilerinin yazılarıyla*) 175-179.
- 1994: Die alttürkische Maitrisimit – Textbuch für theatralische Darstellungen? K. Röhrborn & W. Veenker eds., *Memoriae Munusculum* (Wiesbaden: Harrassowitz) 99-103.
- 1995: Konversion von "Adjektiven" im Alttürkischen. Erdal & Tezcan, 135-140.
- 1996: Zur Suffixklassifikation im Alttürkischen. *UAJb N.F.* 14: 176-186.
- 1996a: Chinesische Binome und ähnliche Junktoren in der alttürkischen Xuanzang-Biographie. Emmerick et al., 255-258.
- 1998: Probleme der alttürkischen Lexikographie. B. Oguibenine, ed., *Lexicography in the Indian and Buddhist Cultural Field. Proceedings of the Conference at the University of Strasbourg 25 to 27 April 1996*, München, 105-113.
- 1998a: Zur Etymologie der uigurischen Partikel *ärki*. *MT* 19: 1-4.
- 2000: Kausative Verben des Alttürkischen in elliptischen Sätzen. L. Bazin & P. Zieme eds., *De Dunhuang à Istanbul. Hommage à James Russell Hamilton* (Belgium: Brepols) *Silk Road Studies* 5.
- & Veenker, W. eds. 1983: *Sprachen des Buddhismus in Zentralasien. Vorträge des Hamburger Symposions vom ... Juli 1981* (Wiesbaden: Harrassowitz) *VdSUA* 16.
- Róna-Tas, A. 1970: Some problems of Ancient Turkic. *AO* 32: 209-229.
- 1974: Tocharische Elemente in den altaischen Sprachen?. *Sprache, Geschichte und Kultur der altaischen Völker. Protokollband der XII. Tagung der P.I.A.C 1969 in Berlin* (Berlin), *Schriften zur Geschichte und Kultur des Alten Orients* 5, 499-504.
- 1987: On the development and origin of the East Turkic "Runic" script. *AOH* 41: 7-14.
- 1991: *An Introduction to Turkology* (Szeged) *Studia Uralo-Altaica* 33.
- 1998: The reconstruction of Proto-Turkic and the genetic question. Johanson & Csató, 67-80.
- Rybatzki, V. 1999: Punctuation rules in the Toñuquq inscription?. Janhunen & Rybatzki, eds. 207-225.
- Salonen, A. 1937: Über den syntaktischen Gebrauch der Flexionsendungen der Nomina im Uigurischen (einschließlich des Oğuz Qayan). *JSFOu* 49: 18-28.
- Ščerbak, A.M. 1961: *Grammatičeskij očerk jazyka tjurkskix tekstov X-XIII vv. iz vostočnogo Turkestana* (Moskva-Leningrad).
- 1966: Tjurkskije glasnyje v količestvennom otnošenii. *TS* (Moskva): 144-162.

- 2001: *Tjurkskaja runika. Proisxoždenie drevnejšej pis'mennosti Tjurok, granicy jejo rasprostranenija i osobennosti ispol'zovanija* (Sankt-Peterburg: Nauka).
- Schakir, S. 1933: *Denominale Verbbildungen in den Türkischen Sprachen*. Inaugural-Diss. (Roma). (= S. Çağatay)
- Scharlipp, W.-E. 1994: *Introduction to the Old Turkish Runic Inscriptions* (University of Cyprus: Nicosia).
- 1999: Inverted syntax in early Turkish texts. Janhunen & Rybatzki eds. 235-243.
- Schilling, U., 2001: Zur Bildung und Bedeutung von Paarformeln im Alttürkischen. *TDA* 11: 153-170.
- Schinkewitsch, Jakob 1926: Rabyūzīs Syntax. *MSOS* XXIX: 130-172.
- Schmitt, G. 1971: Wo siedelten nachweislich türkische Stämme im ersten Jahrhundert vor bzw. nach der Zeitwende? *AOH* 74: 337-358.
- Schönig, C. 1995: *qa:ño und Konsorten. Erdal & Tezcan 177-187.
- 1996: Komplexe Verben im *Babur-name* (Haidarabad-Kodex). *UAJb N.F.* 14: 206-217.
- 1997: A new attempt to classify the Turkic languages (1) and (2). *TL* 1,1: 117-133 and 1,2: 262-277.
- Schulz, P. 1978: *Verbalnomina und Konverbien als adverbiale Ergänzungen im Alttürkischen*. Ph.D. diss. (Giessen).
- Sertkaya, O.F. 1979: Uygur metinlerinde yanlış okuma, anlama ve mânâlandırılmalar. *Türk Kültürü* 195: 139-145.
- 1984: Köl Tigin'in ölümünün 1250. yıl dönümü dolayısı ile Moğolistan Halk Cumhuriyeti'ndeki Köktürk harfli metinler üzerinde yapılan arkeolojik ve filolojik çalışmalara toplu bir bakış. *Belleken* 47: 67-85.
- 1985: Fragmente in alttürkischer Runenschrift. Röhrborn, K. & Veenker, W. eds., *Runen, Tamgas und Graffiti aus Asien und Osteuropa* (Wiesbaden: Harrassowitz) VdSUA 19, 133-164.
- 1990: Do the Köktürk characters have an alphabetical order?. Géza Bethlenfalvy et al., eds., *Altaic religious beliefs and practices. Proceedings of the 33rd Meeting of the PIAC* (Budapest).
- 1992: Zamirlerde katmerli çekim üzerine. *Uluslararası Türk Dili Kongresi* (Istanbul).
- Šerwašidze, I.N. 1978: Analitičeskije formy glagola v jazyke tjurkskix runičeskix nadpis'ej. *ST* 1978,1: 64-67.
- 1979: K voprosu o deepričastii na -ujyn, -jin; -matyn / -maty, -majn v jazyke drevnetjurkskix runičeskix pamjatnikov. *ST* 1979,4: 90-93.
- 1986: *Formy glagola v jazyke tjurkskix runičeskix nadpisej*. Tbilisi.
- Shōgaito, M. 1978: Kodai uigurugo ni okeru indo raigen shakuyō-goī no dōnyūkeiro ni tsuite (On the routes of the loan words in the Old Uigur language). *Ajia Afurika gengo bunka kenkyū* (Journal of Asian and African Studies) 15: 79-110.
- 1982: Kodai torukogo n hōgen ni okeru ī/i no teiboinka ni tsuite (On the reduction of ī/i in the Old Turkic n dialect). *Kōbe gaidai ronsō* 33: 39-57.
- 1986 (1987): Uiguru bunken ni dōnyū sareta kango ni kansuru kenkyū. *Nairiku ajia gengo no kenkyū. Studies on the Inner Asian Languages* 2. Kōbe, Shōwa 62 nen, 17-156.
- 1991: On Uighur elements in Buddhist Mongolian texts. *The Memoirs of the Toyo Bunko* 49: 27-49.
- Shōgaito M., L. Tugusheva & S. Fujishiro 1998: *The Dašakarmapathāvadānamālā in Uighur, from the Collection of the St. Petersburg Branch of the Institute of Oriental Studies, Russian Academy of Sciences* (Kyoto: Shokado).

- Sims-Williams, N. 1981: The Sogdian sound system and the origins of the Uyghur script. *JA* 269: 347-360.
- 2000: Avestan *suβrā-*, Turkish *süvre*. L. Bazin & P. Zieme: 329-331.
- 2000a: *Bactrian Documents from Northern Afghanistan. I: Legal and Economic Documents* (Oxford: Oxford U.P.) Studies in the Khalili Collection vol. III. Corpus Inscriptionum Iranicarum. Pt. II Inscriptions of the Seleucid and Parthian Periods and of Eastern Iran and Central Asia. Vol. VI: Bactrian.
- 2002: Ancient Afghanistan and its invaders: linguistic evidence from the Bactrian documents and inscriptions. *Proceedings of the British Academy* 116: 225-242.
- Širalijev, M.Š. 1960: Ob etimologii deepričastij formy na -yban, -ibän, -uban, -übän. *VJa* 3: 98-99.
- Sprachwissenschaftliche Ergebnisse der deutschen Turfan-Forschung*. Bde. I-III. Leipzig, Zentralantiquariat der Deutschen Demokratischen Republik, 1972-1985.
- Stachowski, M., 1995: Der Komitativ im Jakutischen und Dolganischen. *Analecta Indoeuropaea Cracoviensia* 2: 553-59. (= Smoczyński, W., ed., *Kuryłowicz Memorial Volume*, part I).
- Street, J., 1984: The particle čī/čü in Early Middle Mongolian. *CAJ* 28: 119-152.
- Subaşı Uzun, L. 1995: *Orhon yazıtlarının dilbilimsel yapısı* (Ankara: Simurg) TDAD 7.
- Šukurov, Š. 1965: -ğalır/-gälir formasi haqida. *Issledovanija po grammatike i leksike tjurkskix jazikov* (Taškent).
- Tekin, Ş. 1965: Uygurcada yardımcı cümleler üzerine bir deneme. *TDAYB* 35-63.
- Tekin, T. 1963: On Kök Turkic *büntägi*. *CAJ* 8/3: 196-198.
- 1964: On a misinterpreted word in the Old Turkic inscriptions. *UJb* 25: 134-144.
- 1966: Bir “runik” harfin fonetik deęeri hakkında. *Reşid Rahmeti Arat için* (Ankara) Türk Kültürünü Araştırma Enstitüsü 19, seri I, sayı A 2, 412-417.
- 1967: Determination of Middle-Turkic long vowels through ʿarüd. *AOH* 20: 151-178.
- 1968: *A Grammar of Orkhon Turkic* (The Hague: Mouton).
- 1975: *Ana Türkçede Aslı Uzun Ünlüler* (Ankara) Hacettepe Üniv. Yayınları B 15.
- 1982: On the structure of Altaic echoic verbs in {KIrA}. *AOH* 36: 503-513.
- 1985: Üze zarfı hakkında. *V. MATK, İstanbul, 23-28 Eylül 1985*. I. Türk Dili, cilt 1 (İstanbul: İ. Ü. Edebiyat Fakültesi Türkiyat Araştırma Merkezi) 253-260.
- 1986: Zetacism and sigmatism: Main pillars of the Altaic theory. *CAJ* 30: 141-160.
- 1991: The comitative case in Orkhon Turkic. In Brendemoen ed., 355-359.
- 1992: Sigmatism in Chuvash reviewed. *TDA* 91: 121-130.
- 1993: Old Turkic Word Formation üzerine notlar. *Dilbilim Araştırmaları* 1993: 201-208. Refers to Erdal 1991.
- 1994: Review of Doerfer 1993. *TDA* 4: 183-190.
- 1994a: Notes on Old Turkic Word Formation. *CAJ* 38/2: 244-281. Refers to Erdal 1991.
- 1994b: *Tunyukuk yazıtı* (Ankara: Simurg). TDAD 5.
- 1995: Relics of Altaic stem-final vowels in Turkic. B. Kellner-Heinkele & M. Stachowski eds., *Laut- und Wortgeschichte der Türksprachen. Beiträge des Internationalen Symposiums Berlin, 7. bis 10. Juli 1992* (Wiesbaden: Harrassowitz) *Turcologica* 26, 173-187.
- 1995a: *Türk Dillerinde Birincil Uzun Ünlüler* (Ankara: Simurg) TDAD 13. Re-edition of Tekin 1975.
- 1996: On Uigur {-gAll} *bol-*, {-gAll} *boltuk-*. *TDA* 6: 63-70.
- 1996a: On the Old Turkic dative-locative suffix {+A}. In Emmerick et al., 327-333.
- 1997: On the Old Turkic verbal noun suffix {-dOk}. *TDA* 7: 5-12.
- 2002: On the Turkic gerundial suffix {-mAtI(n)}. Ölmez & Raschmann 375-384.

- 2003: *Orhon Türkçesi Grameri* (Istanbul) TDAD 9. 2. Baskı.
- et al. ed., 1987: *Türkoloji Çalışmaları ve F. Almanya'daki Türk Çocuklarının Eğitim-Kültür Problemleri Sempozyumu. Ankara, Hacettepe Üniversitesi (20-21 Eylül 1985)* (Ankara).
- Telicin, N.N. 1987: K karakteristike deepričastij v drevneujgurskom jazyke. *ST* 1987/6: 10-18.
- 1992: Imena deistija v drevneujgurskom jazyke (vii-xiv veka). *Vostokovedenie. Filologičeskie issledovanija* 19: 55-57.
- 2000: O proisxoždenii nekotorix narečii v drevneujgurskom jazyke. *Vestnik SPbGU Serija 2*: 137-139.
- Temir, A. 1949: Uygurca yme sözü hakkında. *Türk Dil Belleteni* 3: 12-13, 33-43.
- 1956: Die Konjunktionen und Satzeinleitungen im Alt-Türkischen. *Oriens* 9: 41-85 (I. Deskriptiver Teil), 233-280 (II. Historischer Teil).
- Tenišev, E.R. 1953: *Grammatičeskij očerk drevne-ujgurskogo jazyka po sočineniju „Zolotoj blesk“*. Avtoreferat (Leningrad: Leningradskij Gosudarstvennyj Universitet).
- 1963: Sistema soglasnyx v jazyke drevneujgurskix pamjatnikov ujugurskogo pis'ma Turfana i Gan'su. *Voprosy Dialektologii Tjurkskix Jazykov* 3: 124-135.
- 1971: Pereboj s/š v tjurkskix runičeskix pamjatnikax. E.V. Sevortjan et al., eds., *Struktura i Istoria Jazykov* (Moskva: Nauka) 289-295.
- 1976: Otraženije dialektov v tjurkskix runičeskix i ujugurskix pamjatnikov. *ST* 1976/1: 27-33.
- 1976a: O naddialektnom karaktere jazyka tjurkskix runičeskix pamjatnikov. Kljaštornyj et al., eds., 164-172.
- 1979: Jazyki drevne- i srednetjurkskix pamjatnikov v funkcional'nom aspekte. — *VJa* 1979,2.
- Tezcan, S. 1975 : VIII. Yüzyıldan kalma 1283 numaralı Tibetçe el yazmasında geçen Türkçe adlar üzerine. *Türk Dil Kurumu'nun 40. ve Divan-ü Lûgati't-Türk'ün 900. Yıldönümleri dolayısıyla düzenlenen I. Türk Dili Bilimsel Kurultayına Sunulan Bildiriler. (Ankara, 27-29 eylül 1972)* (Ankara : Ankara Üniversitesi Basımevi) 299-307.
- 1981: Kutadgu Bilig dizini üzerine. *Belleten C. XLV/2*: 23-78.
- 1986 : Eski Türklerde edebi dil var mıydı?. *TDAYB* 1982-83: 157-161.
- 1991: Gibt es einen Namen Kök-Türk wirklich ?. I. Baldauf et al., eds., *Türkische Sprachen und Literaturen. Materialien der 1. deutschen Turkologen-Konferenz Bamberg 3.-6. Juli 1987* (Wiesbaden : Harrassowitz) 357-375. VdSUA 29.
- Thomsen, V. 1893: Déchiffrement des inscriptions de l'Orkhon et de l'Iénissei. Notice préliminaire. *Bulletin de l'Académie Royale du Danemark* 285-299.
- 1901: Sur le système des consonnes dans la langue ouigoure. *KSz* 2: 241-259 (lecture held at the 11th International Congress of Orientalists, 1897).
- 1913-1918: Une lettre méconnue des inscriptions de l'Iénissei. *JSFOu* 30.
- 1916: *Turcica, étude concernant l'interprétation des inscriptions turques de la Mongolie et de la Sibérie* (Helsingfors: Société Finno-Ougrienne) *MSFOu* 37.
- 1922: L'alphabet runiforme turc. *Samlede Afhandlinger III* (København) 27-82. (A previous, shorter version of this paper appeared in 1894-96.)
- Thomsen Hansen, K. 1957: The closed e in Turkish. *AO XXII*: 150-153.
- 1963: Bemerkungen über das türkische Vokalsystem der zweiten Silbe. *AOH* 16: 313-318.
- Tuguševa, L.Ju. 1974: Orxono-tjurkskij i drevneujgurskij jazyki, ix sxodstvo i različie. *ST* 114-124.

- 1986: *ol* v rannesredevekovom uigurskom literaturnom jazyke. S.G. Kljaštornyj et al., eds., *Turkologica 1986. K vos'midesjatiletiju akademika A.H. Kononov* (Leningrad: Nauka) 277-283.
- Tuna, O. N. 1957: Bazı imlâ gelenekleri. Bunların metin incelemelerindeki önemi ve Orhon yazıtlarında birkaç açıklama. *TDAYB*, 41-81.
- 1960: Köktürk yazılı belgelerinde ve Uygurcada uzun vokaller. *TDAYB*, 213-182.
- Vasil'ev, D.D. 1976/1978: Pamjatniki tjurkskoj runičeskoj pis'mennosti aziatskogo areala I-II. *ST* 1976,1: 71-81 and 1978,5: 92-95.
- 1983: *Korpus tjurkskix runičeskix pamjatnikov bassejna Jeniseja* (Leningrad).
- 1983a: *Grafičeskij fond pamjatnikov tjurkskoj runičeskoj pis'mennosti aziatskogo areala* (Moskva).
- Wilkens, J. 1999/2000: Ein manichäisch-türkischer Hymnus auf den Licht-Nous. *UJb N.F.* 16: 217-231.
- 2000: *Alttürkische Handschriften Teil 8. Manichäisch-türkische Texte der Berliner Turfansammlung*. (Steiner : Stuttgart). *Verzeichnis der Orientalischen Handschriften in Deutschland XIII*, 16.
- 2001/2002: Der manichäische Traktat in seiner alttürkischen Fassung – neues Material, neue Perspektiven. *UJb N.F.* 17: 78-105.
- 2002: Ein neuer alttürkischer Text zur manichäischen Beichtpraxis. Ölmez & Raschmann: 395-407.
- 2003: Studien zur alttürkischen *Daśakarmaphāvadānamālā* (1) Die Udayana-Legende. *SIAL* 18: 151-185.
- Xelimskij, E.A. 1986: Proisxoždenije drevnetjurkskogo čeredovanija r ~ z i dilemma „rotacizma / zetacizma“. *ST* 1986,2: 40-50.
- Yakup. A. 2000: 'A new *cakrasaṃvara* text in Uighur'. *Kyoto University Linguistic Research* 19: 43-58.
- Yamada, N. 1971: Four notes on several names for weights and measures in Uighur documents. L. Ligeti, ed., *Studia Turcica* (Budapest: Akadémiai Kiadó) 491-498.
- Yoshida, Y. & Moriyasu. T. 1999: Bugut inscription. T. Moriyasu & A. Ochir, eds., *Provisional Report of Researches on Historical Sites and Inscriptions in Mongolia from 1996 to 1998* (Osaka: The Society of Central Eurasian Studies) 122-124.
- Zieme, P. 1969: *Untersuchungen zur Schrift und Sprache der manichäisch-türkischen Turfantexte*. Unpubl. Ph.D. dissertation (Berlin).
- 1981: Bemerkungen zur Datierung uigurischer Blockdrucke. *JA* 269: 19-20.
- 1984: Zur Verwendung der Brāhmī-Schrift bei den Uiguren. *AoF* 11: 311-346.
- 1991: *Die Stabreimtexte der Uiguren von Turfan und Dunhuang. Studien zur alttürkischen Dichtung* (Budapest: Akad. Kiadó) Bibliotheca Orientalis Hungarica 33.
- 1992: TWYNY = *töni*, eine bisher verkannte Postposition des Alttürkischen. *AoF* 19: 160-165.
- 1992a: Alternative Übersetzungen in alttürkischen buddhistischen Werken. C. Fragner & K. Schwarz eds., *Festgabe an Josef Matuz. Osmanistik – Turkologie – Diplomatiek*. Berlin, 343-353.
- 1992b: Some remarks on Old Turkish words for "wife". *TDAYB* 1987:305-309.
- 1994: Review of Doerfer 1993. *OLZ* 89: 570-574.
- 1998: Turkic fragments in 'Phags-pa script. *SIAL* 13: 63-69.
- 2000: Verse des Candrasūtra nach chinesisch-ugurischen Bilinguen. *TDA* 10:65-80.
- 2000a: Araṇemi-Jātaka und ein Sündenbekenntnistext in einer alttürkischen Sammelhandschrift. Bazin & Zieme: 401-433, planches XXXVI-LIII.

- 2001: A Manichæan-Turkic dispute in runic script. P. Mirecki & J. BeDuhn eds., *The Light and the Darkness. Studies in Manichaeism and its World* (Leiden: Brill) Nag Hammadi and Manichaean Studies L, 209-219.
- 2002: Gab es Entnasalisierung im Altuigurischen?. Unpublished lecture held at the Frankfurt VATEC-Symposium September 2002.
- 2002a: Ein weiteres alttürkisches Fragment des „Sūtras von der vollkommenen Erleuchtung“. *AOH* 55: 281-295.
- 2002b: Alttürkische Fragmente aus dem Devatāsūtra. W. Gantke et al. eds., *Religionsbegegnung und Kulturaustausch in Asien. Studien zum Gedenken an Hans-Joachim Klimkeit*. (Wiesbaden: Harrassowitz), 226-244.
- 2003: Indische Wörter in nichtbuddhistischen alttürkischen Texten. Bretfeld & Wilkens, 153-163.
- 2003a: A new fragment of the Old Uighur Vimalakīrtinirdeśasūtra. *SLAL* 18: 143-150.

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