

Notes on *Old Turkic Word Formation*

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Old Turkic word formation was first dealt with by W. Bang in his numerous notes to his publications. Later on A. von Gabain gave a list of Old Turkic derivational suffixes with adequate examples in her *Alttürkische Grammatik* (Leipzig 1941). Thirdly, C. Brockelmann, making a good use of Mahmud Kashgari's dictionary and other Middle Turkic sources, tried to classify the Karakhanid, Khwarezmian and Chagatay Turkic lexical material under nominal and verbal derivative suffixes (*Osttürkische Grammatik der Islamischen Litteratur-Sprachen Mittelasiens*, Leiden 1954). Fourthly, Martti Räsänen published his *Materialien zur Morphologie der türkischen Sprachen* (Helsinki 1957) in which he brought together the Turkic etymologies made by previous scholars, adding to them also the Altaic etymologies established by Ramstedt, Kotwicz, Poppe and others. He then published the results of his lifetime studies on Turkic phonology and morphology in the shape of an etymological dictionary (*Versuch eines etymologischen Wörterbuchs der Türksprachen*, Helsinki 1969). But a more careful and more reliable study of Old Turkic word formation in the shape of a dictionary was carried out by the late Sir Gerard Clauson (*An Etymological Dictionary of Pre-thirteenth-Century Turkish*, Oxford 1972).

Needless to say, all these previous works with the exception of Clauson's dictionary, were not specifically aimed at being a study of Old Turkic word formation. Clauson's etymological dictionary of Old and Early Middle Turkic is indeed an important contribution to the field of Turkic studies. This does not mean that it is free of deficiencies, false readings, false interpretations and etymological errors. In spite of all its defects, however, Clauson's dictionary is

and will for a long time to come be the main source of those who are interested in Old and Early Middle Turkic studies.

Other important works in the field of Old Turkic lexicology are *DTS*, i.e., *Drevnetjurkskij Slovar'* (Leningrad 1969) compiled by a group of Soviet Turkologists and K. Röhrborn's *UW*, i.e. *Uigurisches Wörterbuch*, appearing in fascicles since 1977. The first is, in spite of its all deficiencies, false readings and false interpretations, still a handy source for Old Turkic lexical material. Röhrborn's work, on the other hand, is an exhaustive and fully documented etymological dictionary of Old Uigur based on published and unpublished texts. However, since only four fascicles of the work have so far been published, it seems that the completion of the whole dictionary will take quite a long time. Therefore, it may be said that Erdal's *Old Turkic Word Formation: A Functional Approach to the Lexicon* has come out at the right time as a reference book to be used safely by the students of Turkology.

The book under review is a voluminous work aimed to be an exhaustive study of Old Turkic word formation. It consists of two volumes. The first volume deals with Old Turkic nouns, both denominal and deverbal. The second volume is assigned to denominal and deverbal verb constructions. It is in fact an enlarged and revised edition of the author's unpublished doctoral dissertation entitled *Voice and Case in Old Turkish* (Hebrew University, Jerusalem 1976).

The author expresses his aim at the beginning of his work as follows: 'The aim of this study is the description of a part of Old Turkic grammar, that part by which speakers of the language created new lexemes and recognised the transparency of lexemes created by others' (p. 3). Erdal's approach to Old Turkic word formation is functional as understood from both the title of his work and its first sentence quoted above. In this work, all nominal and verbal formatives of Old Turkic are classified according to their functions, e.g. 'Diminutives and caritatives; proper name formations' (39–59), 'Intensification' (59–66), 'Similatives' (67–76), 'Class markers' (76–90), 'Collectives' (90–97), 'Color names and their derivatives' (97–103), 'Functional and local formatives' (103–131), 'Lack and negation' (131–138), etc. etc. Using this approach, Erdal rightfully rejects, for example, Kononov's etymology of *bark* deriving from \**barık*, i.e. a noun in {-Ik}. The author states that

the word in runic spelling may as well be read *barık*, and it could go back to either *\*bar-ok* or *\*bar-ig*, but never to a form like *\*bar-ık*, for there is no a suffix {-Ik} in Old Turkic deriving nouns from verbs (p. 22). Similarly, he states that Kononov's *üläsik+* would be a possible *reading* for the runic *Ülsk+*, but not a possible *form*. He then adds that the only possible reading of *Ülsk+* would be *öl-sük+*, for 'we have positive Old Turkic evidence for a suffix -sXk' (ibid.).

Another such example showing the author's method and reasoning in analyzing Old Turkic words in his etymology of *ögrän-* 'to get used to, practice, exercise' and *ögrät-* 'to teach a certain behavior, instruct'. As is known, Menges regards the base of these stems as 'a denominal derivative in -ra-/rā-' from *ög* 'reason, mind' (1968: 158–159). Erdal rightfully rejects this etymology saying that there is no formative '+rA-' in Turkic (p. 33) and derives *\*ögrä-*, i. e. the base of these verbal stems, from *ögür* 'herd' (p. 33). I fully agree with the author on this etymology of his, for it is in complete accordance with the rules of Turkic morphology and those of semantics: (1) {+A-} is one of the most common suffixes in Old Turkic and (2) the original meanings of *ögrän-* and *ögrät-* must have been 'to be associated, tamed, get used to, be accustomed' and 'to associate, tame, accustom' respectively. In this connection, I would like to point out that Modern Turkish *öğrən-* 'to learn' and *öğrät-* 'to teach' were still in use with their original and etymological meanings in Old Anatolian Turkish, e.g. *İstanbula öğrenen ādem, ele öğrenmiş kuş, kunlacı eylemiş tā ki dölin alup öğrede*, etc. (TS V: 3060–3061). All this makes it clear that the ultimate base of *ögrän-* and *ögrät-* is *ögür* 'herd', and not *ög* 'mind, reason'.

A typical etymology offered by Erdal is OT *irkäk* 'male' < *irk* 'ram' + *Ak* (dim. suffix). As is known, CT *ärkäk* 'male' is generally regarded as a derivative of *är* 'man'. Erdal argues that *irkäk* cannot be derived from *är* 'man', it can, however, be connected with *irk* in MK which means 'a ram approaching his fourth year' (p. 41). The author's evidence for this etymology is the following: 1) To this day, *ärkäk* is 'a two year old ram' in some Anatolian and Azeri dialects, 2) in UigTot 384 *irkäk közi* translates a Tib. expression which corresponds to Chin. 'bull's or ram's eye', 3) in the oldest Old Turkic sources (twice in IrqB and in M I 36,10–11), *irkäk*

denotes a male animal, 4) its derivate *irkäk + län-* is clearly written with *i* in TT VIII P 19 (Brahmi). As for the form *ärkäk* occurring in some Middle Turkic sources, Erdal says that “Contamination with *är* and perhaps with *ärk* ‘power’ is probably responsible for the form *ärkäk*, common in DLT and QB and found also (with short vowels) in Tkm.”

This etymology suggested by Erdal seems to be more plausible and convincing than the commonly accepted < *är + käk*. Here I would like to point out that there is also modern evidence supporting this etymology, i.e. Yak (dial.) *irgäx* ‘male (for animals and birds)’ vs. *är* ‘husband, man’ and Khal. *hirkäk* ‘männlich’ vs. *här* ‘Mann, Ehemann’.

Throughout the work Erdal refutes many wrong but generally accepted etymologies and offers the new ones which are more plausible and convincing like those just mentioned. However, some of the numerous new etymologies suggested by the author in this voluminous work do not seem very convincing to me. Below I will discuss such etymologies. I will also make some additional remarks on some of the etymologies which seem to be plausible and convincing.

1. Erdal does not regard MK *kısrak* as a diminutive in {+Ak} from MK *kısır* ‘barren’ (p. 42). But we have evidence showing that *kısrak* is derived from *kısır*. First of all, it occurs in MK with the meaning ‘mare’ in the phrase *adgır kısr* ‘stallions and mares’ occurring in a verse: *adgır kısr kişnädı* (MK I 235). Secondly, in Yakut we have, apart from *kıtırax//kıtaraş* ‘mare’ (< \**kısrak*), *kıttı* < \**kısıt*) which means ‘a young mare’.

2. On *budık* ‘branch’ Erdal comments as follows: “*budık* ‘branch’ (spelled with D and not T in Maitr 57 v 2. etc. and with DH in Brahmi TT VIII K) hardly comes from *but* ‘thigh, leg’” (p. 43–44).

The spelling of an original /t/ with D is quite common in Uigur texts. Besides we have the spelling *butık* in MK seven times. Clauson’s etymology deriving *butık* from *butı-* (EDPT 301) is of course wrong. In my opinion *butık* is a metaphorical diminutive in {+Ik} from *bu:t*, very much like *topık* ‘ankle bone or wrist bone’ coming from *top* ‘ball’ (Clauson’s *to:b* and *tobık* must be corrected to read *top* and *topık* respectively). For a reverse metaphorical use cf. *dal* ‘arm’ in many Anatolian dialects (DS IV 1333). OT *butık* survives in Tuv. *buduk* and Yak. *mutuk* with the same meaning.



3. On *äşgak* 'donkey', rejecting Gabain's etymology, Erdal says as follows: "*äşgak* 'donkey' cannot be derived from *eş* 'companion', whose vowel is an /e/; it belongs to the *-gAk* formation, q.v. below" (p. 74). Erdal is right in rejecting the old etymology, but not so, I think, in accepting Doerfer's etymology, i.e. *äşgak* < *äş-* 'to amble' (p. 393). It should be reminded that OT *äşgak* has a good Altaic etymology: with the exception of its final *-k*, it perfectly corresponds to Mo. *elġge(n)*. In the light of this equation and taking the Khal. form *äşgä* 'donkey' into consideration, we can safely assume that OT *äşgak* is a diminutive in {+Ak}.

4. Erdal reads MK *sulak* 'spleen' (according to MK, the Kipchak counterpart of Common Turkic *talak*) as *solak* and inclines to interpret it as a derivative of *sol* 'left' (p. 75). In my opinion, MK *sulak* does not have anything to do with *sol*, but it belongs to the Bulgar dialect (cf. Chuv. *sula* 'spleen'). This form is one of the earliest examples of the sporadic alternation *t- ≈ s-* seen in Turkic as well as in Altaic.

Erdal's doubts about *talak*'s belonging to the {+Ak} formation (p. 75) are out of place. The form *tal* 'spleen' occurring in Heilk II 1,2 and 85 has of course nothing to do with the other *tal* meaning 'branch' (with short /a/). The *tal* in Heilk II is in fact the base of CT *ta:lak* (> Trkm. *da:lak*) and it survives as such to this day in Yak. *ta:l* 'spleen'.

5. *karlıgaç*//*kargılaç* 'swallow' is rightly discussed under nouns in {+gAç} (p. 84). MK says that *karlıgaç* is a metathetical alternative form of *kargılaç* (EDPT 657). The exact opposite must be true, because all the forms in historical sources and in modern languages can be traced back to *karlıgaç*. In addition to this we have Tel. *karılık* 'die Schwalbe' beside *karılıgaş* in Wb. II 176.

6. *tüzügü* 'all' and its adverbial form *tüzügün* 'all together' mentioned among collective nouns in {+(A)gU} (p. 94) must be read *tözügü* and *tözügün*, for the base *TWYZW* comes from Proto-Turkic *\*töz-* which survives in Yakut together with its older counterpart in /r/, i.e. *tüös-* ≈ *tüör-* 'to uproot, eradicate, exterminate'. Cf. also Yak. *tüörä* 'all, all together' (see Tekin 1989).

7. Orkhon Turkic collective noun *käliñün* 'daughters in-law' may come from an older and original *kälin(ä)gün* with the loss of medial /ä/, as Erdal thinks (p. 97). The final /n/ in *in(i)y(ä)gün* and

*k(ä)l(i)ñün* is probably an archaic part of the suffix, retained here before the possessive suffix (cf. *ekin ara* ‘between the two’ in KT E 1 instead of the expected *\*eki ara*). As for *t(a)ygun(u)ñ(u)z* occurring synonymously with *ogl(a)n(ı)ñ(ı)z* in KT SE, it could be read *t(a)y(a)gun(u)ñ(u)z*, and contrary to what Erdal thinks, this too could be a collective noun derived from *tay* ‘foal’ but used here metaphorically in the sense of ‘son’.

8. Erdal seems to regard MK *targıl* ‘an animal with narrow white and black stripes on its back’ as an adjective derived from *tar* ‘narrow’ (p. 99); but there is no a word meaning ‘narrow’ in MK’s definition. MK *targıl* survives in modern languages, e.g., Kirg. *targıl* ‘red with black spots (of cows and oxen)’, Tat. *targıl* ‘blakish red’, etc. In my opinion, this word is related to Kirg. *tarlan* ‘white with red, yellow or black spots’ (cf. also Mo. *tarilan*, *tarlan* ‘spotted, speckled, flecked; varicolored, streaked; a stripe’, *t. iiker* ‘cow with a white stripe along the spine’). In Kirghiz we also find *tazıl* in the phrase *kızıl tazıl* ‘various kinds of red objects’, a form which could be related, through zetacism, to the base of *targıl* and *tarlan*.

9. Erdal seems to regard MK *kaşga* ‘an animal with a white blaze on the forehead’ as a derivative of *kaş* ‘eyebrow’ (p. 99). But there is a good Altaic etymology for *kaşga*: The base of *kaşga* corresponds to Mo. *qaljan* ‘blaze on the forehead’ (of a horse, ox, etc.); bald-headed’ (Poppe 1960: 17, 86). Apart from *qaljan*, there is also a *qalja* in Mongolian with the meaning ‘frontal band or stripe for decoration; clearing in a forest’. These two words are very close to each other both phonetically and semantically. Turkic *kaşga* may then be regarded as an adjective derived from an obsolete *\*kaş* ‘a blaze or white spot on the forehead of an animal’ corresponding to Mo. *qalja* and *qaljan*.

10. Erdal accepts Bang’s etymologies suggested for *kızıl* ‘red’ and *yaşıl* ‘green’, i.e. *kızıl* < *\*kızıl* and *yaşıl* < *\*yaşıl* (p. 100). Considering the fact that the Turkic medial clusters /zs/ and /şs/ have generally been retained, Bang’s etymologies can hardly be accepted. Besides, Chuv. *xěrlě* ‘red’ going back to an older *\*kırıl* speaks against them. It seems that there was also an old suffix {+(I)l} in Proto-Turkic functioning as the Old and Middle Turkic {+gIl}, e.g. Trk. *gövel* ‘a green-headed duck’, Chuv. *kávaGal* ‘a duck’ < *\*kö:kü+l*, etc.

11. Concerning my view about the connection between *boz* 'gray' and *borsuk*, *borsmuk* 'badger', Erdal comments as follows: "If it (i.e. *borsmuk*) comes from *boz* 'gray', as suggested by Tekin, 1986: 157, it should belong to this formation" (p. 101).

Let me make my view once more clear: What I have suggested in the article mentioned by Erdal is that in *borsuk* and *borsmuk* we have the older form of CT *boz*, i.e. *\*bor*. Pre-Turkic *\*bor* developed into *\*boz* in Proto-Turkic, but it remained as *\*bor* in pre-zetacism derivatives *borsuk* and *borsmuk* (cf. Hung. *borz* 'badger' < Proto-Bulg. *\*bors* > Chuv. *purăş* id.).

12. Erdal, following Doerfer (*TMEN* 1679), considers {+şIn} in MK *kökşin* 'bluish' and in Modern Turkish *sarışın* 'blonde' to be original and says that "It is rather likelier for +şIn to have become +çIn after consonants than the other way around" (p. 103). In my opinion, exactly the opposite seems to be likelier. It should be noted that MK *kökşin* 'bluish' occurs in QB always as *kökçin* (six times). Taking the forms derived with the almost identical suffix +çIl in modern languages into consideration (e.g. Trk. *akçıl* 'whitish', Kzk. *akşıl* id. *kırçıl* 'grayish', Kzk. *kökşil* 'bluish' < *\*kökçil*, etc), we can say that the first form with /s/ in MK is in all likelihood secondary, as Clauson thinks (EDPT 710).

13. To support the change *\*çIn* < *şIn* he believes, Erdal brings the following evidence: 1) MK *kırça-l* 'to hit the side of something' < OT *kırşa-l* < *kırış+a-*, 2) MK *yapçın-* and *yapçur-* coming from *yapış-*, 3) inscriptional *kik-şür-* > MK *kikçür-*, 4) the adverb *tutçı* from *tut-şı*. In my opinion, MK *kırça-* 'to hit the side of the target' seems to have been formed from *\*kır* 'side' with the rare suffix {+çA-}, and not from *kırış* coming from *kır-* 'to scrape, strip, cut off'. The base *\*kır* has not yet been attested in Old Turkic, but it occurs as the base of MK's *kırlat-* 'to cause to arise banks for a canal', i.e. *kır+la-t-*. The noun *kır* survives as such in some modern languages, e.g. Tat., Kzk., NUig., etc. *kır* 'side'. The formative {+çA-}, on the other hand, is found, among others, in the structure of Uig., MK *kırşa-* 'to gird; to surround, encircle' < *\*kur+ça-*, Alt., Kirg. *kırça-* id., Khak. *xırça-* id., Kzk. *korşa-* id. < *\*kırça-* (cf. Tekin 1989: 344).

Orkh. *kikşür-* 'to incite people to mutual enmity', too, seems to be a secondary form of MK's *kikçür-* 'to make two things strike one another', although the first is older than the latter.

As the forms *yapçın*- and *yapçur*- in MK, these too seem to be original and older than the forms with /s/, for, in general, an original final consonant can preserve itself as such in medial position before or after another consonant, whereas in final position it is easily exposed to changes. Besides, the evidence found in Chuvash, i. e. *şıpäs*- 'to stick, adhere' < \**yapıç*- = CT *yapıç*-, *xirės*- 'to oppose, stand against' < \**karıç*- = CT *karıç*-, *xires* 'opposed, opposite, against' < \**xirś* < \**karçı* = CT *karşı*, *vărs*- 'to fight, make war' < \**u:ruç*- = CT *u:ruş*- and the Chuvash archaic reciprocal/cooperative suffix {-(A)s-} occurring in all the other genuine Chuvash verbs indicate the priority of /ç/ to /s/ in Turkic (cf. Tekin 1989: 344–345).

14. MK *kömüldürük* 'the breast strap of a saddle' can hardly be connected with *könül* (EDPT 722). First, the /ñ/ of *könül* has changed to /m/ only in Chuvash: *kämäl* 'delight, pleasure, desire' and this must be a recent development; secondly, *könül* does not have a material meaning. For a possible etymology of *kömüldürük* see my *Tuna Bulgarları ve Tuna Bulgarcası* (Ankara 1987), pp. 37, 38.

15. Among the place nouns {+lAg} (pp. 108, 109) the hap.leg. *sinläg* 'cemetery' occurring in the Tariat inscription, south, 5 (Tekin 1982: 54–55) could have safely been included (cf. Old Anatolian Turkish *sinlä* 'semetery' < \**sinläg*).

16. For the base of *tozumçı* occurring in the phrase *yol tozumçı* 'highwayman' Erdal posits a hypothetical \**to-z-* which he considers to be related to OT *to-d-* 'to be(come) satiated' (p. 117). But a hypothetical verb with such a meaning would not agree with the meaning of *yol tozumçı*. In my opinion, OT *tozumçı* comes from the verb \**toz-* 'to bar, block up' which, I believe, survives in modern languages, e.g. Kirg. *toz-* ≈ *tos-* 'to bar, block up; to receive, encounter', Yel. Uig. *toz-* ≈ *tuz-* id., Tuv. *dos-* id., Kar.Cr. *toz-* 'to wait for, expect'. Kar.T. *tyoz-* ≈ *töz-* id., Uzb., NUig., Kzk., Kklp. *tos-* id. The phrases Kirg. *col tos-* 'to block the way' and Tuv. *oruk dos-* id. fit perfectly to the meaning of Uig. *yol tozumçı* 'highwayman'. The verb *toz-/tos-/dos-* cannot be related to OT *tod-* for semantic reasons. In my opinion, it is rather related, through zetacism, to Kirg. *toro-* 'to bar, block up the way' and NUig. *tora-* id. (cf. Tekin, 'New Examples of Zetacism' TDA 1991, 145–150).

17. Uig., MK *adaş* 'friend, comrade' cannot come from *\*a:t+daş* 'namesake', as thought by Doerfer (*TMEN* 437), for both phonological and semantic reasons. Neither can it be a {+dAş} noun, as Erdal seems to regard it (p. 119), for its /d/ has undergone the sound change  $d > y$ , in some languages, e.g. IM, Kirg. *ayaş* 'friend'. Trk., Az. *adaş* 'namesake', on the other hand, comes from *\*a:tdaş*, an original form which survives in Turkmen.

18. The adjective *yassı* occurring in a sentence taken from ŞU E9 (p. 123) must be a printing mistake for *yası*, a deverbal noun in {-I}.

19. Among the instrument names in {+lXk} Erdal mentions *tütsüklük* 'incense burner' from Suv (p. 129). In my opinion it must be read *tütsüglük*, for the base has lost its final velar in the Oghuz group: Trk. *tütsü*, Az. *tüssü*, Trkm. *tüsse*.

20. Discussing the vowel of the suffix {+sXz} in Old Turkic Erdal mentions *yolsızın* 'without any roads' from Ton 35 and says: '*yolsızın* can definitely not have had rounded vowels in its suffixes'. He also gives an additional example, i.e. *umugsızın* from Suv and TT VII supporting the inscriptional evidence. Erdal's conclusion is as follows: "Seeing that *+sIzIn* appears in the earliest attestation of the sequence and in one of the earliest Old Turkic texts, it seems possible that *+sXz* originally had /I/ instead of /X/" (p. 132). These examples and interpretations are very important, because they support the classical theory about the origin of the composite suffix {+sIrA-}, i.e. {+IsIr+A-} (cf. Poppe 1927: 112; T. Tekin 1969: 66).

21. Erdal offers two etymologies for OT *otuñ* 'firewood':  $< *ot+duñ$  and  $< *otu-$ , i.e. the base of hap.leg. *otun-* (p. 156). I would prefer the second etymology for the following reasons: 1. A development like  $*o:tduñ > otuñ$  is phonologically difficult; 2. the OT verb *otun-* survives in Khakas *odın-* 'to make a fire' (for oneself); 3. the suffix {-(X)ñ} which makes nouns denoting objects (see pp. 337, 338) fits better the meaning of *otuñ*.

22. On the etymology of Uig. *bilärzök* // *bilärsök* 'bracelet', MK *biläzök* id., Erdal has this to say: "The common base of this (i.e. *bilärsök*) and *biläk* 'wrist' may have been *\*bilä-*, possibly *\*belä-* 'to wrap'" (p. 158). This seems to be a good etymology, but both *biläk* and *bilärsök* have /i/ in their first syllables whereas *belä-* has /e/,

e.g. CC *bele-*, OAT and Anat. dial. *belä-*, Kzk. *böle-*. Khak. *pölä-*, Kirg. *bölä-*, etc. < \**belä-*.

23. Clauson maintains that the Old Turkic form of *tış* 'tooth' was originally *ti:s* (EDPT 557). Erdal, too, thinks that *tış* had the shape *tış* in Old Turkic, but "soon it went over to front vowels" (p. 162). Accordingly, he postulates a Proto-Turkic \**tış*+*agu* to match Mo. *silegü* 'two year old animal' (p. 163). I do not share this view. In my opinion, Proto-Turkic form of *tış* was in all likelihood \**ti:s* (cf. Yak. *ti:s*, Tuv. *di:s*). Clauson's view has obviously been based on examples like *tışig* (acc.) in MK II 311, 346 and *tışlat-mak* 'to order to bite' in MK II 344. I believe that these examples could be read *ti:sig* and *tişlätmak* respectively and could be regarded as the earliest disharmonic examples in Central Asian Turkic caused by the neutralization of the vowel /i/ (cf. NUig. *çış* 'tooth', pl. *çış-lar*, *çışañ* 'hustler, rude', but *çışlimäk* < *çışlä-*, *çışlätmäk*; Uzb. *tiş*, *tişlämäq*, *tişlätmäq*). As is known, as a result of the complete loss of the vowel /i/ later on in Chagatay, not only Turkic words but also the Arabic and Persian loanwords with /i/ took the backvocalic allomorphs of suffixes, e.g. *di:nga* 'to the religion', *ilmga* 'to the science' *dilga* 'to the heart', etc.

24. Among the OT deverbal nouns in {-(X)g}, Erdal mentions Uig. *käñirsig* or *käñirsik* coming from MK *käñirsi-* (p. 175). The hap.leg. in MK occurs in the sentence *äşiç käñirsidi* 'something burnt at the bottom, for example, of a cooking pot, so that a smell rose from it' (EDPT 734). The Uig. example *käñirsiK* occurs in the following context: *k(a)ra tüntünlär çokrayur, käñirsiK yndlar yndıyur* (p. 175). It is very curious that Uig. *käñirsiK* survives in Yak. *keñerdi*: 'smell of burning', e.g. *keñerdi: sita id.*, which goes back to \**käñirsig yndıt*. This Yak. data makes it clear that Uig. *K'Ñ'RSIK* is actually *käñirsig* with /g/. Cf. also Mo. *kengsi-* 'to burn slightly' (< Yak. *keñsiy-* // *keñsey-* id., *keñsik* 'burning, smell of burning' < \**käñsi-k*), *kengsigün* // *kengsigüü* 'smell of frying food'. Khak. *kiñis-* 'to burn' < \**käñsi-* and *kiñzığ* 'burnt' < \**käñsig*, too, are obvious cognates. In the light of Mo. data we may assume that the base of MK *käñirsi-* is \**käñir*, an enlarged form of \**käñ*.

25. *turuk* 'emaciated' on p. 175 and *twru-k* id. on p. 249 should be amended to read *toruk* with /o and analyzed as *tor-uk*, and not as *туру-k*, for we have enough evidence to prove that the verb had the shape \**to:r-* in Proto-Turkic: Yak. *tuor-* 'to grow thin' < \**to:r-*,

*torgon* 'hungry', Alt., Tel. *toro* id., *torolo-* 'to grow thin', etc. On p. 249 Erdal further states that 'The base has the shape *turu-* in Khal. and Suv 116,22 in the series *kiücsirämiş yavrumış twrumış umugsuz magsız*, but *twr-* in DLT fol. 524. It was lent into Mo. as *tura-* or *turu-*'.

I have already commented on the vowel of OT *tor-*. Let me add that PT *\*to:r-* and Mo. *tura-* 'to be(come) lean, emaciated; to loose weight; to be(come) exhausted, worn out' are good cognates. The disyllabic form in Suv may have been derived from a homophonous nominal base, i.e. *\*to:r+u-* (cf. Yel.Uig. *tor* 'hungry'). As for Khal. *turu-*, it means 'klar sein, geklart sein (vom Wasser)', and not 'to grow thin or emaciated' (cf. Doerfer & Tezcan, *Wörterbuch des Chaladsch*, p. 209).

26. Commenting on Ottoman Turkish *sıvık* 'liquid (adj.), runny', *sıvı* 'a liquid' and Khal. *sıvık* 'watery', Erdal says as follows: "The vowel of the first syllables here is probably not the result of unrounding: As the sibilant of Chuvash *şiv* shows, *suv* 'water' must originally have had an unrounded back vowel, subsequently rounded the by /v/" (p. 177). Let it be known that Chuv. *şiv* may better be explained as coming from a diphthongized long /u/, i.e. *\*su:b > \*siuw > şiv*. As for Uig. *sıvık* occurring in BT VII A326 and in Turkish, this form must be secondary coming from an original *\*suvık* (cf. Yak. *ubagas* 'watery' < *\*subıkağ*, Trkm. *suvuk*, Tuv. *suuk*, Alt., Kirg., etc. *suyuk*).

27. Commenting on the etymology of *adıg* 'sober' Erdal states as follows: "It is no doubt connected with *adıł*, *adın-*, *adın* and *adıı-*, being closest in meaning to the UW's *adın-* I. *\*adıı-* or *\*ad-*, the base, is taken to be tr., *adıg* would therefore be its object" (p. 181). I would like to make it clear that two different bases have been mixed up here: MK *adıg* 'sober' is from the same base as *adın-* 'to sober up, recover from drunkenness' and the base of both forms is *\*a:d-* (> Trk. *ay-* 'to come to senses', *ayıl-* 'to sober up', Trkm. *a:ynl-* id., etc.). OT *adıı-* 'to separate' and *adın* 'different', on the other hand, go back to a base with a short /a/, i.e. *\*adıı-* (cf. Trkm. *ayır-* 'to separate').

28. OT *büdi-* 'to dance' and its derivative *büdig* are read *bödi-* and *bödig* (p. 184), probably after Clauson who claims that Mo. *böci-* id. (which, in his view, is a loanword borrowed from Turkic) 'fixes the first vowel as -ö-, not -ü- as usually transcribed' (EDPT

300). Putting aside Clauson's view about Mo. *böci-* for the time being, it may be claimed that the OT form of this verb was not *bödi-*, but *büdi-*. On the other hand, the inner-Turkic evidence given by Clauson himself indicates that the vowel of the first syllable was not /ö/ or /ü/, e.g. CC *beyi-*, *biyi-*, Kzk., Kirg. *biy* 'dance', *biyle-* 'to dance' (Clauson's Kzk. example *bile-* 'to dance' is a misreading of the Cyrillic spelling). Further examples are Tat. *biye-* 'to dance', *biyii* 'dance', Bşk. *beye-* 'to dance', *beyew* 'dance', Kum., Nog. *biyi-* 'to dance', Kum. *biyiv*, Nog. *biyiv* 'dance', etc. It is curious that Yak. *bitiy-* 'to dance by trampling on the floor', too, goes back to a form with /i/. In view of this evidence, it may be concluded that the original form of this very was either *\*bidi-* or *\*büdi-*.

29. Erdal seems to be willing to derive OT *kapıg* or *kapag* 'gate, door' and MK *kapga* 'a great gate' from a hypothetical *\*kapa-* (p. 190). In my opinion, all these words are derivatives of *\*kap-* 'to shut, close', a verb already obsolete in Old Turkic, but survives in Chuv. as *xup-*: *alak xup-* 'to shut the door', *kus xup-* 'to close one's eyes', *xupa* 'closed' (< *\*kapuk*) *xupa alak* 'a closed door', etc. MK's *kapgak* 'a leather cover of a quiver', too, is a deverbal noun in {-gAk} derived from the same *\*kap-*. Uig. and MK *kapak* 'eyelid', on the other hand, seems to be a diminutive in {+Ak} coming from MK *ka:p* 'cover, container'. Cf. Trkm. *ga:bak* 'eyelid' (< *\*ka:pak*) vs. *gapak* 'lid, cover' (< *\*kapgak*); cf. also Kirg. *kabak* vs. *kapkak*, Kzk. *kabak* vs. *kakpak*, Nog. *köz kabak* vs. *kapak*, *kapkaş*, Tat., Bşk. *kabak* vs. Tat. *kapkaş*, Bşk. *kapkas*, Uzb. *qâvâq* vs. *qâpqâq*, NUig. *kapak* vs. *kapkak*, etc. In some Turkic languages including Turkish the first word is replaced by the second, e.g. Trk. *göz kapağı* 'eyelid', Kum. *köznü kapkaçları*, etc. All these examples and Trkm. *gapık* 'closed (generally of eyes)' testify to the fact that the verb under question is *\*kap-*, not *\*kapa-*.

30. Erdal reads the mainly inscriptional *körüg* 'spy' as *küräg* 'fugitive', i.e. as a noun in {-(X)g} from the well-attested *kürä-* 'to run away, desert' (p. 196). This is very reasonable and convincing. It is more probable that the ancient Turks got information about their neighbors and enemies from the fugitives.

31. Erdal, following Clauson, reads YILsG in KT E 26 as *ynlısıg* 'comfortable, prosperous or the like' (p. 218). But MK *ynlıs-* means only 'to become warm altogether' and its figurative use has not so far been attested. In my publications of the inscriptions I



have read this word *yılsıg*, and translated it as 'wealthy, prosperous'. I believe that the base of *yılsıg*, a denominal adjective in {+sIg} may be found in Trkm. *yılgır*- 'to smile' (< \**yıl+ı-gır*), Kirg. *cılmay*- id., Tat., Bşk. *yılmay*- id. (< \**yılmad*- < \**yıl+ı-m+ad*-), Kirg. *cılmañ* 'joy, happiness' (< \**yılmañ*), etc.

32. Discussing *sezik* 'doubt, apprehension, suspicion, questioning' from *sez*-, Erdal comments on the shape of the verb as follows: "The base cannot have been *sez*-, attested from Middle Turkic on, but has to be \**sezi*-" (p. 242). I would like to remind my colleague that the Mongolian counterpart of *sez*- has /i/ as its stem-final vowel, i.e. it is *seri*- 'to awaken, revive; to recover consciousness; be become sober; to keep vigil; to learn, find out; to mistrust'. Hence, if OT *sezik* is in fact an {-Ok} noun, Mo. *seri*- may support Erdal's view, i.e. *sezik* < *sezi-k*.

33. MT *ügük* 'heaped up, loaded, full' occurring in the clause *köñli kadgun ügük* in OB 6198 is read *ükük* by Erdal (p. 253). He regards this *ükük* as a form derived from the base of *ük-üs*, *ük-ül*-, etc. Let me say that Arat's transcription of the word is correct, for the base of *ügük* is obviously *üg*- 'to heap up', e.g. Trkm. *üv*-, Khak. *üg*-, Kzk., Kirg. etc. *üy*-, Tat., Bşk. *öy*-, etc. < \**üg*-. The passive stem *ükül*- in EDPT and elsewhere, too, must be corrected to read *ügül*-. As for OT *üküş* 'many' and MK *ükil* id., these two forms must have had a different base with /k/. In connection with this, I would like to point out that Clauson's interpretation of Orkh. *ökünüp* in the sentence *antag üdke ökünüp kül tiginig az ärin ıttımız* (KT E 40) as *ükünüp* 'collecting' (EDPT 111) is not convincing. OT *ökünüp* 'regretting' fits in well the whole context: 'Our army horses were lean (and exhausted) and our army had no provisions. (Our men were) in a bad condition ... (Furthermore), those who had attacked us were brave men. *Regretting such an (unsuitable) time*, we sent Prince Kül (forward), providing him with a few men'. Needless to say, Clauson's *az eren*, too, is a misreading for *az ärin* 'with a few men'.

34. The word *yüksä-k* 'eminent, lofty' mentioned among the {- (O)k} nouns (p. 258) should be transcribed as *yügsäk*, for its base in Orkh. *yügärü* 'up, upwards' is obviously \**yüg* with /g/, i.e. < \**yüggärü*; cf. also Gag. *ü:säk* 'high' < \**yügsäk*.

35. The word *ıy(i)nc* mentioned among the deverbal nouns in {- (X)nc} on p. 282 should be amended to read *ıyınc*, for it is writ-

ten with the back-vocalic sign Y in the Tes inscription: [y]oll(u)g *vyā b(a)s(i)p* (or, *basa*) *ol(u)rm(i)s* ‘Yollug reportedly reigned, suppressing (his subjects)’ (Tes19). The verb *vy-* does not seem to have survived, but its derivatives live on with /ɨ/ to this day, e.g. Kirg. *vyin-* ‘to make a great physical effort, to force oneself’, Tuv. *vyit-* ‘to press, oppress, suppress’, *vyik* ‘crushed, bruised’, etc. The examples *iyin-* and *iyinç* in DTS must therefore be corrected to read *vyin-* and *vyinç*.

36. Among the {-nçU} nouns Erdal mentions *to-nçu* ‘a stopped up hole in the earth’ (p. 289). He also reads the passive stem of the verb as *to-n-* ‘to be blocked, be closed up’ (p. 620). In addition to this, he connects this *to-* with the base of *tod-* ‘to be satiated’, *tok* ‘full, satiated’, *tol-* ‘to be filled’ and *toş-* id. Let it be known that the OT verb meaning ‘to block up, close’ was *tu-* with /u/, for all the survived derivatives of this verb have /u/, not /o/, e.g. Alt., Tel. *tul-* ‘to be blocked up, be barred’, Tel. *tulum* ‘an impassable place’, Khak., etc. *tuyuk* ‘closed, shut’, Tat. Bşk. *ton-* ‘to become deaf (of ears); to become dim (of eyes)’, Tuv. *dun-* ‘to be stopped up, be choked’, *dunuk* ‘hoarse or choked (of voice)’, *dumcuk-*, *duncuk-* ‘to be clogged up’, Nog. *tunşık* ‘overcast (of weather)’; suffocating, stuffy’, NUig. *tuncuk-* ‘to be suffocated’, *tuyuk* ‘closed’, etc. In this connection, I would also like to remind that Orkh. *tug.* ‘barrier, obstacle’ occurring in Ton 26 is in all likelihood a deverbal noun in {- (X)g}.

37. Uig. *tolum* in the fixed phrase *tuş tolum bol-* ‘to meet’ should be read with /u/, not with /o/ (p. 293); for it is in all likelihood related to *tuş* ‘to meet’ through sigmatism.

38. MK, etc. *tulum* ‘weapons, military equipment’, too, should be read with /u/, not with /o/ as done in DTS and elsewhere. I agree with Erdal who states that it probably comes from MK *tul-* ‘to strike (a ball)’ (p. 293).

39. Among the {- (U)t} nouns Erdal mentions *ögit* ‘grinding wheat’ from MK and comments as follows: “The DLT’s entry *ögit* ‘grinding wheat etc.’ has an *i* in the second syllable instead of the base’s original vowel *ögü-*, and may be a hypercorrection. All this shows that there was some uncertainty as to this vowel in Qarakhanid Turkic, at any rate” (p. 309).

The causative stem of this verb is with /ö/ in Turkish (*öğüt-*), but it is with /ü/ elsewhere in the Oghuz group: Az. *üyüt-*, Trkm. *üve-*

‘to grind; to mince’, *üvet*- id., Gag. *ü:t*- ‘to grind’. All these forms go back to *\*ügi-*, not to *\*ögi-*. A possible Mo. cognate also supports this reconstruction: *üyire-* (intr.) ‘to break into small pieces; to crumble’ < *\*ügi-re-*. Consequently, EDPT’s *ögi-* and *ögit* must be corrected to read *ügi-* and *ügit*. On the other hand, the following Kipchak examples compel us to reconstruct a voiceless velar for this group: Kzk., Kklp. *ügi-* ‘to mill, grind’ (< *\*üki-*) Kzk. *ügit*- id., *ügil-* (pas.), *ügindi* ‘wood shavings, sawdust’, etc. We even have a monosyllabic *ük-* in Kzk., Kklp. and Kirg. which means ‘to thresh; to break into small pieces, crumble’. In this case, the element *-i-* in *\*ügi-*, *\*üki-* may be explained as the frequentative suffix {-I-} which is also seen in MK’s *kazı-* ‘to excavate, scrape off’.

40. Erdal maintains that *mañirt* ‘shouting’ comes from *mañra-*, *käñirt* ‘grumbling’ from *käñrä-* and *kükürt* ‘thunder’ from *kükürä-* (p. 309). Let me say right away that I agree with him on these etymologies. The discrepancies between these nouns and their bases, however, remain unexplained. In my opinion, the nouns under discussion must have been derived when these verbs had the shapes *\*kükir-*, *\*käñgir-* and *\*mañgir-* respectively. Later on, when the aorist forms in {-yUr} were replaced by those in {-r} after vocalic stems, as a result of syncopation, the new aorist forms in {-Ar} misanalyzed as *-A-r* by the speakers and the new verbal stems in pseudo-suffix {+rA-} came into existence: *kükir-ar* > *kükür-är* > *kükürä-r*, *\*mañgir-ar* > *mañr-ar* > *mañra-r*, etc. I believe that this explanation would satisfy Erdal who comments about the connection between echoic verbs in {+kIrA-} and {+krA-} as follows: “Proto-Turkic form of the formative was *\*+kIrA-*. A few onomatopoeic verbs ending in *+krA-* will be mentioned below. It will be difficult to connect the two sets convincingly, if it cannot be shown why the stem-final /A/ was dropped here but retained there” (p. 467).

41. Dealing with MK *urt* ‘eye of a needle’, Erdal mentions Tezcan’s etymology connecting this word with *ur-* ‘to put, place’ (p. 310). In view of Trk. *yurdu* ‘eye of a needle’ (< *yurd-ı*), Chuv. *sarta* id. (< *\*yurt+ak*) and Trk. *vur-*, Chuv. *var-* (< *\*u.r-*), however, this etymology does not seem to be very likely.

42. Erdal maintains that *öliit* ‘slaughter’, *şaşut* in *şaşutsuz* ‘without mixing up’, *takşut* ‘verse’, *çaşut* ‘delation’, *batut* ‘secrecy’, *kaşut* ‘a pursuit in battle’, etc., come from *ölür-* ‘to kill’, *şaşur-* ‘to mix

up', *takşur-* 'to compose verses', *çaşur-* 'to delate', *batur-* 'to cause to sink' and *kaçur-* 'to put to flight', etc. respectively (pp. 310, 311). While this view seems to be plausible semantically, it does not so phonetically. It would indeed be difficult to explain why the sound /r/ disappeared here and retained in *kükiirt*, *mañirt*, *käñirt* etc. Besides, if *kavşut* 'a place of coming together' could be either from *kavış-* or from *kavşur-*, as Erdal states (p. 312), why could all these nouns not come from *öl-*, *saş-*, *\*takış-*, *bat-*, *kaç-*, etc.?

43. On the etymology of *yogurt*, Erdal says as follows: "It is commonly thought that *yogrut*  $\approx$  *yorgut* comes from *yogur-* 'to knead'. This is indeed possible, since *\*yog-*, the base which this and *yogun* 'thick' have in common, may have signified 'to become dense or thick'" (p. 313). Let it be known that *yogurt* cannot come from *yogur-*, because the latter has an /u/ in its first syllable everywhere (except Turkish and Azeri) and not with /o/. Secondly, and perhaps being more important than this, *yogurt* is not made by 'kneading'. Therefore, it is very probable that *yogurt* is connected with the base of *yogun* 'thick'. In other words, *yogurt* may be an {-Ut} noun derived from *\*yogur-* 'to make thick', i.e. the hypothetical causative stem of the hypothetical base *\*yog-* 'to become thick or dense'.

44. Erdal tries to explain Uig., MK *kızgut* 'punishment', MK *ögüt* 'advice', Uig. *boşgut* 'instruction, teaching', Uig. *bışgut* appearing in the binary *bışıg bışgut* 'matured', etc. as deverbal nouns in {-Ut}, but the existence of /g/ in these forms makes such an explanation difficult, if not impossible. In the end, he summarizes his comments as follows: "The positing of an independent suffix '-gUt' for these lexemes does not seem sufficiently justified" (p. 314).

In my opinion, the evidence we have is sufficient for positing the existence of such a suffix: *ögüt* and *bış-gut* are derived from the well-attested bases; *kız-gut* 'torment, torture, punishment' comes from *\*kız-* 'to be punished' (cf. MK *kızıl-* 'to be punished') the older base of which is found in Uig. *kırkın* 'torment, torture, punishment' occurring with its synonym *kıyn*; *yapgut* 'stuffing or matted masses of hair or wool, for pillows and the like' is connected with MK *yap* 'matted wool' and *yapaku* 'a thick mass of wool or hair on the head' surviving in Trk., Az. *yapağr* 'wool of a sheep sheared in the spring' (probably a collective noun) and may ulti-

mately come from *yap-* 'to cover' as suggested by Clauson and others; Uig. *ürgüt* 'continuously' used together with its synonym *ürüg* (*\*ürü-g*) may come from *\*ürü-* (< *ür* 'a long time'). As for *boşgut* 'instruction, teaching', it belongs to deverbal nouns in {-Ut}, not to those in {-gUt}, for we have *boşgun-* 'to learn' and *boşgur-* 'to teach', but not *\*boş-*.

45. *ük-mä* 'heap' mentioned among the {-mA} nouns (p. 318) should be read with /g/ and not with /k/, for the base is spelt as *üg-* in TT VIII A 27 and the noun in {-Xn} as *ügiim* (D 29), although it is once written as *hyukyum* (K 3). The forms of the verb and its derivatives in modern languages all show an original /g/: Khak. *üg-*, *ü:l-* pass., Kzk., Kirg. etc. *üy-*, Alt. *ü:-*, Tat., Bsk. *öy-*, Trkm. *üvmek* 'heap', Krg. *üymök* id., etc. The readings *ük-*, *ükmäk*, *ükül-*, *üküm* and *ükün* in DTS and EDPT should therefore be corrected.

46. *uysuz*: This word occurring in the phrase *uysuz kötgisiz tüz süñüki* 'his smooth bones which had no holes or protrusions' in MaitrGeng 5 a 13 has been read *ösüz* by Geng Shimin. Erdal reads this *uysuz* (p. 322). In my opinion, however, it should be read *oysuz* with /o/, for we have Turkic data supporting this reading, e.g. Trkm. *o:y* 'a depressed, low-lying place; hollow, hole, cavity', Tuv. *oy* d., Kzk. *oy* 'lowland, depression', Kirg. *oyduñ* id., Tat., Bşk. *uy* 'valley', Bşk. *uyhuw* 'depression; depressed, low-lying' (< *\*oysıg*), etc. Furthermore, the meaning of *oysuz* in the above-mentioned phrase must be "without depression(s)".

47. In the section dealing with the -(X)z nouns, Erdal maintains that *ku:tuz* 'a mad dog' may, with the loss of /r/, come from *\*ku:tur-(u)z*, *ärgüz* 'melted ice' from *\*ärgür-(ü)z*, *munduz* 'feeble-minded, stupid' from *\*mun-dur-(u)z*, *yavız*, 'bad' from from *\*yavrı-z*, *sämiz* 'fat' from *\*sämri-z*, etc. (p. 323).

Let me first remind that *kutur-* in Uig. and MK is in all likelihood a late metathetical form of *\*ku:tri-*, an older and original form which survives in Trkm. as *gu:dura-* 'to be wild with joy; to become rude and naughty; to become unruly and unmanageable'. This hypothetical *\*ku:tri-*, in its turn, could be an {+I-} derivative from *\*ku:tur assemri-* could be one from *\*semir* (T. Tekin 1969; 62, 63). The reason why *\*ku:tri-* could not preserve its original form in Uig. and MK may be the fact that it had a long /u/ in its first syllable; with an early shortening of this vowel, metathesis must have taken place in this verb at an early date.

Secondly, if we posit that *yavız* comes from *\*yavri-z* and *semiz* from *\*semri-z*, etc. how could *\*yavır* and *\*semir*, i.e. the nominal bases of these verbs, be explained? Erdal is right in regarding the verbs *semri-* and *yavri-* as being {+I-} formations (p. 480), but he is not so when he states that '*semri-* comes from *semiz* and *yavri-* comes from *yavız*'. His descriptive statement to the effect that "When bases end in /z/ or /s/, these consonants are replaced by /r/ and /l/ respectively und +I- expansion" does not seem to me sound and satisfactory at all. Why should a final /z/ in a word change to /r/ when the suffix {+I-} added to it? Similarly, why should a final /s/ in a word turn into /l/ before the suffix {+I-}? As far as I know, a medial consonant occurring before or after another consonant is hardly exposed to such drastic changes as  $z > r$  and  $s > l$ . Therefore, a zetacistic and sigmatistic explanation is much more plausible for such formations: In cases like *semiz*  $\approx$  *semri-*, *üküş*  $\approx$  *ükli-*, etc., the older and original final /r/ (i.e. r2) and /l/ (i.e. l2) became /z/ and /s/ respectively, but they changed to normal /r/ and /l/ in pre-zetacism and pre-sigmatism derivatives like *semri-* and *ükli-*. In this connection, it should be emphasized that consonants in final position are more exposed to phonetic changes than those occurring in medial clusters.

48. MK's *küz* 'the notch of an arrow' cannot come from the unattested base of *kärt-* 'to notch', as assumed by Erdal (p. 324). The element -t- in *kärt-* is in all likelihood the causative suffix {-(X)t-} (cf. Mo. *kerçi-* 'to notch' < *\*ker-ti-*, -ti- being the causative suffix). The base of *kärt-*, then, could only be *\*kär-* which is also seen in MK's *kärki* 'a carpenter's implement'. Consequently, the base *\*kär-* cannot be identical with the noun *küz*. The latter may better be explained as a deverbal nouns in {-z} derived from a hypothetical simplex *\*kä-*.

49. On the structure of OT *uçuz* 'easy' Erdal has this to say: "*uçuz*, whose first and most dominant meaning is 'easy', may have come from *uç-* 'to fly', taking the latter in an (unattested) metaphorical sense" (p. 324). This etymology seems to be weak phonetically, for the voicing of /ç/ in *uçuz* in the Oghuz group (cf. Trk., Az. *ucuz*, Trkm. *ucı:z*, etc.) shows that the initial /u/ in this word was originally long.

50. Dealing with the structure of *baz* 'pacified' Erdal contents himself with mentioning Tezcan's etymology deriving it from *ba-*

'to bind' (p. 325). Let me point out that I too had derived Orkh. *baz* 'pacified, obedient' from *ba*: 'to bind' in my Orkhon Turkic grammar (p. 115). Later, however, I saw a zetacistic connection between this and IM *barış*- 'to be reconciled', Hou., Trk., Az. *barış*- 'to make peace' (T. Tekin 1975: 276). Note that *ba*:- 'to bind' has a long /a/ (cf. Khal. *va*:- 'to bind', Trkm. *ba:g* 'bond, tie'), but Trkm. *barsık* and *barlıs*- have a short one. Therefore, I still hold the view that Orkh., Uig. *baz*, CC *bazlık*, *bazılık*, *bazlux* 'peace, tranquility', Kar. TL *baz* 'peace; peaceable, peaceful', Kar. T *bazlan*- 'to make friends' and *bazlaş*- 'to be reconciled' are zetacistically related to forms with /r/ in the Oghuz group.

51. MK's *ärgüz* 'the melting of snow and ice at the beginning of spring' is hard to explain, although its connection with *ärü*- 'to melt' is obvious. Erdal connects *ärgüz* with transitive *ärgür*-, for the reason that "a direct connection with *ärü*- 'to melt' (intr.) appears morphologically impossible" (p. 325). Since there is no a suffix {-gUz}, he seems to be right in his assumption. For this word he actually thinks of a development *ärgüz* < \**ärgür*-(ü)z, i.e. a development of the type *ku:tuz* < \**ku:tur*-(u)z, etc. (p. 323). This assumption seems to me too far-fetched as I have already made it clear. A more possible explanation would be as follows: The causative suffix {-gUr-} could be a compound consisting of {-gU-} and {-r-} as {-tUr-} actually is. If this is correct, *ärgüz* can then be explained as a noun in {-(X)z} derived from an unattested \**ärgü*-.

52. Uig. *kırkın* occurring in the binomial *kıyn kırkın* 'torture, punishment', seems to be regarded as a noun in {-gXn} connected the base of *kırıl*- 'to be killed' (p. 328). In my opinion, *kırkın* is related, through zetacism, to Uig., MK *kızgıt* 'torture, punishment', Uig., MK *kızgur*- 'to punish' and MK *kızıl*- 'to be punished'. Turkish *kırgın* 'murrain, casualties resulted infectious diseases of cattle', on the other hand, obviously comes from *kır*-.

53. Bang derived *kızıl* 'red' and *yaşıl* 'green' from \**kızıl* and \**yaşıl* respectively. Erdal rightly says that "Concerning *yaşıl* and *kızıl*, the existence of +sIl is no more than a hypothesis" (p. 100). In the section dealing with the formations in {-(X)l}, however, he seems to have accepted this hypothesis (p. 331). Bang's hypothesis on the etymologies of these two nouns, however, cannot be accepted for the following reason: The traces of medial consonant clus-

ters /z/ and /s/ in these hypothetical forms are not seen anywhere in Turkic including Chuvash and Yakut, e.g. Chuv. *xerle* 'red' < \**kırl*, Yak. *kıhl* id. < \**kızıl*, Yak. *sahl* 'fox' < \**ya:şıl* (cf. Yak. *a:stıy*- 'to become white' < \**a:zsi*-, *ta:stıy*- 'to become petrified' < \**ta:şsi*-). Therefore, it would be more reasonable to regard *kızıl* and *yaşıl* as denominal formations derived with the suffix {+l} from \**kız* (cf. *kız*+*ar*- 'to become red') and \**ya:ş* 'fresh, green', respectively. See also note 10.

54. Erdal is probably right in deriving OT *kudı* 'downwards' (generally read *kodı*) from *kud*- 'to pour' (p. 341). In the inscriptions it generally governs running waters: *ol sub kudı bardımız* (Ton 27), *Säläñä kudı yorıpan* (BK E 37), etc. and it is spelt with /u/ in Brahmi *qutıqı* [kudıqı] 'situated below'. The word survives in modern languages both with /u/ and /o/, however: Tuv. *kudu*, Uzb. *quyi*, but Yak. *xotu* 'along' (*sü:riik xotu* 'along the current'), *xotugu* 'northern', Yel.Uig. *kozi* 'low, below; north', Turkish *koyun* in the expression *yüzü koyun* 'face downwards' (< EAT *yüzi koyı*). The change /u/ > /o/ is quite common in the Oghuz group, e.g. *boz* 'to destroy' < *buz*-, *sok*- 'to insert' < *suk*-, etc. It is also found in Yakut, e.g. *xotuo* 'vomiting, vomit' < *kus*-, etc.

55. For inscriptional *yalñus* and MK *yalñus* 'alone, solitary' Erdal suggests a new etymology: *yalñ*+*us* 'intelligence' (p. 338). This etymology mainly depends on the fact that the word is spelt with /s/ in its earliest occurrences, i.e. in the Yenisei inscriptions and in MK. But in MK (actually in Karakhanid Turkic) devoicing of final /z/ is a general development, e.g. *-mAs* < *-mAz* *käñäs* 'shallow' < \**käñäz*, *öläs* 'fainting' < \**öläz*, etc. In languages spoken in the area where the Yenisei inscriptions are found, i.e. in Tuvinian, Khakas and Altay, there is no final /z/. As a matter of fact, devoicing of final /z/ in polysyllabic words is natural only for Turkic, the opposite change being extremely rare (e.g. Trk. *horoz* 'rooster' < Persian *xorū:s*). Another weakness of this etymology is that *us* is not Common Turkic. Finally, it must be added that this etymology is weak also semantically: In conclusion, the old etymology deriving *yalñuz* from \**yalñ* *öz* still seems to be more convincing.

56. Erdal is right in rejecting MK's explanation to the effect that *koñı* is an Oghuz metathetical form of *koñı* 'neighbor' (p. 344). The exactly opposite must be true, i.e. *koñı* comes from



\**konuş-* 'to settle together'. Although the latter has not yet been attested, *konuş-* is found in Uig. *konuşı*. This and *konat* in MK shows that the older form of *kon-* was \**kona-* (= Mo. *gono-* < \**gona-*). This also explains why we have *konak* for 'guest' instead of the expected *konuk* in most of the modern languages today, e.g. Kzk., Kklp., Nog. *konak*, Kirg. *konok*, Tat., Bşk. *kunak*, Uzb. *qonâq*, Trkm.dial. *gonak*, Az *gonag*, etc.

57. Erdal, as a careful reader and investigator of DLT, pays utmost attention to the spellings of words in the manuscript, to MK's morphological comments and makes many corrections. A very important correction he makes is the identification of passive participles in {-(X)glXg}, e.g. *töşäglig töşäk* 'bedding that is spread out' (p. 345). Another such correction is *üläglig* occurring in MK's example *bilig, kişi ara üläglig ol*. Atalay reads this word as *ülükliğ*, Clauson, Dankoff and Kelly as *ülüglüg*. These are all wrong. First, the word is actually written as 'ULKLK in the manuscript', as Erdal points out (p. 344). Secondly, MK gives this example as a passive participle (*mafu:l*) and translates it accordingly: 'Intelligence is divided (*maqsu:m*) among people' (Erdal's translation). Such passive participles could actually be recognized easily for what they are by looking at the back-vocalic examples like *kuruglug ya:* 'a strung bow', *tutuglug yer* 'a place occupied (by evil spirits)', etc.

58. *iy(i)ngsiz* in the binomial *basıncsız iy(i)ngsiz* taken from Maitr and the one occurring in the expression *ıyıncsız basıncsız bolmak* quoted from Neujahr (p. 349) should be corrected to read as *ıyıncsız* (see note 32).

59. Another important correction made by Erdal (p. 350) is the transcription and interpretation of the expression *ogsuz tägingंसiz* occurring many times in Maitr and *og täging* occurring in Suv 610, 4. He shows that *ogsuz tägingंसiz* in Miatr and elsewhere means 'without occasion', and not 'gelişi-güzel, nasipsiz' as translated by Ş. Tekin, for *täging* corresponds to Skr. *ksana* 'moment' in the sentence *oglug tägingंसlig turur sizlär ... sözlägüi bo şloklarag* (Sho-Agon 3, p. 206, 10–11). Similarly, *og teging* in Suv 610, 4 means 'a free moment, an occasion to do something'. I agree with Erdal in his interpretation of the binomial, but I think what he reads with /o/ is close to, actually identical with, Uig., MK *kugur* 'occasion, time' in meaning and is probably the base of the latter (cf. also

Tuv. *ug* in *çañıs ugda* ‘once, on one occasion’). I therefore suggest that the word be read *ug*, and not *og*.

60. Erdal derives MK’s *saraguç* ‘a woman’s veil’ from \**sara-*, “a verb which is attested only in Turkmen: The DLT has *saru-* and *sarla-* instead of it” (p. 358). Let it be known that Trkm. *sara-* ‘to wrap’ goes back to MK’s *saru-*. According to Clauson *saraguç* is ‘probably a metathesis of \**sarugaç*’ (EDPT 849). But this kind of metathesis is rather unusual for Karakhanid Turkic. On the other hand, a development \**saruguç* > *saraguç* does not seem very likely either. All this shows that a better etymology should be sought for this word.

Commenting on the synonymous *saru-* and *sarla-* in MK, Erdal says as follows: “It appears that Qarakhanid Turkic created three alternate denominal verbs from Persian *sar* ‘head’. West Turkish *sar-* ‘to wind or wrap-round’ (Middle and Modern Turkic) may be a shortening of *sar+u-* or \**sar+a-*, with its meaning presumably widened through the influence of *sarmal-/sarmaş-*, qq.v. in the EDPT” (p. 358, note 410). In view of the Turkic data we possess, however, this etymology does not seem to be sound and satisfactory: Chuv. *sır-* ‘to wind, wrap round’, Bšk. *hır-* id., Tat., Trk. *sar-* id., Khak. Az. *sarı-* id. < *saru-*, Trkm. *sara-* id. < *saru-*, etc. The monosyllabic stems may come from *saru-* with the loss of the final vowel; *sarla-* in MK may go back to \**sarula-*, i.e. a stem formed with the frequentative suffix {-*lA-*} and \**sarma-* in MK *samal-*, *sarmaş-* and *sarmat-* may be explained as an {+*A-*} verb derived from \**saru-m* as assumed by Clauson (EDPT 853).

61. Referring to my reading BK SE *YULGÇA* as *yulugçı* Erdal comments as follows: “A word read as *yulugçı* by T. Tekin in BQ SE and translated as above (i.e. ‘merchant’) appears in fragmentary context and is dubious” (p. 372). First, I would like to make a correction here: I translated the word *yuluygçı* as ‘plunderer’, not as ‘merchant’, deriving from *yul-* // *yulı-* ‘to plunder’ in my Orkhon Turkic grammar (pp. 111, 279, 407). Later, however, I changed my view and read the same word as *yol(a)gçı* ‘öncü (?)’ taking it to be a noun in {-*gçI*} from *yola-* ‘yola çıkmak, yürümek’ in my reedition of the two main inscriptions (*Orhon Yazıtları*, Ankara 1988, pp. 52, 111-111: note 226, 188). This word survives in modern languages, e.g. Trkm. *yo:lagçı* ‘traveller, passenger’, Kirg. *colo:çu*, Kzk. *jolawşı*, etc. Tuv. *çola:çı*, however, means ‘driver’, closer to the meaning

I assume for Orkh. *yolagçı*, i.e. either ‘vanguard’ or ‘guide’. Therefore, I now believe that this reading fits better the fragmentary context in BK SE: *çor(a)kka t(ä)g(i)p yol(a)gçı [(ä)r](i)g ...* ‘çorak (arazi)ye varıp öncü (askerler)i ...’. This all depends of course on the assumption that the final *A* in *YULGÇA* is a misreading for *I*.

62. Erdal thinks that *kü-* ‘to guard’ which has so far been read as such should be spelt with /ö/, because *kö-* is probably the base of *kör-*, *köz* etc. (p. 194). For this reason he reads *kügçi* in the binominal *kügçi küzätçi* ‘watchmen’ as *kögçi* (p. 373). But *küzäd-* ‘to watch, guard, protect’ is spelt with /ü/ in TT VIII and *kü:d-* ‘to wait; to wait on, tend, attend to (guests, animals, etc.)’ lives on in modern languages with /ü/. Erdal obviously does not regard the two verbs as cognates. But the semantic relation between the two is obvious. Cf. also MK *bärklä-* ‘to guard, keep secure’, Uig., MK *bäklä-* ‘to fasten, make fast, secure’ > Trk. *bekle-* ‘to wait; to watch, guard, protect’, *bekçi* ‘watchman’.

63. Erdal explains *bärgä* ‘whip, goad’ as a form derived from *bärt-* ‘to bruise’ ‘by simplification of the consonant cluster’ (p. 379), but it may also be derived from the base of *bärt-* i.e. from *\*bär-*. Cf. Mo. *berte-* ‘to be injured, hurt’, *-te-* being the allomorph of the passive suffix {-dA-}.

64. Mentioning *tuman* first among the nouns in {-mAn}, Erdal comments as follows: “It can’t be derived from *to-* ‘to block’, which has a different vowel” (p. 387). To the contrary of what Erdal says, however, the OT verb meaning ‘to block’ must have had the shape *tu-* (cf. note 33 above). Doerfer’s suggestion to relate *tuman* ‘mist, fog’ with *tumagu* ‘a cold in the head’ and *tuml-* ‘to be cold’ (TMEN 935) is weak semantically. MK *tuml-* ‘to be cold’ can best be explained as an {+I-} derivative (not found in Erdal), for we have *tum* in MK meaning ‘cold’ (EDPT 503), *tumagu* may then be explained as a collective noun in {+AgU} (not found in Erdal). We may also assume a *\*tumul*, an {+(X)l} derivative as the base of *tuml-*, i.e. *tuml-* < *\*tumul+ɪ-*. As for *tuman*, it may well be regarded as a deverbal noun in {-mAn} derived from *tu-*, very much like *ürtmen* ‘a flat upper surface of a house, roof’ (originally ‘something which covers’).

65. Dealing with the etymology of Uig. *yapırgak*, *yalpırgak* ‘leaf’, Erdal says as follows: “A verb ‘*yalpır-*’ is not known to me, but several other verbs of similar shape signifying ‘to flutter’ are

mentioned in the section dealing with the formative +Ar-” (p. 392). It is true that a verb *yaplır-* has not yet been attested in Old and Middle Turkic texts. But the existence of such a verb can be deduced from the data found in modern languages, e.g. Tel. *yal-bı-* ‘to fan’, *yalbra-* ‘to flutter’, Shor. *çalbra-* id., Kirg. *calbıra-* id., *calbırak* ‘leaf’, Kzk. *japırak* *\*yalpırak* id., etc. The last two nouns are obviously derivatives in {-k} whereas OT *yalpırgak* is a deverbal noun in {-gAk}. The base of OT *yalpırgak* is probably an inchoative verb in {-(Ir)-}, i.e. *\*yalpı-r-*, and the surviving *yalbra-*, *çalbra-*, *calbıra-* are obviously the older vocalized forms of the unattested *\*yalpır-*.

66. OT *tamgak* ‘palate’ is derived by Erdal from *tam-* ‘to drip’ on Doerfer’s suggestion (p. 392). However, this is not very convincing semantically. An Altaic etymology suggested by Tsintsius (*SSTM* Ya II 158) seems to be more plausible: Evk. *tam-* ‘to inhale’, Nan. *tami-* ‘to swallow air, spittle, saliva’ (cf. also Mo. *tama-* ‘to collect or gather together’, Ma. *tama-* id.).

67. Erdal is right in correcting my reading *TURDI* as *tur(ut)dı* in Tariat N2 and my interpretation of *turg(a)k* occurring in the same place as ‘watching posts’ (p. 392). As he clearly shows, OT *turgak* means ‘day sentry’.

68. Commenting on QB *karakçı* ‘brigand’ and DLT’s *karakla-* ‘to pillage’, Erdal says that “they come from -(O)k derivate of *karga-* ‘to curse’. This *karga-k* would then denote ‘something accursed’” (p. 395, note 463). I think this is a semantically weak etymology. In my opinion, MK, QB *karma* ‘pillage, theft’ and MK *karmala-* ‘to pillage’, Kirg. *karma-* ‘to seize, catch, grasp’, *karmala-* id. (freq.), etc. seem to be more convincing cognates. If MK *karma* is a verbal noun in {-mA}, *karak* would then be an action noun in {-k} derived from *\*kara-*, i.e. the archaic disyllabic form of *\*kar-*.

69. In the same note Erdal says that “*kuç-ak* ‘an armful’ in the DLT, ‘bosom’ in later texts, may possibly also come from *\*kuç-gak*; in this case this is correct, the DLT hapax *kuçam* could be an analogical creation following *kuçak*”. The data obtained from modern languages, however, do not support this etymology. A form like *\*kuggak* or *\*kuçkak* occurs nowhere in Turkic. The word occurs without suffix-initial velar in those languages where this velar is preserved. Consequently, we may assume that *kuçak* and MK’s hapax *kuçam* are old derivatives coming from the disyllabic

stem of OT *kuç-*, i.e. *\*ku:ça-* (cf. MK *konat-*, *konal-*, *konat-*, *konaşı*, *tutaşı*, QB *tutam*, etc.).

70. Erdal derives MK *kurça-* 'to hit the side of the target and pass on' from an unattested *\*kırış*, a noun in {-Xs} from *kur-* 'to scrape' (p. 421). The etymology I suggest seems to be more plausible for phonetic and semantic reasons (see Note 11).

71. Erdal derives *kurşa-* 'to gird, surround' from a hypothetical *\*kuruş*, a hypothetical denominal noun in {+Xs} from *kur* 'belt, girdle', like OT *bağış* 'joints' from *ba:g* 'tie, bond' (p. 422). But OT *kurşa-* occurs in Altay and Kirghiz as *kurça-* and in Khakas as *xurça-*. These forms go back to an older *\*kurça-*, not to *\*kurşa-*. Therefore, it is very probable that /s/ in Common Turkic *kurşa-* was originally /ç/ (see Tekin 1989: 344).

72. Erdal transcribes Orkh. *tirkış* 'caravan' as *terkiş* and its base as *\*terkă-* among the {+A-} verbs, deriving it from *ter-ig* (p. 424). But *tirkış* is spelt with /i/ in the inscriptions. More important than that it survives with /i/ in Trkm. *tirkış* 'line, row', e.g. *bir tirkış düiye* 'a line of camels'. The base of this word, i.e. *tirkă-*, survives in modern languages: Kzk., Nog. etc. *tirke-* 'to join together, conjoin, tie, bind', Tat. *terkă-* id., etc. Therefore, *tirkăş-* 'to walk in a line (used of camels and warriors)' in DLT fol. 269 must be read so and not *tergeş-* as Caluson did (EDPT: 545b) or *terküş-* as Erdal reads (p. 424). These words have nothing to do with *ter-* 'to collect, gather together' or *terig* derived from it. In my opinion, Orkh., Trkm. *tirkış* and Mk's *tirküş-* are zetacistically related to CT *tiz-* 'to arrange things in a row' (see Tekin 1975).

73. Erdal who mentions *tükă-* 'to be completed, fulfilled' among the {+A-} verbs finds Dankoff's etymology deriving it from *türk* 'mature, in the prime of life, young, vigorous' quite plausible (p. 426). This etymology has two important weaknesses, however: 1. OT *tükă-* means 'to come to an end', a meaning quite far from that of *türk*; 2. the loss of /r/ before /k/ which is quite difficult if not impossible. For the loss of /r/ Erdal gives three examples, i.e. *iklä-*, *bärk* and *kigür-*. In two of the examples given for the loss of /r/ before /k/, i.e. *irklä-* > *iklä-* and *bärk* > *bäk* the sonant /r/ occurs as the first element of a final consonant cluster occurring in one and the same syllable. In *kigür-* < *\*kir-Kür-*, on the other hand, /r/ and /g/ occur in two different syllables. For this reason, the development *\*kigür-* > *kigür-* seems very doubtful to me (cf. *argur-*,

ärgür- ‘to melt, dissolve’, ärgür- ‘to make something be’, särgür-, tırgür-, turgur-, etc.). I would like to point out that OT *kigür*- can be analyzed as *\*ki:-gür*-, *\*ki:-* being the base of *ki:r*- ‘to enter’. The element *-r*- in *ki:r*-, in its turn, can be explained as the inchoative suffix *{-(I)r-}*.

74. Erdal tentatively includes Uig. *butarla*- ‘to tear to pieces, to destroy’ among the *{+IA-}* verbs (p. 434). Clauson’s etymology to the effect that the verb comes from the aorist form of *buta*-, *buti*- (EDPT 309) is unlikely, as Erdal states. In my opinion, *butarla*- is a frequentative stem in *{-IA-}* coming from an unattested *\*butar*-; cf. Mo. *butara*- ‘to break to pieces, smash; to disperse, scatter’ (intr.), *buta* ‘in fragments or pieces; into pieces’.

75. Erdal is right in his judgement that the Uig. verb meaning ‘to steal’ is *ogurla*-, and not *ogrıla*- (p. 442). The latter, however, seems to be the original form of the verb which, with the regular loss of /i/, must have acquired the shape *ogurla*- at an early date. As for *ogrı* ‘thief’, it can best be explained as an *{-I}* noun from *\*ogur*-, an unattested base which seems to have been preserved only in Yak. *uor*- ‘to steal’ < *\*o:r*- < *\*ogur*-.

76. Erdal transcribes the Uig. word meaning ‘to sweat’ *asterlä*-, apparently on the basis of its spelling in Uigur script (p. 448). But the verb, its base *tär* ‘sweat’ and *tärit*- ‘to sweat’ (intr.) are all spelt with /ä/ in MK. The latter is also spelt as *trIt*- in Irk Bitig 50. Cf. also Chuv. *tar* ‘sweat’ (< *\*tär*), Trkm. *der* id. etc. The vowel /i/ in Yak. *tirit*- ‘to swear’ is secondary.

77. About the base vowel of *tış+la*- (p. 448) see note 21 above.

78. *istä*- ‘to seek something or ask for it’ is obviously a verb in *{+tA-}* derived from *iz* ‘trace, track, footprints’ as Erdal confirms (p. 455). The fact that it is usually written with /s/ both in Uigur and in Karakhanik Turkic is not a strong evidence against this etymology as Erdal seems to believe, let alone the fact that the word is spelt with /z/ in at least one of its occurrences in the Uigur texts (p. 433). See also note 77 below.

79. Erdal thinks that “*üstä*- ‘to increase something’ is possibly derived from *üzä* ‘above’ with syncope of the unstressed and open second vowel” (p. 457). This etymology does not seem very likely. First, how do we know that the final vowel of *üzä* is unstressed? Secondly, even if it were unstressed, the loss of a medial /ä/ in a formation like *\*üzä+tä*- would not be easy. In my opinion, *üstä*- is a

derivative of *üz* 'top, the upper part' (occurs in CC) which is also the base of Uig. *üzdiin*  $\approx$  *üztün*  $\approx$  *üstün* and *üzä*. The latter is derived from this *üz* with the archaic dative-locative suffix +A (for these etymologies see Tekin 1991: 145–146)).

80. Erdal says that "*äsirkä-* comes from *äsiz*, an exclamation of bereavement found already in the Yenisei inscriptions" (p. 459). In my opinion, exactly the opposite seems to be true. This etymological explanation should then be changed to read "*äsirkä* – comes from *\*üsir*, i. e. the older and original form of *äsiz*" (see Tekin 1991: 149).

81. I had read runic *TwKRRK* in KT S 8 and *TWKRRK* in BK N 6 as *tokurkak* 'one who regards himself as full' in my Orkhon Turkic grammar (pp. 109, 232, 383). In my reedition of the two Orkhon inscriptions, however, I read this word *astok* (*ar*)*k(u)k* 'tok (gözlü) ve aksi', in spite of the fact that runic *RKK* could hardly be read *arkuk* (*Orhon Yazıtları*, pp. 4, 5, etc.). Now, I see that Erdal accepts my first reading and interpretation (p. 462). The reason why I changed my reading from *tokurkak* to *tok* (*ar*)*k(u)k* was that I thought the context requires here an adjective meaning 'contrary, perverse, obstinate, stubborn', for in the immediately following sentence the kaghan analyzes the Turkish people's character as 'contrary, perverse' etc.: *a:çs(a)r tos(ı)k öm(ä)z s(a)n, bir tods(a)r a:çs(ı)k öm(ä)z s(ä)n* 'if you are hungry you do not think about you would be satiated (again), (and) once you are satiated you do not think that you would be hungry (again)' (BK N 6). In MK we find *arkuk* signifying 'obstinate, refractory', a word no doubt related with *arkuru* 'crosswise; transverse, perverse' (> Turkish *aykırı*). But, as I have already said, runic *RKK* can only be read *\*arkak*. However, it should be pointed out that in the inscriptions there are some examples in which the rounded vowel of the second syllable occurring after an unrounded vowel is not written, e.g. *y(a)r(u)k* 'sun' (Shine-Ussu E 1).

82. After dealing with echoic verbs in {+kIr-}, Erdal says as follows: "A few onomatopoeic verbs ending in *krA-* will be mentioned below. It will be difficult to connect the two sets convincingly, if it cannot be shown why the stem-final /A/ was dropped here but retained there" (p. 467). The alternation {+kIr-}  $\approx$  {+krA-} can be explained as follows: The aorist forms of the echoic verbs in {+kIr-} is always {-Ar}, -A- being the relic of the older forms of such verbs,

e.g. *ba:kır-*, *ba:kır-ar*, i.e. *ba:kıra-r*, but occasionally with the loss of /1/, as *ba:kr-ar* (cf. MK *sıkr-* ‘to whistle’, *sıkr-ar*). Such being the case, the aorist forms of these verbs were apparently analyzed by the speakers in two different ways, i.e. either as *ba:kır-ar* or as *ba:kıra-r*. In MK the verb is recorded as *ba:kır-* and its aorist form as *ba:kır-ar*, but in Tafs. the verb occurs as *bakra-*, e.g. *tevälärin bozlamakı bakramakı* (Borovkov, p. 90). Tafs. *bakra-* survives in New Uigur as *waqıra-* (cf. Tekin 1983: 510).

83. After dealing with {+U-} verbs, Erdal mentions two derived verbs, i.e. *säsü-* ‘to weaken’ (intr.) and *adru-* ‘to be superior to, excel’ which, according to him, “look as if they were derived from verbs” (p. 476). The first of these two verbs was derived by Ramstedt from *säs-* ‘to loosen, untie, unfasten’ with the suffix *-ü-* (II:157). According to him this *-ü-* is cognate with Mo. *-bu-/bü-* forming passive stems, a view accepted by Räsänen (1957: 163) and Street (). Erdal rejects this etymology and derives *säsü-* from *\*säs* which he describes as “an *-Xş* derivate from *säs-*” (p. 476).

The existence of the verb *adru-* ‘to be superior to, excel’ apart from *adır-* ‘to separate’ was first recognized by Röhrborn who translates it as ‘sich auszeichnen’ (UW 61). Erdal, after giving additional examples which display the existence of such a verb in Uigur, rightly states that “*adru-* is certainly not a variant of *adır-*, as it differs from it in shape, meaning and government” (p. 477). Röhrborn derives *adru-* from *adır-*, i.e. *adru-* < *adır-u-* with the loss of medial /1/, but Erdal does not accept the existence of such a suffix: “No deverbal formative *-U-* can yet be postulated, as some might be tempted to do for the sake of Altaic comparison (following Ramstedt): A single verb does not make a formation” (p. 477). But we now have, together with *säsü-*, at least two {-U-} verbs, not one. Another such formation could be El-İdrak *koku-* ‘to emit a smell of burning’, Trkm. *koka-* ‘to smell bad’ < *\*koku-*, Az. *goru-* id. coming from MK *kok-* ‘to give out a smell of burning, stink’, Trk. *kok-* ‘to smell, stink’.

84. In the section assigned to the +*I-* verbs Erdal deals, among others, with *sämri-*, *sekri-*, *yavri-*, *ükli-*, *yaltri-* and *yuldrı-* and he makes the following statement: “When bases end in /z/ or /ş/, these consonants are replaced by /r/ and /l/ respectively under +*I-* expansion. This descriptive statement could be replaced by an ex-



planatory one only within a theory accounting for Altaic rhotacism and lambdacism as a whole" (p. 480). As I have already said above (note 45), these verbs could only be explained as +*I*-formations coming from Pre-Turkic nouns with final /r/ and /l/ which changed into /z/ and /s/ in Proto-Turkic.

An important discovery made by Erdal is the Uigur word *sekiz* occurring in the phrases *tetik sekiz biliglig ü[zä]* 'because he is sharp-witted and bright' (Maitr 4 r 23) and *y(i)ti sekiz bilgä biligin* ... 'a sharp and quick-witted mind' (153 v 12). This word cannot have anything to do with the numeral *säkiz*. Erdal rightfully thinks that this *sekiz* which seems to be used metaphorically in these phrases is etymologically related to *sekri*- 'to jump, start off (intr.)'. We thus have one more doublet for the type *sämiz* ≈ *sämri*- supporting the theory of zetacism. i. e. *sekiz* ≈ *sekri*-.

85. In the +*I*-verbs section Erdal also mentions *yeltri*- 'to blow' and says as follows: "The direct base of *yeltri*- is not attested, but it must, in some way, come from *yel*" (p. 482). Erdal's conjecture about the ultimate base of this verb is correct, but the same cannot be said of his etymology, for this verb generally appears as *yeltir*- in Uigur and is spelt as *yeldir*- in MK. The variant *yeltri*-, on the other hand, appears only once in Uigur, as noted also by the author himself. Since its aorist form is *yeltir-är* in Uigur and *yeldir-är* in MK, it cannot be an +*I*-formation. In my opinion, the original form of the verb is *yeltir*- ≈ *yeldir*-, the unique *yeltri*- in M III being metathetical. This verb may have been derived from *yel* with a suffix {+dir-}. This suffix may correspond to Mo. {+jirA-}, a denominal suffix forming intransitive verbs, e.g. *qatagujira*- 'to become hard' (< *qatagu* 'hard'), *sayijira*- 'to become better, improve' (< *sayin* 'good, well'), etc. This etymology also explains the existence of /ä/ in the aorist form: It is a relic of the original stem-final vowel.

86. Commenting on *bIrki* [bi:rki] 'united' in the inscriptions, Erdal says that this word cannot be a derivative of *birik*- 'to get together, join, to be united' (p. 494). In my opinion, Orkh. *birki* is an adjective in {-I} derived from *bi:rik*-, very much like *adri* 'forked', *karsı* 'opposite, opponent', *konaşı* ≈ *konşı* 'neighbor', *tutaşı* ≈ *tutşı* 'continuous', *yaraşı* 'suitable', etc. This word seems to have survived only in Yak. *bi:rgä* 'together', e.g. *bi:rgä barıax* 'let's go together'.

87. In the {+(A)r-} verbs section, Erdal derives *kapar-* 'to form into a blister or a vesicle' from *kap* 'container' (p. 501). This etymology belongs to Clauson who wrongly spells the noun as *ka:b* and the verb as *kabar-* (EDPT: 585). In my opinion, Uig., MK *kapar-* (< \**ka:par-*) comes from the adjective \**ka:pa*. The latter is found in MK: *kapa* 'thick, protruding' (III 225), wrongly spelt as *kaba* by Clauson (p. 580). It survives in modern languages with the meanings 'thick, dense, bushy, swollen': Trk. etc. *kaba* 'puffed out, bushy, spongy', Trkm. *ga:ba* 'bushy; big; swollen' < \**ka:pa*, etc. In this connection, I would like to point out that Trk. \**ka:pa* and \**ka:par-* have cognates in Mongolian: *qabuda-* 'to swell, puff', Kh. *xavda-* id., *qabudur*, *qabudar* 'swelling, tumor', Kh. *xavdar* id., etc.

88. In the same section, the spelling *kebä+r-* 'to swell, to be inflated (of one's belly)' should be corrected to read *käpär-*; cf. Trk. *gebe* 'pregnant', Az. *gäbä* id., Trkm. *gä:be* 'swollen, inflated' < \**kä:pä*, *gä:ber-* 'to swell' < \**kä:pär-*, etc.

89. At the end of the section assigned to the verbs in {+s(I)rA-}, Erdal comments on the obvious relation of this suffix to {+sXz} as follows: "A possible explanation could be that +sIrA- was originally \*+sXz+A-. As so often happens in +A- derivation, the final vowel of the base was syncopated, resulting in \*+szA-. The two sibilants were apparently dissimilated and, in later texts, an anaptyctic vowel appeared. A zetacistic explanation is also possible" (p. 509).

Erdal's theory which is based on four assumptions (i.e. syncopation, assimilation, dissimilation, vowel epenthesis) seems to me extremely hypothetical, let alone the fact that in Turkic medial consonants cluster /ss/ coming from /s/, /sz/ or /zs/ usually results in /st/, e.g. Az. *isti* 'warm' < \**issi*, Kzk. *ıstık* id. < *ıssık*, Yak. *a:stıy-* 'to become white' < \**a:zıv-*, etc. Consequently, a zetacistic explanation, i.e. +sIr2 > +sIz and +sIr2+A- > +sIrA-, seems to be the only solution.

90. After a discussion of the so-called 'intensive formatives' -A-, -I- and -U- Erdal comments as follows: "There is no much ground for the assumptions that there were any suffixes of the form '-A-' or that there were any 'intensive' verbs in early Turkic. With the material we have at present, such a hypothesis cannot be supported" (p. 525).

Let it be known beforehand that Erdal rightfully refutes most of the examples brought by Brockelmann, 1954: 199 ff. (p. 524, 525). Yet, as he accepts, there are “a few real candidates for comparatively early *-I-*”, i.e. *kazı-* ‘to dig and scrape’ in MK beside *kaz-* ‘to dig’ and *tatı-* ‘to be tasty, delightful, pleasant’ in MK beside Uig., QB *tat-* ‘to taste’. The intransitive *tatı-* could be explained as a denominal verb in {+*I-*}, although a noun *tat* ‘taste’ (< \**ta:t*) homophonous with *tat-* (< \**ta:t-*) has not been attested so far (cf., however, Tat., Bşk. *tat*, Trk. *tad*, Az. *dad*, Trkm. *da:t* etc.). MK’s *kazı-*, on the other hand, seems to be a diminutive (or frequentative?) stem.

91. Discussing the structure of *adır-* ‘to separate’, Erdal states as follows: “It shares its base with *adın* ‘different’, *adıg* ‘sober’, *adıl* ‘excellent’ and *adın-* ‘to sober up; to be impressed, surprised, shocked’ ...” (p. 535). Let it be said that *adıg* ‘sober’ and *adın-* ‘to sober up’ cannot be cognates with *adır-*, for *adın-* must have had a long /a/ originally, whereas *adır-* has a short one (cf. Trkm. *a:yıl-* vs. *ayır-*). See note 27.

92. In chapter 6.3 which deals mostly with inchoative verbs in {-(I)r-}, Erdal also mentions the verbs *adır-*, *ägir-* ≈ *äñir-*, *kadır-* and \**tägir-* (pp. 535–537). But these verbs are all transitive; therefore they must have been formed with a different formative, perhaps an archaic transitive suffix {-r-}. Uig. *tävir-* ‘to turn (tr.)’ in the phrases *nom tilgänin tävir-*, *nomlug tilgän tävir-* ‘to turn the wheel of *dharma*’ (p. 676) also seems to have been formed with the same suffix.

93. When dealing with *to-s-* ‘to become full’ in the chapter assigned to ‘Verbs of vying and cooperation’, Erdal says as follows: “*tok*, *tol-* and *tod-* are cognates” (p. 570). This seems impossible, however, because of the quantitative difference in their vowels: Both *tok* and *tod-* have short vowels, whereas the vowel of *tol-* is a long one (cf. Trkm. *do:l-*, Yak. *tuol-* vs. Trkm. *dok*, *doy-* and Yak. *tot*, *tot-*). OT *toş-*, too, must have had a long /o/ originally, for it is synonymous with and perhaps lamdacistically related to \**to:l-*.

94. In the section where verbal stems in {-(X)n-} are dealt with, Erdal writes the verb meaning ‘to be blocked, to be closed up’ with /o/, i.e. as *ton-* (p. 620). This spelling cannot be correct, for the verb occurs with /u/ everywhere as I have already said above: Tuv. *dun-* ‘to be stopped up, be choked’, *dunuk* ‘deaf’, *dugla-* ‘to shut,

close', Khak. *tun-* 'to become deaf', *tunux* 'deaf', *tuyux* 'shut, closed', *tug* 'pond, puddle', *tulga-* 'to close firmly'; 'to block the way' < \**tugla-*, Kzk. Kklp. *tuyuk* id., Tat. *ton-* 'to become deaf', etc. OT *tuman* 'mist, fog', can then be derived from the base *tu-* 'to bar, block up, obstruct', contrary to what Erdal thinks (p. 387). See also note 27.

95. *ük-ün-* '(of troops) to collect (intr.)' mentioned among the {-(X)n-} verbs (p. 625) should be corrected to read *ügin-* see § 45). As Erdal mentions, in the *EDPT* this verb is quoted twice from the Orkhon inscriptions (p. 111). This, too, should be corrected. The verb which occurs in the Orkhon inscriptions is not *ükiin-* 'to bring together, concentrate (troops)', but *ökiin-* 'to repent, regret, feel sorry'. Furthermore, the *EDPT's* *ük-* 'to heap up, accumulate (something)', too, is a mistake for *üg-*. Clauson's runic example *uyur kadaşım üğin ükdım* 'I heaped up (wealth) for my capable (?) kinsmen' (Malov 17, 2), too, should be corrected to read *uyur kadınım üğin öldüm* 'I died for the sake of my capable in-law' (see Vasil'ev 1983, 22, 62). See also note 45.

96. On *yetlin-* listed among the verbs formed with {-lXn-} Erdal comments as follows: "*yet-lin-* 'to disappear' is common, and so is its base *yet-* 'to lose'; an -(X)n- derivative from this base is not attested, however, and *yet-il-* is very rare" (p. 640). It is unknown to me why Erdal writes the base with /e/ and not /i/. Although he says that he would explain it when dealing with *yet-tür-* 'to allow something to get lost' (p. 686), he does not do so (see p. 815). His reason or reasons notwithstanding, it should be reminded that the base occurs with /i/ everywhere with the exception of Yakut where it is with /ü/, i.e. *süt-*, going back to an older \**yüt-*. It seems that this verb had two slightly different forms in Proto-Turkic, i.e. \**yit-* and \**yüt-*. In connection with this, I would like to draw attention to *yütiürüp* 'having lost' occurring in Irq Bitig 24: *täglük kulun irkäk yunt(t)a ämig tiläyür. küin ortu yütiürüp tün ortu nägiüdä bulgay ol tir.* 'A blind foal looks for an udder on a stallion. Having lost it at midday, where and how to find it at midnight? it says.' Thomsen and Clauson read the word *yütiürük*, taking the final letter to be *Ük*. But the final letter is clearly *Up* in the manuscript, as first pointed out by Erdal (1977: 96). Therefore the word should be read *yütiürüp*, although it is the only case in IB where the letter *Up* is used to write the sound group *üp*.

97. Dealing with *tod-* among the medial verbs in  $-(X)d-$ , Erdal says as follows: “*to-d-* ‘to be or become satiated’. This, *to-k*, *to-l* and *to-ş-* are all cognates. Cf. also *to-z-umçı*” (p. 643). I have already pointed out that *tol-* and *to-ş-* must have had a long /o/ originally, and therefore they cannot be cognates to short-vocalic *to-*, *tod-* and *tok-* (see § 93). For the base of *tozumçı*. See note 16.

98. Among the passive verbs in  $-(X)l-$  a verb *büksül-* ‘to burst and split open’ is listed (p. 657). This verb is read as *böksül-*, *böksül-* in the *DTS* (p. 117) and as *büksül-* in the *EDPT* where it is thought to be connected with *büküş-* (p. 329). Erdal comments on this verb as follows: “I take the *EDPT* to be right about the connection with *bük-*, but the immediate source could have been *\*bük-üz-*” (ibid.). But all these readings and assumptions are wrong. The word under discussion should be read *bögsül-*, for both this and its base survive in Turkmen: *bövüs-* ‘to pierce, split’, *bövsül-* ‘to be pierced, be split’. Turkmen /v/ in these words can only go back to an original /g/.

99. Commenting on *taral-* ‘to be or to get dispersed’, i.e. the unusual passive form of *tar-* ‘to disperse’, Erdal says as follows: “The Uigur variant *taral-* may have arisen out of contamination between *tar-* and *tara-* (i.e. ‘to comb’) or, alternatively, the second vowel may be due to the influence of the /r/. As we read in *EDPT* 547a, some modern languages have *tara-* as a secondary form of *tar-*. The present ex. may also be the first instance of such an -A-expansion, as comes up in a number of verbs in Middle Turkic. This remains only a possibility as long as there is no certain such ex. of *tara-* itself” (p. 675).

In my opinion, there is nothing unusual in Uig. *taral-*. The vowel /a/ of the second syllable is a relic of the original disyllabic stem of *tar-* which apparently was *\*tara-* (cf. Mo. *tara-* ‘to disperse’). Such cases are not rare in Old and Middle Turkic, e.g. OT *kon-* ‘to settle down’, but MK *kona-t-*, Uig. *kona-ş-ı* ‘neighbor(ing), adjacent’ (cf. Mo. *qono-* ‘to spend the night’ < *\*qona-*), MK *irk-* ‘to collect, assemble’, but *irkü-ş-* // *irk-i-ş-* (cf. Mo. *irge-* ‘to collect, assemble’), etc.

100. For my view about *yet-il-* from *yet-* ‘to get lost’ on p. 686. See note 96 above.

101. Erdal deals with *utuz-* ‘to give up, lose’ among the  $\{-tXz-\}$  verbs instead of those formed with  $\{-Xz-\}$ , because he thinks that

“The behaviour of *utuz-* would be quite aberrant among *-Xz-* verbs and can be explained by assuming that it comes from a simplification of *\*ut-tuz-*” (p. 708). I must say that this is a rather far-fetched explanation. OT *ut-* means ‘to win at gambling; to beat, defeat (someone) at gambling, in battle, etc.’, whereas *utuz-* signifies ‘to lose, be beaten’, i.e. ‘to let someone win’. The meaning of *utuz-* is thus in complete agreement with the meanings of other verbs in *-Xz-*, e.g. *tam-* ‘to drip’, *tamız* ‘to let something to pour out drop by drop’, *tüt-* ‘to smoke’, *tütiüz-* ‘to let something smoke’, *ud-* ‘to follow’, *uduz-* ‘to lead’, i.e. ‘to let someone lead’, etc.

102. *yet-ür-*  $\approx$  *et-ür-* ‘to lose’ cited among the causative verbs in *-(U)-r-* (p. 724) should be corrected to read *yit-ür-* and *it-ür-*. To these must also be added the form *yütiür-* occurring in IB 24: *kün ortu yütiür-üp* ‘Having lost it at midday’. See note 96 above.

103. Among the causative verbs, Erdal also mentions *yogur-* and comments on this verb as follows: “*yogur-* ‘to knead’; originally perhaps ‘to condense, thicken (tr.)’ if it is related to *yogrut* and *yogun*” (p. 725). As far as I know, this verb survives with /u/ in its first syllable everywhere except for Turkish and Azeri. Even in Turkmen it lives on as *yugur-*, *yogrut* and *yogun*, on the other hand, have an /o/ in their first syllables. Only for this reason, Clauson’s etymology connecting *yogrut* with *yugur-* (EDPT: 905b) cannot be accepted. Besides, the two lexemes are not related to each other semantically. *yugur-* means ‘to knead’ and *yogrut* is not made by ‘kneading’. See note 43.

104. *üksürü* ‘repeatedly’ discussed among the petrified converbs in the shape of *-Ur-U* (p. 726) should be corrected to read *üğsürü* (see §95).

105. Discussing *kigür-* among the causative stems in *{-gUr-}*, Erdal comments as follows: “*kigür-* ‘to introduce, bring in’ served as causative of *kir-* ‘to enter’. It is unlikely, however, that it should actually have been derived from *kir-*: no elision of /r/ occurs with a number of *-gUr-* derivatives from bases ending in this phoneme, the most relevant instance being *tir-gür-* ... *kir-* (which had a long vowel) and *kigür-* could-, however, come from the same unattested base ...” (p. 750).

I agree with Erdal on his assumption of his. OT *kir-* is an inchoative stem in *{-(I)r-}* derived from the unattested *\*ki-* which

is also the base of *kigür-* < \**ki:gür-*. A similar etymological relation seems to be found between *olur-* and *olgur-t-*. See note 108 below.

106. When discussing *tir-gür-* ‘to bring to life’ among the *-gUr-* verbs, Erdal also mentions the inscriptional *tirg(ü)rü* and comments as follows: “T2IR2G2R2W in KT E 29 is hardly an ex. for this verb, as the *EDPT* writes; rather of *tirig+gärü*” (p. 753). And in note 482 below, on the same page he further states as follows: “As Meyer, 1965–1966 has shown, rounded vowels are not tacit in Orkhon spelling after unrounded ones. The parallel passage in the BQ inscr. (also in the *EDPT*) is damaged. The exs. in the short list in Tekin, 1968: 36 (headed “Rounded vowels occurring after unrounded ones are not marked only in the following examples.”) can all be refuted, excepting two in the Ongin inscr.”

First of all, let it be made clear that the spelling rules observed in the Orkhon inscriptions are not without exceptions. For example, the unrounded narrow vowels occurring after rounded vowels are generally written; but there are quite many exceptions to this rule, e.g. *süçig* (KT S 5, 5, 6)), but *süç(i)g* (BQ N 4, 4, 5)), *tölis* (KT E 33), but *töl(i)s* (BQ E 12, S 13), *udım(a)d(i)m* (BQ E 22), but *ud(i)m(a)d(i)m* (KT E 27), *yor(i)td(i)m* (KT S 4), *yor(i)tm(a)z* (KT S 6), etc. Again, the initial /i/ is, as a rule, always written; but we once have *lgrÜ*, i.e. *(i)lg(ä)rü* in KT E 21 as against the 13 instances of *ilg(ä)rü* in the two Orkhon inscriptions. In Tonyukuk and the other inscriptions, there are even more exceptions to such spelling rules. Yollug Tegin and the scribes of other inscriptions were, after all, human beings living in Mongolia in the first half of the eighth century and it would only be natural for them to have made such spelling mistakes. Therefore, I see no reason to think that the scribe would not have forgotten to write the letter *Ü* after *g* in *trgrÜ*.

As for Erdal’s suggestion to read to word *tIrgÜ* as *tiriggärü*, this is of course possible, but not plausible; for *tirig* is not an action noun in Orkhon Turkic. It signifies ‘living, alive’ and \**tiriggärü* could only mean ‘toward those who are alive’, a meaning which would be out of place in a context like *öltäçi bodunug ... igittim* ‘I fed (or, nourished) the dying people ...’ There is no doubt that the word under discussion is the vocalic gerund of *tirgür-*. If we cannot read it *tirg(ü)rü*, we have to read it *tirgrü*.

107. In connection with *tütiüz-* listed among the -Xz- verbs, Erdal says as follows: “*tüt-üz-* ‘to let something smoke; to fumigate something’. The EDPT is wrong in taking ‘to emit smoke’ to be *tütä-*” (p. 758). In the note 491 below, on the same page, he makes the following comment: “*tütär* in KP, the only ex. adduced for this, is better devided *tüt-är* than otherwise. *tütäk* ‘spout’ spelled TUTAK in DLT fol. 194, may be one of the numerous vowel errors of that source: All other documentation indicates a narrow vowel. *tütäk* could also come from *\*tüt-gäk*; note that this lexeme has a long vowel in Tkm., whereas the verb has a short one there. There may have been an +A- derivate from *tü:t* as onomatopoeic for the sound emitted from a reed pipe (unrelated to the verb denoting the emittance of smoke). As for the -(X)t- causative signifying ‘to emit smoke (of fire)’ in DLT fol. 415: Attested are *tütätti*, *tütitür*, *tütitmäk*, of which the first must be a simple error (for *tütit-*).”

Erdal is right in analyzing KP’s *tütär* as *tüt-är*, for otherwise we would have expected *\*tütäyür*. He is also right in rejecting Clau-son’s etymology deriving *tütäk* ‘spout’ from *tütä-* ‘to emit smoke’ (EDPT: 455). But he is not so when he says that *tütäk* could come from *\*tüt-gäk*. The reasons are: 1. The suffix-initial /g/ could not have been lost in Karakhanid Turkic, 2. Trkm. *tüydek* has an originally long /ü/, as Erdal notes. His assumption to the effect that *tütäk* may have been derived from a hypothetical *\*tüt-tä-* formed from an echoic *\*tüt:t* with the suffix +A- is not very convincing either, for echoic verbs are usually formed with {+kIr-} and {+kI-}, as shown by Erdal himself. In my opinion, *\*tüt:täk* could be a loan-word borrowed from some Iranian language.

Erdal is not right either in stating that *tütät-* in MK must be an error for *tütit-*, for in most of the modern languages this verb is disyllabic: Trkm. *tüte-*, Khak. *tüde-*, Kirg. *tütö-*, Kzk., Kklp. Nog. *tüte-*, Tat., Bšk. *tötä-*, Uzb. *tutä-*, YUig. *t’uti-*, Khal. *titi-*, etc. All this shows that *tüt-* had a final /ä/ originally and the vowel /ä/ in MK’s *tütät-* is a relic of this stem-final vowel.

108. On the structure of Uig. *olgurt-* ‘to seat’, Erdal comments as follows: “*olgurt-* may have come from *\*ol(o)r-ur-t-* by /r/ dissimilation: Since *olor-* ‘to sit’ cannot be shown to be derived I prefer this account to the hypothesis that there was a -gUr- verb underlying *olgurt-*.” (p. 780).



First, I must say that a development like *olgurt-* < \**ol(o)r-ur-t-* is not very likely in Old Turkic. Secondly, I must make it clear that I don't agree with Erdal on his opinion to the effect that *olur-* 'to sit' cannot be shown to be derived. This verb seems to have been derived with the inchoative suffix {-(X)r}- from a base like \**ol-* or \**olu-*, very much like the verb *kir-* coming from \**ki-* (see above). The data found in some modern languages may support this etymology. First of all, there is an *olut* 'seat, place to sit; sitting' surviving, as far as I know, only in Tuvinian and Kirghiz. (Radloff has *Kkir. olut* 'chair, armchair, table; plateau, terrace' and two more variants belonging to the Sagai dialect, i.e. *olūt* and *olat* both meaning 'a place where one can sit'). This word could well be a noun in {-(U)t} derived from the obsolete base of \**ol-or-*, i.e. \**ol-* or \**olu-*. Secondly, we have *olox* in Yakut which means 'sitting; life; home, residence'. This, too, may have been derived from the same root with the suffix {-(U)k} or {-(O)k}, i.e. *olox* < \**olak*, very much like \**ku:çak* 'the bosom, lap' derived from Proto-Turkic \**ku:ça-* 'to embrace sexually'. Uig. *olgurt-* 'to seat' could, then, be a formation like *ar-gur-t*, *toş-gur-t*, etc. On the other hand, /t/ in Uig. *oltr-up* (M II,13), may have been an epenthetic consonant introduced when the second vowel of *olur-* was dropped in cases like \**olr-up*, as Erdal rightly assumes (p. 780, note 515). The form *oltrup* could then have given rise to the forms *oltur-*, *oldur-* in Middle Turkic. As for the causative *olxut-* 'to seat' in MK; it, in all likelihood, goes back to an older \**olgut-*, as Kashgari remarks, and this, in its turn, may have resulted from *olgurt-*, with the loss of /r/ before /t/.

Finally, there is also a curious *olūt-* 'to sit' recorded by Radloff as a lexeme belonging to the Soyon dialect, but not found in modern dictionaries. If it is not a back formation extracted from *oltur-*, *olūt-*, it could be explained as a medial verb in -(X)d- like *si-d*, *to-d*, etc.

109. In discussing Uig. and Karakhanid *müntür-* 'to help someone to mount', Erdal also mentions the inscriptional *b(i)nt(ü)rä* and comments on it as follows: "Several scholars (including the *EDPT*) read *bintürä* in Toñ 25 and assign the form to the verb discussed here. This is quite unlikely as the second vowel is not written out and cannot therefore be rounded, and the converb vowel of this formation is not /A/. Read perhaps *ävin terä* instead" (p. 801–802).

Erdal does not give the meaning of his *ävin terä*. It could only signify, however, something like ‘tidying their tents up’. But such a phrase would not fit the context better than *b(i)nt(ü)rä: (a)t üzä b(i)nt(ü)rä k(a)r(i)g sökd(ü)m* ‘ordering (the soldiers) to mount (their) horses, I broke through the snow’. It would only be logical to think that Tonyukuk, in order to break the snow, ordered his soldiers to mount their horses. In short, it must be admitted that the scribe has made two spelling mistakes in writing *bintiüre*: 1. He forgot to write *I* after *b*, 2. he also omitted the letter *Ü* after *t*. Such spelling mistakes occur frequently in the Tonyukuk inscription.

As for the quality of the converb vowel of *bintiür-*, Erdal is right in stating that the converb vowel of *-tUr-* verbs is not /A/. But aren’t there exceptions to the rules regarding the converb vowels on Old Turkic texts? For example, the converb vowel of the *-(X)t-* verbs is generally /I/ in Old Turkic and the vocalic converb of *el(i)t-* ‘to carry’ is expectedly *elt-i* in Irk Bitig (7, 11), KP, etc., but it is *elt-ü* in TT V, TT X and Hsüan Tsang. *terä* in Erdal’s alternative reading *ävin terä* must be the vocalic converb of *ter-* ‘to collect, bring together, assemble’; but we find *tir-ü*, not *terä*, in the Shine-Usu inscription dating from 759–760: *tok(u)z og(u)z bod-(u)n(u)m(i)n tirü kubr(a)t alt(i)m* (N 5). The form *terä*, on the other hand, is a late form attested only in TT X and Insadi Sutra. All this shows that there are exceptions to the rules concerning the converb vowels in Old Turkic.

110. *yetlin-tiür-* ‘to make something vanish’ on p. 824 should be corrected to read *yitlin-tiür-*, for the vowel of the base is undoubtedly /i/ (see §§ 96, 102).

Here come to an end my remarks on Marcel Erdal’s *Old Turkic Word Formation*. Although I think I have almost covered all the views which did not seem acceptable to me, I am sure that there still are some points on which I have not made any remarks or comments. Before concluding this paper, I must once more say that Erdal’s work is a great contribution to Old Turkic studies. I enjoyed reading this work and no doubt benefited from it. Needless to say, *Old Turkic Word Formation* will certainly remain as a main and reliable reference book for the students of Turkic for a long time to come.