Indo-European Loanwords in Altaic

by
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The investigation of lexical parallels between Altaic and Old English may well prove to be one of the most important ways in which we can detect early contact between Altaic and Anglo-Saxon in Inner Asia. Although historical documents contain many records of the existence of European peoples in Inner Asia, it remains unknown whether Anglo-Saxon in particular and Germanic in general played an important role in this area. This paper deals primarily with Old English loanwords in Altaic.

Most of the loanwords to be discussed are what may be considered a part of basic vocabulary. My assumption is that the historical long-term contact between Altaic and Indo-European in Eurasian steppes could lead to repeated circulation of basic words. Ancient vocabulary was not as complex and abundant as today's. Moreover, the proportion of basic words in ancient vocabulary was significantly larger than today's. Say randomly, if basic words represent fifteen percent of today's total vocabulary, they were eighty percent of the ancient one. So what circulated were mostly basic words. Circulation was an important means of vocabulary proliferation in the Eurasian steppes. Every circulation may have brought about certain phonetic, semantic, and morphological modifications, thus creating considerable divergence between the initial circulation and the later (say, the fifth) circulation in some instances. Under these circumstances if we refrain from digging into basic vocabulary, we will not be able to make significant progress in the domain of contact between Altaic and Indo-European.

What historical linguists need is an emphasis on transfer from periphery to kernel. Many attempts have been made to reveal Indo-European impact on Altaic. Perhaps influenced by the concept that basic vocabulary cannot be borrowed from one language to another, many researchers have paid insufficient attention to basic vocabulary. As we shall see, many of the loanwords to be discussed in this paper are widespread and highly productive in various Altaic languages. English scholars generally maintain that most of the Old English words are native English; if there are some borrowings, they are from Norse and Latin. Few scholars have turned their attention to contact between Altaic and Old English, which has some bearing on the vocabulary of Old English and can shed light

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on its phonological and semantic change. Since for the time being I am not in a position to determine which word is native to Altaic or native to Old English, it is safe to posit that Old English (or a related Indo-European language) was a lender.

Whether borrowing from one language to another in early history could take place or not represents a problem in linguistic studies. Webster (1828) once argued:

> that in the early periods of the world, when no books existed, nations, living remote or distinct, never borrowed words from each other. One nation, living in the midst of another, as the Hebrews did among the Egyptians, may adopt a single word, or a few words; but a family of words thus adopted is an occurrence rarely or never known.

In the early period of the Eurasian steppes, languages remained oral in the main, words diffused through mutual contact, oral communication, and cultural exchange resulted from nomadism, travel, migration, trade, war (which produced many prisoners of war), and slavery, and so on.

Historians have built up considerable information about the Yuezhi (Yüeh-chih, Tokharian) and Xiongnu (Hsiung-nu, Huns) that would seem to be reliable. There was contact, and sometimes conflict, between the Yuezhi and the Xiongnu. Presumably, the Yuezhi were more advanced and sophisticated as a culture and society. In the early years of the Warring States Period (which existed in Chinese history from 475 BC to 221 BC) the Yuezhi inhabited what is now western Gansu (province), China. During the Qin Dynasty (221 BC-206 BC) and the following short period, the Yuezhi became a powerful country and threatened its eastern neighbor Xiongnu. One result was that the Xiongnu supreme ruler Tümen (touman in Chinese transcriptions[2]) had to have his elder son Mokdun (maodun in Chinese) held as hostage by the Yuezhi. However, Mokdun was able to escape and return to his Xiongnu land. When the Xiongnu rose as a dominant power in northern China under the leadership of Mokdun chanyu (209 BC - 174 BC), they seriously defeated the Yuezhi. Mokdun's son and successor Lokjin (laoshang in Chinese) chanyu (174 BC-161 BC) gave the Yuezhi a heavy blow and drove them westward in the Ili valley. However, in 89 AD the Xiongnu were defeated by the Eastern Han (dynasty) troops and disintegrated into different parts. It should be noted that neither Yuezhi nor Xiongnu were a homogeneous ethnic group, and among them there must have been some Altaic tribes. It

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[2] In citing foreign words preserved in Chinese sources I have made reference to supposedly relevant Altaic and Indo-European words and archaic Chinese pronunciations. I have also placed the present-day Chinese pronunciations in parentheses using Chinese Romanization (pinyin). I will discuss the etymology of Xiongnu Tümen and Mokdun in (71) and (102) respectively.

was likely that many Old English and Tokharian words penetrated into the Altaic languages including Xiongnu. These loanwords can be a helpful source of information for both Indo-Europeanists and Altaicists.[3]

(1)　OE.　　*ān* 'one', *ānga* 'only, sole'. ToA *āñu* 'cessation, rest'

　　　　Ma.　　*aniya* 'year', Udehe *an'a* 'festival, the first day and month of the year'

　　　　Dag.　　*äniä* 'the New Year's Day', *äniä-* 'to celebrate'

　　　　WMo. *angkan* 'beginning, first', MMo *angka* 'the most'

Presumably, ToA *añu* once meant 'holiday, the New Year's Day'. Generally, the beginning moment of the new year marks the end of the last year. Manchu *aniya* originally meant 'one, first' and then was taken to denote the first day or month of the year as indicated by the Manchu phrase *aniya biya* 'the first lunar month' (*biya* means 'moon, month'). Manchu *aniya* used in the latter sense is widely distributed in Tungusic languages and entered Dagur as shown in (1). The semantic transfer from 'one' to 'year' is also found in Jurchen, the earliest recorded language in Tungusic. The Jurchen documents transcribed in Chinese contain two words for 'year': one is *anie*, which is equivalent to Manchu *aniya*; the other is *se*, which is cognate to Manchu *emu* (< **semu*) 'one'. Like the word *anie*, the Jurchen word *se* is also used in the phrase *se bie* 'the first month of the year'. What is important is that Jurchen *se* and Manchu *emu* were borrowed from Tokharian B *ṣe(me)* and A *ṣom* 'one' (Gothic *sama* 'same'). In these two cases we have a similar pattern of semantic change.

(2)　OE.　　*ege* 'fear, awe', Gothic *agis* 'fright'

　　　　WMo. *ayu-* (< **agi-*), Dongxiang *ayi-*, Dagur *ai-* 'to fear, dread'

　　　　Ma.　　*gele-* (< **ege+le-*) 'to fear', WMo *gelme-* 'to be frightened'

The English word *awe* is of Scandinavian origin: OE *ege* was pronounced ['εjε], the first vowel having been changed by front-mutation and the *g* palatalized to [j] by the following vowel (see Barber 1993:130). The palatal consonant *y* [j] in WMo *ayu-* developed from the early velar stop **g*. This change can be evidenced by a group of WMo words in which the intervocalic *g* freely alternates with *y*: *ünigen/üniyen* 'cow', *gejige/gejiye* 'plait', *doliga-/doliya-* 'to lick', *aniga-/aniya-* 'to close eyes'. The intervocalic *g* later weakened to [j] in some Mongolian languages and disappeared in the other Mongolian languages. However, Manchu *gele-*, which was borrowed by WMo as *gelme-*, preserves the consonant *g*, while dropping the initial vowel **e*.

(3)　OE.　　*æfter*, ON *aptan* 'behind'

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[3] The following unfamiliar abbreviations are used below: Bao: Baoan, Dag: Dagur, EYu: the Eastern Yugur, Jur: Jurchen, Ma: Manchu, MMo: Middle Mongolian, OT: Old Turkic, ToAB: Tokharian A/B, Uig: Uigur, WMo: Written Mongolian, WYu: the Western Yugur.

OT. *art* 'back, hinder', Salar *ardë* 'behind'. Eyu *ārtë* 'north, back'

As is formulated in my previous papers, a major loan correspondence is that Indo-European obstruents may be rendered as liquids in some Altaic languages in the environment V__C. We will encounter many etymologies affected by this correspondence or change throughout this paper.

(4)   OE.   *æht* 'possessions, property, power'

WMo. *altan*, Monguor *haldan*, Dongxiang *antan* 'gold'

(5)   OE.   *æx/æcs/eax*, Latin *ascia* 'ax'

OT.   *kerki:* 'adze'

MMo. *haluga* (< **halka* < **haska*) 'hammer'

Ma.   *argacan* 'large ax', Evenki *halka-/alka-* 'to strike with a hammer'

Ma.   *folgo/folho* (< **halko*) 'hammer'

OE *æx* is believed to be developed from IE **agwesī*. Significantly, Old Turkic and Middle Mongolian preserve the initial consonant *k* and *h*, respectively, which is not found in the attested and reconstructed IE words. But the Mongolian languages have the words for 'ax' with serious initial erosion, for example: Monguor *sgo*, WMo *süge* (< **asgo*) 'ax'. The doublets *haluka* and *süge* in Mongolian were due to different phonetic changes: the former underwent lambdacism, and the latter dropped the initial vowel *a*.

(6)   ToA.   *āco* 'embryo'

MMo. *acika* 'grandson', WMo *aci*, Dongxiang *hačï* 'grandchild'

Ma.   *aji* 'first-born', *ajige* 'small, little, young'

(7)   OE.   *æcer* 'field', ToA *ekrä*, ToB *aikarya* 'empty, desolate'

WMo. *kegere*, Dagur *hë:r*, EYu *kēre* 'open steppe, wasteland'

It is generally held that OE *æcer* is cognate to OHG *achar*, Old Icelandic *akr*, Gothic *akrs*, from Proto-Germanic **akraz*, and to Latin *ager*, Greek *agrós* -- all in the sense of 'field' or earlier a pasture and originally a hunting ground or wild area, untenanted and open (see Barnhart 1988:9). Given the Mongolian initial *k-* or *h-* we can assume that the Proto-Germanic word had an initial consonant something like **k-* or **h-*.

(8)   OE.   *īren* '(iron) sword'

Dag.   *hir*, EYu *her* 'blade, the edge of a knife'

(9)   OE.   *ides* 'woman, wife'

Dag.   *ätïrkan* (< **etes+kan*) 'old woman', Solon *etïrkan* 'wife'

(10)   OE.   *yldan* 'to delay'

MMo. *jilda* 'late'

Jur.   *yandihun, yandiha* (< **üldan*) 'evening, late', Dagur *önji* 'late'

(11)   OE.   *gieldan* 'to pay, render'

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Dag. *yold-* 'to lend'. Uigur *yandur-* 'to return'

(12) OE. *geard* 'yard, enclosure'

Dag. *gǎd* 'yard', WMo *gadana* 'outside'

(13) OE. *haga* 'enclosure, curtilage'

WMo. *kaga-* 'to close', *kagalgan* 'gate', Dagur *hǎ-* 'to block up, enclose'

OT. *kapïǧ* 'door, gate'

(14) OE. *hǎr* 'hoary, grey-haired, old'

OT. *karï:* 'old (normally only for human beings and animals)'

(15) OE. *hæsp, hæpse* 'hasp, fastening', OHG *haspa*

Dag. *halba-* 'to weave, plait', *halba* 'plait, braid'

Ma. *halbaha* 'a small knob on a helmet'

(16) OE. *hōc* 'hook, angle'

Dag. *goko* 'hook', *goklo-* 'to hook'

Ma. *gohon* 'hook', *goholo-* 'to hook'

(17) OE. *henn* 'hen'

Dag. *ënën/ëinën* (< **henen*) 'hen'

(18) OE. *hof* 'enclosure, building; temple, sanctuary'

Dag. *obo* (< **hobo*), EYu *owō*, WMo *obugan* 'round mound, kurgan'

Jur. *bo* (< **obo*) 'house', Manchu *muhun* (< **obuhun*) 'a mound on which funerary offerings to the nobility were made in ancient times'

Traditionally, the Dagurs hold a worship ceremony for Heaven on a natural round mound (*obo*) or on a hilltop by building stone or earthen platforms on it as a sacrificial altar. In history every Dagur clan had its own *obo*, and all the male adult members of the clan were obliged to attend the *obo* sacrificial offerings. Now in some Dagur communities there are annual areal *obo* gathering characterized by ethnic sports (the so-said *nǎdam*, WMo *nagadum* < OE *lǎcan* 'to play') and art performances.

(19) Lat. *harmonia* 'harmony', Grk *harmos* 'a fitting'

EYu. *hamës* (< **harmus*) 'rest', Monguor *hamburǎ-* (< **harmu-*) 'to rest', WMo *amur* 'peace'

Ma. *amga-* 'to sleep'

(20) OE. *here* 'troop, army', *heretoga* 'commander'

MMo. *ere* 'army', Dagur *ër* 'a male adult, husband, true man'

Jur. *ere* 'patriarch', Manchu *erke* 'powerful'

OT. *er* 'a human male, fighting man, husband'

(21) OE. *hyldu* 'loyalty, reverence'

WMo. *kündüle-* (< **küldü-*) 'to show respect'

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      Ma.   *kundu* 'respect, honor'

(22)   OE.   *holm* 'sea, water', ON *holmr* 'island'

      Hexi. *humpan* (< **holban*; *hongfan* in Chinese transcriptions) 'river'

      Dag.   *humpa-* 'to bathe in a river, swim', WMo *ombo-* 'to swim'

      Jur.   *humpa* 'paddy, rice'. Manchu *elbiše-* 'to bathe in a river'

It can be assumed that Jurchen *humpa* originally meant 'water, river' and then was taken to denote 'watered rice field'. The Dagur verb *humpa-* probably derived from a noun meaning 'water, river'. This kind of semantic change is not difficult to understand. Incidently, we may be tempted to speculate whether the river names *Humber* (OE *Humbre*) and *Elbe* have any connection with Jurchen *humpa* and Manchu *elbiše-* respectively.

(23)   OE.   *hulc* 'ship', *sulh* 'plow'

      Dag.   *hulg* 'plow', *hulgdë-* 'to plow'. WMo *kölgen* 'means of transport'

OE *hulc* is believed to be ultimately from Grk *holkás* 'towed vessel' (IE **solkos* 'a pull, something dragged' < IE base **selk-/solk-* 'to pull'). The IE base **selk-* developed into Grk *hēlkein* 'to pull' and OE *sulh* 'plow'. In Wang (1992b:87) I compared MMo *onggaca* (< **olgaca*) 'water trough, boat' with ToA *olyik* (< **holk*) 'boat'. Now I would like to connect these words with those in (23).

(24)   OE.   *holt* 'wood, forest'

      Ma.   *holdon* 'Siberian cedar', Jurchen *hondo*, Dagur *koldon* 'pine'

(25)   ToB. *korp-*, ToAB *kārp-* 'to make one's way towards, go', ToA *korpā* 'to, towards (a place)'. OE *hweorfan* 'to turn, go', *hwearf* 'exchange'

      MMo. *hurba-*, Dagur *hurb-* 'to turn over, roll', Manchu *kurbu-* 'to turn around'

      Hexi. *hurbas-* 'to trade'

Van Windekens (1941:43) compared the Tokharian words with OE *hweorfan*. In Inner Asian history trade largely depended on transcontinental caravan merchants. Presumably for this reason Hexi *hurbas-* means 'to trade'. Also, the following words may be connected with those in (25): Persian *kārwān* 'caravan', Tatar *harba/arba* 'big chariot', *karwan* 'caravan'.

(26)   OE.   *hæs* 'behest, command'

      Ma.   *hese*, Dagur *kës* 'imperial order, edict; divine decree'

(27)   OE.   *hege* 'fence, enclosure, hedge'

      Ma.   *hecen* 'city, city wall'. Dagur *këjin* 'wall', Kitan *heces* 'a state'

      WMo. *kerem* (< **kesme*) 'wall', Manchu *keremu* 'rampart'

      Dag.   *kërjë*, Solon *kërjë* 'vegetable garden'

(28)   OE.   *hyse* 'warrior, youth'

      OT.   *kü:ç* 'strength'

WMo. *kücün*, EYu *kujën* 'power, strength'

Ma.   *hūsun* 'strength, power, worker'

In discussing early Germanic society, Barber (1993:82) points out that the Germans disliked peace, for it was only in war that renown and booty could be won; in peacetime, the warriors idled about at home, eating, drinking, and gambling, and leaving the work of the house and of the fields to women, weaklings, and slaves. During the Liao Dynasty (916-1125) in China the Kitan rulers set up an organization called *hüse ordu*. As the Kitan word *hüse* means 'power' and *ordu* means 'palace' (cf. WMo *ordu* 'palace'), the organization appears to be understood as 'the palace of warriors'. At that time the Kitan worriors were held in high prestige. One wonders whether the Kitan tradition has something to do with that of Germanic.

(29)   Grk.   *hydōr*, OE *wæter*, German *wasser* 'water'

WMo. *kudug*, MMo *kudus/hudu*, Dagur *kōdir* 'a well'

Ma.   *hūcin* 'a well', Jurchen *huti* 'a well', *hoto'on* 'pond'

Uig.   *kuduk* 'a well', Hexi *kudu* 'lake'

(30)   OE.   *hȳd* 'hide, skin', Grk *kútos* 'skin, hide'

Dag.   *hudus*, WMo *ödün* 'feather', MMo *yüdü* 'plume'

In addition, there are two more layers of borrowings in Mongolian languages, and both have reasonable semantic connections with OE *hȳd*. First, in MMo documents we encounter the word *huduci/hudulci* 'tanner', which apparently formed from *hudu/hudul* 'skin, hide' and the suffix *-ci* denoting a person having to do with, especially as an occupation or profession. In this regard, the other MMo word *arasuci* 'tanner' (*arasu* 'skin, hide, leather') lends clear support for our comparison. Second, the ancient Mongols made boots from raw hides or tanned hides. So the word for 'hide' extended to denote 'boot': MMo *hudusun/utusu* 'boot', *gutusu* 'boot maker, cobbler', EYu *Gudusun* and WMo *gutul* 'boot'. In ancient times animals' skins and hides were also used for clothing. OE *hȳd* also entered Manchu as *etuku* (< **hetuku*) 'clothing, garment' and *etu-* 'to put on (clothing), wear', Old Uigur as *yutu* 'boot', and Tokharian B *yetse* and A *yats* 'hide'.

(31)   OE.   *hām* 'home; country'

Bao.   *hamunuŋ* 'a married woman's parents' home', WMo *aman* (< **haman*) 'family, household'. Jurchen *fama'a* 'state, country'

(32)   ME.   *cutten*, *kitten* (possibly borrowed from a Scandinavian source) 'to cut', Swedish dialect *kuta* 'to cut', *kuta* 'knife', Icelandic *kuti* 'knife'

WMo. *kidu-* 'to cut', WMo *kituga*, Dongxiang *qudoγo* 'knife'

(33)   ToB.   *kuñcit* 'sesame'. OE *hænep*, Grk *kannabis* 'hemp'

WMo. *künjid* 'sesame'. MMo *genjir* 'hemp'. WMo *ganjuga* 'a pair of thongs attached to the saddle'

OT.   *kendir* 'hemp'. Salar *ɢamju* 'whip'

EYu. *kenjer*, Baoan *këncir* 'hemp'

Ma.   *hūnta* 'hemp'

It has been noted that OT *kendir* was etymologically connected with German *Hanf* and English *hemp*. Clauson (1972:729) once wondered whether OT *kendir* was borrowed from Tokharian, but did not provide the Tokharian source. Here I have extended the etymology to include ToB *kuñcit* and WMo *künjid*, since hemp and sesame are both herb plants. In ancient nomadic societies fiber of the hemp was used to make ropes and strings to control and fasten horse and cattle. So Salar *ɢamju* and WMo *ganjuga* are added.

WMo *kancu* and Baoan *ɢanjoŋ* 'sleeve' may be related to those in (33). My point is that sleeves (*kancu*) functioned as a *ganjuga* 'a pair of thongs attached to the saddle'. In March and April 1992, Chinese archeologists unearthed twenty-odd remains at Subeshi in Xinjiang, China. Surprisingly, the sleeves of the fur coats worn by the women are about one meter in length, wide at the top and narrow at the bottom. The size of the cuffs is just like a chicken egg. It is suggested that such long sleeves were either merely an ornamental style or used to fasten the upper part of coat near waist in case it became hot.[4] I would like to suggest that the long sleeves were also used to help women to buckle up on the saddles while riding on horses.

(34)   OE.   *gād* 'goad, point, arrow-head', *gādīsen* 'goad'.   ToA *karke* (< **katke*) 'branch'

WMo. *kadagasun*, Dagur *gatës* 'stake (serving as a fence post)', MMo *hatasun*, EYu *ɢadësën* 'nail'

WMo. *kada-* 'to sew (button)', *kadku-* 'to stick in', Dagur *karkw-* (< **kadku-*) 'to stick in, prick', MMo *karkumi*, Dagur *karkumul* 'embroidery'

Ma.   *hadahan* 'nail, peg', *hada-* 'to nail', *karka-* 'to scrape with a wooden stick', *gargan* 'branch'

OT.   *kadu:-* 'to sew or stitch very firmly', Salar *ɢada-* 'to nail'

According to English etymologists, OE *gār* (< Proto-Germanic **ȝaisaz*) and OHG *gēr* 'spear' are allied to OE *gād*. For the word for 'spear' Manchu has *gida* and WMo *jida*. But I am not sure whether these words belong to those in (34). Dagur *had* 'crag' (WMo *kada* 'rock, cliff') and Manchu *hada* 'crag', *hadai* 'plug, wedge' may well be affiliated with those in (34).

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[4] See a news report in *Renmin Ribao: Haiwai Ban* (People's Daily: Overseas Edition), May 13, 1992, section 1.

(35) OE.   *gamol* 'old, aged, ancient'

WMo. *kagucin* (< **kabucin* < **kamu-*) 'old, ancient'

The change from **m* to **b* and then to *g* is made possible because (a) the bilabial nasal stop *m* alternates with the bilabial stop *b* in a couple of WMo words: *nilmusun/nilbusun* 'tear', *molor/bolor* 'crystal', *kamar/kabar* 'nose', and (b) a number of WMo words show a free alternation between *b* and *g* in the intervocalic position: *kebeli/kegeli* 'stomach', *ibegen/igegen* 'protection', and *jiber/jigür* 'wing'. Also, *b* in MMo *gaban/haban* 'wild boar' alternates with *k* in WMo *gakai* 'pig'. A similar change from **m* to **b* and then to *g* took place in the following words: Kitan *nobo* (*nabo* in Chinese) 'camp', WMo *negü-* (< **nebü-* < **nemü-*) 'to be a nomad', Dagur *nëu-* 'to move (house)', and Manchu *nukte-* 'to be a nomad', which were ultimately from Grk *némein* 'to pasture' (English *nomad*).

(36) OE.   *gãst* 'soul, spirit'. IE **gheizd-* 'to be excited'

WMo. *galjigu* (< **gasdi*) 'mad, crazy'

OT.   *kal* 'wild, savage, mad'

(37) Lat: *charta* 'leaf of paper', OE *carte* 'paper for writing on', Grk *khártēs* 'leaf of papyrus, metal plate, written work'

OT.   *kegde* (*?kagda:*), Old Uigur *kegdede* 'paper (linen or wooden tablet)', Kazak *qaɢaz* 'paper'

WMo. *cagasun*, Baoan *gëdëgë* (< **gedge* < *kegde*) 'paper'

Ma.   *hoošan*, Jurchen *hauša* (< **hagusa*) 'paper'

Some etymologists posit that the IE words were from Egyptian. As for OT *kegde*, Clauson (1972:710) argues that it was borrowed from some Iranian (?Sogdian) and cognate to Persian *kãğad/kãğid* 'paper'. In my view, the IE words were from the attested Sanskrit word *kãsṭha* 'piece of wood, board' through rhotacizing the sibilant *ṣ*, which was rendered as *r* in Dagur *kartës* 'board' and as *g* in Old Turkic. Support for my claim comes from the historical fact. Before paper was invented, people used wooden or bamboo slips for writing. In China wooden slips came into being during the Warring States Period and continued down for the following several centuries. Up to now, more than sixty thousand such slips or tablets have been unearthed in China; more than fifty thousands of them were found in Gansu Province alone.[5] At the beginning of this century in the ancient town of Niya, Sir Aurel Stein found many (eighty-five in one room alone) inscribed wooden tablets with Kharoshthi texts and a narrow slip of wood bearing Chinese characters. The tablets were mostly in wedge-shaped pairs, from seven to fifteen inches long, and held together with string. A number of the wooden tablets bore clay seals. Significantly, on cleaning the first of these Stein found the figure of Pallas Athene, with aegis and thunderbolt. Other

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[5] See a news report in *Renmin Ribao: Haiwai Ban*, June 6, 1994, Section 3.

seals also depicted Greek deities, including a standing and a seated Eros, Heracles and another Athene.[6] In a recent joint expedition to Niya, Chinese and Japanese scholars spotted eight Caucasoid remains with dolichocephalic heads, long and large noses, yellow or brown-yellow hair, and they also found thirty wooden tablets with Kharoshthi texts and Greek style engravings.[7] All these findings show that the western part of China was a center for using wooden tablets (which is called *jian* in Chinese, *kæn* in archaic Chinese). It is natural that Altaic and Indo-European would denote such tablets by using the word for 'piece of wood, board'.

(38)　ToB.　*keme-*, ToA *kam* 'tooth', OE *camb* 'comb'

　　　　OT.　*kemür-* 'to gnaw'

　　　　Dag.　*kĕm-* 'to ruminate', Baoan *kamĕl-* 'to bite'

(39)　OE.　*cuð* 'familiar, well-known'

　　　　Ma.　*gucu* 'friend, comrade'

(40)　OE.　*costere* 'spade, shovel'

　　　　Dag.　*kuldur/kĕldur* 'spade, shovel'

For the word for 'spade' WMo has *gürji* and EYu *gurjig*. I am at present not certain whether these words were from *gürdi*, which can be allied to Dagur *kuldur*, or from OT *kürge:k* 'spade'.

(41)　OE.　*cyrtel* 'coat', ON *kyrtill* 'tunic', Latin *curtus* 'short'

　　　　MMo.　*kürtei* 'dragon gown', Dagur *kurt* 'gawn'

(42)　OE.　*cycen/cicen* 'chicken'

　　　　Ma.　*cecike* 'a small bird', Dagur *cicmol* 'bird'

(43)　OE.　*cēace* 'cheek, jaw, jawbone'

　　　　WMo.　*cikin*, Dagur *cik*, EYu *ciǧĕn* 'ear'

　　　　Ma.　*cukcuhun* 'protruding forward'

(44)　OE.　*cwīðan* 'to bewail, lament'

　　　　Dag.　*kisal-* 'to give memorial speech (before the dead)'

(45)　Lat.　*papȳrus*, Grk *pápūros* 'paper-rush', English *paper*

　　　　Dag.　*pabĕn* 'law'

　　　　Ma.　*fafun* 'law, prohibition'

It is held that the Latin and Greek words for 'paper' were probably of Egyptian origin. The reason for including Dagur *pabĕn* and Manchu *fafun* in this etymology is that in

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[6] For a detailed statement of Stein's discovery, see Hopkirk (1980:90-92).

[7] For a detailed statement of the expedition's discovery, see a news report in *Renmin Ribao: Haiwai Ban*, November 18, 1993, Section 3.

history official documents and religious scripts were written or printed on paper, and eventually the paper was taken to mean 'law, decree'.

(46) OE. *bæð* 'bath', IE **bhe-* 'to warm'

WMo. *bucal-*, Dagur *bäcil-* 'to boil'

(47) OE. *bōgian* 'to dwell, take up one's abode'

WMo. *bagu-* 'to get down', Dagur *bō-* 'to get down, stay'

(48) OE. *bucca* 'he-goat, male deer'

WMo. *bugu*, Dagur *bog* 'deer'

Ma. *buka* 'ram', *buhū* 'deer', *bukūn* 'antelope'

In Altaic languages there is another set of words: OT *buka*, WMo *buka*, Monguor *buGa* 'bull'. These words seem to be related to those in (48).

(49) OS. *fāhān*, Gothic *fahan* 'to get'

Ma. *baha-* 'to get'

(50) OE. *feohtan*, ME *fighten*, German *fechten* 'to fight'

Ma. *mekte-* 'to bet, wager', Dagur *mëlj-* (< **mekdi-*) 'to compete'

(51) OE. *fela, feala* 'many'

EYu. *bulan*, WMo *olan* (< **bolan*) 'many'

(52) OE. *fugol* 'bird'

Dag. *cicmol* '(small) bird', *gōṣmol* 'wild swallow (which does not build its nest inside barns, but possibly in the eaves of barns)'

The Dagur morpheme *-mol* is found in the words listed, being an unproductive suffix, has the vowel *o* which can also be pronounced as a long vowel *ō*. I assume that the suffix *-mol* was developed from **mugol* 'bird' through a syllable contraction. Dagur *gōṣmol* is pronounced *gōṣmāl* and *gosĭmal* in some dialects (see Enhe Batu 1983:65 and Ka Ying 1982:106). The variant pronunciations of *-māl* and *-mal* lead one to posit that the Dagur word *jiljma* 'barn swallow' contains the suffix *-ma* (< *-mal*). In addition, Dagur *mië:l-* 'to hover, soar' and Uigur *mikiyan* 'hen' may be allied to those in (52).

(53) OE. *flēogan* 'to fly'

Jur. *file* 'kite', *fologu* 'dragonfly'

EYu. *hunës-* (< **hules*)-, WMo *nis-* (< **hunis-*) 'to fly'

(54) OE. *fot* 'foot'

Ma. *futahi* 'a first-generation bondman'

Dag. *huatig*, WMo *kotug* 'slave'

The semantic shift from 'foot' to 'slave' was quite understandable, since slaves were discriminated simply as subordinate runners doing legwork. Note that OT *kul* 'slave' is cognate to WMo *köl* 'foot'.

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(55) ToAB. *was-/wäs-* 'to dress, clothe', OE *wǣd* 'dress, clothing'

Dag. *warkël* 'clothes, garment'

(56) OE. *wīf* 'woman'

WMo. *beri*, EYu *bīrë*, Baoan *värë/uerë* 'daughter-in-law, bride'

EYu. *pësëγui* (< **besgen*), WMo *bergen*, Baoan *urgan* 'elder brother's wife'

WYu. *iŋge* (< **wirgen*) 'elder brother's wife'. Dagur *iŋkë* (feminine name)

The WMo words *beri* and *bergen* seem to be ultimately originated from one etymology, the former resulting from loss of the final syllable *gen*, which is retained in the latter.

(57) OE. *weg*, Gothic *wigs* 'way, road'. ToA *yme*, ToB *ymīye* 'way, road'

WMo. *mör* 'way, road', Dagur *mur* 'trace, track'

(58) OE. *witan* 'to know'

WMo. *mede-*, Monguor *mude-* 'to know'

(59) OE. *wiht/wuhte* 'creature, being'

Dag. *miard*, Orochon *migdu* 'leopard'

Ma.   *buldu* 'small male pig'

(60) OE. *wēste* 'deserted', *wēsten* 'desert, wasteland'

Dag. *mërdën* 'gulf, bluff', Solon *mëddeŋ* 'bay, gulf', Jurchen *moda* 'river bend'

A gulf area has sandy beaches which are easily understood as a desert. Dagur *mërdën* also serves as a clan name. It has been suggested that the *mërdën* clan used to inhabit a gulf area.

(61) OE. *wīd* 'broad'

WMo. *büdügün*, Dagur *budun* 'wide (in diameter)'

(62) OE. *wudu* 'wood, forest'

WMo. *modun* 'wood, forest', Manchu *moo* 'tree, wood'

(63) OE. *māga* 'descendant, son'

WMo. *baga* 'small, young', *bagacud* 'children'

(64) OE. *mǣrðu* 'glory, fame'

WMo. *mendü* (< **merdü*) 'healthy, whole'

Ma.   *mandu-* 'to mature, grow up'

(65) OE. *mere* 'pool, lake'

WMo. *mören*, Dagur *mur* 'river, stream'

(66) OE. *mīn* 'my, mine'

WMo. *minu*, Dagur *min* 'my, mine'

(67) Lat. *monēta* 'mint, coin'

WYu. *menek*, EYu *meneg* 'money'

(68) MLG. *moneke* 'monkey'

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Dag. *monio*, Manchu *monio/bonio* 'monkey'

WYu. *bejin* (< *benin*), OT *bé:çin* 'monkey'

ToB *peñiyo* and ToA *pañi* 'beauty' may be added to (68). Dagur *monio* also means 'smart, lovely' probably because monkeys can perform some imitative actions.

(69)   OE.   *mᴐ̃t* (*gemᴐ̃t*) 'assembly, council', *mᴐ̃tan* 'may, be allowed to'

           WMo. *bolja-* (< *bot+ja-*) 'to arrange, make appointment'

           Ma.   *boljo-* 'to agree on, fix (a date)', Evenki *boljok* 'market(-place), fair'

(70)   OE.   *miht* 'power, might', *muhton* (third person plural of *magan* 'be able')

           Ma.   *mukden* 'rising, ascent, flourishing', *mukde-* 'to rise, flourish'

           Dag.   *murd-/mugd-* 'to rise, develop'

Interestingly, in 1625 the p+7bitious Jurchens (the Manchus) made the place that is now Shenyang City in northeastern China their new capital city and then in 1634 renamed it Mukden 'the flourishing capital'.

(71)   OE.   *Tῖw* 'Tiu, Mars'

           ToB.   *tumane/tmāne*, ToA *tmāṃ* 'ten thousand'

           OT.   *tümen*, WMo *tümen*, Manchu *tumen* 'ten thousand'

It has been suggested that Altaic *tümen* 'ten thousand' was borrowed from a Proto-Chinese form **tman*, or the like, of *wan* 'ten thousand'. In my view, as a large number Altaic *tümen* emerged after OE *Tῖw*, which is the god of war and the sky in Germanic mythology. A Xiongnu supreme ruler was called *Tümen*, which appeared to be the ruler's title of honor rather than his personal name. *Tümen* also served the name of a place that is located in present-day Inner Mongolia where the Xiongnu existed.

      One of the founding fathers of the Turkic khaganate was called either *Tümen* (*tumen*) in Chinese sources or *Bumïn* in Old Turkic inscriptions. My explanation is that *Tümen* and *Bumïn* were titles of honor. *Tümen* was from the Xiongnu title as suggested by some scholars, and *Bumïn* was from Latin *bonus* 'good, excellent' (French *bon*, Portuguese *bom*), used as 'good' modifying 'khan' or as 'Your/His Excellency'.

(72)   Eng.   *June* 'the sixth month of the year'

           WMo. *jun*, EYu *jun* 'summer'

The summer season is generally regarded as starting with the month of June. For this reason the word *June* entered Mongolian as *jun* 'summer'. However, WMo *jun* is not distributed in all the Mongolian languages. The following Mongolian languages have different words for 'summer': Dagur *najir/näjir*, Monguor *yar*, Dongxiang *qalun ɔ̄a* (*qalun* means 'hot' and *ɔ̄a* 'time'), Baoan *ɡār*. Significantly, MMo documents recorded two words for 'June': one is *juro'an sara* (*juro'an* means 'sixth' and *sara* 'month'), the other is *najir*; also two words for 'summer': one is *jun*, the other is *najir*. As is clear, the present-

day Dagur word *najir* 'summer' once alternatively meant 'June' and 'summer' in MMo. This reinforces our argument for the relationship between June and summer. The etymology of English *June* needs further discussion. It is generally held that the popularity of June as a wedding month and the belief that marriages in that month will be lucky date from ancient days; the Romans dedicated the month to the *Juniores*, or young people (see Radford 1946:125). Room (1991:93) disagrees with this explanation and argues that the name of June is probably from the Roman gens or clan of Junius, to whom it was dedicated. In my opinion, we may be tempted to explore a Mongolian source, since MMo uses the numeral *juro'an* 'six' to denote 'June'. The words for 'six' in some Mongolian languages are as follows: WMo *jirgugan*, Dagur *jirgo*, Baoan *jirɢuŋ*, Monguor *jirɢōn*, Dongxiang *jirɣon*. And the Hexi word for 'six' is *ci*. In Wang (1992a:406) I discussed the etymology of the Mongolian words for 'six' and their connection with Manchu *ninggun* [*niŋgun*] 'six'. Note that the Mongolian trill *r* became the nasal *ŋ* in Manchu. This kind of change often occurs in Altaic languages. Although we cannot trace back exactly when this change took place, we can posit that it must be very old. So it was possible that WMo *jirgugan* once entered some neighboring languages as **juŋ(gun)* and then was borrowed by a European language as *June*. In WMo some numerals may denote livestock such as ox, horse, and camel in order of ages, for instance, *gurban* 'three', *gunan* 'three-year male livestock', *gunjin* 'three-year female livestock'; *dörben* 'four', *dönen* 'four-year male livestock', *dönejin* 'four-year female livestock'. In these instances the initial phonetic string CV*r* in the numerals becomes CV*n* in the livestock names. If this pattern continued, the initial string *jir* of WMo *jirgogan* 'six' would be *jin*. We can hardly rule out the possibility that this pattern existed in ancient times.

(73)   OE.   *niman* 'to take'

        Ma.   *jafa-* (< **jifa-* < **niba-*), Ulcha *japa-* 'to take in the hand, grasp'

(74)   ME.   *nome, nomen* (pp. of *nimen* 'to take', OE *niman* 'to take') 'numb'

        Ma.   *nime-* 'to ache, be ill', *nimeku* 'sickness, weakness'

Presumably, in ancient ideology bodily sickness was considered as being taken by certain natural or supernatural phenomena. Thus the word for 'to take, be taken' might connote some illness and casualty. In Dagur the passive form of the verb *au-* 'to take' is *aurd-*, which often means 'to be sick' such as the phrase *hëin d aurd+sen* 'stroke' (literally 'wind-by-was taken'). Accordingly, OE *niman* 'to take' entered Manchu as *nime-* 'to ache'. Although OE *niman* was not introduced into Mongolian in the sense of 'to take', its derivative *numol* 'holding much, quick at learning; biting' (ME *nimmel* 'nimble') entered Mongolian in two semantic directions. First, the Mongols used OE *numol* to denote some small animal such as the weasel and the suslik because they are agile and sneaky. There

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emerged the following words: MMo *numu/noman* 'mole, weasel', *jumuran* (< **numur*), *jumbur* 'yellow weasel', Dagur *jomur* 'suslik', *jombur* 'cunning, sneaky', and ToA *umpar* (< **numpar*) 'nasty, mean', Baoan *nambar* 'attentive'. The MMo words *jumuran* and *jumbur* were borrowed by Manchu as *jumura* 'suslik', by Solon as *jumbur* 'suslik', and by Hexi as *juba* 'corsac fox'. Note that both ME *nimmel* and MMo *jumbur* have an intrusive bilabial consonant. Second, in history the Mongols extensively used bows as a fast-moving weapon both in battle and hunting. So it is reasonable to assume that MMo *numu* 'bow' and Hexi *numu* 'arrow' were also from OE *numol*. In this way MMo *numu* 'mole' and *numu* 'bow' are intrinsically homophonous.

(75) OE. *norð* (< **noht*), OHG *nord* 'north'

  Jur. *ulti* (< **nulti*) 'north', MMo *ulda* 'front'

  OT. *yultuz* (< **nultuz*), Kazak *juldëz* 'star'

At first there appears to be no etymological connection between the Germanic and Turkic words. But things can come together in simple ways. In early history the Altaic and Indo-European peoples were both heavily engaged in sky-god worship. This worship helped to form substantial lexical strata concerning various astronomical phenomena, and its effect was eminent in the matter of conveying the notion of directions. Just consider how certain directions were denoted in Germanic, Latin, and Tungusic. OE *süð* 'south' and OHG *sund-* 'south' are connected with the word for 'sun' and thus understood as 'sun side'. Latin *septem* 'seven' and *septentriō* 'the seven stars of the Great or Little Bear, the north' share the same root. Clearly, the Latin people used a most conspicuous constellation in the northern sky to form the notion of 'north'. Likewise, Evenki *sëpdëptulë:cë:* 'rainbow' (cf. Latin *septentriō*), *sëpdëptun* 'belt', *sogdonno*, *sëgdënnë* 'back' (cf. ToB *ṣukt* 'seven'[8], ultimately through the early meaning 'north, the seven stars'), Solon *cogdono* 'back' are related to MMo *codgan* (< **cogdan*) 'morning or evening glow', WMo *cogtu* 'brilliant, flaming', and Manchu *cokto* 'arrogant' and coined in the same way as Latin *septentriō* is. So we can assume that the Germanic people could hardly neglect the readily available point--the Big Dipper--to express the concept of 'north'.

Incidentally, it is an open question whether 'seven' or 'the Big Dipper' was the original meaning of Latin *septem*. Having examined the Indo-European set of numbers, Lehmann (1992:305) found that **oinos*, the primary word for 'one' is based on the root **ʔey-* 'this', that for 'two' on the root **dew-* 'distant', that for 'three' on the root **ter* 'beyond'. That is to say, the words are based on pointing to objects, rather than on specific references. And the term for 'five', **penkwe*, has been determined to refer to a

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8 WMo *dologan* 'seven' has an etymological connection with ToB *ṣukt* (see Wang 1992a:406).

total set; that is, in a pointing system, use of the whole hand provided the number. Lehmann further argues that the remaining Indo-European numbers are obscure in origin, and may well have been borrowed. Following Lehmann's argument we should consider the IE word for 'seven' as originating from the total set of the Big Dipper. But we do not know whether it was borrowed from Altaic.

The general view is that OE *norð* was from Proto-Germanic **nurthra-* and IE **ner-teros* 'beneath, below' (Grk *nérteros* 'lower'). But we have sufficient basis for arguing that OE *norð* developed from the early form **nohd* or **noht* 'the Big Dipper, the north' through rhotacism in the V__C environment, and OT *yultuz* primarily meant 'the Big Dipper' and subsequently became a generic term for fixed stars and planets. This etymology needs further treatment. OE *norð* shares the same etymon from which developed OE *lēoht* 'light', *lyft* (< **lyht*) 'air, sky', and modern English *left* (probably before 1200 *lift, luft, leoft*, see Barnhart 1988:586) through a correspondence between *n* and *l* in the initial position. Like OE *norð*, English *left* expresses the notion of a direction. The sky-god rituals under influence of which OE *norð* got its meaning as 'north' from the early form **noht* 'the Big Dipper' applied to the emergence of English *left* from OE *lēoht* 'light', because the ancient people were adept at using one word (or its variants) to refer to a set of astronomical objects and phenomena. As the left side is congruent to the eastern side when one faces south, the word *lēoht* 'light' (possibly 'emerging sunlight') evolved into *left* being accompanied by minor phonetic changes.[9] Some etymologists argue that English *left* originally meant 'weak', because the left hand was weak. However, the meaning 'weak' appears to be secondary, and its occurrence was probably not triggered by weakness of the left hand. Contrariwise, evidence from historical records suggests that in ancient times the eastern side or left side was more honorable and more powerful than the western side or right side, because the former was the direction in which the sun rises and the latter was the direction in which the sun sets. The Xiongnu people seriously worshipped the sun-god and greatly appreciated the eastern side or left side. In the Xiongnu government system, given the leadership of the supreme ruler *chanyu*, the wise king of the left was more prestigious and more powerful than that of the right and was the *chanyu*'s successor designate. Although we have no information on the Xiongnu word for 'left', the words for 'left' in neighboring languages well reflect this practice: ToA *śālyi*, ToB *śwālyai* 'left', Tatar *sol* 'left', MMo *solangga* 'rainbow', and WMo *solugai* 'left', which are connected with Latin *sōl* 'sun' (see Wang 1995).

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[9] At this point we can compare OE *æfter*, ON *aptan* 'behind' and EYu *ārtë* 'north, back' discussed in (3) and Uigur *aptap* 'sunlight' with OE *steorra*, Grk *aster-* 'star'. The ancient people really took advantage of celestial bodies in determining the directions. The nomadic economy in the Eurasian steppes required nomads to identify the directions with reference to certain celestial bodies.

We can assume that ancient people were interested in observing the movement of the sun for practical purposes such as to calculate time and arrange everyday activities. Thus the moving sun evoked different images in the mind of the ancient people. The rising and shining sun was metaphorically described as a bird soaring and spreading its wings on the one hand and the setting sun as a bird drooping its wings on the other hand. As a result, the setting sun in the western side (or the right side) implied having weakening light or hanging down. From this conception emerged the following words which were related to OE *lēoht* and *lyft*: East Frisian *luf* 'weak', Kentish *left* 'inanis', Manchu *lekdehun* 'hanging down and screening something', *lebdehun* 'spineless' (through 'the weakening rays that lack spine'), *lekdere-/lebdere-* 'to droop (of birds' wings)', Ulcha *logdo* 'weak'. Through these words we can see that people were sensitive to the moment of sunset which signaled the arrival of darkness, giving it adverse meanings. If we follow this way of thinking, we will be able to catch certain patterns of semantic change and find many seemingly unrelated words which actually derived from an early etymon. The resultant words may be somewhat different phonetically and semantically such as OE *norð*, *lēoht* and *lyft*. They may otherwise remain unchanged phonetically and different semantically. OE *ālīhtan* is a good case in point. The word has quite different meanings: 'to light up' and 'to get down'. Today many English dictionaries no longer treat the form *alight* as one word. But in history OE *ālīhtan* was used to describe the sun in different motions, because the focus of discourse was on one sun no matter what actions it performed. So the rising and shining sun was *ālīhtan* 'to light up' and the setting sun was *ālīhtan* 'to get down', too. It was possible that while using the verb *ālīhtan* people could make motions with their hands and body to give a desired meaning. Another example is OE *wēstan* 'to ravage', and *wēste* 'deserted' which got their meanings from the OE root word *west* 'west (the direction in which sunset occurs)' and *westan* 'from the west'.

(76) OE. *sagu* 'saw'

Bao. *soɢolëi* 'saw', *sahdër* 'file'

(77) ToA. *sāku* 'hair'

WMo *sakal*, Dagur *sagël* 'beard'

(78) OE. *sūcan* 'to suck'

OT. *suǧ-* 'to draw out', WYu *sëk-* 'to squeeze out'

(79) OE. *sceadu* 'shadow, shade', Grk *skotos* 'darkness'

WMo. *següdur*, Dagur *sëudër* 'shadow, shade'

(80) OE. *sagu* 'saying, report', Old Pahlavi *sakhûn* 'word, discourse, speech'

WMo. *dagun* 'voice, sound, song', Dagur *daud-* 'to read loudly'

(81) OE. *sǣgan* 'to cause to sink'

Dag. *dā-* (< **daga-*) 'to permeate, sink (of liquid)'

(82) OE. *sœlan* 'to tie, bind, fasten'

Da. *dala-* 'to mend (clothes)'

(83) OE. *dæg*, OHG *tag* 'day'

Uig. *sähär* 'morning', Tatar *sähär* 'dawn'

(84) OE. *dēop*, Gothic *diups* 'deep'

Ma. *šumin* 'deep', *šumila-* 'to do in a profound way'

(85) OE. *tægel*, OHG *zagal* 'tail'

WMo. *segül*, Dagur *sëul* 'tail'

(86) OE. *dysig* 'foolish', Danish *döse* 'to doze, mope'

OT. *tü:ş*, Kirgiz *tüs* 'dream'

Ma. *tolgin* (< **tos+gin*) 'dream', Dagur *toŋkoc-* (< **tol+koc-*) 'to doze'

(87) OE. *dūst* 'dust'

OT. *to:z*, WYu *doz* 'dust'

(88) OE. *tōð* 'tooth'

OT. *tï:ş* 'tooth'

(89) OE. *tam, tom* 'tame', *temian* 'to tame', *tamcian* 'to tame, soothe', Persian *dām* 'tame animal'

Dag. *tabël-* 'to lecture, advise, try to reconcile parties to a quarrel', Sibe *tom-* 'to curse, reprove'. Manchu *taman*, Dagur *tamën* 'castrated swine' (through 'tame swine')

WMo. *temeci-* 'to struggle, compete, quarrel', Manchu *temše-* 'to compete, vie'. WMo *temegen*, Manchu *temen*, Jurchen *temuge/te'e*, OT *teve:, täbä*, Uigur *tögä* 'camel' (through 'tame animal')

To tame wild animals, early nomads had to struggle against and compete with them for a long period. For this reason WMo *temeci-* and Manchu *temše-* acquired such meanings from a process of taming. As is known, the camel was the common and effective beast of burden in Inner Asian deserts. The livestock the Xiongnu raised included camels.

In addition, we need to examine OT *tamğa:* 'brand', WMo *tamagan* 'seal', Manchu *temgetu* 'sign, brand'. At first these words seem to have no connection with those in (89). But I suspect that it is not the case. According to Clauson (1972:504), OT *tamğa:* was an old word ending in *-ga:*, originally a 'brand' or mark of ownership placed on horses, cattle, and other livestock. This means that the use of the word was closely associated with livestock. So it is reasonable to posit the original meaning of OT *tamğa:* as 'the tame animal'.

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Both OE and Altaic words have two major different pronunciations of the vowels: *a* and *e*. Note that Manchu *temgetu*, which has the additional suffix *-tu*, was most likely borrowed from WMo *temegen* 'camel' plus the WMo suffix *-tu/-tü*. The latter is used to form nouns designating possession of or containment in something, for example: *morin* 'horse' + *-tu* > *moritu* 'horseman', *jebseg* 'weapon' + *-tü* > *jebsegtü* 'armed' (see Poppe 1954:44).

(90) OE. *dǣl* 'portion, part'

  Ma. *dalji*, Dagur *dalj* 'relation, bearing, connection'

(91) OE. *dynt* 'blow, stroke'

  Dag. *jinc-* (< **dinti-*) 'to beat'

(92) OE. *tunge* 'tongue, speech, language', OHG *zunga* 'tongue', ToA *ṣuñk*, ToB *ṣankw* 'mouth (of animal)'

  MMo. *donggodun* 'thunder', *dongkod-* 'to reproach, make sound', Dagur *toŋk-* 'to dig with the snout'

  Jur. *soŋgi* 'nose', Manchu *songgiha* 'the tip of the nose', *songgo-* 'to weep, cry', Sibe *toŋku-* 'to prick with a needle'

Middle English has the verb *tongen* 'to reproach, scold' in about 1388, earlier *tuingen* in about 1300, and the literal meaning of 'to touch with the tongue' is first recorded in 1687 (see Barnhart 1988:1150). These meanings are to a great extent preserved in MMo *dongkod-* and Dagur *toŋk-*. MMo *donggodun* 'thunder' apparently derived from the verb *dongkod-* 'to make sound'.

In the above discussion I have attempted to identify a great number of etymologies, some of which depend on rhotacism/lambdacism occurring in both Altaic and Indo-European. In what follows I will present some more instances involving rhotacism/lambdacism. Before I proceed I would like to dwell on how rhotacism has been treated in the literature on English studies.

Chadwick (1899:257) lists the change *z* > *r* among the earliest English sound changes. Chadwick argues that the change of *z* > *r* before *d* is common to Old Saxon, Frankish, Upper German and Anglo-Frisian but wanting in Scandinavian (260). Lass and Anderson (1975:102) maintain that 'there is the admittedly rather trivial fact that we will need a rule of rhotacism to turn the [z] resulting from Verner's Law in e.g. *curon* < [kuzun] < [kusun] to [r]'. They also point out:

> The rhotacism, which seems to be common Germanic (and also occurs in other dialects: cf. L. *honos*, *honoris* < **honosis*) turns all [z] < [s] by Verner's Law (and all other [z]) to some kind of [r]. This accounts for

alternations of the *cēosan/coren*, *wæs/wǣron* type. The rhotacism is a lenition; it comes under the heading of what we called 'sonorization', i.e. an increase in the output of periodic acoustic energy. (172)

The current approach to rhotacism in Old English is unsatisfactory and is open to further improvements. I would like to suggest three possibilities for such improvements: (a) rhotacism should be analyzed together with lambdacism since they belong to the same process of sonorization, (b) what is rhotacized or lambdacized in Old English is not only *z* but also some other obstruents, and (c) the environment in which rhotacism/lambdacism takes place includes that of V__C. Given the principle that all component segments of a word seem to have been changing, I have paid intensive attention to the obstruents occurring in the V__C environment (and in some instances in the syllable-final position). After the obstruents in question are rhotacized/lambdacized, the liquids *l* and *r* (together with some existing liquids) are in some instances liable to change to a nasal assimilated by the following homorganic consonants, forming a sequential process of sonorization. Mobilizing these pieces of important information we can go a step further to spot the coexisting words which are rhotacized/lambdacized in both Indo-European and Altaic. What I have provided in my previous papers contributes some specimens from Old English and Tokharian. Here I would like to add some more:

(93) ToB. *pāsk-*, ToA *pās-* 'to guard, protect'

  ME. *parc* 'park', OF *parc*

  OT. *balīk* (< **balk*) 'city', WYu *balëk* 'wall'

  MMo. *balkasun* 'city, wall', *balgaci* 'guard', Monguor *valɢasë* 'wall'

  Ma. *falga* 'clan, office', Evenki *balaɣan* 'house'

Adams (1988:20) derives the Tokharian words from IE **pā-ske/o-* and connects them with Latin *pāscere* 'to feed, nourish, support'. In history, English *park* (OE *pearruc*) meant 'fence by which a space is enclosed, enclosure, enclosed land'. Note that in comparison with ToB, ToA *pās-* lost its final consonant *k*. The original meaning of OT *balīk* might well be 'an enclosed place, wall'. In the ancient Altaic world the so-called city was usually a place or settlement enclosed with wooden fences or clay walls.

(94) ToA. *māski*, ToB *amāskai* 'difficult, hard'

  OE. *mearc* 'mark, line of division, boundary', Latin *margō* 'border, edge'

  Ma. *mangga* (< **marga*) 'difficult, hard; expensive; expert at, capable, a strong man', Dagur *maŋg* 'capable'

  WMo. *malagai* (< **malgai*), Monguor *malɢa/marga* 'hat, cap', Baoan *makë* (< **malka* 'scar', Manchu *mahala* (< **malha*) 'hat'

20

English *mark* is reconstructed as Germanic **marka*. But **marka* should be traced back to the Tokharian words. The semantic difference between Tokharian and English may be reconciled if we consider the meanings of the Manchu and Dagur words that are somewhat relevant to English *marked*. Like English *Mark* as a personal name, Dagur *maŋg* (or *maŋga*) may serve as a masculine name.

WMo *malagai* 'hat' enters this etymology by the following justifications. First, a hat as a covering for the head is on the top place serving as a boundary. Second, more importantly, a hat is not merely a covering, but tends to be a *marker* of the wearer's social status, belief, and gender in ancient societies. In 1969-1970 archeologists from the Kazak Academy of Sciences found the so-called Saka Golden Man during excavations at the Issyk burial site, 45 large kurgans located not far from Alma-Ata. The remains of the corpse and the grave goods, buried in the fifth to fourth century BC, were preserved in full (see Pavlinskaya 1989:26). The Golden Man's headdress is rich in symbolism. Decorations representing winged animals, mountains, birds in trees, and arrows pointing upward are obvious symbols of the heavens. Their concentration on the upper part of the garment is an ancient and widely practiced tradition (see Pavlinskaya 1989:28). Chinese archeologists excavated many mummies in Xinjiang, China in recent years. Among them there was a woman who died at least two thousand and two hundred years ago. The mummy wears a cone-shaped hat having two horn-like projections (something like the letter V). According to Chinese archeologists, the two horns functioned as a marker that the woman had two husbands.[10] Some other archeological discoveries in China show that hat or headgear served as a marker. Two small heads carved from mollusk shell were unearthed in Zhouyuan, Shanxi. What is important for my argument is that (a) one of the figurines bears on the top of his head the clearly incised graph ⊹ which identifies him as a *wu* (which means 'shaman' in modern Chinese) and (b) both headgears are slowly tapering truncated cones with closely spaced vertical striations that hug the forehead, temples, and the skull.[11] Mair (1990:30-31) found a strikingly similar bone carving of a human head with vertical striations that was unearthed at Anyang, Henan, earlier in this century. He argues:

> Among comparable headcoverings (whether of hair or cap) elsewhere in
> Eurasia during the time period in question, one finds similar domed
> striations on the head of an Aramean portrayed in an Urartian relief at

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[10] See *Sing Tao Daily*, May 17. 1994, Section B1.

[11] For a detailed statement, see Victor H. Mair (1990:27, 28-29). I thank Professor Daniel Kane for this reference.

Zincirli in the middle late Hittite style dating to the period 832-810 B.C.E.
(31)

The incised graph ⚔ is in itself an identification marker, and the striations seem to imply the sun shining with boundless radiance. Presumably, the wearer of the hat with striations was in charge of sun-god rituals, astrology, and related matters. If this argument is tenable, we can posit that Evenki *amaskī* 'backward', Manchu *amargi* 'back, north', *amasi* 'backward', and Jurchen *amulgai* 'back' originally meant 'bright planet, the Big Dipper' and were related to ToB *amāskai*. In other words, headdress initially served as an amulet, and the amulet exactly symbolized certain bright planets. To strengthen my argument, I would like to discuss one more example. In (75) I have reconstructed **noht* 'the Big Dipper' for OE *norð* 'north', which widely diffused into Inner Asia. WMo *nogtu* 'halter' and Manchu *longtu* (< **lortu* < **loktu*) 'halter' (possibly through 'head-ornament') are ultimately related to OE *norð* 'north' and *lēoht* 'light'. For ancient nomads livestock were the most valuable resources of life. Nomads cared for their livestock very much and employed every means to protect them from misfortune. Chinese archeologists excavated horse head-ornaments made of bronze, round and domed, with triangular or trapezoid pendants, in Inner Mongolia, which date back to the Warring States Period (475 BC-221 BC). Many unearthed gilded harnesses including halters are decorated with dragons (see Nei Monggol bowuguan 1987:29, 87). I have no doubt that the horse head-ornaments served as amulets, and the round and dome-shaped ornament represented the sun--the light (WMo *nogtu*). This practice was not uncommon among the ancient nomads including Anglo-Saxons. We have strong similar evidence in Old English where *sol* 'a wooden halter or collar for beasts' corresponds to *sōl* 'sun', *sigel/sigle* 'necklace, collar' and *sigel/sigil* 'buckle, brooch, gem' correspond to *sigel* 'sun'. Soviet archeologists have made historical investigations of the horse harnesses and their ornaments in the Eurasian steppes. Kurylëv et al. (1989:137-138) point out that the ornaments, fastened at the places where straps joined, prevented them from breaking and, in addition, served as talismans. Ivanov (1983:10, quoted after Kurylëv et al. 1989:138) holds that gold and bronze--metals that symbolized the sun and heavenly fire--had a similar significance.

In some modern societies, hats still serve as markers. During the Cultural Revolution in China, tall paper hats were used as a sign of humiliation. In Chinese the word *maozi* 'hat' often means 'label, tag, brand'.

(95) ToA. *koṣt-* 'to strike, slay', *kot-* (< *koṣt-*), ToB *kaut-* 'to split, cut'
 OE. *holdian* 'to cut up', *hyldan* 'to flay, skin'
 MMo. *koltaci- (qaltaci-)* 'to break', Dagur *koltlo-* 'to break, shell'

(96) ToA. *koṣ* 'blade; cutting, sharp'

Jur. *hoš* 'knife'

OT. *kiliç* (< *kïsti*) 'sword', *kiftu:* (< *kïstu*), Yakut *kiptïy* 'scissors'

MMo. *hildü/yüldü/uldu*, Monguor *uldu* 'sword'

(97) ToB. *kaut-* 'to split, cut'

MMo. *haici/kaici*, Dagur *kaic* 'scissors'

(98) ToA. *kot-* 'to split, cut'

MMo. *hoktol-* (< *hostol-*), Dongxiang *qudol-/otolu-* 'to cut, break'

There are such phonetic and semantic similarities among ToA *koṣ-*, *kot-* and ToB *kaut-* in (95) that they can be treated as doublets. OE *costere* 'spade' in (40) and ToA *koṣ* 'blade' look and sound somewhat the same. They are most probably cognate to each other, because spade and blade as tools could be denoted by the same word in ancient times.

(99) ToB. *latk-*, ToA *lätk-* 'to cut, chop', ME *laschen* 'to lash'

Bao. *lahgë-* (< *lasge-*) 'to destroy', Dagur *läš-*, *lärk-* (< *lask-*) 'to wield, brandish, cut (grass)'

Ma. *lasha* 'asunder', *lashaja-* 'to break off', *lasihi-* 'to shake, brandish'

(100) ToB. *yekte/yäkte/yakte* (< *hekte*), ToA *mkälto* (< *mkäkte*) 'small, little'

OE. *cild* (< *kihde*) 'child, infant', Gothic *kilþei* 'womb'. OE *cynd* (< *cild*?) 'origin, offspring', German *kind* 'child', ON *kundr* 'son'

WYu. *ahdey* 'small, immature', EYu *hdai* 'small, young (animal)', Xiongnu *kükte* (*gutu* in Chinese transcriptions) 'son, child', Evenki *hutë*, Ulcha *piktë* (< *fikte*) 'child'

OT. *kiçig* (< *kiltig*) 'small'

Tokharian *y* developed from **h*, e.g. ToB *yetse* 'hide' was cognate to OE *hȳd* 'hide'. Regarding the ToA nasal *m* in *mkälto*, I am not certain whether it was prosthetic or original. If the nasal *m* was original, the ToA word might be reconstructed **makälto* (cf. OE *mäga* 'son' in (63)). In Altaic language the liquid *l* and *r* is vulnerable to loss in the environment V__C, for example, OT *ak-* 'to flow' (ToA *äk-* 'to go, travel') developed from **alk-* (cf. WMo *alku-* 'to walk'), and Kitan *guwen* 'jade', Jurchen *guwen* 'jade' from **gurwen* (cf. ToB *kärweñe* 'stone'). So it is reasonable to assume that OT *kiçig* was from the earlier form **kiltig*.

(101) ToAB. *kulyp-* (< *kusp-*) 'to desire, wish'

WMo. *küse-* 'to desire, wish'

Ma. *kidu-* (< *kisu-*) 'to think about, long for'

(102) ToA. *malto* 'first, top', OE *molde* 'earth, world', Latin *mundus* (< *muldus*) 'the universe, world', French *monde* 'world'

23

Uig.   *möldür* (< **mökdü*), WMo *möndür* 'hail'. Xiongnu *mokdun* (a title of high honor preceding *chanyu*)

Ma.   *muduri* (< **muldur*) 'dragon'

The ancient Inner Asian peoples worshipped the sun, the moon, the sky, and the earth. It was a general practice that they often referred natural phenomena to the planets themselves, e.g. ToA *sätkār* (< **säktār*) 'air, atmosphere', Manchu *sukdun*[12] 'air, spirit' were etymologically related to OHG *sund-* (< **suld* < **sukd*) 'south (understood as sun side)' and Latin *septentriō* 'the seven stars of the Great or Little Bear, north-wind'.

As mentioned at the beginning of this paper, Xiongnu *mokdun* was transcribed *maodun* in Chinese. I have restored it as such by making reference to another Xiongnu high title *lokjin* which was transcribed *laoshang* in Chinese. That is, Xiongnu *ok* might well be represented by what is now the Chinese diphthong *ao* in these two words. Regarding the title *lokjin*, consider the following Indo-European and Altaic counterparts: OE *lēoht*, ToAB *luk-* 'to light', MMo *lugui* 'dragon' (Chinese *long* [luŋ] 'dragon'). The Xiongnu title *lokjin* was likely from ToAB *luk-* by adding the suffix *-jin* which later appeared in Chinggis Khan's personal name Temüjin (*temü+jin*). It was a prevalent Inner Asian pattern that the words denoting planets and earth (land) may fall on regnal titles due to the power of the nature (cf. Wang 1995). Leaving aside the minor phonetic modifications, we have the following examples, ToA *lyutār* 'chief' is cognate to ToA *lyutan* 'country, land', ToAB *lānt* 'king' to OE *land* 'land, country'. In Altaic praxis the dragon is a very important deity and is personified as the supreme ruler of a country such as the emperor or king.

(103)   ToA.   *peṣke* 'clarified butter', ToA *malke* (< **meske*) 'milk', ToAB *malk-* 'to milk', OE *meolc*, OS *miluk* 'milk', Grk *amélgein* 'to milk'

Dag.   *mēk-* (< **melk-*) 'to suck the breast', *mēk* 'breast', Xiongnu *melk* (*mili* in Chinese transcriptions) 'junket'

WYu.   *emēγ* 'breast'

OE *meolc* is said to be developed from IE base **melg-* 'to stroke, press out, wipe off'. However, given the sibilant *ṣ* in ToA *peṣke*, the lateral *l* in the words listed developed from the early sibilant **s*.

(104)   ToA.   *ars-* (< **aks-*), ToB *ers-* (< **eks-*) 'to move'

WMo.   *arsalan* (*arsa+lan*), OT *arsla:n* 'lion'

Bao.   *asuŋ* (< **ars-*), Dongxiang *asun*, Monguor *āsē* 'livestock'

OT.   *erseg* 'a woman who runs after men, nymphomania'

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[12] In Wang (1993:246) I argued that *kd* in Manchu *sukdun* was from **dk* through metathesis and that ToA *sätkār* was from *säskä-*.

Clauson (1972:237, 1956:185) derives OT *erseg* from *erse:-* 'to run after men, be a nymphomaniac' and analyzes *erse:-* as being from *er* 'man' and the suffix *-se* used to form desiderative verbs. In my view, the Turkic verb *erse:-* originally meant 'to run, be estrous'. The Dagur verb *gui-* 'to run' also means 'to be estrous (of female animals)'.

In Wang (1992a:398-9, 1993:243-4) I discussed the etymology of ToA *kalk-/kälk-* and its diffusion in Altaic languages, but still have some more to add.

(105) ToA.   *kalk-/kälk-* 'to go', OE *gān, gangan* (< **galgan*) 'to go, walk'

      Bao.   *halɢë-*, Dongxiang *hanku-* (< **halku-*) 'to step'. Baoan *halɢër*, Dongxiang *hanɣa* 'excrement', Dagur *hargal* 'dried dung of ox used as fuel'

      WYu.   *kajigë* (< **kasgë*) 'saliva (< *flowing liquid*'), EYu *kaǰë* 'saliva'

      OT.   *ark* (< **hark-*) 'excrement, (especially) human excrement'

It appears that the process of defecation is perceived in terms of movement. As we will see below, the semantic shift from the verbs denoting movement to the verbs or nouns denoting the process and result of defecation is not uncommon in Altaic languages.

(106) ToAB. *wāsk-* 'to move', ToA *wā-* 'to travel', OE *wealcan* 'to move about', OHG *wankon* (< **walkon*) 'to totter, turn'

      OE.   *mearh*, Irish *marc*, Welsh *march* 'horse'

      OT.   *maŋ-* 'to walk'. Tatar *maŋka* 'nasal mucus', Salar *balɢan* 'phlegm'

      Ma.   *wanggiyana-* (< **walgi-*) 'to have a runny nose', *manggiyan* 'running nose; wicked spirit banished out of body', *manggiyana-* 'to get a runny nose', *maksi-* (< **waski-*) 'to dance'

      Dag.   *maŋgiär-* 'to have a running nose', *märs-* (< Manchu *maksi-*) 'to dance'. WMo *mal* 'livestock, cattle'

English *march* is said to be from Frank **markon* (< **marka* 'mark') having the original sense 'to pace off the boundary'. It appears that *march* is allied to the words in (106).

By using verbs denoting movement of any kind people were able to associate the verbs with animals and fluid. Thus from the verbs often derived nouns expressing someting that may flow or move. For example, ToA *äkär* 'tear, teardrop', OHG *aha* 'river', and Manchu *aga/aha* 'rain', *aha* 'slave' (originally 'goer'), WMo *kura* (< **akura*) 'rain' (cf. Latin *aqua* 'water, rain') were etymologically related to ToAB *äk-* 'to go'; OT *akïn* 'stream, current' derived from OT *ak-* 'to flow (of any kind of liquid from tears to rivers)'; OE *sīgan* 'to fall; to move', ToB *sik-* 'to go, walk', ToA *sik-*, ToB *sek-* 'to inundate, flood' were related to Manchu *sike* 'urine', WMo *sige-* 'to urinate', *sigüder* 'dew', OT *sïgïr* 'a large bovine', WYu *ʂugë* 'goat', and Kazak *sekir-* 'to leap, jump'. ToAB *kätk-* 'to move' was related to Tatar *käjä* 'goat' and OE *gāt* 'goat'. In these instances it is pointless to say that OT *sïgïr* 'a large bovine' is from Manchu *sike* 'urine'

and vice versa. Such words radiated from an early common center-verb denoting movement.

ToB *mask-/myāsk-* 'to change, exchange' is also allied to ToAB *wäsk-* 'to move' in the sense that 'to change' developed from 'to turn' and 'to exchange' was affiliated with 'to trade by travel'. So was OE *mangere* (< **margere*) 'trader, merchant'. Some more etymologies concerning the diffusion of ToAB *wäsk-* in Altaic are given in Wang (1992b:80-81).

Much care has been taken with regard to metathesis, a phenomenon which we encounter in Old English such as in *āscian/ācsian* 'to ask'. In Old English and Tokharian a number of words were successively affected by metathesis and rhotacism/lambdacism. To disclose these changes, we need to observe the semantic modifications in the words concerned. For example:

(107) ToAB. *yask-*, ToB *yak-* 'to ask (for), beg for' (probably through 'to pray'). ToB *yase* (< *yask-*) 'respect, fear', ToB *yarke* (< *yask-*), ToA *yärk* 'veneration', ToA *yärk-* 'to honor'. ToAB *yärs-* (< **yäks-* < *yask-*) 'to honor'

OE. *āscian* (< **hask-*) 'to ask' (probably through 'to pray, sanctify'), *hālgian* (< **hask-*) 'to sanctify, make holy'

MMo. *hasaku-* (< **hask-*), Dagur *haso-* 'to ask'

Ma. *hargašan* 'the court' (originally used as something like 'His/Her Holiness')

OT. *yaxsï:* (< **yasxï*) 'good', Dagur *yokcol* 'decency, prospects'

(108) OE. *gōs*, OHG *gans* (< **gars* < **gahs* < **gasha*) 'goose'

Ma. *gasha* 'large bird', Jurchen *gasaha* 'cormorant'

WMo. *galagu* (< **galgun* < **gasga*) 'goose'

WYu. *carya* 'crow', OT *ka:z* 'duck'

English etymologists trace OE *gōs* back to IE **ghans* and connect it with Sanskrit *haṅsás* 'goose, swan'. By comparing Manchu *gasha* and German *Gans* we find the similarity in the initial *ga* and the presence of *s*. The difference lies in the nasal *n* in German. My reconstruction for German *Gans* is based on the probability that some IE nasals occurring in the environment V__C are the result of homorganic assimilation of the liquid *l* and *r*. In (102) I have connected French *monde* to OE *molde*. The rhotacism/lambdacism and homorganic assimilation in question are not available in previous studies. Hopefully, drawing on these changes we may be able to identify more etymologies. As for OT *ka:z*, Clauson (1972:679) argues that the word, being an early loanword from some Indo-European language, probably Tokharian, is generic, particular species being identified by preceding qualifying words. Thus OT *ka:z* is semantically close to Manchu *gasha* 'large bird'.

Indeed, metathesis, rhotacism/lambdacism, and homorganic assimilation of the liquid into a nasal in the environment indicated spread lexically in the early history of Altaic and Germanic. In addition to these remarkable changes, there are a number of loan correspondences between Old English and Altaic though they are irregular and may have counterexamples. They include but are not limited to: (a) some Altaic languages preserve the initial consonant *h-* which disappeared in Old English and vice versa, (b) Altaic *k-* corresponds to OE *h-*, (c) Altaic *d/t* corresponds to OE *s* and vice versa, (d) Altaic *b* or *m* corresponds to OE *f* or *m*, (e) Altaic *c* corresponds to OE *ð*. Morphologically, some Altaic languages add certain suffixes to Old English loanwords, such as *-gen* in WMo *bergen* in (56), *-gün* in WMo *büdügün* in (61), *-hun* in Manchu *yandihun* in (10), *-ha* in Manchu *halbaha* in (15), *-kan* in Dagur *ätirkan* in (9), and *-sun* in MMo *hatasun* in (34).

To sum up, the close contact which lasted for many centuries between Altaic and Indo-European is of primary importance to any student of the languages of the Eurasian steppes. A research strategy which can be followed with a reasonable prospect of success is to scrutinize the basic vocabulary in the Eurasian steppes from commonly used meanings to their extended ones. Paying attention to cultural background, especially nomadism and sky-god cult, is always helpful for linguistic studies.

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