



WHEELS AND CARTS OF THE ANCIENT TURKS IN A LINGUISTIC VIEW

Osman KARATAY*

ABSTRACT

Some vocabulary pointing to geography, technology, culture etc. are usable in defining homelands of peoples, thus of language families and their sub-groups. Recent scholarship has tended to refer words concerning wheel and cart, among others, since they are related to some Neolithic technological innovations visible through archaeological surveys, especially in searching for Indo-European homeland and in defining chronologies of early steps. Those studies are within Eurasian context at all. Turks and Turkic belong to the true Eurasian continent, and should not be exempted from such studies. This paper deals with the concerning Turkic vocabulary and its historical comparison with other Eurasian languages and families, and suggests that Turkic words for wheel and cart are as old as the words of other families (mainly Indo-European). Regarding possible loanings of those Turkic words to some other languages, Turkic homeland is set to the west of Central Asia. On the other hand, the author rejects the idea of relating the concerning vocabulary to innovations. Rather, it seems, suitable verbs or adjectives present in languages were applied to new tools and acts. Thus, the concerning vocabulary may exhibit some Nostratic or Eurasiatic characters, which may be misleading in detecting relationships.

Keywords: Homeland, Indo-Europeans, Turks, Neolithic Eurasia, Wheel, Cart.

DİLBİLİMSEL AÇIDAN ESKİ TÜRKLERDE TEKER VE ARABA

ÖZET

Coğrafya, teknoloji ve kültür gibi alanlardaki söz varlığı halkların, dolayısıyla dil aileleri ve alt topluluklarının türeneklerinin belirlenmesinde kullanılmaktadır. Son zamanlarda bilim dünyası özellikle Hint-Avrupa anayurdunu belirlemede ve erken aşamalarını tespit için diğer kavramlar arasında teker ve araba kelimelerine müracaat ediyor, çünkü bunlar kazı sonuçlarında görülen somut Yenitaş çağı buluşlarıyla ilgilidir. Bu çalışmaların tamamı Avrasya kapsamında sürdürülmektedir. Türkler ve Türkçe Avrasya'nın en has kısımlarına aittir ve bu tür çalışmalardan muaf tutulmamalıdır. Bu makale ilgili Türkçe söz varlığı ve bunun diğer Avrasya dilleri ve aileleriyle karşılaştırmasını içermekte ve Türkçedeki teker ve arabayla ilgili kelimelerin en az diğer dillerdeki (başta Hint-Avrupa) kadar eski olduğunu önermektedir. Bu Türkçe kelimelerin başka dillere muhtemel geçişlerini de nazara alarak, Orta Asya'nın batısında bir Türk anayurdu tespit edilmektedir. Öte yandan, yazar ilgili kelimelerin yeniliklerle ortaya çıktığı veya onlara bağlanması gerektiği fikrini reddetmektedir. Olgu daha ziyade dilde mevcut alakadar fiil ve sıfatların yeni araç veya fiillere uyarlandığı şeklinde gözükmektedir. Bu yüzden, ilgili kelimelerin bir kısmı Nostratik veya Avrasyalılık mizaç sergileyebilmekte, bu da dil alakalarını tespit için yardımcı olabilmektedir.

Anahtar Kelimeler: Anayurt, Hint-Avrupalılar, Türkler, Yenitaş Çağı Avrasya, Teker, Araba.

Arařtırma Makalesi

Makale Gönderim Tarihi: 01.11.2019; Yayına Kabul Tarihi: 21.11.2019

* Prof. Dr., Ege University, Institute for the Turkic World Studies, İZMİR;

ORCID: 0000-0002-1566-3283, E-posta: karatay.osman@gmail.com

Recently scholars invented 'wheel' and started to use 'cart' in their homeland studies. D. Anthony being the trailblazer representative of this approach, it contains a very solid logic and seems very productive in working on the Neolithic peoples of the Western Eurasia. Existence of cognate words for them in various Indo-European (IE) languages implies that proto-Indo-European (PIE) was spoken at the time when carts were invented, and separation into sister (proto-) languages was afterwards. Since we know archaeologically about the story of cart, then it is possible to set a chronology. In accordance with it, late PIE was spoken after wheeled vehicles were invented, that is after 4000-3500 BC, and the Anatolian IE languages might have separated before wheels were invented (Anthony 2015: 202).

The method is excellent, but I'd like to express my doubts on whether those words are names of those innovations suggested by its inventor(s), or applications of pre-existing words with close meaning to the new tool. People might have some words for round things even well before production of the first wheel, or some verbs expressing rolling, turning etc. Garrett suggests that a semantic shift from concrete 'wheel' to abstract 'circle, cycle' is plausible but the reverse shift is unusual at best (Garrett 2006: 145). Why? Basic adjectives stem from and signify concrete things and being circular is as concrete as being that thing.

In that context, I'll survey some Turkic words. Turkic has several words seemingly cognate for the meaning we study on. *Çevür-* 'to twist, or turn (something Acc.)', practically synonymous with *evir-* and *tevir-*. *Tevir-* is older than *çevür-* (Clauson 1972: 14, 398, 443). All the three verbs attest in Old Turkic (OT) and are now used in modern Turkic languages. If these are cognates, *evir-* should be related to a third form, since *t-* > *0-* and *ç-* > *0-* or vice versa is not known. **k-* could be a good candidate, for *k-* > *0-* is possible and widespread. Thus we have the plausible **kevür* > *evir*.¹ But there is no way to formulate **kevür* > *tevir* > *çevir* as a parallel development to *k-* > *0-*. Only the transitions **kevür-* > *çevir-* or *tevir* > *çevir* seems possible. Perhaps we should assume two ultimate roots with *k-* and *t-*, both equally being possible proto-form of *ç-*, unless there was not such a development as *evir-* < **kevür-* > *çevir-*. Just as, today the reiterative *evir- çevir-* is used in the meaning 'to manage things, affairs', but *tevir* is put aside, meaning 'to have st. capsized, to knock over'.²

For **kevür*, Turkish has the verb *kıvır-* 'to twist'. It does not occur in Old Turkic (OT) and is not widespread in Turkic languages of today. There recorded OT *kıyık* "crooked, cut on a slang", but from the root *kıy-* (< *kıd-*) 'to cut into pieces' (Clauson 1972: 676). The 'crooked' meaning of the word *kıyık* might have come from another root like **kiv-* 'crook, curl, bend', and this may help Gülensoy fortify his etymology *kıvır* < OT *kiv* 'pull, correct, adjust' (Gülensoy 2007-I: 520). But OT has only the adjective *kıval* 'well-shaped', and there seems no way to reach a verb root **kiv* from that meaning. Though the *ır* part of the word is redolent of the transitive suffix *-ır*, the case is hardly so, and the root form of the verb seems to be *kıvır*. Thus, Turkish might have preserved relic of a proto-form.

Of the *t-* form we have in OT *tegre* 'surroundings', *tegirmi* 'round, circular', *tegrek* 'ring, circle', *teğirmen* 'a rotary mill' etc. with their phonetic variations (the consonants *-v-* and *-g-* are alternates of each other in Turkish) (Clauson 1972: 485-486; Sevortjan 1980:

¹ The same does exist in IE: **kert-*, **kerät-*, **krät-* (extension from **ker-*⁷) 'to turn, roll, wind', **uer-*³: **uer-t-* 'to turn, wind' (Pokorny 2007: 1550, 3352). Cf. in Turkish *köreke*, *öreke*, *örek* etc. 'spindle' (Gülensoy 2007-I: 556).

² Interestingly, the neologies in Turkish for 'evolution' and 'revolution' are respectively *evrim* and *devrim* of the *evir-* and *tevir-* roots.

172-173).³ OT ‘wheel’ does not attest in any text before the 12th century (in contrary to chariot), but today Turkic languages and dialects have their concerning words all derived from the *tevir-* root: Turkish *teker*, Turkmen *tiğir*, Bashgirt *tegermes*, Tatar *tegermeç*, Kazakh *döngelek*, Kirghiz *döngölök* (Ercilasun 1991: 866-867). These are literary forms. Any of them can be found in any local dialect. For instance, in Turkey you may find forms like *tengerlek* associated with the Kazakh and Kirghiz forms.

Of the *ç-* form Turkish, Uzbek and Uighur have *çember* ‘circle, hoop’ and Kazakh *şenber* ‘id.’, but the others have ‘circle’ derived from the *t-* form: Bashgirt *tüngerek*, Tatar *tögerek*, Turkmen *töverek*, Kirghiz *tegerek/tögörök* (Ercilasun 1991: 124-125). Also of the *ç-* we have Turkish *çevre*, Kirghiz *çöyrö*, and Uighur *çöre* ‘surroundings’ (Ercilasun et al 1991: 126-127). The nonsensical dispersion of the latter shows that it was once common in all Turkic languages, but some of them replaced the word with Arabic (*etraf, muhit*), and some others used instead the *t-* form words for ‘surroundings’.

Of the *0-* form, Turkic languages has the popular cognate verb *eğir-* ‘to surround, encircle’, devoted to spinning wool and similar things (Clauson 1972: 113).⁴ OT has the word *evre* ‘again, in return’ of the same origin (Clauson 1972: 13). *Evren* ‘universe’ is to be a revolving dome in ancient Turkic comprehension, thus OT has that word of the same origin. *Evren* became also name of the dragon revolving the universe, and ‘a dome-shaped oven’ was also called so (Clauson 1972: 13). OT *evriliñsiz* “which cannot be turned back (or aside); an epithet applied usually to the believer’s mind” is, too, of this root (Clauson 1972: 15). The word *kirmen* ‘spindle’ is thought to have derived from that verb: *egir-men* > *kirmen* (Gülensoy 2007-I: 321), if not a fossilized word of *k-* origin.

Of the **k-* form Turkic seems to have indirectly related verbs, too. The verb *kur-*: The basic meaning seems to be something like ‘to put (something) in working order’ with particular applications of which the commonest is ‘to string (a bow)’; usually means ‘to erect (a building, tent, etc.)’, ‘to establish (a society etc.)’ (Clauson 1972: 643). Though not recorded so in OT, the meaning ‘managing’ of the reiterative *evir- çevir-* gets closer to the meanings ‘to establish, set up’ (Clauson 1972: 14). Thus, in the proto-language **kur-* might have originally meant ‘twist’. *Kur* ‘belt, girdle’ (Clauson 1972: 642) is certainly a cognate word. *Kar-* ‘to mix’ should also be related to the same group, since mixing is a ‘rotary’ act. That OT verb, however, survived only in Uzbek and Western Turkic (Clauson 1972: 642). The word *küvrüg* ‘drum’ may be related to its pulley, since the expected onomatopoeic morphology for such a tool is extinct from this word. So, neither cognate lexemes of the *k-* form are scanty in Turkic.

How should we interpret this case? Turkic word(s) for ‘wheel’ seem to have derived only from *tevir-*, though there were alternatives. Especially the verb *çevir-* is very suitable to produce a name for round and turning things. There are examples like the mentioned *çember* ‘hoop’, but no ‘wheel’. This may be for Turkic does not like synonyms and this also

³ Starostin et al (2003: 1360), suggest the root **deg-/*dög-/*dog-* ‘round’ for this word (Altaic **tegá* ‘round’), but not even one of the derived words are without -r. Thus, **tVr* seems the best to explain the eventual roots. All of the Mongolian examples under **tegá* are clear loanwords from Turkic. Japanese **tanka* ‘hoop, rim’ and Korean **thi/*thä* ‘reel, spool; to spin, to round’ seem to be related to Turkic *tö(n)-* ‘come back, return’ rather than to this group.

⁴ This may not be certain, if here is not an accidental case. Old (and new) Turkic has the verb *eg-* ‘to bend, bow’ (Clauson 1972: 99). Despite it is a transitive verb, deverbal causative suffix *-ir* can be added to stress the quality of the act. Such an *eğir-*, however, would define not an act of 360 degree (turn, revolve, rotate, spin etc), but making st. curve, thus the adjective *eğri* ‘curve’ was produced from that verb. This semantic way would relax us, if there would not be *iğ* ‘spindle’.



directly shows linguistic unity of the (Common) Turkic realm roughly by the 10th century. Export-words indicate this fact. Mongolian loaned the verbal root as *tögüri-*, *tögüre-* ‘okružat’, obrazovat’ krug’ (Sevortjan 1980: 173), as well as words of the same origin like *tögürig* ‘circle’ and *togurin* ‘surroundings’. Interestingly, there are few phonetic variants of the Mongolian equivalences. This shows that it is a relatively new and unique copy from Turkic.

Starostin et al all differ their reconstructed **debir-* ‘to capsize, subvert’ from **tegre* ‘surroundings’ (Starostin 2003: 1409-1410). Suggested Altaic cognates of the former are one-syllabic and semantically unrelated, while the latter, taken back to Altaic **t’égè(-r)* ‘edge, border’ has nothing to do with this meaning and with the so-called Altaic counterparts. An inter-Altaic survey seems fruitless except for the aforesaid Mongolian copying. Besides, the original meaning has to contain not ‘subverting’, but ‘rolling’, since the cognate word *tür-* ‘to roll’ does exist in Turkic.

There is a group of Altaic words for ‘carriage’: Proto-Mongol **terge* ‘vehicle’, Proto-Tunguz **turki* ‘sleigh’, and Proto-Korean **tǎrkó* ‘light carriage’ (Starostin 2003: 1433). These may contain a metathetic form of the Turkic *tegrek* ‘wheel’, that was loaned in early ages of the linguistic relation and that undergone a slight semantic change, for any Turkic ‘carriage’ of the **t-* form is not known. The very closeness of the three Altaic forms and the lack of verbal roots to produce them should let us to observe a chain of copying in this case. The same may be true for Mongolian *tengelek* ‘axle’, likely a loanword from Turkic **deŋgil* (Starostin et al 2003: 1365) (Cf. Korean **thòŋ* ‘axle’). On the other hand, Japanese has **dār-* ‘twist’ and Korean **tòr-/tùr-* ‘revolve, surround’.⁵ Existence of these verbs does not seem to contribute to our debate and is likely related to a Nostratic level.

Relatives of the Turkic *tevir-* and *tür-* are not the only Japanese and Korean verbs. English words *tour* and *turn* are associated with them. They were taken from French, and there from Latin (Ayto 2005: 513, 520-521). One can find many cognates of them in other Indo-European languages: Armenian *darj* ‘turn, reversal, return’, Osset *t’iur* ‘twiddled, twisted, rotated, revved, revolved’, Old Irish *tarathar*, Welsh etc. *taradr* ‘borer’, Albanian *tjer* ‘spinne’, *drodha* ‘turn round, turn together, twine, spin’, Old High German *drüen* “turn, work a lathe”, and Greek τόπος ‘circle’. Their ultimate proto-form is reconstructed as **tere-*, **trē-*, **ter(e)-d-* ‘to turn, to bore’ (Collected from StarLing database at <http://starling.rinet.ru>). Thus, English today has *tire*.

The most striking counterpart comes from the Semitic languages Arabic and Hebrew: **dVwVr-* and its duplication **dVrdVr-* ‘turn, rotate, round’. So, except for derived words with certain morphology, like the above-mentioned Mongolian words copied from Turkic, it is difficult to speak about loaning of this verbal root that appears simultaneously in Ireland, Japan and Arabia. Almost everybody in the Old World had and has concerning verbs and words likely descending from the same source.

But the Dravidian case might be different. Its equivalences are amazing: Tamil *tikiri* “circle, circular form, wheel, potter’s wheel, the discus weapon, chariot, car”; Kannada *tiguri*, *tigari*, *tiguru* “a wheel, esp. a potter’s wheel”; Tulu *tagori* “potter’s wheel”,⁶ but no verbal roots to derivatize them. The very similarity with the Turkic forms may remind a very late relation, maybe in the Late Medieval, however, we need to explain means of such

⁵ Starostin (2003: 1379-1380) group the two with the Turkic verb *dola-* ‘to wrap round’, whereas Turkic *tevir-* and *tür-* are most convenient to such a relation.

⁶ Taken from Burrow-Emeneau (1984: 278), who does not consider any relation with Turkic. I’m grateful to İbrahim Ergün for taking my attention to this equivalence.

a relation reaching as far as the Tamil region. There is no a moderate way for this relation. Either Medieval or pre-Aryan, since there does not seem a Sanskrit or Persian mediation, as claimed by de la Fuente to exist in many of the Dravidian-Turkic lexical equivalences (Fuente 2012: 66), unless one claim that Avestan *čaxra* or Sanskrit *čakra* ‘wheel’ was loaned and turned to be the concerning Turkic and Dravidian words. A direct contact between Turkic and Dravidian seems perhaps no historical probability and possibility, but meditation through a lost world, that of the Bactria-Margiana culture(s) may be explanatory. In any case, proto-Turkic (PT) speakers then should be somewhere in the west of Asia.

Phonetic diversity and semantic scope of the Turkic words surveyed here shows their existence in PT, while the restricted semantic and phonetic space in Mongolian and Dravidian points to high probability of copying. The Indo-Iranian lexemes are not also far from being problematic. Together with Gk. κύκλος ‘circle’, Tochar. A *kukäl*, B *kokale* ‘cart’, and Old English *hwēol* ‘wheel’ (with other Germanic variations), the Avestan and Sanskrit words are to go to **k^wek^wlo-*, **k^wok^wlo-* in PIE (Pokorny 2007: 1801-1802), clearly before the split of Tocharian and likely after the split of the Anatolian (Hittite, Luvi, Pala) languages. However, the making of **k^wek^wlo-* is unique, thought to be derived from the root **k^wel-1*, **k^welə-* “to turn; wheel” by reduplication, zero-grade root and thematic vowel (Anthony vd. 2015: 205).⁷ That is, it was certainly produced by contemporary scholars, but we are not sure whether PIE speakers did the same. There is no problem with the root **k^wel-1*, **k^welə-*. Almost all IE languages today have its heritage in this or that way. English *wheel* and its relatives can be descended directly from that root. PIE has another root **ker* producing verbs and adjectives concerning “to twiddle, twist, rotate, revolve” (Pokorny 2007: 2698). For instance, the Latin origin English words *curve* and *car* (Ayto 2005: 93, 166). This PIE **ker* coincides with PT **kevir*. Cf. Hungarian *kör* ‘circle’, *környék* ‘surroundings’, *kerék* ‘wheel’, *kerek* ‘round’. One may add Hu. *kevere-* ‘to mix’ and Tr. *kar-* ‘to mix’ (cf. PIE *kerə-*, *krā-* ‘to mix’) (Pokorny 2007: 1704).⁸

The PIE roots **k^wel-* and **ker* should be cognate,⁹ but IE does not seem to have a root **kek-* to produce Greek *kuklos*; Tochar. *kukäl* or Iranic *čaxra*, except for the aforementioned ‘duplication’ which is reserved to only one case. Maybe the (Pre-Western) Turkic **keger/keg(e)re* ‘wheel’ is expectable as a probable source of Greek, Tochar and Indo-Iranic words before 2300 BC, when Greek and Indo-Aryan was still within the PIE unity. Tochar might have it loaned independently, but not in later times.

This is not a strange case. Indo-Europeans had another word for ‘wheel’: **ret(h)*. It was very popular in all IE languages: Sans. *rātha-*, Iranic *raθa-* ‘cart’, Latin *rota* ‘wheel’, Alb. *rota* ‘wheel’, Ir. *roth* ‘wheel’, Welsh *rhod* ‘wheel’, Old High German *rad* ‘wheel’, Lith. *rātas* ‘wheel, circle’, Ltv. *rats* ‘wheel’ (Pokorny 2007: 2507; Anthony vd. 2015: 203). **ret(h)* is

⁷ Though it is not impossible. Cf. Semitic languages have the forms **dVwVr-* and **dVrdVr-* ‘to turn, rotate, round’ (Taken from the StarLing database). The second verb seems to be a duplication of the former/essential. In the same way, Hebrew *kir’kūr* “circle, circuit, round about way; whirl”, and Arabic *krkr* “to turn the millstone”, of the root **karV* “to twist, turn around, return” (Dolgopolsky 2008: 870).

⁸ This root also seems to be Nostratic. Cf. above **karV* “to twist, turn around, return”.

⁹ According to the StarLing database, PIE **k^wel-*, Altaic **k’ulo*, Uralic **kulke* and Chukchee-Kamchatkan **kəvlə-* are cognates, together with the Kartvelian **kwer-*. I’d remind here existence of the Arabic word *ḥVwVr* ‘to return’. Although PT form **kul* is suggested to mean ‘to roll, fall; round’ in Starostin et al (2003: 850), the given Turkic lexemes mean ‘to fall, drop, collapse, etc.’, and occur only in Central Asia, but not in Siberia, in the Oghuz group and in mid-Volga (Tatar and Chuvash). I do not object to such an expected word in PT, but take attentions to the current dispersion and meanings of the cognate words. Indeed there is only one word, *kola-*, used in the entire Central Asia.



more widespread and seems to be the essential word for ‘wheel’ when it was first invented and denominated, and **k^wek^wlo* is likely a copying from the Proto-Turks. This is not to say one of them learned about wheel from another. It might have been invented in many places independent of each other, and even the first speakers on the Earth should have given a name for round things, by transferring it later to ‘wheel’ and thereafter to ‘cart’.

Interestingly, Turkic languages lack lexeme for ‘cart’ of the before-mentioned productive roots. The common word today among the Turks, including the controversial Chuvash, is *araba*. Its etymology has been debated much, mostly to tie to an Arabic root. Its very popularity throughout Eurasia and its existence in the non-Muslim Turks of the far north and in some eastern Finno-Ugric languages (Cheremish, Votyak, Vogul, Ostyak) (Sevortjan 1974: 164-165), also in Russian, contradicts with the fact that the word does not occur before the 13th century. On the other hand, so remote dispersion of an Arabic loanword is interesting, though its absence in OT supports the copying possibility.

Lack of an inherited lexicon in Turkic languages for ‘cart’ is troublesome enough. Of course, they did know and use carts as shown by archaeological excavations and by testimony of external sources. A South Siberian tribal unity of the Turks in early medieval was called Kao-ch’ê (lit. ‘High Carts’) by the Chinese in Chinese. Their Turkic name was transcribed as T’ieh-lê by the same Chinese. Some scholars suggested that this name meant nothing but **tegrek* ‘cart’, being Altaic cognate of the above-mentioned Mong. *terge* (and other counterparts) (Golden 1992: 93-94). This is a nice etymology; Kao-ch’ê might be a translation of the original Turkic name. Some would find support for this idea from the ethnonym Kangli of the late medieval.

For a kind of carrier, the only Old Turkic record is *qaṇa/qaṇlı* ‘wagon, cart, carriage’ (Clauson 1972: 638; *DTS* 418). Some Siberian Turkic languages keep the original meaning, while everywhere else it replaced the aforesaid *araba*. In Turkish, today the word *kağnı* means only ‘tumbrel’. The word firstly occurs in the dictionary of Mahmud of Kashgar (written ca. 1072) as *qaṇlı* ‘a wagon for carrying loads’ (Maḥmud al-Kāšyārī 1984: 343), and in a 13th century document, in the Uyghur or pre-Islamic *Legend of Oğuz* it is written as *qaṇa*. Oğuz is the legendary emperor of the Turkic mythical golden age, and eponymous ancestor of the so-called medieval tribal union. According to the legend, a capable and wise soldier in his army by the name Çosun invented a vehicle to carry the booty. It was a great and good carriage. Others imitated him and made the same thing. But, while going, their carts were clattering like ‘qaṇa qaṇa’; Oğuz liked it, and called that group *Qaṇaluğ* (‘those with *qaṇa*’), from which the ethnonym *Qaṇlı* stems.¹⁰

This onomatopoeic explanation within the text of legend may not be other than a realistic folk-etymology, since there is no a lexical root to produce that word. Although the word is included in the lexical domain of some Siberian Turkic dialects (Koybal, Sagay, Khagas etc.) (Levitskaya 1997: 259), it does not seem any non-Turkic language around copied it. Besides the fact that the Yakut and Chuvash languages, which were split from the sprache of Turkic mass earlier, have no this word, one can posit such a scenario that the word was cogitated at earliest in the mid-Medieval in Central Asia and South Siberia. The Kōk Türks or Eastern Uyghurs had no this word, thus it was not loaned to Mongolian. For the same reasons, the Proto-Hungarians, who separated from Khazaria and who migrated to the west before the birth of *qaṇa*, did not hear about that word (despite the fact that they did not have to copy it; they had their own lexemes for carts).

¹⁰ English version of the Pre-Islamic legend of Oğuz can be read in Danka (2016: 101, 103).



Such a scenario would lead us to nearing the etymology of Clauson, who has an interesting thesis on the root of the word *qaṅlı*. He suggests that name of the Turkic tribe Qaṅlı turned to be name of the vehicle, which was invented by them and which was thereafter known by their name. "It is surely equally possible that the wagon got its name *kaṅlı*, because it was the Kaṅlı tribe that introduced wagons of this kind into the Turkish world." (Clauson 1963: 148). This does not seem unique, for the Nogay Turks called a kind of big chariot as *macar arba*, literally 'Hungarian chariot'. The Nogays, nomadic wanderers of the Black Sea steppes during the Golden Horde, saw and adopted it from the Hungarians. The word passed later to the Kumuk and Kalmuk languages (Levitckaya 1997: 260). Clauson gives other universal examples, too, for transferring ethnic or personal names to devices.

It would be magnificent to know technical features of *qaṅlı* as a kind of wagon, but this would not help us connect the name to the homonymous tribal name, which is never mentioned in sources before the 12th century. There are detailed lists of Turkic peoples and tribes in medieval sources, especially in the compendium of Maḥmud al-Kāšyārī, but nobody knows about such a tribe then. We have *Kaṅg* of the ancient Central Asia, and the dispersed *Qaṅgar* of almost all ages, but the *Qaṅlı* lived in a restricted zone, both in time and land. It seems it was a new formation in the pre-Mongol conquest days. Unless we make sure that the three ethnonyms are related to each other, we cannot attribute the word *qaṅlı* of the 11th century to the *Qaṅlı* tribe, which was formed in the next century.

The tribe Qaṅlı represents indeed crystallization within the Kipchak mass to the north of the Aral Lake. A distinguishing feature of them related to chariots is difficult to consider for geographical reasons that were absent at all, since their land was only an ordinary part of the Great Steppe, and sources does not mention any chariot connection of their name or style. Instead, it is my opinion, the Kipchak leader *Qaṅlı* of the 11th century mentioned by Mahmud of Kashgar as "name of an important man of Qifçak" (Maḥmud al-Kāšyārī 1984: 343) may be the eponymous ancestor of the tribe. It is not a costume of Mahmud to mention names of his contemporaries in his dictionary; this is one of the very rare cases. Of course, name of the man did not mean 'chariot'; his name has potentially several other meanings. The total result we have got now is cancellation of the Clauson theory for the ethnonym, but continuing on the way for linguistic chronology.

I'd suggest such a retrospective chronology: The word *araba* 'chariot' entered Turkic languages in the late medieval and became much popular both in Central and Western Eurasia, by being copied by almost all Turkic and many non-Turkic languages. Seemingly, it had replaced the word *qaṅa/qaṅlı*. The latter was likely an onomatopoeic neologism in medieval Central Asia, and did not pass to Mongolian or other languages around. Perhaps the term *qaṅa/qaṅlı* was produced to describe 'a kind of' carrier, as implied by the earliest records, and not to replace the previous general term for carts, which does not attest in any Turkic or non-Turkic source. Taking into account the semantic parallels in other languages and early copying by some neighbors, we may conclude that the general term for carts was something with **teger(V)* appearance, from the expected verbal root. It would not be much fruitful to debate on precedence of either **tegir-* or **tevir-* forms, since it does not matter much in Turkic. What is clear is that all the names and adjectives are of the *-g-* form. If there is a relationship on the Nostratic level, **tevir-* would certainly be the older form. This, however, would not help set a chronology. Interestingly, look-alikes in other languages are also with *-g-* form: Mong. *tögürig* 'circle', Tamil *tikiri* 'circle, wheel', Avestan *čaxra*, Sanskrit *čakra* 'wheel', etc. These languages belong to groups totally independent of each other, both genetically and geographically. If the resemblance is not



accidental, then there should be a bounding and common source for them. Thanks to abundance of look-alike verbal roots and their derivations Turkic is a good candidate to be the source. If so, the Dravid and Arya connections point to existence of **teger(V)* ‘wheel’ in Turkic at least ca. 2000 BC.

On the other hand, formation of the PIE **k^wek^wlo-* is skeptical, if it is not a cognate of **h₂eks-* ‘axle’. Considering the Greco-Aryan unity or closeness within the PIE family (Anthony & Ringe 2015: 207), positions of the concerning ‘cognates’ can be easily deduced. Maybe, the Old English *hwēol* and Old Norse *hvél* ‘wheel’ should be related not to **k^wek^wlo-*, but directly to the verbal root **k^wel-*. Then, only the Greco-Aryan and Tochar groups have the wheel and it is a very regular case in terms of relations. Considering the very time span between them, the very closeness of the Greek and Tochar forms do not need to mean a legacy of shared ancestors. Otherwise, we would expect a more ‘irregular’ dispersion of the word in all IE languages, except for the Anatolian group. Proto-Greek and Proto-Tochar might have copied the word separately and in distinct areas from the same source. Equally with this scenario, a local contact first with the peripheral ‘centum’ dialect Tochar, located in the east of the home, and then with the inner and closer regions where the near-future Greco-Aryans used to live is also a plausible idea.¹¹ In any case this would happen at last ca. 2300 BC, just on the eve of the split of the Indo-Iranian branch from the rest.¹² Maybe the kurgan-owners invading Eastern Europe between 2400-2200 and expelling the Proto-Greeks from the Black Sea steppes (Gimbutas 1963: 821-824, by transmitting content of P. Bosch-Gimpera’s book) were the ultimate source of the word, which would be something like **keg(e)re* in its simplest pronunciation.

To sum up, human beings from the dawn of their existence should have had words for round things and actions. One-year old babies can differentiate between geometrical shapes; primitive people were also surely capable of doing it. And this has nothing to do with wheel or cart. Thus, presence of a reconstructed root for wheel or cart does not necessarily indicate their presence at that time. Previous words with close meanings might have been applied to the newly invented devices, as is done still especially in the computer sector. Branches of a proto-language might have done it independently of each other. But if there are clear morphological features and phonetic peculiarities, one should pay attention. **t^wor/*t^wur* is a popular verbal root throughout the Nostratic region, but the development to **t(V)v(V)r-* > **t(V)g(V)r-* seems to have happened in Turkic. Thus, unless otherwise examples are suggested and proved, words of this stock with similar or close shape should be studied in relation to Turkic. The same is true for the parallel **k(V)g(V)r-* root. Existence of Dravidian and Indo-European words for ‘wheel’ of this kind would imply a westerly presence of Proto-Turks. South Urals and the western half of the Kazakh steppe is a good candidate for such a location, from where linguistic contacts both with the Indo-European homeland and lands of the Dravidian speaking peoples were possible.

¹¹ Mallory identifies the “highly mobile Yamnaya groups” with ancestors of Greeks, Armenians, Iranians and Indo-Aryans (1989: 241). I’d read it as intrusion of the Kurgan-makers into the future Greco-Aryan society. In spite of this archaeological and linguistic match of Mallory, the Yamnaya kurgan population of the Early Bronze Age (3rd millennium BC) had a genetic similarity to the members of the Corded Ware culture (Klejn 2018: 195-196, 201; Haak et al 2015: 208) and neither Greeks nor Indo-Iranians had kurgans as far as I know.

¹² It seems there is a consensus on this date (Mallory 1989: 39; Gamkrelidze vd. 1995: 762; Anthony 2007: 51).



BIBLIOGRAPHY

- ANTHONY, D. W. (2007). *The Horse, The Wheel and Language. How Bronz-Age Riders from the Eurasian Steppes Shaped the Modern World*. Princeton: Princeton University Press.
- ANTHONY, D. W. - Don RINGE (2015). "The Indo-European Homeland from Linguistic and Archaeological Perspectives". *Annual Review of Linguistics*. 1: 199-219.
- AYTO, J. (2005). *Word Origins. The Hidden Histories of English Words from A to Z*. 2nd ed., London: A&C Black.
- BURROW, T. – M. B. EMENEAU (1984). *A Dravidian Etymological Dictionary*. 2nd ed. Oxford: Clarendon Press.
- CLAUSON, G. (1963). "The Name Uygur". *Journal of the Royal Asiatic Society*. III/4: 140-149.
- CLAUSON, G. (1972). *An Etymological Dictionary of Pre-Thirteenth Century Turkish*. Oxford: Clarendon Press.
- DANKA, B. (2016). *The Pre-Islamic Oguz-nāmā. A Philological and Linguistic Analysis*. Szeged: Doctoral Dissertation at the University of Szeged.
- DE LA FUENTE, J. A. A. (2012). "Some Thoughts on Dravidian-Turkic-Sanskrit Lexical Comparisons". *Türkbilig*. 24: 41-76.
- DOLGOPOLSKY, A. (2008). *Nostratic Dictionary*. Cambridge: McDonald Institute for Archaeological Research.
- GAMKRELIDZE, T. V. – V. V. IVANOV (1995). *Indo-European and the Indo-Europeans. A Reconstruction and Historical Analysis of a Proto-Language and a Proto-Culture*. (çev. J. Nichols). Berlin – New York: De Gruyter Mouton.
- GARRETT, A. (2006). "Convergence in the Formation of Indo-European Subgroups: Phylogeny and Chronology". *Phylogenetic Methods and the Prehistory of Languages*. (ed. Peter Forster-Colin Renfrew). Cambridge: McDonald Institute for Archaeological Research: 139-151.
- GIMBUTAS, M. (1963). "The Indo-Europeans: Archeological Problems". *American Anthropologist*. LXV/4: 815-836.
- GOLDEN, P. B. (1992). *An Introduction to the History of Turkic Peoples*. Wiesbaden: Harrassowitz.
- GÜLENSOY, T. (2007). *Türkiye Türkçesindeki Türkçe Sözcüklerin Köken Bilgisi Sözlüğü (A-N)*. Ankara: Türk Dil Kurumu.
- HAAK, W. et all (2015). "Massive Migration from the Steppe Was A Source for Indo-European Languages in Europe". *Nature*. 522: 207-211.
- ERCILASUN, A. B. (1991). *Karşılaştırmalı Türk Lehçeleri Sözlüğü*. Ankara: Kültür Bakanlığı Yayınları.
- KLEJN, L. S. (2018). "The Steppe Hypothesis of Indo-European Origins Remains to Be Proven". *Acta Archaeologica*. LXXXVIII/1: 193-204.
- Maḥmud al-Kāšyārī (1984). *Compendium of the Turkic Dialects (Dīvān al-Luyāt at-Turk)*. Part II. (çev. R. Dankoff). Harvard: Harvard University.



- LEVITSKAYA, L. S. vd. (1997). *Etimologičeskij slovar' tjurkskih jazykov (Obštetjurkskie i mežtjurkskie osnovy na bukvu "K" "K")*. Moskva: Jazyki Russkoj Kultury.
- MALLORY, J. P. (1989). *In Search of the Indo-Europeans: Language, Archaeology and Myth*. London: Thames & Hudson.
- POKORNY, J. (2007). *Proto-Indo-European Etymological Dictionary, A Revised Edition of Julius Pokorny's Indogermanisches Etymologisches Wörterbuch* (at www.dnghu.org).
- SEVORTJAN, E. V. (1974). *Etimologičeskij slovar' tjurkskih jazykov (Obštetjurkskie i mežtjurkskie osnovy na glasnye)*. Moskva: Nauka.
- SEVORTJAN, E. V. (1980). *Etimologičeskij slovar' tjurkskih jazykov "V" "D"*. Moskva: Nauka.
- STAROSTIN, S. A. vd. (2003). *An Etymological Dictionary of Altaic Languages*. Leiden: Brill.

Internet Bibliography

StarLing database, <http://starling.rinet.ru> (28.09.2019).

