

Absolute Time Units in Old Turkic Runic Inscriptions

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ABSTRACT

This article is devoted to the study of lexical units expressing absolute time in Old Turkic runic inscriptions. Based on ancient Turkic written monuments, particularly inscriptions, the research analyzes the usage, semantic development, and functional characteristics of time-related lexemes such as *kün*, *tün*, *ay*, *yil*, and *yanı*. The study highlights the polysemantic nature of these units, demonstrating that they simultaneously denote both cosmic entities (sun, moon) and chronological units (day, month). In addition, expressions such as *kün toγuru* and *käčä yaruq* are examined as examples of time representation based on natural astronomical phenomena. The article shows that ancient Turks possessed a well-developed system of time reckoning and recorded events in a precise chronological order using year, month, and day units. It also explores the similarities between Turkic chronological methods and the Chinese timekeeping system, indicating intercultural interactions. The findings contribute to a deeper understanding of the semantic structure of the Old Turkic language, particularly the conceptualization and expression of time.

Keywords: Old Turkic language, absolute time, semantics, chronology, inscriptions.

INTRODUCTION

Old Turkic written monuments provide not only valuable information about historical events and political processes but also shed light on the Turkic peoples' perception of time and space. The inscriptions demonstrate a well-established tradition of presenting events in chronological order by specifying the exact year, month, and day, indicating that the ancient Turks possessed a highly developed system of time reckoning. In particular, chronological references in the inscriptions are expressed through the units of year (according to the twelve-animal calendar), month, and day, and were primarily employed to record the timing of military campaigns and ceremonial events. This practice suggests that accurately associating historical events with specific points in time was of considerable importance in Old Turkic society.

Moreover, the chronological methods employed in Turkic inscriptions display certain similarities with the Chinese

calendrical system. This correspondence reflects the political and cultural interactions between the Turkic peoples and neighboring civilizations, through which traditions of chronological reckoning developed in mutual contact. A notable example is found in the inscription of Qari Chor Tegin, where it is recorded that the funeral ceremony was conducted under the authority of the Tabghach (Chinese) emperor:

"yoγı : t(a)by(a)č q(a)n yoγl(a)dı" — "The funeral ceremony was conducted by the Khan of Tabghach (Tang China)." (QCh 13–14)

The expression t(a)by(a)č q(a)n refers to Emperor Daizong of the Tang dynasty (r. 780–805), who commissioned the prince's monumental mausoleum, prepared its inscription, and organized the funeral ceremony. The date of the ceremony is specified in lines 15–17 of the inscription:

"l(a)γzın yil altınč ayqa yiti yanıqa" — "On the seventh day

of the sixth month of the Year of the Pig." (QCh 15–17)

The Year of the Pig corresponds to 795 CE, when the monument, inscription, and funeral ceremony were completed.

The second part of the inscription further specifies the month during which the burial ceremony took place:

(a)ltinč ayqa. Here, *altı* is the numeral "six"; *-(i)nč* is the ordinal suffix; *ay* means "month"; and *-qa* is the dative case marker, which in this context expresses temporal location ("in the sixth month"). The date of the funeral is subsequently indicated by:

"yiti yañıqa." In this expression, *yiti* means "seven"; *yañı* denotes "day"; while *-qa*, formally the dative suffix, functions as a temporal marker meaning "on the day."

The chronological method employed in the Qari Chor Tegin inscription closely resembles the Chinese calendrical system, and the recorded dates correspond exactly with the Chinese historical chronology. As Cengiz Alyılmaz (2013, p. 51) notes, this correspondence demonstrates that the Turkic tribes possessed an advanced awareness of historical chronology and that Chinese officials were thoroughly familiar with the chronological system used by the Turks.

It is also worth mentioning that Chinese craftsmen and artisans participated in the creation of several monuments erected within the territory of the Turkic Khaganates. For instance, the Tonyukuk inscription records that artisans were dispatched from Tabghach to decorate the memorial stone:

"Tabyač qayanıñ içräki bädizčig it(t)ı" — "The Khagan of Tabghach sent his court engraver." (Tonyukuk, 12)

This evidence indicates that Chinese artisans, envoys, and officials were well acquainted with Turkic funerary traditions, monument construction, ritual customs, and, importantly, Turkic concepts of temporal and spatial measurement.

The lexical units denoting standardized and universally recognized time divisions may be classified into the following micro-groups.

Daily Time Units. *kün* – "day" (MCh Sha 1, 9; J 7; QB I 3; Tar G' 2, 3; Tes Sha 5; Su 4; XT XII 4); *tün* – "night" (MCh

Sha 1; XT XII 4); *yañı(qa)* – "day" (literally "on the day") (MCh Sha 1, 3, 6, 11; Shi 9; G' 1, 2, 4; XT VI 4; XV 2; QCh 17)

The lexeme *kün* exhibits polysemy in Old Turkic, expressing both "sun" and "daytime". This semantic distinction becomes evident in the following passage:

"küm suruyım kün toyuşıqa batisıqa tğdi" — "My fame and glory reached from the sunrise (east) to the sunset (west)." (Su 4–5)

Here, *kün* clearly denotes the sun, since *kün toyuşıq* literally means "the place where the sun rises."

In another passage, however, *kün* refers to the daylight portion of the day:

"bın yilliq tımän künlük bitigimin..." "I had my inscription, intended for a thousand years and ten thousand days, carved upon the stone." (Tar G' 2–3)

Here *künlük* denotes a chronological unit rather than the celestial body.

Monthly and Yearly Time Units: *ay* – month (MCh J 1, 6, 7, 11; Sha 3–9; Tar J 2; XT II 1, etc.); *yıl* – year; *yaş* – age, lifetime

Like *kün*, the lexeme *ay* is also polysemous, denoting both the Moon as a celestial body and the month as a chronological unit.

In the following passage:

"öñrä kün toyuşuqdağı bodun, kisrä ay toyuşuqdağı bodun..." "The peoples living where the sun rises in the east and those where the moon rises in the west—all the peoples of the four directions—serve me." (Tar G' 3–4)

ay clearly refers to the Moon, functioning as a spatial reference parallel to *kün*.

By contrast, in the following example:

"äki ay kütdim... säkizinč ay bir yañıqa..."

"I waited for two months, but they did not come. On the first day of the eighth month I ordered the army to march." (ShU Sha 5)

ay denotes the calendrical month. Thus, the semantic development of ay parallels that of kün: both originally referred to celestial bodies but subsequently acquired abstract chronological meanings. This semantic evolution illustrates that the Old Turkic conception of time was fundamentally grounded in astronomical observation.

Astronomical Time Expressions: kün toγuru – sunrise; dawn; kăčă yaruq – before darkness falls; at dusk

The following passage illustrates these expressions: "bökögükä yätdim. kăčă yaruq batâr äriklä süñüşdim... äki yañıqâ kün toγuru süñüşdim..." "I reached Bökögük. I fought Batar Erkin until dusk and killed him there. The day ended, and the troops assembled again during the night. On the second day, at sunrise, I fought once more. Heaven and Earth granted victory to my servants and my people, and there I slew them." (ShU Sha 1–2)

The expressions kün toγuru and kăčă yaruq function as lexical-semantic units denoting specific times of day. The former consists of kün ("sun, day") and toγuru ("rising"), yielding the meaning "at sunrise," "at dawn." It marks the beginning of military action and serves as a temporal adverbial indicating the precise time of the event.

The latter expression combines kăčă ("evening") and yaruq ("light"), literally meaning "the light of evening," that is, the period immediately before darkness falls. The component yaruq emphasizes the final stage of daylight, indicating that the military engagement continued until sunset.

These expressions demonstrate that Old Turkic did not necessarily rely on precise clock-based measurements of time. Instead, time was conceptualized through observable natural phenomena such as sunrise and the fading of daylight. Consequently, these expressions function not only as temporal indicators but also as stylistic devices that integrate the sequence of events with the natural cycle of the day. Significantly, both expressions are based on the movement of the sun, rather than the moon.

CONCLUSION

The lexical units denoting absolute time in Old Turkic runic inscriptions clearly demonstrate that the ancient Turks possessed a highly developed chronological consciousness. Units such as kün, ay, and yıl functioned not merely as measures of time but also formed a semantic

system closely connected with cosmological conceptions. The precise chronological references found in the inscriptions testify to a well-established tradition of recording historical events systematically and accurately. Furthermore, the frequent use of natural phenomena as temporal reference points reflects the close relationship between the Turkic worldview and the natural environment. Consequently, these lexical units constitute valuable evidence not only for historical linguistics but also for the study of the history, culture, and intellectual traditions of the early Turkic peoples.

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