



Article

Semantic and grammatical connections of the Old Turkic word *ačïγ* with the vocabulary of the Kazakh language

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ABSTRACT

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The article examines the semantic connections of the Old Turkic word *ačïγ*, which is part of the main lexical fund of the language, with the words of the Kazakh language, genealogically ascending to the Old Turkic word. The lexeme *ačïγ* denotes a basic taste and is derived from the verb *ačï-* following a word-formation pattern with the suffix *-g*, which forms deverbal nouns. The reconstruction of the semantic structure of the polysemous Old Turkic word enables to conclude that it is largely preserved in the modern Turkic languages. This is confirmed by data from Kazakh language dictionaries. The analysis of the semantic structure of the word *ačïγ*, its comparison with the semantics of the verbal root from which it is derived in Old Turkic, as well as with the semantic structure of the lexeme *auçy* in Kazakh, has made it possible to identify a number of trends in the development of lexical and grammatical connections between polysemous words in Old Turkic and Kazakh. These include the expansion of direct meanings, the divergence of lexical-semantic variants of the polysemous Old Turkic word, and the emergence of homonyms in the modern Turkic language, such as Kazakh. A simplification of the semantic structure of lexemes etymologically related to the Old Turkic word is also observed, due to the aforementioned process of divergence in lexical-semantic variants, along with the simultaneous emergence of new meanings. An important role in the semantic development of the word *auçy* in the Kazakh language was played by the syncretism of Old Turkic deverbal words, which led to the differentiation of meanings between adjectives and nouns that were originally part of a single semantic structure of the Old Turkic lexeme. The analysis of the semantic structure of Old Turkic lexemes, as demonstrated by our study, reveals hidden and lost semantic connections in Kazakh words and reconstructs the logic behind the development of their meanings.

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**Көне түркілік асйү сөзінің қазақ тілі
лексикасымен семантикалық-грамматикалық байланыстары**

Аннотация. Мақалада тілдің негізгі лексикалық қорына кіретін көне түркілік асйү сөзінің қазақ тіліндегі осы сөзден генеалогиялық тұрғыда тарайтын сөздермен мағыналық байланыстары қарастырылады. Асйү лексемасы негізгі дәмді білдіреді және -g жұрнағы арқылы етістіктен зат есім тудыратын сөзжасам үлгісі бойынша асй-етістігінен туындаған. Бұл жұрнақ етістіктен зат есім тудыратын сөзжасам үлгісіне жатады. Асйү есім лексемасында негізгі дәм сезімдерінің бірі заттың қасиеті ретінде де, ашыту, ашу үдерісінің нәтижесі ретінде де берілген. Лексеманың екі тікелей мағынасы бар: «қышқыл» және «ашы». Олар «ашыту, ашу нәтижесінде алынған» және «дәм сезу рецепторларында тітіркендіргіш, ашытатын әсер тудыратын» мағыналарымен ұштасқан. Біз жүргізген көп мағыналы көне түркі сөзінің семантикалық құрылымын реконструкциялау қазіргі түркі тілдерінде оның көп жағдайда сақталғаны туралы қорытынды жасауға мүмкіндік береді. Мұны қазақ тілінің сөздіктеріндегі деректер де растайды. Асйү сөзінің семантикалық құрылымын талдау, оны көне түркі тіліндегі сөз тудырушы етістік негізінің семантикасымен, сондай-ақ қазақ тіліндегі ашы лексемасының семантикалық құрылымымен салыстыру ежелгі түркі және қазақ тілдеріндегі көп мағыналы сөздер арасындағы лексика-грамматикалық байланыстардың дамуына тән бірқатар үрдістерді айқындауға мүмкіндік береді. Оларға тура мағыналардың кеңеюі, көп мағыналы көне түркі сөзінің лексика-семантикалық нұсқаларының бір-бірінен алшақтауы және қазіргі түркі тілдерінде, соның ішінде қазақ тілінде омонимдердің пайда болуы жатады. Ашы лексемасының тура мағыналарына «қышқыл», «ашы» дегендерден басқа, көне түркі тілінде қалыптаса бастаған, бірақ қазақ тілінде сөздің семантикалық құрылымына мықтап енген «тұзды» мағынасы да жатады. Сондай-ақ ежелгі түркі сөзімен этимологиялық тұрғыда байланысты лексемалардың семантикалық құрылымының қарапайымдануы байқалады. Сондай-ақ жоғарыда аталған лексико-семантикалық нұсқалардың алшақтауының үдерісі және сонымен қатар жаңа мағыналардың пайда болуы нәтижесінде көне түркі сөзімен этимологиялық тұрғыдан байланысқан лексемалардың семантикалық құрылымының қарапайымдануы байқалады. Асйү лексемасынан мұраға қалған ауыспалы мағыналардан бөлек, қазақ

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тіліндегі ащы сөзінде метонимиялық және метафоралық мағына ауысуы негізінде пайда болған «күйдіргіш, ойып түскіш», «өткір, ащы (дауысқа қатысты)» секілді жаңа мағыналар да байқалады. Қазақ тіліндегі ащы сөзі семантикасының дамуында көне түркі тіліндегі етістіктен жасалған сөздердің синкретті сипаты маңызды рөл атқарды, бұл өз кезегінде көне түркі лексемасының бір семантикалық құрылымына кіретін сын есімдер мен зат есімдердің мағыналарының жіктелуіне алып келді. Жүргізілген зерттеуіміз көрсеткендей, көне түркі лексемаларының семантикалық құрылымын талдау қазақ тіліндегі сөздерде жасырын қалған немесе ұмытылған мағыналық байланыстарды анықтауға мүмкіндік береді және олардың мағыналық дамуының қисынын қайта қалпына келтіреді.

Кілт сөздер: көне түркі сөзі, семантикалық құрылым, *ащы*, ащы, синкреттілік, аффикс, лексика-семантикалық нұсқа, көп мағыналы сөз, қазақ лексикасы, етістіктен туған зат есім.

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Семантико-грамматические связи древнетюркского слова *ащы* с лексикой казахского языка

Аннотация. В статье рассматриваются смысловые связи древнетюркского слова *ащы*, входящего в основной лексический фонд языка, со словами казахского языка, генеалогически восходящими к древнетюркскому слову. Лексема *ащы* обозначает базовый вкус и производна от глагола *ащ-* по словообразовательной модели с аффиксом *-g*, образующим отглагольные имена. В именной лексеме *ащы* – обозначение одного из базовых вкусовых ощущений – представлено как качество предмета и как результат процесса квашения, брожения. Лексема имеет два прямых значения: «кислый» и «горький», которые объединены семами «полученный в результате брожения, квашения» и «ощущение едкости, раздражения», производимого на вкусовые рецепторы. Проведенная нами реконструкция семантической структуры многозначного древнетюркского слова позволяет сделать вывод о том, что она во многом сохраняется в современных тюркских языках. Это подтверждается данными словарей казахского языка. Анализ семантической структуры слова *ащы*, ее сопоставление с семантикой производящей глагольной основы в древнетюркском языке, а также с семантической структурой лексемы *ащы* в казахском языке дали возможность установить ряд тенденций в развитии лексико-грамматических связей между древнетюркским и казахским многозначными словами. К ним относится расширение прямых значений, расхождение лексико-семантических вариантов многозначного древнетюркского слова и появление омонимов в современном

тюркском языке, таком, как казахский язык. К прямым значениям лексемы ащы, кроме «кислый», «горький», относится значение «солёный», которое начало формироваться в древнетюркском языке, но в казахском языке уже прочно вошло в семантическую структуру слова. Также отмечается упрощение семантической структуры лексем, этимологически связанных с древнетюркским словом, за счет названного выше процесса расхождения лексико-семантических вариантов и одновременно появление новых значений. Помимо унаследованных от лексемы ащы переносных значений, в казахском слове ащы отмечены новые значения «едкий, разъедающий», «пронзительный, резкий», которые возникли на основе метонимического и метафорического переноса значений. Важную роль в развитии семантики слова ащы в казахском языке сыграла синкретичность древнетюркских отглагольных слов, которая привела к дифференциации значений имен прилагательных и существительных, входящих в одну семантическую структуру древнетюркской лексемы. Анализ семантической структуры древнетюркских лексем, как показывает проведенное нами исследование, позволяет обнаружить скрытые и утраченные в казахских словах смысловые связи и реконструирует логику развития их значения.

Ключевые слова: древнетюркское слово, семантическая структура, ащы, синкретичность, аффикс, лексико-семантический вариант, многозначное слово, казахская лексика, отглагольное имя.

Introduction

The study of genealogical connections between the vocabulary of the proto-language and the lexical units of modern related languages is one of the most important tasks of linguistics, since it allows us to determine the etymological roots of words, establish trends and patterns in the development of the lexical and grammatical semantics of related languages over a long period of time. In our article, we will try to restore the semantic and grammatical relationships of the Old Turkic lexeme *ačïγ* (lit. 'sour, bitter'), derived from the verb *ačï-* ('to turn sour, to ferment'), with the vocabulary of such a modern Turkic language as Kazakh. The word *Ačïγ* denotes one of the universally recognized basic tastes for humans, their designation is included in the main lexical fund of any language, including Old Turkic and Turkic languages. Accordingly, the lexeme denoting the basic taste is actively used in speech, is a source of generating new meanings and forming related lexical units in the language. All of the above determined the choice of the named lexeme for our research.

M. Erdal emphasizes the fundamental distinguishability of the verb and other classes of lexemes, which is characteristic of the Old Turkic language, but sometimes, in his opinion, a convergence of lexemes occurs: "One might add that convergence may also have had some influence, verbal and nominal stems which happen to be similar in meaning and shape having drawn even closer as they got associated with each other by speakers" (Erdal, 2004: 142). And then he gives an example of such a convergence: "one obvious Old Turkic example is *kari* 'old' and *kari-* 'to get old'" (Erdal, 2004: 142). In our case, the derivation of the lexeme *ačïγ* from the verb *ačï-* is determined unambiguously due to the presence of the nominal adjectival formant *-γ* in it.

To achieve the goal, it is important to establish the semantic structure of the ancient Turkic word, which is polysemantic. The semantic structure of a polysemantic word, as the

researcher believes, is needed for a practical solution to the issue of its semantic volume, its semantic boundaries. Without knowledge of the typical forms of connection between meanings, it is impossible to judge the violation of these connections, it is impossible to correctly determine the boundaries beyond which the meaning becomes a separate word, i.e., a homonym (Gries, 2019: 472).

Materials and research methods

The source material for the study was the “Old Turkic Dictionary” (2016) (hereinafter referred to as OTD), “Kazakh tilinin tusindirme sozdigi” (2014) the explanatory dictionary by B. Kaliyev, “Sozdik” edited by B. Ismagulova, E. Erezhepova, G. Abdizhapbarova (2002) and “Kazakhsha-Oryssha sozdik” (hereinafter referred to as KOS). The interpretations of the lexemes *ačīγ*, *ačī-* and five related lexical units were selected from the Old Turkic Dictionary. Furthermore, the definitions of nine lexemes with the root *aщ-* (ash-) were taken from the Explanatory Dictionary of the Kazakh Language by Kaliyev, the meanings of nine words from the dictionary edited by B. Ismagulova and others and the definitions of two words were taken from “Kazakhsha-Oryssha Sozdik”.

The main research method is the semantic analysis of lexical units, which is partially carried out using the method of component analysis of lexical meaning and the method of modeling the semantic structure of a word. Semantic analysis made it possible to establish the etymological connections of the words *ačīγ*, *ащы* in the lexical system of languages.

As a result, we constructed a model of the semantic structure of ancient Turkic words and compared it with the semantic structure of words in the Kazakh language. The purpose of the comparison is to identify genealogical links between ancient Turkic and Kazakh vocabulary.

Research background

As mentioned above, from the point of view of word formation, the verb *ačī-* is the productive basis for the word *ačīγ*, which is formed using the affix *-γ*. Zh. O. Tektigul writes that “in the ancient Turkic language there were affixes that had two phonetic variants: *-(a) ғ/г* и *-(a)қ/к*. V. Radlov notes that the difference between them was lost in the most ancient era” (Tektigul, 2013). According to G. Ramstedt, the Old Turkic affixes *-g/-q* and, accordingly, the words formed with their help are created according to three main word-formation models: 1) the infinitive type *-γ(ғ)*: *jamaγ* “patch”, *artuγ* “luggage, cart”, *tatyγ* “sweetness”, etc., 2) the model with the affix *-g*, forming verbal adjectives: *jīlīγ / jīli* “warm”, *isig/issi* “hot”, *qatīγ (qatī)* “hard”, *arīγ* “clean”, etc., 3) the model with the affix *-q*, denoting the result of an action: *ačuq* “open”, *tīlāk* “wish”, *toq* “well-fed”, *jūk* “cart”, *joq* “no”, etc. (Ramstedt, 1957: 201). Thus, the affix *-γ(ғ)* belongs to the frequent word-formation formants in the Old Turkic language.

Turkologists have correctly emphasized the syncretic nature of verbal nouns. E.D. Sevortyan believes that verbal nouns are often grammatically syncretic, they simultaneously express word-forming and form-building features (Sevortyan, 1966: 204). Syncretic nature is also manifested in the fact that verbal nouns can have different characteristics as parts of speech. This also concerns the word *ačīγ*, which has the morphological characteristic of both an adjective and a noun in the Old Turkic language. The formation of a noun and an adjective using the same affix, their polysemy, testify to the grammatical syncretic nature of words and the word-forming formant *-γ*.

The nominal lexeme *ačïγ* is semantically related to the verb *ačï-*, the designation of one of the basic taste sensations is presented as a quality of an object and as a result of the process of pickling, fermentation. Zh.O. Tektigul believes that in the formation of such words, word-formation meanings (tool, method, place and features of an object) and grammatical meanings (process, its subject, object and result) are combined (Tektigul, 2013). The interaction of word-formation and grammatical features in different formants differ, but syncretism is characteristic of all of them (Sevortyan, 1966: 204; see also: Kairzhanov et al., 2024). It should be noted that the study of the semantics of the lexeme *ačïγ*, which names the basic taste sensations in the ancient Turkic language, its semantic-grammatical connections with the lexemes of the Kazakh language has not been conducted. In this, as we believe, lies the novelty of this work.

Thus, the article aims to establish the semantic and grammatical connections of the ancient Turkic word *ačïγ* with the vocabulary of the Kazakh language, and on this basis to determine some trends in the development of the meanings of words that make up the main fund of languages, from the ancient Turkic period to the modern state.

Analysis

1. Semantic connections of the adjective *ačïγ* and the verb *ačï-*

Next, we will present the semantic structure of the word *ačïγ* and try to identify its semantic-grammatical connections with the verb *ačï-*. It is important to clarify that the meanings, i.e., lexical-semantic variants (hereinafter LSV) are interconnected in a polysemantic word by metaphorical, metonymic, functional relations and other semantic associations (Gries, 2019: 474). It is these regular semantic relations that ensure the unity of a polysemantic word as a linguistic sign with a single form and a complex of different meanings. They should be reflected in the semantic structure of a polysemantic word, which is modeled on the basis of its lexicographic description.

The Old Turkic polysemantic derivative word *ačïγ* has the following meanings:

“1. sour, bitter: *ačïγ nara* sour pomegranate (*Rach II* 2₁₂); *atasï anasï ačïγ alimla jesä oïly qışï tizi qamar* parents eat sour apples – children’s teeth become sore (*MK* 564₈); *ačïγ sub tēg kör ol bu dünja neñi* things of this world, look, like bitter water (*QBH* 57₂₉);

2. fig. bitter, poor: *ačïγ ünin jylaju* crying with bitter tears (lit. with a voice) (*Suv* 635₂₂); *aγuda ačïyraγ janutï maña* his answer is worse than poison to me (*QBN* 283₃); *köni söz ęirig ol köñülkä ačïγ* direct word harsh, offensive to the heart (*QBN* 16₄₉);

3. in the meaning of noun bitterness, bitter: *saqinčqa sebinč ol ačïγda tatïγ* in sorrow there is joy, in bitterness – sweetness (*QBN* 47₉); *süčüg tattïñ ęrzä ačïγqa anun* tasted the sweet – prepare for the bitter (*IOΓ A* 209₉);

4. hard, severe, unbearable: *qop jerdä ačïγ ęmgäk körtükin* since [they] saw hard suffering everywhere (*Man I* 9₉); <...>

5. angry, cruel: *tügük jüz ačïγ söz kişig tumlitur* a stern face, a harsh word embitters a person (*QBH* 94₃₁);

6. in the meaning of the noun anger, embitterment: *tilin söksä bütmäs ačïγï jilin* when they scold with words, the embitterment [from this] does not go away for years (*QBN* 192₁₀); “*el qan ačïγin t [... mäkin]* alp it is difficult [for you to calm] the king’s anger (*TT I* 83)” (OTD: 4–5).

As we can see, the dictionary entry notes, firstly, the grammatical syncretism of the word, i.e., the attribution of the LSV to different parts of speech – an adjective and a noun,

and secondly, the presence of figurative meanings. The word *ačïγ* has a branched semantic structure, which we have presented in Table 1.

Table 1. Semantic structure of the word *ačïγ*

Lexeme <i>ačïγ</i>	Part of speech	Type of meaning	Meaning	The feature at the basis of meaning transfer
LSV 1	adj.	direct	sour, bitter	—
LSV 2	adj.	metaphor	bitter, poor	Negative taste sensation
LSV 3	noun	direct	bitterness, bitter	—
LSV 4	adj.	metaphor	heavy, difficult, unbearable	Painful effects of taste
LSV 5	adj.	metaphor	angry, cruel	Negative painful consequences of taste and emotions
LSV 6	noun	metaphor	anger, bitterness	Negative nature of taste and emotions

The direct meanings of the adjective *ačïγ* include the meanings “sour”, “bitter”. In one nomination, two meanings are represented, which are designated differentially in other languages. Why are two different taste sensations verbalized in one lexical unit in the Old Turkic language? We believe that in the linguistic consciousness of the speakers of the Old Turkic language, both of these tastes were recognized as obtained in the process of fermentation, pickling. It is the seme “obtained as a result of fermentation, pickling” that unites both tastes. In addition, the unification of the tastes of bitter and sour in one nomination was facilitated by the similarity of the physiological sensation of causticity and irritation produced on the taste buds. Although the dictionary does not indicate the meaning “salty” for the adjective *ačïγ*, some facts indicate that it was used in the specified meaning. For example, this is evidenced by the functioning of ancient Turkic toponyms with the word *ačïγ*: “*Ačïγ Altır Köl* *geogr.* lake Achyg-Altyr-Köl, lake Solyony Altyr (*МЧ В*)” (OTD: 5).

In several dictionaries of the Kazakh language, the adjective *ашы* also has the meaning ‘salty’. This probably speaks of the strength of the associative semantic representations that exist in the ancient Turkic language, their preservation and consolidation in the lexical meaning of words in the modern Turkic language.

A number of derivative words with the same root were formed from the lexeme *ačïγ*, denoting the process of fermentation, oxidation: “*ačïγsï-* to turn sour, to become sour: *üzüm ačïγsidi* the grapes turned sour” (MK 144₃) (OTD: 5); some of them may contain additional semes, for example, the modal seme of desirability: *ačïγsa-* to want something sour: *er ačïγsadi* the man wanted [to eat] something sour (MK 142₁₆; 153₇)” (OTD: 5); seme of presence: *ačïγliγ* having leaven, with leaven: *ačïγliγ küp* a jug with leaven (MK 85₃)” (OTD: 5); seme of objectified taste: *ačïγliq* ‘sour taste’, ‘acid’, ‘bitterness’ (MK 85₃; USp 43₁₅)” (OTD: 5).

Reconstruction of the semantic structure of the verb *ačï-* with the meaning of pickling, fermentation makes it possible to compare it with the semantic structure of the word *ačïγ*, which is derived from it. The meaning of the verb *ačï-*, the totality of its lexical-semantic variants is recorded in the dictionary:

ači- “1. to sour, to ferment: sirkä ačidī vinegar has fermented (MK 555₁₄);

2. to be ill (*about a wound*) (MK 555₁₄), to worsen (*about an illness*): igiñ ačirīñ ačidī your illness has worsened (TT I₄₉);

3. fig. to be sad, to grieve, to mourn: iki neñkä artuq ačir mēn bu kün I am sad today because of two things (QBN 44I₁₁); ačir mēn jigittikkä köjüp tütä lamenting and grieving, I mourn for [my] youth (QBN 404₂)” (OTD: 4).

Mahmud al-Kashgari in his dictionary points to the functioning of the verb ажит- in the Old Turkic language with the meaning “to make sour, to acidify”: “ул сиркә ажиттй “he prepared vinegar (or other), giving it a sour taste” (al-Kashgari, 2005: 224). The scholar also notes another figurative meaning of this verb, “to cause suffering”: “ул аңлик кунлиң ажиттй “he made him suffer” (al-Kashgari, 2005: 224). It echoes the 2nd and 3rd meanings of the verb ači- in the Old Turkic dictionary.

From the verb ači-, using the formants -š- and -t-, verbs with the grammatical meanings of compatibility and incentive are formed:

“ačiš- *com.* from ači- to sour, to ferment: üzüm ačišdī the grapes fermented (MK 1004); sirkä ačišdī the vinegar completely fermented (MK 100₄)” (OTD: 6);

“ačit- *imper.* from ači- 1. to leaven, to ferment: ol sirkä ačittī he set vinegar to ferment (MK 1127); 2. to irritate, to cause a burning sensation: basal jep ačitma ačiz do not cause a burning sensation in the mouth by eating onions (YUG B₁₆₂); 3. to upset, to sadden: sözün söksä jalñuq ačitsa tilin when a person scolds with words and upsets with speech (lit. tongue); ol anıñ köñlin ačittī he made his heart sad; 4. to make a stern face: közi qaşı tügmiş ačitmiş jüzin frowned (lit. eyes and eyebrows), made his face stern (QBH 44₁₀)” (OTD: 6).

“ačit- *imper.* from ači- 1. to leaven, to ferment: ol sirkä ačittī he set vinegar to ferment (MK 1127); 2. to irritate, to cause a burning sensation: basal jep ačitma ačiz do not cause a burning sensation in the mouth by eating onions (YUG B162); 3. to upset, to sadden: sözün söksä jalñuq ačitsa tilin when a person scolds with words and upsets with speech (lit. tongue); ol anıñ köñlin ačittī he made his heart sad; 4. to make a face stern: közi qaşı tügmiş ačitmiş jüzin frowned (lit. eyes and eyebrows), made his face stern (QBH 4410)” (DTS: 6).

In the polysemantic verb ačit-, 2 meanings appear that are absent in the original verb ači-: the meanings “to irritate, to cause burning” and “to make his face stern”. For a more complete reconstruction of the semantic structure of the productive stem, it is necessary to combine the LSV of the single-root related verbs ači- and ačit-. It is presented in Table 2.

Table 2. Semantic structure of verbs ači-, ačit-

Lexeme ačiγ	Part of speech	Type of meaning	Meaning	The feature at the basis of meaning transfer
LSV 1	verb	direct	To go sour, to ferment	—
LSV 2	verb	metaphor	To hurt (about a wound), to worsen (about an illness)	Comparison of painful sensations from taste and pain, disease
LSV 3	verb	metaphor	To be sad, to grieve, to mourn	Comparison of negative painful taste sensation and negative emotions

ačit-	verb			
LSV 4	verb	metonymy [impact – result]	To irritate, to cause burning	A painful sensation resulting from the influence of taste
LSV 5	verb	metaphor	To make your face stern	Complex association of facial expressions with taste sensations

Comparing the LSV *ačiy* and *ači-*, we can conclude that the meanings of the adjective as a derivative word are largely determined by the meanings of the verb as a producing word. The complexity and multifaceted nature of semantic connections often make it difficult to identify the semantic dependence between meanings and establish the semantic derivation of the LSV. Nevertheless, we tried to determine the semantic connections and interdependence of meanings with clarification of the semantic-grammatical relations between them, the results of which are shown in Table 3.

Table 3. The relationship between the meanings of the verb *ači-* and the adjective *ačiy*

<i>ači-</i>	Meaning	Semantic relations	<i>ačiy</i>	Meaning
LSV 1	To go sour, to ferment	Action – result	LSV 1	sour, bitter
LSV 2	To hurt (about a wound), to worsen (about an illness)	Painful physiological sensations – negative emotions	LSV 3, LSV 4	1) angry, cruel; 2) anger, bitterness
LSV 3	To be sad, to grieve, to mourn	Negative emotions – mental signs	LSV 2, LSV 3, LSV 4	1) bitter, poor; 2) bitterness, bitter; 3) heavy, difficult, unbearable;
LSV 4	To irritate, to cause burning	Painful physiological sensations – negative emotions	LSV 5, LSV 6	1) angry, cruel; 2) anger, bitterness
LSV 5	To make your face stern	Negative facial expressions are a reflection of negative emotions	LSV 5, LSV 6	1) angry, cruel; 2) anger, bitterness

In the correlation of semantic structures, two types of semantic interaction between the LSV of the generating and derivative words are noted. Firstly, one LSV of the generating word can be a source of two or three LSV of the derivative word, for example, LSV3 → LSV2 + LSV3 + LSV4; LSV4 → LSV5 + LSV6. Secondly, two of the six LSV of the derivative word can be motivated by two LSV of the generating verb, for example, LSV5 and LSV6 of the lexeme *ačiy* are motivated separately by LSV4 and separately by LSV5 of the verb. It is important to emphasize that the semantic relations between them are different, in the first case it is

“Painful physiological sensations – negative emotions”, in the second case it is “Negative facial expressions – reflection of negative emotions”.

2. Semantics of the adjective *ащы* in the Kazakh language

In the Kazakh language, the word *ащы* was transformed as a result of phonetic processes into the lexeme *ащы*. The reduction of the final consonant – the affix *-γ* is a common feature in many adjectives in the Kazakh language. Experts write about such a phonetic transformation: “The adjectives *ұлы, кіші*, as is known, had the form *улуз//улыз, кічіз* in the language of ancient Turkic written monuments” (Sarbalayev, 2014: 252-253). The word *ащы* has synonyms *ашты* with the mark “dialect”, *аушы* with the mark “colloquial” (KOS). It is polysemantic:

“1) salty: *сорпа тым ащы* → the soup is too salty;

2) bitter: *ащы гүлкекіре* → *bot. bitter knapweed (Centaurea)*; *ащы дәм* → bitterness; *ащы дәрі* → bitter medicine; *ащы жалбыз* → *bot. peppermint (Mentha piperita)*; *ащы жусан* → *bot. полынь (Artemisia)*; *ащы пияз* → *bot. onion (Allium)*;

3) sour: *ащы қымыз* → sour kumys;

4) caustic; corrosive: *ащы иіс мұңк ете қалды* → smelled of a pungent odor; *ащы натр* sodium hydroxide → *chemical. caustic soda*; *ащы түтін* → acrid smoke;

5) a piercing, sharp (*about voice*): *ащы дауыс естілді* → a piercing cry was heard; he has a sharp voice;

6) *fig. caustic; angry*: *ащы тіл* → a sharp tongue; *мұның тілінің ащысын қарай гөр* → look at his sharp tongue;

7) *fig. woeful; bitter; mournful*: *ащы зар* → bitter sobs; great grief; sorrow; *ащы күйік* → severe suffering; “*ащы мен тұщыны татқан білер* → *proverb*, the one who has tried something knows the difference between bitter and bland; without tasting something bitter, you will not know something sweet; *ащы тер* → *idiom* seventh sweat; *ащы тері шықты* → *idiom* worked until the seventh sweat; *ащы шындық* → *idiom* bitter truth” (KOS).

This table shows the semantic structure of the Kazakh word *ащы*.

Table 4. Semantic structure of the adjective *ащы* in the Kazakh language

Lexeme <i>ащы</i>	Part of speech	Type of meaning	Meaning	The feature at the basis of the transfer of meaning
LSV 1	adj.	direct	salty	—
LSV 2	adj.	direct	bitter	—
LSV 3	adj.	direct	sour	—
LSV 4	adj.	metonymy	caustic; corrosive	Taste is the result of its effect on physiological receptors
LSV 5	adj.	metaphor	piercing; sharp	Acoustic association with negative taste impact
LSV 6	adj.	metaphor	acrid; angry	Comparison of mental trait with negative impact of taste

LSV 7	adj.	metaphor	sorrowful; bitter; mournful	Comparison of emotional sign with negative impact of taste
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The direct meanings of the adjective *ащы* include the basic tastes “bitter”, “sour”, “salty”. We have already mentioned above that in the ancient Turkic language the lexeme *ащы* functioned in the meaning of “salty”, but this meaning was not recorded in dictionaries, apparently due to the insufficient fixation and stability of this meaning. The designation of one of the basic tastes “salty” by the adjective *ащы* indicates the fixation of this meaning in the practice of native speakers of the Kazakh language. This is also expressed in the fact that new words with this meaning are formed in the Kazakh language, for example, the compound noun *ащыағар*: “Ащыағар – noun. Суы ащы (тұзды) ішуге жарамайтын бұлақ” [‘A source whose water is bitter (salty) and undrinkable’] (Kaliyev, 2014: 71).

In addition to the figurative meanings inherited from the Old Turkic lexeme *ащы*, the word *ащы* has new LSVs “caustic, corrosive”, “piercing, sharp”, which arose on the basis of metonymic and metaphorical transfer of meanings. It is also interesting to note the emergence of new meanings in the word *ащы* as an independent, separate noun, see, for example: “Ащы – noun Arak” [Bitter – noun Vodka] (Kaliyev, 2014: 71). “When the meaning of a word changes, changes occur in its semantic structure: some components of the meaning are weakened, others, on the contrary, are activated, brought to the forefront. <...> The complexity of the semantic structure of a word determines the possibility of developing new meanings as a result of a change in the structure of the meaning, in the ratio of the semantic components that make it up” (Zhamolova, 2021: 649-650).

The adjective *ащы* is derived from the Kazakh verb *ауу* (with the variant *ашыту*), which genealogically goes back to the Old Turkic verb *ащы*. The Kazakh verb retains its polysemy, a feature inherited from the Old Turkic verb. However, in a number of dictionaries, some lexical and semantic variants of the verbs *ауу/ашыту* are recorded as separate words, for example, *ашыту (ашытұу)* – “to itch on a sore spot; to hurt; to itch” and *ашыту (ашытұу)* – “to cause fermentation; to sour, to ferment, to malt”; *ауу (ашуу)* – “to sour, to ferment; fermentation” and *ауу (ашуу)* – “anger, indignation, malice” (Sozdik, 2002: 45-46).

Results

D.E. Klein and G.L. Murphy believe that the connection between the meanings of a polysemantic word is realized through a single elementary common meaning, which serves to bind the meanings into a single structure and does not allow them to be considered the meanings of separate independent words, i.e., homonyms (Klein and Murphy, 2001: 260). If the connection through a single internal meaning, i.e., through the direct meaning of the lexeme, weakening, then the lexical meanings separate and become the meanings of separate homonymous words. This is exactly the process that occurs in the modern Kazakh language. It is evident that numerous words, which in the ancient Turkic language were lexical-semantic variants, have undergone a process of centuries-old development of the lexical system, resulting in the loss of semantic connections with the direct meaning of words and the subsequent transformation into independent lexemes. This phenomenon has been meticulously documented in the dictionaries of the Kazakh language. Accordingly, a comparison of the semantic structures of the word *ащы* and the verb *ауу/ашыту* appears to be a challenging task.

However, it is necessary to find out which meanings of the ancient Turkic word *ačïγ* have been preserved in the semantic structure of the Kazakh word *ащы* in order to understand the patterns of historical development of lexical semantics. See Table 5.

Table 5. Comparison of the meanings of genealogically related words *ačïγ* и *ащы*

<i>ačïγ</i>	Meaning	<i>ащы</i>	Meaning
	—	LSV 1	salty
LSV 1	sour, bitter	LSV 2	sour
LSV 1	sour, bitter	LSV 3	bitter
LSV 2	bitter, poor	LSV 7	sorrowful; bitter; mournful
LSV 3	bitterness, bitter		—
LSV 4	heavy, difficult, unbearable	LSV 7	sorrowful; bitter; mournful
	—	LSV 4	caustic; corrosive
LSV 5	angry, cruel	LSV 6	acid; angry
	—	LSV 5	piercing; sharp
LSV 6	anger, bitterness		—

In addition to the meaning “salty”, new LSV4 “caustic; corrosive”, LSV5 “piercing; sharp” appear in the semantics of the polysemantic word *ащы*, which have no correspondence in the semantics of the word *ačïγ*. LSV7 “sorrowful; bitter; mournful” of the adjective *ащы* is close to two LSV2 and LSV4 *ačïγ*. Some meanings (“bitterness, bitter” and “anger”) have not been preserved in the structure of the Kazakh adjective *ащы*, as shown in Table 5. This is due to the syncretism of verbal words and the formant *-γ* in the Old Turkic language, since the lost LSVs in the structure of *ačïγ* were nouns. The development of the grammatical system of the Turkic languages followed the path of reducing syncreticity, which led to the differentiation of homonymous verbal words: adjectives and nouns in the Kazakh language.

Another trend in the development of the lexical semantics of ancient Turkic words in modern Turkic languages is the emergence of a ramified system of single-root derivative words that take on the representation of individual meanings of the original word. For example:

ашындыру – 1) to outrage; to anger; 2) to drive to despair;

ашыну (*ашынуу*) – 1) to experience mental pain, despair; 2) to be indignant;

ашудас – alum;

ашу-ыза – “anger, rage, indignation” (Sozdik, 2002: 45);

ашулырақ – a little angry; intense, persistent;

ашымал – katyk (strained ayran);

ашыныс – anger, irritation, frustration” (Kaliev, 2014: 69-70).

Another tendency in the development of the lexical meaning of words that go back to ancient Turkic original words is the complication of their semantic structure, i.e., the emergence of new meanings. For instance, the metaphorical meaning of the verb *ашыту*

(ашытұу) is illustrated by the following example: “fig. басты ашыту – to fool, to whine” (Sozdik, 2002: 46).

Conclusions

It is important to note that the semantic structure of a polysemantic word in the ancient Turkic language is largely preserved in modern Turkic languages, as evidenced by data from Kazakh dictionaries. The turkologists believe that “most homonymous roots that are attributed to different parts of speech can in many cases go back to syncretic roots from an etymological point of view (Tektigul, 2013). Furthermore, the development of lexical semantics was analyzed through the examination of words included in the main lexical fund of languages. This phenomenon can be understood as a weakening of the semantic links between the LSV of words of the proto-language, which leads to the emergence of homonymous words in modern Turkic languages. The simplification of the semantic structure of lexemes can also be seen as a result of this weakening. Furthermore, new meanings emerge in the words of the modern Kazakh language in the process of development. The divergence of LSV was also facilitated by the syncretism of ancient Turkic verbal words, which underwent weakening over time and led to the differentiation of adjectives and nouns. The detailed analysis of the semantic structure of ancient Turkic lexemes included in the main lexical fund, carried out in this study, allows for the discovery of semantic connections lost in Kazakh words and the restoration of the logic of the development of their semantic structure, dating back to ancient Turkic lexical roots.

Abbreviations

KOS – Kazaksha-oryssha sozdik. [Kazakh-Russian dictionary]. [Elektronnyy resurs]. Available at <https://sozdik.kz/> (Accessed: 12.01.2025). [in Kazakh and Russian].

OTD – Drevneturkskiy slovar', 2016. [Old Turkic dictionary]. Pod red. D.M. Nasilova, I.V. Kormushina, A.V. Dybo, U.K. Isabekovoy; sost. T.A. Borovkova, L.V. Dmitrieva, A.A. Zyrin, I.V. Kormushin i dr. 2-e izd., peresmotr. Astana: “Gylym” baspasy. 760 s. [in Old Turkic].

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