

Word Formation by Reduplication Method in Modern Turkic Languages

Gatiba Chingiz Mahmudova ¹

¹ *Azerbaijan National Academy of Science Institute of Linguistics named after Nasimi*
31 H. Cavid, Baku, AZ1143, Azerbaijan

DOI: [10.22178/pos.92-6](https://doi.org/10.22178/pos.92-6)

LCC Subject Category: PE1001-1693

Received 28.04.2023

Accepted 28.05.2023

Published online 31.05.2023

Corresponding Author:
dr.gatibe@gmail.com

© 2023 The Author. This article
is licensed under a Creative
Commons Attribution 4.0 License



Abstract. There are examples of grammaticalisation in various forms in Turkic languages. Reduplication attracts attention both as a grammatical sign and as one of the ways of word formation. Repetition is one of the grammatical categories functionally used in Turkic languages. This article examines examples from old and modern Turkic languages. It explains with examples that the method of reduplication is used in Turkish as a method of word formation, as in some other world languages. In addition, some language units formed by repetition are tried to explain by the theory of grammar and are dealt with from examples in which reduplication creates the inflectional features in semantic and morphological categories.

The method of reduplication in languages where it is used as a grammatical sign, grammatical categories such as augmentative, limitation, frequency, transition, etc., can be mentioned by forms with different phonological values, such as full or partial reduplication. The reduplication formed by the repetition of a word in the first stage represents the intermediate stage before the completion of word formation in the second stage. It is a semantic description of the newly formed word. There are many lexical units in the orthographic dictionary of the Azerbaijani language, which are words formed by the method of reduplication. The reproduction process is less productive than morphological, syntactic, lexical and other word-formation methods. Still, as a result, there is such a method in the grammatical structure of Turkic languages.

Keywords: reduplication; word formation; grammar; Turkish; Turkic languages.

INTRODUCTION

As we know, the Western world has made significant progress in science and technology. Discoveries and inventions, especially innovations in information technology, have created conditions for a substantial influx of new words from the West to our country. Sometimes these words have been accepted as they are and used in the language, and occasionally new ones have formed equivalent to them.

Ever since the son of man began to speak and communicate in words on Earth, he has felt the need to create new comments quickly. As the cultural level of the peoples increased, as science and technology developed, new terms and means of expression of notions were introduced into the language. This process is still ongoing. Of course, as new words enter the language or new words appear in the language, some lexical units also need to be removed from the language. But this process itself must be approached very carefully,

too. Removing a word from a literary language takes a nation away from its thousand-year history and national culture. Therefore, whether we like it or not, it is not a good idea to replace lexical units, words of Arabic and Persian origin, that have been used in our language for thousands of years and have acquired the right of citizenship. However, it is an undeniable fact that every language can remain active. Every language is developing dynamically, and this process is inevitable. There are different ways of word formation in modern Turkic languages. It is possible to form an infinite number of new words in Turkic languages in several different ways.

Word formation refers mainly to words that are formed morphologically and syntactically, and derivative and compound words are studied. Of course, we are talking about a synchronous plan. But there are more ways to create dishes in a

language. One is the phenomenon of reduplication, which needs to be written more.

Reduplication, widely used in old and modern Turkic languages, has mainly performed the augmentative function in the Turkic language. However, reduplication is used in Turkic languages as an inflectional element that reflects various semantic fields with a wide range of parts, such as plurality, sequence-multiplication, similarity, limitation, diminutiveness, degrading, and predicatization. Examples from multiple Turkic languages prove that reduplication is also used in Turkic languages as a method of word formation. Reduplication has been added to word formation ways in recent studies. The research presented as a method of word formation is mainly conducted by Turkish scientists. In these studies, it has been determined that reduplication plays a vital role in the typology of Turkic languages. Lexical units formed by the method of reduplication are found not only in literary languages but also in various dialects and accents of Turkic languages. Reduplication is a grammatical category used in Turkic languages as an element of derivativeness and inflexion (change of form) in both processes of lexicalisation and grammaticalisation.

METHODS AND MATERIALS

Two research methods were followed in the current article. Apart from the historical-comparative method, the descriptive approach has also been implemented, and the selected examples have been researched within the framework of the two mentioned methods.

RESULTS AND DISCUSSION

Grammaticalisation, which transforms independent words into grammatical signs, is also widely observed in Turkic languages. One of the grammaticalisation theory founders was Wilhelm von Humboldt [1, p. 22]. In morphophonology, there are two types of reduplication, full and partial. A full reduplication is a reduplication of an entire word, root, or body, that is, a repetition. Partial reduplication is simply a reduplication in various forms, from consonant gemination or vowel lengthening up to the nearly complete base of the word. In partial reduplication, the repeated part is often

the first part of the base of the word but also appears in the middle and last positions. Both types of reduplication are found in Turkic languages. While full reduplication is used more functionally in word formation, partial reduplication is distinguished by a grammatical marking function. Reduplication is "forming another suffix and a word from this base by repeating a certain part or all of the base" [2, p. 40]. Forms such as "qıpqırmızı, kopkoyu, büsbüyük" are formed by the reduplication of the first syllables of words such as "az-az, hızlı hızlı, qaça-qaça", which are created by the repetition of words in Turkic languages, attract attention with their meaning reinforcing features. Although the definition of reduplication is slightly different in different sources, it has been emphasised in most studies that the structure being formed can be used as a single word in a sentence. In particular, although many studies have dealt with the "forming other words" feature of reduplication, no extensive research has been conducted on the subject. Sh. Akalin emphasised the meaning-reinforcing features of the language's syntax of words formed by reduplication under the heading "doubling". Some of them, such as *ev bark*, *çalı çırpı*, *er geç* have acquired lexical value with meaning, function and frequency of use. In this study, "doubling" is not considered one of the main ways of word formation in Turkic languages [3, p. 836]. In Turkish linguistics, the word-formation function of the reduplication method is not mentioned, and the reinforcing feature is emphasised in the category of inflexion. In other Turkic languages, however, there is no information about reduplication among word-formation methods in general, while many linguists [4, p. 436; 5, p. 376–377, 513; 6, p. 134, 7, p. 147] emphasise the reinforcing function of full and partial reduplication in adjectives and adverbs, but J. Cornfield noted that in some examples full reduplication provides forming a more distinct meaning, instead of its reinforcing function [9, p. 513]. We are witnessing reduplication in the augmentative degree of adjectives in the Azerbaijani language. But we do not accept such adjectives as newly forming words. In Turkish literature, under the heading "Phonology", three types of reduplication are discussed:

1. *Emphatic reduplication* (e.g., *kıpkırmızı* (*crimson*));

2. Reduplication with *-m* (e.g., *çirkin mirkin* (ugly));

3. Doubling (e.g., *yavaş-yavaş* (slowly)).

So, reduplication and doubling are different terms, albeit partially. In Turkish Turkic it's dealt with double reduplication in various categories, such as lexicographical, systematic, and text. It is confirmed that there are 347 doubling repetitions in the Turkish dictionary. Although most linguistic studies have mentioned that reduplication affects semantic meanings such as augmentative, plurality, and continuity, no study has evaluated this method in grammaticalisation theory and tried to explain it with concrete examples.

The method of reduplication in languages where it is used as a grammatical sign, grammatical categories such as augmentative, limitation, frequency, transition, etc., can be mentioned by forms with different phonological values, such as full or partial reduplication. The remarkable point in this model of grammaticalisation by reduplication method is that the state created by the reduplication method without using any morphological symbols provides the necessary semantic and grammatical value.

Although A. von. Gabain does not explicitly mention the difference in meaning and grammatical function formed by reduplication in ancient Uyghur Turkic. He draws attention to this situation with some examples: *öñi öñi* "Çox fərqli (çeşidli) (very different)" (< *öñi* "Başqa, ayrı, digər, fərqli (other, different)"), *adın adın* "Çox fərqli (müxtəlif) (different)" (< *adın* "Başqa, digər, o biri, növbənöv (various)"), *basa basa* "Çox sonra" (much later) (< *basa* "Arxa, dalınca; sonra; irəlidə; arxasından, ardınca (after)"), *kim kim* "Kim olursa (anybody); hər kəs (everybody)" (< *kim* "Kim (who); hər kim (anybody); heç kimsə (nobody); kim ki (whoever); çünkü (because), için (for)"), *neçe neçe* "Nə isə (nice)" (< *neçe* "Nə qədər, neçə (how much)"), *ol ol qılınclar* "Bu işlərdən hər biri". In the following examples of ancient Uyghur Turkic, new lexical units have appeared with the reduplication (repetition) of nouns, adjectives and adverbs that have a close or distant connection of meaning to the first word, but have different semantic values: *Ança* Bir az (a little); *belə* (so), *beləsinə*; *bunun kimi* (like this); *o qədər* (so many); *bu cür* (this kind); *bu barədə* (about this)" > *ança ança* "Bir nice" [10, p. 22] ... *yılki ajunıntaki ança ança tınlıqlar*

yılki ajunıntın ozup ... [10, p. 23] *basa* "Geri (back), ardınca; sonra; qabaqda; irəlidə (ahead), arxasından (behind), sonra (after)." > *basa basa* "Bir-birinin ardınca (one after another); həmişə (always)" [10, p. 17] *ol antaq akıqsız arıq köñülüg bütürgelir üçün ötrü köñülüg basa basa üzüksüz yıkmak turgurmak erür* [10, p. 18] *kayu* "Hansı (which); kim (who); Nə (what); kim olursa olsun (whoever); nə olursa olsun (whatever); bir neçə (several)." > *kayu kayu* "Çox müxtəlif (very different); hər nə qədər (however much)" [10, p. 89] *kaçan birök bo iki yigirmi bölükler içinte kayu kayu bölüklerteki nomlarıg eşidip azu ontın sınırkı kayu kayu erser yirtinçüde erigme tüz teñri burkan mu yarlıkar erki teñrim tip ötünti:*

teng 1. Bərabər (equal), eşit, eyni (same), ölçü (size); ölçmək (measure), çəkmək (to weigh). 2. tərəzi (scales). 3. qədər (till)... > *teñ teñ* "növbənöv" (diverse)... *kelip örletir teñ teñ ig emgetir* ; *tsun* 1. Uzunluq ölçüsü (length measurement). 2. şəkil (picture); vergi (tax). 3. kiçik (small), zəif (weak) (<Çin. ts'un) > *tsun tsun* parça parça; parçalanmış (disintegrated) [11, p. 27] *takı yime kim kayu tınlıq beglerde ağır yazuklug bolup tutup ölürgeli azu kınagalı sakınsar kılıçı biçgesi kağılı tsun tsun sınar uvşanur neñ bat kılı umaz* [11, p. 24–27].

The following example taken from Turkish Turkic is essential in showing the semantic stages of word formation by the method of reduplication. The reduplication formed by the repetition of a word in the first stage represents the intermediate stage before the completion of word formation in the second stage. It is a semantic description of the newly formed word. In the third stage, a new word forms that are semantically related but has an entirely different semantic value:

Tel 1. Müxtəlif metallardan düzəldilmiş, qırılmaya davamlı olan uzunsov əşya (a longish item made of various metals, resistant to breakage). 5. Bəzi orqanizmlərin dəstə formasında yaranmasını meydana gətirən ipçiklərin hər biri (each of the filaments that make up the formation of some organisms in groups). > *tel tel* "1. Tel formasında olan (in the form of wire). 2. Ayrı-ayrı tellər şəklində (in the form of separate wires)" [12, p. 2309] > *teltel* "Pişmaniye (pishmaniye)" (dialect) *göz* (eye) 3. Otaq (room). 6. Deşik (hole), boşluq (emptiness). 7. Çəkməçə (drawer). 8. Tərəzi qabı (scales)." > *göz göz* "Çox gözlü, üzərində deşiklər

olan (smth. with a lot of holes on it)" > gözgöz "Un, bulgur və s. içərisində əşyaların saxlanması üçün bölünmüş olan böyük sandıq (a large box for storing things such as flour and bulgur in it".

According to M. Agcha, it reflects the semantic stages of word formation by reduplication in Turkish. In the first stage, the word is used only as the name of an object in the meaning of "tel" in the second stage, tel turns into a form of tel and appears as a reduplication describing all things resembling "tel" in the meaning of "tel". In the third and final stage, it shows a complete semantic change and becomes a new lexical unit in the sense of "peşmaniyə" (pishmaniye):

Tel "tel"__tel -tel __ being in the form of "tel" __ peşmaniyə (pishmaniye)

In Azerbaijani, the phrase "tel-tel olub, tel-tel bişib" is used for very well-cooked meat.

CONCLUSIONS

The following examples from modern Turkic languages clearly show the functionality of reduplication in word formation. For example, in the Kazakh language *julum* "bir dəstə, bir çimdik" > *julum-julum* "Yırtıq yırtıq, yırtıq pırtık"; xakas dilində: *haydar* "Hara, haraya (where)" (adverb) > *haydar-haydar* "Görülməmiş (not seen), eşidilməmiş (not heard)" [13, p. 159]; *hayda* "Harada (where)" (adverb) > *hayda-hayda* "Uzaq (far), uzaqda (away), bir yerlərdə (somewhere)" (hayda-hayda poldım "Çox uzaqlarda idim. (I was far away)) [13, p. 159]; *haydi* "Necə" (how) (adverb) > *haydi-haydi* "1. Necə isə (somehow). 2. Elə belə (so-so); kötü (bad)" [13, p. 159]. *noo* "Necə" (how) (adjective) > *noo-noo* "Uzaqlarda, çox uzaqda" (too far) (noo-noo parıbışan "Çox uzağa getdi" (He went too far) [13, p. 325]. *sala* "Bir az, birazcık" (a little) (adverb) > *sala-sala* "Ancaq, olsa olsa, yalnız" (just, only) [13, p. 46]. In Turkish Turkic: *Kıl* (hair) "1. A filamentous extremity in some animals' skin is a product of the upper skin visible in certain parts of the human body. 5. Appears on plants, usually digested, hollow, very thin extremity" [13, p. 1406] > *kılkıl* "Mısır" (dialek). in Kazakh language: *elen* "maraq (interest), təlaş (fuss)" > *elen-elen* "Utancaq halda ətrafa baxma (to look around shyly).

M. Kashgari, in his dictionary, spoke about partial reduplication and said it was used in Turkic dialects to emphasise and augment adjectives,

especially in adjectives expressing colours. According to M. Kashgari, it is a rule to add the sound / p / to the end of the reduplicated first syllable. In contrast, in Oghuzs this sound can change its place with / m /. The suffix observed in the Oghuz dialect is *süçig* "şirin bir şey" (something sweet) > *süm süçig neş* "çox şirin bir şey" (something lovely) (Oghuz dialect), *sarığ* "hər şeyin sarısı" (yellow of everything) > *sap sarığ* "parlaq sarı" (bright yellow), *tegirme*, *tegirme neş* "çörək, dəyirman və ya pul kimi yuvarlaq olan hər hansı bir şey" (anything round like bread, mill or money) > *tes tegirme* Oghuz people say *tes tegirme* if they want to exaggerate too much when describing something round. M. Erdal notes that in old Turkic, partial reduplication is used for reinforcing the expression, especially in colour names. In this model, which is formed by repeating the first syllable of the base of the name, if the first syllable ends with a consonant, this consonant is replaced by the sound / p/. If it ends with a vowel, it is repeated by bringing the sound / p / directly to the end of the first syllable. Colors, in which partial reduplication is defined, include *qara* (black), *(y)ürün* "bəyaz" (white), *kızıl* (gold), *yaşıl* "yeşil" (green), *kök* "mavi" (blue) and *sarığ* "sarı" (yellow). According to M. Erdal, it is not accidental that colour names do not accept the augmentative suffix + rAK added to adjectives and adverbs [14, p. 65–66]. However, there are examples where colour names have the suffix + rAK. By taking the suffix + rAK, which is a grammatical sign of the same word, giving the same or similar semantic and grammatical values by using the method of partial reduplication is an important indicator that proves of being used of the reduplication method: *sap sarıq* ~ *sarıgarak* [15, p. 686]. In terms of functionality, in some examples used in studying reduplication in the Turkish language, it is noteworthy that it has semantic and grammatical substitutional functions. Reduplicating of the word *çok* used in Turkish Turkic "as an independent lexical unit in terms of number, quantity, value, intensity, degree etc., as a sign of a grammatical category expressing limitation in terms of lexical meaning and function in the form of "en çok, olsa olsa" [12, p. 559-560]; in the form of "açıq", losing the true meaning of the second word, which appears by reduplication (repetition) of the word *açık* used in the meaning of "Açılmış, qapalı olmayan, qapalının əksi (opened, not closed, the opposite of closed) "1. Gizlətmədən (without hiding).

2. Bütün təfərrüatları ilə (in all its details)". The transformation of a characteristic semantically and grammatically in different categories can be explained by the grammaticalisation theory [12, p. 16].

The following examples, taken from the Turkic languages and formed by the method of reduplication, are used as a sign of inflexion in various semantic fields, such as plurality, frequency, sequence, distribution, limitation, frequency, similarity, diminutiveness, degreeding, predicatization. The phenomenon of reduplication in the Turkic languages has initially expressed the concept of plurality since ancient times. For example, in the old Uyghur language: *miñ* "min" (thousand) > *ming ming* "Minlərlə" (thousands); *neçe* "1. Nə qədər, neçə (how many). 2. Necə, hər hansı (how)" > *neçe neçe* "Çox çeşidli, bir çox (various, several); hər nə qədər (however much)"; Turkish Turkic: *neler* (nə sual əvəzliyinin cəmi) (plural form of the interrogative pronoun nə) > *neler neler* "Çox və çeşidli şeylər" (lots and variety of things) (*neler neler yaşadık şu kısa sü-reçte*); new Uyghur language: *elvân* (<Ar.) "Rənglər (colors); müxtəlif rənglərdə olan (being in different colors)" > *alvan-alvan* "Çeşit çeşit, türlü türlü; dəyişik (various, colorful)" (*alvan-alvan taam* "Türlü türlü yemek").

Some of the new lexical units formed as a result of reduplication in Turkic languages express the meaning of frequency and repetition. Kharazm Turkic: *kaç* "Kaç, birkaç" > *kaç-kaç* "Tekrar tekrar" (*kaç kaç yuldi* "Tekrar tekrar çevirdi" [16, p. 98]; *koş* "Çift, eş, denk" > *koş koş* "Tekrar tekrar" (*koş koş sözledi* [16, p. 46]; Kazakh language: *dürkin* "Kez, defa, kere." > *dürkin-dürkin* "Tekrar tekrar; bazı bazı".

Words expressing semantics of intensity: Kharazm Turkic: *artuk* "Fazla, çok; değerli, kıymetli" > *artuk artuk* "Fazla fazla, çok çok fazla, daha çok" (*Atası 'Ayaznı artuk artuk sewer erdi* "Atası Ayaznı çok, lap çox sevirdi" [16, p. 36]. Azerbaijani: *yavaş-yavaş; yelli-yelli; dil-dil* and so on.

Words expressing semantics of similarity: Uyghur language: *tag* "dağ" > *tag-tag* "Dağ kimi böyük və uca" (As big and high as a mountain); *Tag-tag bolup yatidu* "Dağ gibi büyük və bol", *Bazarda tarvuz tag tag bolp yatid* "Bazarda qarpız qalaq-qalaqdır" (There are a lot of watermelons in the market). Xakas dili: *halbah* "1. Geniş (wide), bol (abundant). 2. (Yağda kızardılmış) küçük çörək (small bread (fried in oil))" (Naskali

vd. 2007: 140-141) > *Halbah-halbah harlar çaap turğan*. "Lopa lopa qar yağır" (It is snowing with flakes) [16, p. 40].

Lexical units formed as a result of reduplication have abstract descriptive semantics: Turkish Turkic: *ters* "1. Lazımı vəziyyətin əksinə (Contrary to the necessary situation). 2. Uyğun olmayan, yaraşmayan, münasib olmayan (Inappropriate, unsuitable). 3. ürəkbulandıran və ruhdan salan, qəzəbli, sərt (nauseating and discouraging, angry, harsh)" > *ters ters bak-* "Düşmən kimi hirsli və tərs-tərs baxmaq (To look angry as an enemy)" [12, p. 2332-2333].

Words denoting semantics of limitation: Turkish Turkic: *hepsi* "Hamısı, tamamı, bütünü" > *hepsi hepsi (hayat nasıl olsa)* (T.Trk.) *aman* (ünlem) > *aman aman bir güzelliği yok* "Olağanüstü bir güzelliğe sahip değil". (T. Trk.) *çok* "Sayı, nicelik, değer, güç, derece vb. bakımından büyük ve aşırı olan, az karşıtı" > *çok çok* "En çok, olsa olsa".

Lexical units denoting semantics of diminutiveness: Turkish Turkic: *mini* "Çok küçük veya kısa" > *minimini* "1. Küçükük. 2. Pek sevimli, küçük çocuk." *kiçig* "Küçük, ufak" > *kiçig kiçig* "Küçükük, ufacık" [10, p. 21-22].

Lexical units denoting semantics of augmentativeness: Azerbaijani: *alay-alay; vaqon-vaqon; cəmdək-cəmdək; xalvar-xalvar; taya-taya; bölük-bölük* and so on.

Lexical units denoting degree: Uyghur language: *kşan* "Kısa bir an, lahza" > *kşan kşan* "Çok kısa; bir anlık".

New words formed by reduplication used in the predicative function: In the following example belonging to the Kharazm Turkic, the second word, repeated by reduplication of the word *yox*, which is used as an independent, meaningful linguistic unit, completely loses its true meaning and becomes a dependent morpheme. This dependent morpheme expresses a grammatical category with its predicative function: *yok* "1. Yok, xeyir (no). 2. Deyil (be not)" > *yok yok* "Yoktur" *menim ol işke rıza:m yok yok* - "Mənim o işə rızam yoxdur" (I do not agree with that) [17, p. 211].

It is doubling - words formed by repeating the same and similar expressions. Doubling is a group of words formed by reduplication.

Let's look at the lexical units formed by reduplication in the "Azerbaijani-Uyghur"

dictionary: Azerb: *ac-yalavac* -- Uyghur: *aç-yalıñaç*; Azerb: *arsız-arsız* -- Uyghur: *pərvasız*; Azerb: *balaca-balaca* -- Uyghur: *az-maz*; Azerb: *bir-bir* -- Uyghur: *birləp*; Azerb: *şayiə* -- Uyghur: *miş-miş* [19].

There are many lexical units in the orthographic dictionary of the Azerbaijani language, which are words formed by the method of reduplication. Lexical units formed in this way in the Azerbaijani language can be divided into two parts: 1. Lexical units consisting of words with similar meanings formed by the method of reduplication: For example, *adlı-sanlı*; *ay-ulduz*; *bağça bağ*; *baş-qulaq*; *bərli-bəzəkli*; *cərgə-cərgə*; *cod-cod danışmaq*; *çala-çuxur*; *çən-duman*; *çığır-bağır*; *çöl-bayır*; *çöl-çəmən*; *daşlı-qayalı*; *dərdsiz-qəmsiz*; *əzilib-büzülmək*; *inyə-sap*; *əsər-ələmət*; *ənlikli-kirşanlı*; *gözəl-göyçək*; *hay-küy*; *künc-bucaq*; *qar-boran*; *qayda-qanun*; *qışqır-bağır*; *mal-dövlət*; *nökər-qarabaş*; *od-alov*; *sübut-dəlil*; *şan-şərəf* [19].

2. Lexical units formed by repetition of the same word created by the method of reduplication: While the first component of these lexical units is used in completely different semantics, they are implemented in different semantics when repeated. For example, *deşik-deşik*; *dəli-dəli*; *dişlək-dişlək*; *hərflər-hərflər*; *xana-xana*; *key-key*; *köhnə-köhnə*; *əlçə-əlçə*; *isti-isti*; *kəllə-kəlləyə*; *lağ-lağ*; *lay-lay*; *lopa-lopa*; *naxoş-naxoş*; *rahat-rahat*; *səfeh-səfeh*; *şax-şax(baxmaq)*; *tel-tel*; *yamaq-yamaq*; *zülüm-zülüm(ağlamaq)*; *yumru-yumru* [19].

We concluded from our research that a new word formation by reduplication could be added to the list of many word formation methods available in Turkic languages. The reduplication method is less productive than morphological, syntactic, lexical and other word-formation methods. Still, there is such a method in the grammatical structure of Turkic languages.

REFERENCES

1. Gumboldt, V. (1984). *Izbrannye trudy po yazykoznaniiyu* [Selected works in linguistics]. Moscow: Progress (in Russian).
2. Akalin, Sh. (2014). Türkçede Söz Yapımı Yolları ve Sözlükselleşme [Ways of Word Construction and Lexicalisation in Turkish]. In *Milli Türkoloji Kongresi Bildirileri*, 11-13 November (Vol. 1, pp. 831–841) (in Turkish).
3. Aliyefa, E. (2021). *Azərbaycanca-uyğurca lüğət* [Azerbaijan-Uyghur dictionary]. Ankara: Zangazurda (in Turkish).
4. Arat, R. (1959). *Kutadgu Bilig*. Ankara: Basimevi (in Turkish).
5. N. d. (2021). *Azərbaycan dilinin orfoqrafiya lüğəti* [Orthography dictionary of Azerbaijanian language]. Baku: Elm (in Turkish).
6. Banguoghlu, T. (2011). *Türkçenin Grameri* [Turkish grammar]. Ankara: TDK (in Turkish).
7. Erdal, M. (1991). *Old Turkic Word Formation*. Wiesbaden: Otto Harrassowitz.
8. Erdem, M. (2005). *Harezm Türkçesinde İkilemeler ve Yinelemeler Üzerine* [About duplications and repetitions in Khwarazam]. *Bahar*, 33, 189–225 (in Turkish).
9. Forza, F. (2011). Doubling as a Sign of Morphology: A Typological Perspective. *Journal of Universal Language*, 12(2), 7–44. doi: 10.22425/jul.2011.12.2.7
10. Hengirmen, M. (2009). *Dilbilgisi ve Dilbilim Terimleri Sözlüğü* [Grammar and linguistics terms dictionary]. Ankara: Engin (in Turkish).
11. Kara, M. (2009). *Hakas Türkçesinde İkilemeler* [The Hendiadyoin In the Khakas Turkish]. *Gazi Türkiyat*, 4, 35–62 (in Turkish).
12. Kaya, J. (1994). *Uygurca Altun Yaruk* [Golden light in Uyghur]. Ankara: Türk Dil Kurumu (in Turkish).
13. Korkmaz, Z. (2009). *Türkiye Türkçesi Grameri - Şekil Bilgisi* [Turkish Grammar – morphology]. Ankara: TDK (in Turkish).

14. Kornfilt, J. (1997). *Turkish*. London: Routledge.
15. Naskali, E. (2007). *Hakasça-Türkçe Sözlük* [Khakas-Turkish dictionary]. Ankara: TDK (in Turkish).
16. Tekin, Sh. (1993). *Uygurca Metinler* [Texts in Uyghur]. Ankara: TDK (in Turkish).
17. N. d. (2011). *Türkçe Sözlük* [Turkish Dictionary]. Ankara: TDK (in Turkish).
18. Underhill, R. (1985). *Turkish Grammar*. Cambridge: The Massachusetts Institute of Technology.
19. Unlu, S. (2012). *Harezmi Altınordu Türkçesi Sözlüğü* [Khwarezm Altınordu Turkish Dictionary]. Konya: Eghitim (in Turkish).