



Lexicographic Analysis of Homonymy in Modern General Dictionaries: The Case Study of Tatar Language

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Abstract

In the current study, it was tried to investigate the features of dictionary description of lexical homonymy using bilingual language reference books of general type, included in the digital corpus of Tatar dictionaries. The type of homonyms and their part-of-speech characteristics are analyzed (with quantitative data). Comparative analysis revealed the differences in dictionaries related to the interpretation of "homonym" notion, characterization of units with similar formatting, an indication of a part of speech, etc. The article presents the materials found in the course of the research, which testify to the mistakes and drawbacks in presentation and description of homonymy (omissions of units, lack of individual labelling of homonymic units or incorrect labelling, discrepancies between interpretation and formatting). Many of these drawbacks are primarily due to the heterogenic description of the units forming a single lexicographic class. The authors substantiate the relevance of a comprehensive approach to registering words with a similar form in dictionaries; under the broader diffusion of written communication, lexicography should treat homonyms as units with identical graphical appearance.

Keywords: Lexical Homonymy; Language Reference Book; Quantitative Characteristic; Digital Corpus of Dictionaries; Lexicographic Class.

1. Introduction

In distinct language subsystems, including syntax, transitional phenomena can be seen. In the absence of complete correspondence between a signifier and a denotatum, a natural language presents a sign scheme, which is defined by the asymmetry of a language sign (Andreevna Mikhailova, 2019; Bozhenkova & Bozhenkova, 2019). Sentences, which are simple, mono-predicative units from the formal point of view, and complex, are one of the types of the manifestation of asymmetry between the sphere of speech and the sphere of substance. The phenomenon of asymmetry of a language sign, the lack of clear correlation, and coincidence between its plane of expression and plane of content (one signified for $n > 1$ signifiers of one signifier for $n > 1$ signified) have long been attracting the attention of linguists (Artyukh, 2013; Bergenholtz & Agerbo, 2014; Khudoliy, 2018; Nikolaeva, 2019).

A simultaneous multi-aspect analysis of language resulting in the priority of anthropocentric, functional cognitive, pragmatic and text-centric paradigms, characterizes contemporary linguistics. The importance of other well-known paradigms, particularly those related to the analysis of the structure of syntactic constructions, especially that of the word, must not be denied, however. All the latest scientific paradigms, especially text-centered ones, reveal the surprising complexity of the word, which on the one hand, is explained by a large number of its aspects and on the other



hand, by the complexity of those aspects (Chen, Xu, & Yang, 2020; Fu, Liu, Guo, & Guo, 2013; Hu et al., 2018; Wu, Ying, Dai, Huang, & Chen, 2020; Xianghua, Guo, Yanyan, & Zhiqiang, 2013). That is why the lack of very little details about a complex sentence can be spoken about. It should be stressed that a complex term introduces a phenomenon of a transitional type. Such phenomena synthesize characteristics unique to the forms or groups opposed to them. That is why it is possible to present transitivity as the approach of one system's language unit to the position and quality of another system's language unit. The Other Machine Gauge Unit. In distinct language subsystems, including syntax, transitional phenomena can be seen. In the absence of a complete correspondence between a signifier and a denotatum, a natural language presents a sign scheme, which is defined by the asymmetry of a language sign (Goldin-Meadow & Brentari, 2017; Kopečková, Marecka, Wrembel, & Gut, 2016; Puglisi & Befi-Lopes, 2016). Sentences, which are simple, mono-predicative units from the formal point of view and complex, poly-propositive from the semantic point of view, are one of the types of the manifestation of asymmetry between the domain of speech and the sphere of material (Adams, 2016; Bloom, Lahey, Hood, Lifter, & Fiess, 1980).

Typically, a complex sentence is characterized by the enumeration of inconsistently separated forms of complicated structures. The scientists, however, did not choose the characteristics that contain them, uniting and shaping even historically differentiated structures and phrases. In the second half of the 20th century, various facets of the complication (structural, semantic, communicative) that were separately studied started to be distinguished by linguists. In our view, various forms of complications need to be analysed not individually, but on the basis of the knowledge expressed by them. Moreover, it is more appropriate to define the classification of complex structures on the basis of the nature of the knowledge conveyed by them and the means by which it is expressed. It should be noted that the analysis of complicating elements in their relationship to predication is one of the most important aspects, allowing us to shape such communicative structures as simple and complex sentences, to engage in the creation of their semantic structure, and to create a grammar basis for the sentence's communicative paradigm. In order to describe a semantically complex sentence as a particular syntactic phenomenon, the syntactic component to which the notion of "complication" refers must be defined (Croft, 2001; Kneepkens, 1990; Lakoff, 1989; Pereltsvaig, 2004). A mental phenomenon is presented in the proposal. It is an aspect connecting every sentence to the circumstance denoted. It can be said that the idea is the topic of a denotative branch of an analysis of phrase semantics. The suggestion is a standard psychological reflection of an ontological condition (Greene, Azevedo, & Torney-Purta, 2008; Hocking, 2012; Imai & Gentner, 1997; Kamens, 2019; Pérez-Campos, 2017). The capacity of an individual to shape a proposition is dependent on his ability to categorize, interpret and synthesize fragments of a perceived and cognizable setting. Thus, one of the ways of storing information in the mind of an individual is proposal. The component can be called its objective material, representing an extra-linguistic situation defined by the sentence, while all the other components are more or less linked to the attitude of the speaker to the situation described, thus belonging to the subjective domain. In linguistic semantics, this objective aspect of a sentence substance is termed a proposition (Lipka, 2010; Nevalainen, 1999; Nikolaeva, 2019; Stubbs, 2001).

Due to the fact that the proposition is characterized by a predicate and argument form, the representation of any circumstance by a propositional part is possible. It should be stressed that the proposal has a two-component structure consisting of a relative predicate actants as a mental correlate of real-world relationships and of some predicate as a mental correlate of real-world things that are closely intertwined with each other. The actants are united into a proposition by a relative predicate and define the function of parameters. The topic thus replaces the phenomenon of truth, while the predicate, which serves the purposes of communication, exposes only its abstract content. A propositional structure is formed by one or more unified propositions, acting as the basis of an organization of sentence semantics and affecting the choice of the key constituents of the sentence and the hierarchical character of relations between them with the predicate's dominant role. A subordinate predication is the primary feature that unites and shapes complicated structures. The secondary prediction expressed by it separates it from various cases of possible predication expressed. It is important to note that in English, secondary-predicative structures (SPS) are commonly represented and belong to one of the most common inter-level character transitional phenomena (Shyu, Wang, & Lin, 2013; Strigin, 2008; Strigin & Demijanow, 2001; Winkler, 2011). The sentences occupy the place between simple and complex sentences with various secondary-predicative structures. Complicating mechanisms require secondary projections. There is a point of view in the theory of syntax that if a sentence contains logical propositions, realized in a complex sentence, different propositions will change the positions of the actants. Today, the topicality of distinguishing and interpreting these phenomena increases due to the tasks related to the automated processing of large amounts of textual information and the increased volumes of written

communication (Bezuglova, Kuznetsova, & Ilyasova, 2018). Solving this issue is highly essential for practical lexicography (Kasemu, N Denmukhametova, & G Khisamitdinova, 2019; Tarp, 2001) (particularly in regard to the language units' homonymy).

There are various variations in the field of lexicography when it comes to an understanding the word lexicography and variations in deciding the meaning, scale and scope of this word. Although lexicography is generally agreed to consist of two components, i.e. theoretical lexicography and lexicographic practice, there is no unambiguous reflection of this distinction and of the individual components by various definitions of lexicography (Adamska-Sallaciak, 2019; Fuertes-Olivera, 2017; Gouws, 2018; Sinu, 2019; Tarp, 2018). The research has focused on interpreting features of the lexicographic description of homonyms and been conducted as a part of a grant project of compiling a composite dictionary of the modern Tatar literary language (Kupriianov, Ostapova, & Yablochkov, 2020; Nurutdinovna & Nurutdinovna, 2015). This article does not touch upon the issue facing linguists, particularly compilers of dictionaries – the distinction between homonyms and polysemantic words (this issue will be presented in further articles).

There are many publications devoted to this issue (see, for example, one of the latest works (Kachurin, 2013), reviewing the existing approaches to this problem, as well as a summarizing article in an international encyclopedia on lexicography (Béjoint & Béjoint, 2000; Zöfgen, 1989).

1.1. Research Objective

Using bilingual language reference books of a general kind, included in the digital corpus of Tatar dictionaries, the article discusses the characteristics of the dictionary description of lexical homonymy (Chetverikov, Puzik, & Tyshchenko, 2018; Mamedova, 2020; Qurbonova, 2020).

2. Methodology

In each time of its development, the study of the lexical structure of a language is important. Changes in language have always generated a vibrant interest for linguists and society. The works in the Tatar language are dedicated to the classification of definite words and groups of words, to the explanation of lexico-semantic peculiarities of the language of the authors of one time or another, to the language of separate works (Erofeeva, Gimatova, & Sergeeva, 2018; Peters & Borovsky, 2019; Pizzioli & Schelstraete, 2011; Wang, Kuperberg, & Jensen, 2018; Weber & Lavric, 2008). Separate layers (terminology, name-study, phraseology, dialectology etc. of the Tatar language vocabulary are also well studied. There are works on Tatar literary language history; in separate periods of language life, the ways of forming Tatar vocabulary are studied. The vocabulary is the most variable layer of language; it responds instantly to all changes in culture that arise. It is replenished with borrowings from other relatives and non-kindred languages, preserving its originality. The processes that can be seen in the vocabulary of the Tatar literary language in the first half of the twentieth century are as follows: on the one hand, all previous words of active or passive use are preserved; on the other, new words emerge by triggering language tools or by borrowing words from foreign languages. In this relation, internal and external vocabulary refilling tools are separated. This paper views the features of lexicographic processing of homonymic units in the Tatar-Russian dictionaries published in 2014 (S-14 – Tatarsko-russkiy slovar, 2014), 2008 (S-08 – Tatarsko-russkiy polniy uchebniy slovar, 2008), and 2007 (S-08 – Tatarsko-russkiy polniy uchebniy slovar, 2008) (further – S-14, S-08, S-07). The following methods were applied in the research: descriptive – for describing the materials of dictionaries, comparative – for comparing the dictionary data of homonymic words, linguo-quantitative – for quantitative characteristics of the studied units (Bobkova, 2017; Oppong-Asare, Abrefa, & Marfo, 2017; Wagner, Kok, & Priemer, 2020).

3. Results

In the analyzed dictionaries, homonymic words are given in homonymic groups (HG) with the various number of units – from 2 to 6:

- 1007 units (5.33 % of the total volume of the word-list) in 475 groups [S-14];
- 600 units (4.57 % of the total volume of the word-list) in 276 groups [S-08];
- 2807 units (6.53 % of the total volume of the word-list) in 1290 groups [S-07].



The analysis shows that dictionaries often interpret and represent the same units differently (homonymy vs polysemy); cf. examples (A) and (B):

(A) **zerä** *adv.* see **yuqqa**;

zërä *ochen'*, slishkom very, exceedingly [S-14];

(B) **zerä** *adv.* 1. see **yuqqa** 2. *ochen'*, slishkom very, exceedingly [S-08].

Within some HG, elements of words are also given; see in [S-07] **avto** I and **ávto-** II; **kontr-** I and **kontr** II; **kul't** I and **kul't-** II (on the features of angiographic processing of international word-building elements in the Tatar language dictionaries see (Karimullina, Karimullina, & Galiullin, 2016).

The quantitative data on homonyms and HG are shown in Table 1.

Table 1. *Number of homonyms and homonymic groups in dictionaries*

Number of homonyms in HG	Number of HG			Total number of homonyms		
	S-14	S-08	S-07	S-14	S-08	S-07
6	-	-	5	-	-	30
5	1	1	6	5	5	30
4	3	4	30	12	16	120
3	48	36	129	144	108	387
2	423	235	1120	846	471	2240
TOTAL	475	276	1290	1007	600	2807

The HG with the largest number of homonyms are: [S-14] – **xaq**^{I-V}; [S-08] – **kötü**^{I-IV}, **qatu**^{I-IV}, **töş**^{I-IV}, **xaq**^{I-V}, **yazu**^{I-IV}; [S-07] – **çalu**^{I-VI}, **tik**^{I-VI}, **tur**^{I-VI}, **şır**^{I-VI}, **yözlek**^{I-VI}.

Most of the words within HG are nouns, verbs, and adjectives (88.4 % of the total number of homonyms in [S-14]; 88.7 % in [S-08], and 85.5 % in [S-07]); the detailed information on the distribution of homonyms by lexicogrammatical classes is shown in Table 2 (number) and in Table 3 (percentage).

Table 2. *Part-of-speech characteristic of homonyms*

Part of speech	Number of homonyms in dictionaries		
	S-14	S-08	S-07
noun	509	244	1361
verb	229	207	578
adjective	153	81	459
adverb	23	18	78
pronoun	6	6	15
numeral	2	-	9
predicative word	1	1	6
modal word	-	-	2
particle	15	9	39
postposition	10	7	25
conjunction	4	3	17
interjection	11	7	34
(sound)imitation	9	7	33
parenthetical word	1	-	5
no part of speech	34	10	146
TOTAL	1007	600	2807

Table 3. *Part-of-speech characteristic of homonyms*

Part of speech	Percentage of homonyms in dictionaries		
	S-14	S-08	S-07
noun	50.5 %	40.7 %	48.5 %
verb	22.7 %	34.5 %	20.6 %

adjective	15.2 %	13.5 %	16.4 %
adverb	2.3 %	3.0 %	2.8 %
pronoun	0.6 %	1.0 %	0.5 %
numeral	0.2 %	-	0.3 %
predicative word	0.1 %	0.2 %	0.2 %
modal word	-	-	0.1 %
particle	1.5 %	1.5 %	1.4 %
postposition	1.0 %	1.2 %	0.9 %
conjunction	0.4 %	0.5 %	0.6 %
interjection	1.1 %	1.2 %	1.2 %
(sound)imitation	0.9 %	1.2 %	1.2 %
parenthetical word	0.1 %	-	0.2 %
no part of speech	3.4 %	1.7 %	5.2 %
TOTAL	100 %	100 %	100 %

The share of nouns and adjectives in [S-08] is smaller due to the compiler's approach to forming the word-list which is rather dubious from the point of view of relevance ("some words are omitted which show full graphical coincidence in the Russian and Tatar languages" [S-08]). A large part of such inter-lingual analogs, occurring due to borrowing, are nouns and adjectives, that is why in [S-08] many HG, presented in other dictionaries, are lacking; see, for example, in [S-14], the HG consisting of nouns (**blok**^{I-II}, **boks**^{I-III}, **boston**^{I-II}, **val**^{I-II}, **gaz**^{I-II}, **granat**^{I-II} and others) or of a noun and an adjective (**biofizik**^{I-II}, **bioximik**^{I-II}, **botanik**^{I-II}, **istorik**^{I-II}, **kibernetik**^{I-II}, **klassik**^{I-II}, **komik**^{I-II} and others). This fact also explains the increased share of verbs among homonyms [S-08].

According to the widely spread tradition, homonyms are often interpreted as identically pronounced words; that is why the units with the same graphical appearance but differing in the place of stress are often not shown in dictionaries as homonyms, see:

(C) **írís** *noun*, *bot.* iris <...>; **irís** *noun*, iris, iriska toffee (*sweet*) <...>;

(D) **átlas** *noun*, *geogr.* atlas <...>; **atlás** *noun*, atlas satin (*cloth*) [S-14].

Some units with other kinds of specific pronunciation are also described without marking their homonymy; see:

(E) **kanat** / **канат** *noun*, kanat, arkan rope, lasso; **qanat** / **канат** [**къанат**] *noun*, <...> krylo wing <...>; *cf.* with example (N);

(F) **bolgar** / **болгар** *noun*, bolgarin Bolgar <...>; **bolğar** / **болгар** [**болğар**] *noun*, bulgarin Bulgar <...>;

(G) **qort** / **корт** [**къорт**] I *noun*, 1. cherv' worm <...>; **qort** / **корт** [**къорт**] II *noun*, kurt curd <...>; **kort** / **корт** *noun*, *sport.* kort tennis court <...> [S-14]; *cf.* with example (M);

(H) **kárta** / **карта** *noun*, karta map (*geographic*); **qartá** / **карта** [**къарта**] *noun*, tolstaya kishka large intestine <...>.

However, this dictionary sometimes indicates homonymy (in our opinion, absolutely relevantly) of those units for which differences in pronunciation are shown; *cf.*:

(I) **ya** / **я** I (*ya*) *interjection* (*when addressing*) o <...>; **yä** / **я** II (*yä*, *yägez*) *interjection* 1. nu well <...>; **yä** / **я** III (*yä*) *conjunction* or <...>;

(J) **sır** / **сыр** I *noun*, 1. gran' side <...>; **syр** / **сыр** [**сыр**] II *noun*, syr cheese <...> [S-14].

In some cases, the features of pronunciation are not explicated:

(K) **tol** I *adj.* vdoviy widowed <...>; **tol** II *noun*, tol // toloviy tolite <...>;

(L) **tír** / **тип** I *noun*, pot sweat <...>; **t'ir** / **тип** II *noun*, tir shooting range (*e.g., training, shooting*) [S-14].

4. Summary

Weighing a significant rise in written communication, which does not reflect features of pronunciation (stress marks are not indicated, transcription is not given), it is proper when selecting, including, and interpreting the similarly formed units in dictionaries, to result from understanding homonyms units with an identical graphic image (regardless of their pronunciation). In the dictionaries examined, this approach is most frequently and consecutively implemented in [S-07]:

(M) **qort / қорт** [kɔrt] I, **qort / қорт** [kɔrt] II, **kort / қорт** III [S-07]; *cf.* with example (G);

(N) **kanat / канат** I *noun*, kanat rope ⟨...⟩; **qanat / канат** II [kanat wing] *noun*, ⟨...⟩; *cf.* with example (E).

Another reasonable approach to homonymy is the one under which a HG comprises the similarly formed units regardless of their part of speech. In the dictionaries analyzed, this approach is implemented in the overwhelming majority of cases. Only some dictionary entries deviate from it; see, for example:

(O) **i (i-i-i)** *interjection* ⟨...⟩; **i: igä kertü (kiterü)** *verb* nalazhivat' to fix ⟨...⟩;

(P) **altynçy** *num.*, shestoy the sixth; **altynçy** *noun* ⟨...⟩ zolotykh del master a jeweler;

(Q) **u** *sound imitation* ⟨...⟩; **u** *interjection* u, o [S-08].

Unjustified lack of homonymy indication sometimes occurs in units of the same lexico-grammatical class; see:

(R) **arpa** *noun* yachmen' barley ⟨...⟩; **arpa** *noun med* yachmen' sty (disease) [S-08].

The number indicating homonymy should stand immediately next to the title unit which has a homonymic equivalent in the dictionary and should not be separated from it by other components of the dictionary entry (for example, part-of-speech or functional-stylistic labels, supra-word units); see:

(S) **zir: zir qubaru** I ⟨...⟩;

(T) **tokin** *dial. I noun* ⟨...⟩ [S-07].

The correct formatting of homonymic units is the following: (S) – **zir I: zir qubaru** ⟨...⟩; (T) – **tokin I dial.** ⟨...⟩.

If the title unit has variants (synonyms), the indicator should accompany only that one which has homonymic relations with another title unit; see, for example:

(U) **satiracy, satirik** I *noun*, ⟨...⟩; **satirik** II *adj.* ⟨...⟩ [S-14]

In some cases, his rule is violated; *cf.*:

(V) **laç I 1.** *adj.* ⟨...⟩; **laç(t)** II *sound imitation* ⟨...⟩ [S-14];

(W) **i (i-i-i)** I *interjection* ⟨...⟩; **i II: igä kertergä** ⟨...⟩ [S-14].

The above example may have the following variants of the title part formatting; (V) – **laç II, laçt**, (W) – **i I, i-i-i**.

(X) **täxqıyık, täxqıq** I *obsolete bookish noun*, ⟨...⟩; **täxqıyık, täxqıq** II *modal word* ⟨...⟩ [S-07].

As both variants in the example (X) have homonymic pairs, both variants should be supplied with number indicators: **täxqıyık I, täxqıq I** ⟨...⟩; **täxqıyık II, täxqıq II** ⟨...⟩.

There are also technical imperfections in the source dictionaries.

Some units from HG lack number indicators of the word being a part of the homonymic group; see, for example:

(Y) **arqılı** *adj.* ⟨...⟩, *cf.* **arqılı** II *postposition* ⟨...⟩ [S-07].

In some cases, the number indicator of homonymy is placed next to a lexical unit having no similarly formed unit in this dictionary, which could form a homonymic group with this word; see, for example:

(Z) *assiriyäle¹, açı¹, duğalıq¹, cüt¹, in¹, saqaltay¹¹, çağan¹* [S-07].

As analysis shows, most of the errors and inaccuracies in presenting and describing homonyms are connected with a diverse presentation of the units referring to the same lexicographic class; «a lexicographic (broader – linguographic) class is a set of language units which, due to the presence of common features, have (or should have) similar interpretation in a dictionary».

5. Conclusion

The study of dictionaries performed as a part of work on creating a digital lexicographic fund allows revealing the specific features of the presentation of units with the same form. The analysed bilingual sources have their peculiarities referring to the selection and description of such words. The analysis allowed revealing differences in interpretation of homonyms and identifying the reasons for these differences: difference in interpreting units with similar formatting (homonym / polysemantic word), the difference in determining the part-of-speech characteristic of words, taking or not taking into account the features of pronunciation (different position of stress, similar graphic presentation of different sounds), exclusion of certain groups of units from some dictionaries, etc.

The research materials testify to the need to broaden the range of homonyms registered in dictionaries by including various types of units, coinciding graphically (regardless of their pronunciation and part of speech characteristic).

5.1. Contribution

The authors substantiate the value of a systematic approach to the registration of terms in dictionaries with a similar form; lexicography should regard homonyms as units of equal graphical appearance in the wider diffusion of written communication.

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