

46

Presentation date: February, 2022

Date of acceptance: May, 2022

Publication date: July, 2022

NUMBERS

IN AZERBAIJAN GRAMMAR BOOKS OF THE 20TH CENTURY

LOS NÚMEROS EN LOS LIBROS DE GRAMÁTICA DE AZERBAIYÁN DEL SIGLO XX

Zeynalov Sardar Sayyad oğlu¹

Email: serdarzeynal.53@gmail.com

ORCID: <https://orcid.org/0000-0002-5377-6035>

¹ Azerbaijan State Pedagogical University, Azerbaijan.

Suggested citation (APA, 7th ed.)

Sayyad oğlu, Z. S., (2022). Numbers in the Azerbaijani grammar books of the XX Century. *Revista Universidad y Sociedad*, 14(4), 447-452.

ABSTRACT

The article compares grammatical textbooks and grammar books in the Azerbaijani language published in the 20th century. Its objective is to address different approaches regarding the linguistic treatment of numbers examining scientific texts. It is noticed that in the first textbooks numbers were given as a part of a name because it stated the names of quantities, similarity to adjectives according to the place of their use in the language. As the first grammar textbook, Gafur Rashad Mirzazadeh's book "Rahbari-Sarf" written and published together with Mohammad Sadig Akhundov brought a lot of attention bringing the issue to the center of attention. In general, it is analyzed how the number is reflected in secondary and high school textbooks published in the twentieth century as part of a speech, and the ideas expressed in grammar books.

Keywords: Azerbaijani language, numerical adjectives, parts of speech.

RESUMEN

El artículo compara libros de texto gramaticales y libros de gramática en lengua azerbaiyana publicados en el siglo XX. Su objetivo es abordar diferentes enfoques sobre el tratamiento lingüístico de los números en el examen de textos científicos. Se nota que en los primeros libros de texto los números se daban como parte de un nombre porque expresaba los nombres de cantidades, similitud con los adjetivos según el lugar de su uso en el idioma. Como primer libro de texto de gramática, el libro "Rahbari-Sarf" de Gafur Rashad Mirzazadeh, escrito y publicado junto con Mohammad Sadig Akhundov, atrajo mucha atención y puso el tema en el centro de atención. En general, se analiza cómo se refleja el número en los libros de texto de secundaria y bachillerato publicados en el siglo XX como parte de un discurso, y las ideas expresadas en los libros de gramática.

Palabras clave: Idioma azerbaiyano, adjetivos numéricos, partes del discurso.

INTRODUCTION

According to Aliyev (2021) numbers come in many varieties: natural numbers, rational numbers, real numbers, complex numbers, and others. Just as Platonists and their opponents cannot settle the question of mathematical reality, philosophers of mathematics also can't agree on what numbers actually are. A number may be conceived as "multitudes of units", "nothing but names" or numerals, a mental entity or projection, and as several other ideas. However, all of these interpretations have their respective advantages and problems (Nieder, 2019).

From a linguistic point of view the term 'number' is, in its widest sense, used to describe a grammatical pattern in which a form is marked for either singular or a higher value. The general idea in most descriptive approaches to the world's languages seems to be that every language has a means of expressing number, mostly on nouns, but also on verbs and other word classes. It is also commonly claimed that every language has a way of counting things, however, the linguistic means of expressing number and countable amounts differ greatly, and the absence of nominal plurals or higher values of numerals, for example, is not a rare phenomenon cross-linguistically. Moreover, number seems to be of considerable semantic complexity in many languages worldwide, expressing all kinds of extendedness, multiplicity, salience, size, and so on. While this is interesting to explore, it also raises a number of questions regarding what exactly is described under the slightly monolithic label of 'number' (Storch & Dimmendaal, 2014).

Cross-cultural studies suggest that access to a conventional language containing words that can be used for counting is essential to develop representations of large exact numbers. However, cultures that lack a conventional counting system typically differ from cultures that have such systems, not only in language but also in many other ways. As a result, it is difficult to isolate the effects of language on the development of number representations (Spaepen et al., 2011). In the words of Franzon et al., (2019) we are so accustomed to using symbols to solve numerical tasks that it seems apparently impossible to perform mathematical calculation without the support of language. In this sense, there are enlightening works (Gelman & Butterworth, 2005; Gelman & Gallistel, 2004) although it is a very interesting topic, and it is still open.

Like other nations, the future development of the Azerbaijani people is bounded to the development of its current science and education, which at the same time according to Condry and Spelke (2008) depends on systems of abstract concepts, especially the rich system of

number concepts that supports counting, arithmetic, and the measurement of space and time. Then, it is important to pay attention to the early stages of children education in this field due to the foundation of the study of all sciences begins with the first textbooks.

Today's "Azerbaijani language" textbooks taught in schools have a long history and have been improved year by year in order to be more concise, simpler and easier to understand. The first examples of "Azerbaijani language" textbooks taught in schools began to be published by various authors in the late 19th century, and although unsystematic, they were of great importance in teaching the phonetic and grammatical features of the Azerbaijani language. The textbooks of the Azerbaijani language have changed from year to year since their publication, and some changes have been made in their form, content and volume. Thus, in grammar books on morphology published in the twentieth century, different views on each part of speech have been put forward and improved.

However, even today there are different views on the approach to numbers. Taking this into account in this article we will look at the way in which textbooks and grammar books on the Azerbaijani language were written from 1920 to 2004 and try to clarify some of the issues that remain obscure regarding numbers.

DEVELOPMENT

Number expressions in textbooks

Concepts that have certain signs and qualities in language differ from each other by certain quantitative indicators. The quantity and quality of the attributes and qualities of concepts can be more or less quantitative, just as one is more or less qualitative than another. Quantities and numbers expressed in language are studied in the "number" section, which is the main part of speech.

One of the main parts of speech that is the object of study of morphology is number. In this sense Midar numbers are one of the oldest parts of speech in the languages of the world. One of the main features that distinguishes numbers from other parts of speech is the active formation of other parts of speech from numbers, even though no part of speech is composed of numbers. Thus, with the help of various lexical suffixes, new words are formed, joined to the list of words belonging to different parts of speech, and accept their morphological sign and syntactic function. For example: unity, five-year, forty-five, five-story, etc.

Unlike parts of speech, such as nouns and verbs, the term denoting the part of speech is expressed in the original Turkish word. The word "count" is still widely used in

Azerbaijani language as both a noun and a verb. At the same time, the word “count” is used figuratively to refer to counting, not counting, disrespecting, and so on. We will talk about the word “count” as a section that includes one of the main parts of speech. Today it is included in the grammar of the Azerbaijani language and is one of the main parts of speech studied in detail. “In all grammar books written before 1920, numbers were included in nouns as adjectives. They were called “names” as a type of names (G. R. Mirzazade & Akhundov, 1910, p. 103).

In the textbook “Turkish spend-nahv” published in 1924, the numbers are clarified and written in the part of speech called “adjective” under the heading “Numerical adjectives or numeral adjectives”: adjectives (SZ) are adjectives that define numbers (renewal, renewal - SZ). These are also called (numerals) or (numbers)”. At the same time, it is noted that there are three types of adjectives: 1) original, 2) rank, and 3) tawzi (distribution - SZ).

In the textbook “Spending and Nahv”, published in 1925, the numbers are not shown as an independent part of speech, but as a part of “Sifet”. The section, entitled “Numeral Numbers,” states: “Nouns denoting numbers are called nouns. For example, I bought three books. They sold five sheep. In these sentences, “three” and “five” are nouns. Nouns are included in the adjective chapter (chapter, part - SZ)”. In the textbook “Turkish grammar” it is not about numbers, but about the suffixes that make up the number, and it is written in this regard: separate suffixes are used” (Chobanzade & Agazade, 1930, p. 78). In this section, like -inci⁴, -nci⁴, which is still widely used in our language today, and im⁴ (one-im-pearl), ar, er, shar-shar (one, husband, three -er), dice (two-dice, seven - Lesser suffixes such as zar) are mentioned and their development points in the language are explained.

In the Grammar textbook published in 1933, numbers were separated from adjectives and included in the textbook as an independent part of speech under the name “Number names” and it was noted that “Words denoting quantity and series are called number names. While adjectives denote the quality of nouns, numerals generally denote quantity” (Hasanov & Sharifov, 1934, p. 36).

In the text “Types of number names” it is noted that number names are divided into four parts: quantity, series, fraction, and section. In this book, the topic “General information about number names” consists of only two sentences. Although it is stated that “types of number names” include, in addition to quantity and series numbers, there are also fractional numbers and section numbers. The definition of number is called “words denoting quantity and series.” It is possible that the authors gave this definition

by taking both fractions and section numbers as a form of quantity. On the topic of “The role of number names in sentences”, it is noted that numbers are used as both primary and secondary members.

In the Grammar textbook published in 1937, the part of speech called “Say names” in the previous textbook is called “Say”. While the textbook published in 1934 mentions four types of numbers, the textbook mentioned above mentions five types of numbers. The number is defined in the form “Words denoting quantity and order” (Hasanov & Sharifov, 1934, p. 60).

Although the “Grammar” textbooks published in 1938 were published by new authors, A. Demirchizade and D. Guliyev, here, too, “The sentence is mainly about how much, how many, how and so on, words denoting quantity and order that answer questions” (Demirchizade & Guliyev, 1938, p. 79). However, no different opinion was expressed than in the previous textbooks.

In the textbook “Grammar of the Azerbaijani language” published in 1941, the section “Numbers” is widely covered, all the features of numbers are given here: “Information about numbers”, “Structure of numbers”, “Types of numbers”, “Spelling of numbers” and “Solving numbers” sections. It was noted that “words denoting the quantity and order of objects are called numbers” (Abbasov et al., 1941, p. 62). “The structure of numbers” was first included in this textbook as an independent topic. However, it was noted that numbers have only simple and complex forms.

In the textbook “Grammar of the Azerbaijani language” published by S. Jafarov in 1959, the section “Number” is widely clarified. Quantities, series and indefinite numbers, which are considered types of meaning, are widely covered in separate paragraphs, in the form of various topics. In this point the spelling, structure, and names of each type of number have been scientifically studied.

Until 1972, there was no significant change in the explanation of the subject of “Say” in high school textbooks. However, in the textbook “Azerbaijani language” prepared by S. Jafarov and A. Farajov for 5-6 grades in 1972, the view of “count” changes a little. For example, in textbooks published before 1972, if the phrase “... words are called numbers” was used in the definition of number, then the number is treated as a part of speech and it is called “the part of speech that expresses the quantity and order of things” (Jafarov & Farajov, 1997, p. 85) and the content is defined. At the same time, the book states that the numbers cannot be multiplied by words that do not indicate the amount.

Probably, in order to overcome the shortcoming of the fact that numbers cannot be processed in every word, a new idea, which has not been included in the textbooks so far, is "The use of numerical words after quantitative numbers". The person, head, number, grain, pair, set, etc. are included in this group. For example, we can't say three water, six flours, but three drops of water, six sacks of flour.

However, in the textbook "Azerbaijani language" published by A. Akhundov and B. Ahmadov in the same year (1972), the person, number, pair, etc. used between numbers and nouns were mentioned. Although such words are mentioned in the textbook, they are not named as an independent topic, they are written only when explaining certain quantitative numbers: a number of words can be added" (Akhundov & Ahmadov, 1977, p. 104). Nevertheless, in the textbooks published in the following years, such words used between numbers and nouns are called "numerical words" (Akhundov & Ahmadov, 1977, p. 97).

In high school textbooks published before 1990, both the definition of number and the types of meaning of number did not change but were given in the same form. However, in the definition of number in 1990, the form and content were changed to some extent, and in the general grammatical sense the main part of speech that expresses the quantity or order of things is called number (Ahmadov & Akhundov, 1997, p. 132). This change in the definition of the number cannot be taken as a positive development. This is because the expression "according to the general grammatical meaning" included in this definition is nothing but aggravating the structure of the definition. Because words are initially divided into parts of speech according to their grammatical meanings and are formed as parts of speech.

To turn this fact, which substantiates the division of parts of speech into groups, into a definite part of the definition given to all parts of speech is nothing but to add weight to the definition. Such a complex definition of the concept makes it difficult for the student to memorize and understand its meaning. On the other hand, it is not only their grammatical meaning but also their lexical meaning that plays a key role in distinguishing words. Because what distinguishes the main parts of speech is, first of all, the lexical meaning they express.

Words have grammatical meanings according to their lexical meanings. When defining any part of speech, including numbers, the definition should be more concise, concrete, reflecting the main features of the part of speech. The definition of complex parts of speech creates certain difficulties for both the teacher and the student.

Therefore, it seems to us that if we define number in the form "The main part of speech expressing quantity is called number", it will be more concise, more concise, easily understood and memorized by students. In the definition given in the textbook, the idea is more complex, more general, and in the definition, we offer it is more precise and concise. At the same time, the content does not differ from the previous definition. This is of great importance in the teaching of the Azerbaijani language.

In a textbook published in 1990, it is explained why it is important to remove the expression "according to the general grammatical meaning" from the definition given in the textbook. But what is the function of the word "thing" used in that definition?! From all the explanations we have given so far, it is clear that even though all the adjectives and numbers used in language belong to nouns, not all nouns refer to the content of a thing. We have mentioned this in the explanation of the name.

In linguistics, it is not logically correct to call all nouns "grammatical objects" at certain moments. Because it is inadmissible to call people and abstract nouns things. For example, we have three people, four girls, five men, two loves, five cows, and so on. We cannot consider nouns that belong to numbers in any of the phrases such as Separately, even if we cannot call a man, a girl, a man, a lover, or a cow an object, we are forced to consider such notions as objects in the definition, which seems far from reality. Each word in the definitions of the concepts must express its original lexical meaning, be far from the figurative meaning it acquires later, and be used in the real sense.

Providing information on all parts of speech, including numbers, was initially one of the main tasks of high school textbooks. After some of the grammatical concepts included in these textbooks were taught in schools, these concepts were studied in detail in university textbooks and scientific grammar, until they were finally exhausted. "If we do not take into account a number of syllabic changes in the words denoting numbers, it can be said that the numbers used in the Turkish system languages consisted of common lexical units" (H. Mirzazade, 1962, p. 98). Therefore, the number of views in linguistics has not changed much over the past years. The opinions of linguists dealing with this section of morphology about numbers did not differ much from each other.

Eminent linguist M. Huseynzadeh, expressing his attitude to the study of numbers in a certain period of time, either as a noun or as an adjective, came to the conclusion that should be" (Huseynzade, 1954, p. 137). Although the author discusses in detail the types of meaning of

numbers, he does not talk about the structural types of numbers and the head, person, number, and other words used between numbers and nouns. Numerative words show only examples of the use of numbers in the language of these lexical units, but do not specify what these words are called.

In the book "Grammar of the Azerbaijani language" published by the Institute of Literature and Language named after Nizami in 1960, the explanation of the section "Number" begins with the form and content definition "The part of speech that expresses the quantity or order of things is called number" (Valiyev, 1960, p. 126). Then the features that distinguish the number from other parts of speech are listed. It is noted that the number is divided into two parts under the name of quantity and series numbers, and the quantity numbers, in turn, are divided into definite, indefinite and fractional numbers. The structural types of numbers are not explained as an independent topic, but all types are explained together.

In the textbook "Modern Azerbaijani language", published in the 1970s on "morphology" and considered the main textbook, the author (M. Huseynzadeh) did not express such a new idea about numbers, but only in the textbook published in 1954 with new enriched artistic examples. What distinguishes the author's views on numbers from those in the previous book is that he calls a group of words, which are considered only quantitative, "Approximate Quantitative Numbers" (Huseynzade, 1954, p. 112). Finally, in the book "Modern Azerbaijani language" published in 1980, the explanation of the section "number" begins with the definition of "number means the order and quantity of things" (Namazov, 1980, p. 126).

Final remarks

It should be noted that there are some errors in the meaning of the definition given in the books analyzed which includes:

1) The idea that "number signifies the quantity of an object" is not logically correct.

In such combinations, none of the words denoting the second part to which the first part belongs to the numbers. True, some linguists have suggested that all nouns, that is, nouns, are grammatical, but this idea is not enough. This is because grammatical concepts are linguistic units that differ from each other in very subtle meanings. If the comma, which completely changes the meaning of the sentence by changing its place in the sentence, has such a logical weight in the language, then the naming of a non-object concept as an object has the same semantic confusion.

If grammar does not take into account the grammatical meaning and semantic meaning of words, then there would be no need to use synonymous words in the expression of the idea in the place that best suits the content. For example, an expression that touched my heart could replace a song that touched my heart. If the substitution of such expressions is not normal in the language, then it is illogical to say that the numbers used in the combinations of five people and three cows "indicate the quantity of the thing."

Therefore, it is not acceptable to use the word thing in the definition given in the number, because nouns mean the names of non-objects as well as the names of things. If the substitution of such expressions is not normal in the language, then it is illogical to say that the numbers used in the combinations of five people and three cows "indicate the quantity of the thing."

2) The use of both the words "quantity" in the definition is not logical. Since the meaning of the word quantity (number, destiny, quantity - SZ) in our language and the word quantity (quantity, destiny, number, number - SZ) passing through that language do not differ from each other. Taking all this into account, if we define number in the form of "The main part of speech that expresses quantity and order is called number", we can expect more coherence.

CONCLUSIONS

The provided definition of counting can fully reflect the characteristics of this process; it allows the expression of an idea in a few words but at the same time prevents the development of different words that have the same meaning in the expressed opinion. The conciseness of the definitions of the concepts, the expression of the wide meaning in a few words is easily understood by the students and is quickly understood as a fact of language. Also, the concreteness, in a word, broad expression, avoidance of metaphors and synonyms are among the greatest demands of grammar books, so attention have to be taken in this regard. In this work it has been seen that despite the progress made in the treatment of numbers from the perspective of language, it is still a complicated issue and more work have to be done in this direction.

REFERENCES

- Abbasov, A., Guliyev, D., & Jafarov, S. (1941). *Grammar of the Azerbaijani language: Vol. Part I, for 5th grade*. Azerneshr.
- Ahmadov, B. A., & Akhundov, A. A. (1997). *Azerbaijani language for 6th grade*. Dilmanc Publishing House.

- Akhundov, A., & Ahmadov, B. (1977). *Azerbaijani language. Textbook for 5th grade*. Maarif Publishing House.
- Aliyev, O. (2021). On the symbolism of numbers three, seven and forty in Azerbaijani folk stories. *Revista Conrado*, 17(78), 121–126. <https://conrado.ucf.edu.cu/index.php/conrado/article/view/1651>
- Chobanzade, B., & Agazade, F. (1930). *Turkish grammar*. Azerneshr.
- Condry, K. F., & Spelke, E. S. (2008). The development of language and abstract concepts: The case of natural number. *Journal of Experimental Psychology: General*, 137(1), 22–38. <https://doi.org/10.1037/0096-3445.137.1.22>
- Demirchizade, A., & Guliyev, D. (1938). *Grammar, for incomplete and high school. Part I*. Azerneshr.
- Franzon, F., Zanini, C., & Rugani, R. (2019). Do non-verbal number systems shape grammar? Numerical cognition and Number morphology compared. *Mind & Language*, 34(1), 37–58. <https://doi.org/10.1111/mila.12183>
- Gelman, R., & Butterworth, B. (2005). Number and language: How are they related? *Trends in Cognitive Sciences*, 9(1), 6–10. <https://doi.org/10.1016/j.tics.2004.11.004>
- Gelman, R., & Gallistel, C. R. (2004). Language and the Origin of Numerical Concepts. *Science*, 306(5695), 441–443. <https://doi.org/10.1126/science.1105144>
- Hasanov, I., & Sharifov, A. G. (1934). *Fifth academic year for secondary school*. Azerneshr.
- Huseynzade, M. (1954). *Modern Azerbaijani language*. AUL Publishing House.
- Jafarov, S., & Farajov, A. (1997). *Azerbaijani language for 6th grade*. Education.
- Mirzazade, G. R., & Akhundov, M. S. (1910). *Head-spend*. Bahariya Publishing House.
- Mirzazade, H. (1962). *Historical morphology of the Azerbaijani language*. Azertadrisneshr.
- Namazov, M. (1980). *Modern Azerbaijani language*. Elm Publishing House.
- Nieder, A. (2019). *A Brain for Numbers: The Biology of the Number Instinct*. MIT Press.
- Spaepen, E., Coppola, M., Spelke, E. S., Carey, S. E., & Goldin-Meadow, S. (2011). Number without a language model. *Proceedings of the National Academy of Sciences*, 108(8), 3163–3168. <https://doi.org/10.1073/pnas.1015975108>
- Storch, A., & Dimmendaal, G. J. (2014). One size fits all? On the grammar and semantics of singularity and plurality. In A. Storch & G. J. Dimmendaal (Eds.), *Number—Constructions and Semantics: Case studies from Africa, Amazonia, India and Oceania* (pp. 1–32). John Benjamins Publishing Company.
- Valiyev, A. (1960). *Grammar of the Azerbaijani language. Part I: Morphology*. Academy of Sciences of the Azerbaijan SSR.