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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

TYPOLOGY OF QUANTITATIVE WORD-CHANGING CATEGORIES

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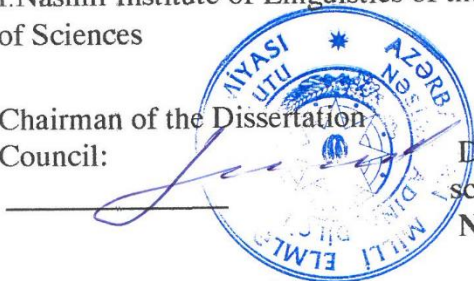**Habib Mammad Zarbaliyev**

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INTRODUCTION

Relevance of the topic and degree of development. Since it is necessary to form a typological inventory of world languages for their typological classification, it is important to determine the typological characteristics of all categories of languages, including the typological characteristics of quantitative word-changing categories, and include them in this inventory. From this point of view, the topic of the study is relevant. The emergence of the concept of quantity, the category of quantity, substantive quantity and quantity of facts have been studied in one way or another on the materials of individual languages (this is discussed separately in Chapter I) but the quantitative quantification of objects and facts, the non-quantitative category of objects and facts have not been thoroughly studied from a typological point of view.

The concept of quantity is inherent in all languages of the world. This concept is expressed in languages using various lexical and grammatical means. Words denoting quantity have developed and reached the highest level of abstraction, leading to the emergence of a separate part of speech - numbers.

The concept of quantity does not only cover objects and events in the objective world. The duration and intensity of work, state and action can also be expressed by words that are carriers of the concept of quantity, along with the category of the verb's mood. The meaning of quantity can also be attributed to the category of degree of the adjective, because the scarcity and abundance of signs and qualities in adjectives can only be measured quantitatively. All this shows that quantity has deeply penetrated the language system as one of the most important and abstract categories of human cognition.

In objective reality, that is, in real life, quantitative determination manifests itself both discretely (discontinuously) and indiscretely (continuously). If quantity is discontinuous, it can be determined by counting, if continuous, by measuring. From this it can be seen that in the category of quantity, which is one of the main categories of human cognition, two rings are mainly combined. The first of them is number (for discrete sets), and the second is measure (for indiscrete sets).

In many languages, the concept of quantity can be expressed by grammatical means. The ability to express the concept of quantity with affixes is the ultimate limit of abstraction. In terms of the ability to express quantity with affixal morphemes, the languages of the world are divided into several groups. In some languages, the category of quantity finds its expression in the singular-plural opposition (for example, in Turkic languages, Mongolian languages), and in some languages, in the singular-plural opposition (for example, in modern Arabic). In a number of languages, there is even a singular-complexion/dual-triple/trial-plural opposition. The use of special means - affixal morphemes - to indicate that there are two, three and four things in the world around us makes the language somewhat heavier. For this reason, the language has tended to get rid of the excess burden in its historical development. All this gives reason to say that the study of quantity as a conceptual category, as well as a grammatical category, from a typological point of view based on the materials of various languages, and the classification of its inherent features are very important.

So far, the theoretical aspects of quantitative modifier categories have been discussed at various levels, albeit not systematically, in the studies of L.S. Barkhudarov, V.I. Yefimov, B.N. Golovin, V.V. Vinogradov, I.A. Baudouin de Courtenay, O. Jespersen, A.V. Isachenko, I.G. Koshevaya, I.A. Melchuk, V.Z. Panfilov, A.A. Potebnya, A.A. Reformatsky, L. Bloomfield, D. Armstrong, E. Cassirer, C.H. Greenberg and others. In Azerbaijani linguistics, the concept of quantity has been illuminated from certain aspects in the studies of A.A. Akhundov, F.Y. Veyselov, O. Musayev, B. Khalilov, M. Huseynzade, G.Sh. Kazimov, M. Kipchak, A.M. Gurbanov, Y. Mammadov, A. Alizade, G.B. Aliyeva, M.I. Islamov and others, but it has not been systematically studied from a typological aspect as a grammatical category.

Object and subject of the study. The object of the study is the quantitative word-changing categories and the subject is the typological similarities and differences possible in these categories in different languages.

Goals and objectives of the study. The aim of the study is to identify and inventory the typological characteristics of these classes

of quantitative word-changing categories in languages of different systems - the similarities and differences that manifest themselves in them in this respect. The main task of the study is to determine the quantitative and non-quantitative quantification of objects and facts.

Research methods. In accordance with the nature of the topic, typological methods were applied in the study.

The main provisions put forward for defense:

1. The functional-semantic category of quantity is inherent not only to substances expressed by nouns, but also to actions / situations expressed by verbs.

2. The quantification of actions / situations does not differ from the quantification of substances.

3. The language has a system of quantitative categories of quantity, grouping, intensity, diminutiveness / superlativeness, and scale, intertwined with the categories of certainty / uncertainty and precision / approximation.

4. If the quantity is discrete, it is determined by counting, if it is indiscrete, it is determined by measuring.

5. The main and primary meaning of the semantic content of the category of quantity is the opposition of singularity / plurality.

6. Such features as the intensity, duration / continuity of the movement determine its size, characterize it in an indivisible quantitative sense.

7. Being non-quantitative categories of objects, mensuration quantifies objects in themselves, while distributivity and grouping contrast the object with the multitude.

8. There is no language in which the grammemes of the singular applied to uncountable nouns and the group applied to countable nouns are expressed next to the same lexeme.

9. Grouping is inherent to all languages as a universal phenomenon but differs in different languages according to the number of grammemes and means of expression.

Scientific novelty of the research. Although quantitative and non-quantitative quantification of objects and facts has been superficially studied in individual languages, it has not been studied at all based on materials from different languages. In this regard, the issues raised in the research are new.

Theoretical significance of the research. The study of quantitative and non-quantitative quantification of objects and facts based on materials from different languages is important in terms of determining the general theoretical issues of languages, especially the typologically similar and different features of the categories of different languages, as well as determining what linguistic means compensate for the functions they perform in languages where there are many grammatical categories, and in terms of forming a typological inventory of languages within the framework of categories.

Practical significance of the research. The results of the research can be used in the preparation of general and typological linguistics courses for students of philological faculties of universities.

Approval and application. The main provisions and results of the research were reported at the scientific seminars of the department, domestic and international scientific conferences. The main content and results of the dissertation are reflected in the author's 9 articles published in various scientific publications in Azerbaijan and foreign countries, in the collections of theses and materials of domestic and international conferences.

The name of the organization where the dissertation work was performed. The dissertation was performed at the Department of General Linguistics of the Azerbaijan University of Languages.

The total volume of the dissertation with a mark, indicating the volume of the structural sections of the dissertation separately. The dissertation work consists of an introduction, 3 chapters, a conclusion and a list of used literature. The Introduction part of the dissertation is 4 pages (6,995 characters), Chapter I is 30 pages (58,223 characters), Chapter II is 32 pages (60,053 characters), Chapter III is 46 pages (77,261 characters), and the Conclusion part is 2 pages (2,667 characters), and the total volume with a mark is 205,204 characters.

MAIN CONTENT OF THE WORK

In the **"Introduction",** the relevance of the topic is substantiated, the goals and objectives set for the dissertation are determined, information is provided about the hypothesis, theoretical and practical significance of the research, the object and subject of the research are highlighted, the methods, scientific novelty, and the main provisions presented for defense are commented on. At the same time, information is provided about the approval and structure of the research.

The first chapter of the dissertation, entitled **"Quantity as a logical and linguistic category"**, consists of three sections.

The first section, entitled *the concept of quantity*, talks about the perception of the category of quantity as a sensory-visual quantity in the early stages of the formation of human cognition. L. Levy-Bruhl expresses the following opinion in this regard: this type of feature has already been recorded in a number of animals in relation to very simple phenomena. If we remember that the memory of primitive men, according to most observers, is "phenomenal" (according to Spencer and Gillen), "miraculous" (as Charlevoix says), then there is every reason to believe that they could easily do without numbers. By habit, the totality of all the objects that interest them is preserved in their memory with such precision that it allows them to recognize without error the footprint of this or that animal, person. If there is any deficiency in this known set of objects, they immediately determine it. In the memory preserved with such clarity, the idea of the number of objects and beings is not yet differentiated..., nothing allows it to be expressed separately. At the same time, this number is perceived qualitatively, or, if necessary, felt.

When preparing to go hunting, they sit in the saddle and look around, and if one of the many dogs they keep is missing, they start calling that dog.[1]

When clarifying the ways of expressing the concept of quantity in language, one aspect should always be taken into account: in a certain set of objects, when the number of objects that make up this

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[1] Леви-Брюль, Л. Первобытное мышление / Л.Леви-Брюль. – Москва: – 1930. – с.121.

set is within the first ten, the set is perceived more quickly with sensory-visual imagery. According to the general opinion of researchers, a person can perceive and accurately remember some sets without counting the objects and beings that surround him. This is possible when the number of units that make up this set is within 7 or 7±2.

Other researchers have also expressed similar ideas. For example, according to A. Vasilyev, the Eskimo does not keep the total number of dogs, but separate specific ideas about them - a white dog with black spots, a dog born in a cold winter, etc. remembers the signs.[2]

In the next stage of the development of the concept of quantity in thought, one or more specific sets are taken as a standard for counting or measuring all other sets. Primitive people did this work mainly with the help of fingers and toes. With the separation of standards, concepts of individual numbers arise. The concept of quantity appears as a common property of identical sets.

The lexical-syntactic methods of expressing quantity can be attributed to the most ancient periods of the world's languages - the period when people had not yet isolated the concept of quantity from the concept of quality. Now in many languages, lexical units denoting a group act as relics reflecting the way of thinking of that period. Since the grammatical category of quantity had not yet developed at that time, people used two different lexical units to contrast two identical objects that differed only in terms of quantity. This method was used to compare not only objects and subjects, but also qualities and signs. This is also evidenced by the degree of comparison of the suppletive form of some adjectives, preserved as a relic in a number of languages. Having learned to express the idea of quality, a person did not immediately acquire the ability to give quality in action and development. Thus, the remnants of degrees of comparison in the suppletive form that exist in a number of languages indicate a period of development of ideas about quality, when man was not yet able to understand quality quantitatively, and when each subsequent level of quality was conceived as an isolated quality, not as a sequential development of the previous level.

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[2] Васильев, А.В. Целое число / А.В.Васильев. – Петроград: – 1922. – с.4-5.

It is known that the concept of quantity does not only cover objects and events in the objective world. The duration and intensity of work, state and action can also be expressed by words that are carriers of the concept of quantity, along with the mood category of the verb. The words *çox, xeyli, az* in Azerbaijani, and *many, few, much, little* in English can be examples of this.

The meaning of quantity can also be attributed to the degree category of the adjective. The scarcity and abundance of signs and qualities in adjectives can only be measured quantitatively.

All this shows that quantity has deeply penetrated the language system as one of the most important and abstract categories of human cognition.[3]

In objective reality, that is, in real life, quantitative determination manifests itself in both discrete (discontinuous) and indiscrete (continuous) forms. If the quantity is continuous, it can be determined by counting, and if it is continuous, by measuring. From this it can be seen that in the category of quantity, which is one of the main categories of human cognition, two rings are mainly combined.

The first of them is number (for discrete sets), and the second is measure (for indiscrete sets).[4]

In some languages, the category of quantity finds its expression in the opposition singular-plural (for example, in Turkic languages, Mongolian languages), and in some languages, in the opposition singular-complexity-plurality (for example, in modern Arabic). In a number of languages, there is even a singular-complexity / dual-complexity / trial-complexity / plural opposition.

The singular / plural meaning, which creates the paradigm of quantity and the main function of the category of quantity – the quantitative distinction of discrete objects, is the basic grammatical

[3] İskəndərova, S. Müqayisə dərəcələri kateqoriyası və isim // Filologiya məsələləri. AMEA M.Füzuli adına Əlyazmalar İnstitutu. – Bakı: Elm və təhsil, – 2019. – s.35; Məsimova, S. Faktların kvantifikasiyasının aspekt kateqoriyası çərçivəsində reallaşması // Uluslararası Mesleki ve Teknik Bilimler Kongresi. Nakhchivan University, Azerbaijan, 16-18 october, – 2020; İksad publications, – s.53

[4] Məsimova, S. Faktların kvantifikasiyasının aspekt kateqoriyası çərçivəsində reallaşması // Uluslararası Mesleki ve Teknik Bilimler Kongresi. Nakhchivan University, Azerbaijan, 16-18 october, – 2020; İksad publications, – s.51

meaning of quantity. Thus, the basic and primary meaning of the semantic content of the category of quantity is the singular / plural opposition.[5]

The term "grammatical category" refers to a concept in which similar objects and events are grouped together in certain groups.

As is known, from the point of view of the characterized object, quantitative characteristics can relate either to the participants of the described (the one about which information is given) or the linguistic fact, or to the described fact itself. From this arises the opposition of two main types of grammatical quantification: quantification of objects and quantification of facts.

From the point of view of the method of characterization, two types of quantitative characteristics are also distinguished:

- numerical: "one", "more than one", "two", "more than two",
- non-numerical: "all" – "partial", "many" – "few".

The interaction of these two oppositions gives rise to four classes of quantifier categories:

- quantitative quantification of objects,
- quantitative quantification of facts,
- non-quantitative quantification of objects,
- non-quantitative quantification of facts.[6]

Quantitative quantification categories are closely related to the semantics of the lexemes to which the corresponding grammemes are attached. For example, nouns with the meaning "... substance" do not have a plural form: Azerbaijani. *bir neçə süd 'a few milks', *altı su 'six water'; in Russian, verbs with the meaning знать 'to know' or любить 'to love' cannot form a finite form. The following concepts are used in the dissertation to explain such manifestations:

- countable / uncountable nouns,
- finite / infinite verbs,
- dynamic / static verbs.

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[5] Məsimova, S. Dilçilikdə tək hal və cəm hal oppozisiyası // Dil və ədəbiyyat. Beynəlxalq elmi-nəzəri jurnal. Azərbaycan Dillər Universiteti. – 2020. №1(113), – s.96

[6] Мельчук, И.А. Курс общей лингвистики / И.А.Мельчук. Т.II. Пер. с фр. Москва-Вена: "Языки русской культуры", Венский славистический альманах, – 1998. – с.82.

The opposition of countable nouns ~ uncountable nouns. It is known that in terms of quantity, all nouns are divided into those that vary in quantity and those that do not. Nouns that vary in quantity denote countable concepts. The use of uncountable nouns in the plural form, the existence of *singularia tantum and pluralia tantum* forms of nouns, and the lexicalization of the plural form open up different views on the definition of the semantics of the category of quantity. These same aspects lead to the explanation of that category in terms of opposites such as singular-plural, non-plural-plural, zero-greater than zero, membership-non-membership.

Thus, one of the existing problems of the semantics of the quantity category of nouns is the issue of describing its internal diversity. One of them is the opposition "countable nouns ~ uncountable nouns".

The concept of quantity can be attributed not only to countable objects, but also to uncountable objects and facts. In countable concepts, quantity acts as quantity, number, and in uncountable concepts, it acts as measure, volume. In objects, quantity is specifically related to the object itself, and measure is related to the quantity inherent to it. For example, in the judgment "There are more pens in this box than in the other box", the quantity is specifically related to the number of pens. Here, quantity is specifically related to the pens themselves. In the judgment "There is more food in this bowl than in the other bowl", the concept of plurality is related to the size of the food. In other words, the abundance of food is related to a certain quality of it, or rather, its volume.

Objects can be divided into two categories: continuous and discrete (above, they were called countable / uncountable, dis-continuous / continuous, discrete / indiscrete, according to the ideas of various authors). For example, water is linguistically continuous: any part of it is water. However, a glass is linguistically discrete: a part of a glass is not a glass. Let us also call the meanings whose referents are conditionally *continuous / discrete*. Thus, "water" is continuous, and "glass" is discrete.

The opposition "finite verb ~ infinite verb". This opposition characterizes a certain feature of syntactics.

The modern doctrine of the methods of action identifies two "higher abstractions" in this area – finiteness and infinity. Finiteness is the presence of an internal limit to which the action reaches or is directed. This limit is implied by the very nature of the action. The finiteness includes all methods of action that occur in both types and only in the finished form (verbs such as Russian *заблестеть* 'to shine', *разыграться – разыгрываться* 'to play', *докопаться – докапываться* 'to dig up [and] find the root', *вырастить – выраститься* 'to grow'). Verbs of one-way action can also have the meaning of limitation (only the action method associated with the imperfective mode: Russian *идти* 'to go', *везти* 'to carry', *нести* 'to carry', etc.).

Limitlessness is the absence of limit in action. Action, by its very nature, does not imply any limitation, boundary, or completion. Infinitiveness is a common property of a number of modes of action that are associated only with the finished form: static (expressing stillness) action (Russian *сидеть* 'to sit, to be in a seated position'), relational action (Russian *иметь* 'to own'), accompanying action (Russian *приговоривать* 'to decide'), multiple action (Russian *хаживать* 'to walk; to walk, to come and go'), multi-act action (Russian *мигать* 'to blink; to tremble'), undirected action (Russian *ходить* 'to go'), intermittent-softening action (Russian *позвякивать* 'to jingle'), continuous-softening action (Russian *накрапывать* 'to sprinkle'). If the meaning of the verb is discrete / continuous, it is *finite / infinitive*.

"Dynamic verb ~ static verb" opposition. If the meaning of the verb corresponds to the event, it is dynamic, if it corresponds to the state, the situation, it is static.

Dynamic verbs indicate that an object performs a certain physical action. The following are examples of dynamic verbs: azerb. *yerimək* 'to walk', *sürümək* 'to drag', *bölüşdürmək* 'to share', rus. *читать* 'read', *писать* 'write', *танцевать* 'dance', *плавать* 'swim', fr. *battre* 'hit', *manger* 'eat', *construire* 'build', *nourrir* 'feed', *courir* 'run', *tuer* 'kill', eng. *to water*, *to write*, *to dig*, *to burn*, *to swim*.

Static verbs indicate stillness, inaction, state, etc. They cannot be described or shown. For example: azerb. *fikirləşmək* 'to think', *bilmək* 'to know', *arzulamaq* 'to wish', rus. *помнить* 'remember',

хотеть 'want', *презирать* 'hate', eng. *to love, to understand, to feel,* frans. *aimer* 'love', *avoir mal* 'to get sick, feel pain', *avoir faim* 'to be hungry'.

The second chapter of the dissertation is called **"Quantitative quantification of objects and facts"** and consists of four sections. In *the first section*, called *"Quantitative quantification of objects"*, the discreteness in the quantitative characteristics of objects is associated with the emergence of the concept of "one" in language. In other words, the perception of only the number "one" in thinking and its expression in language conditioned the emergence of other numbers − "two", "three", "four", etc.

However, at this point, questions arise such as whether, after the concept of "one" and the word expressing this concept emerged in the language, it formed a correlation with the subsequent number "two" and the word expressing this number, and whether the number "one" can create opposition not with the number "two" that follows it, but with the indefinite plurality that exists in human cognition.

Researchers have different views on this issue. Some of them say that the concept of "one" is correlated with the concepts of "two" and "three", while others take the opposite position. According to the former, when the concept of "one" was created, it could only be opposed to any plurality that was greater than itself.

Indeed, in the development of the concept of quantity, the concept of "one" in thinking can be opposed not to individual numbers, but to any non-specific, indefinite, or, more precisely, "non-one" set. The correctness of this idea is also proven by the facts of the languages of peoples living in different parts of the world. For example, according to L. Conant, the Indians of the Botokud tribe knew only the number "one". They simply called all indefinite abstract sets that are more than one "many".[7] This fact, noted by L. Conant, clearly shows the existence of the opposition "one" - "many".

Quantitative quantification of objects is possible only for countable nouns. It is represented by the *substantive category of*

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[7] Conant, L.L. Primitive Number Systems // Annual Report of the Board of Regents of the Smithonian İnstitution (1892). – Washington: – 1893. – p.586.

quantity. The (substantive) category of quantity is a category whose elements indicate the number of corresponding objects. A substantive quantity usually has two, and rarely three, grammemes:

- either "singular" [one object] ~ "plural" [more than one object];
- either "singular" ~ "tesniyye" (or "dual") [two objects] ~ "plural" [more than two objects].

There are also more complex systems that include trialis [three objects] or paucal quantity [several objects] grammemes.

The quantitative meaning clearly manifests itself in pronouns, as in other parts of speech, and this is discussed in the paragraph of the dissertation entitled *Pronominal Quantitative Category*. This can be attributed primarily to personal pronouns. In the study of the quantitative category of personal pronouns, issues such as the systems of quantitative forms, the methods of formation of quantitative forms, similarities and differences in the quantitative category between nouns and personal pronouns are of greater interest. The opposition of quantitative forms of personal pronouns is one of their most characteristic features. There is an opinion that since the unity of the individual is most often perceived in the first person, the formation of the quantitative category in languages began with the first person pronouns. According to P. Forchheimer, the quantitative forms of personal pronouns of a number of languages differ only in the first person. He describes the development of the category of quantity in pronouns and nouns as follows. Singular and plural were first distinguished in the sphere of the first person pronoun, only then did the distinction extend first to the second person, and then to the third person. Kinship terms such as "mother", "father", "sister", "brother", "son", "daughter", depending on the speaker, could easily receive the category of quantity from personal pronouns. Later, this category was applied first to nouns denoting people, then to all living beings and finally to all nouns, including names of things and events, and gradually gained a wider scope.[8]

Pronominal quantity differs somewhat from substantive quantity in connection with the semantic properties of personal pronouns. For

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[8] Forchheimer, P. The category of person in language / P.Forchheimer. – Berlin: Walter de Gruyter and Co., – 1953. – p.12-13.

example, the pronoun "me" (= "the one who expresses this statement") cannot be pluralized like the nouns "house", "tree", "sea", "emotion". Indeed, "houses" are undoubtedly conceived as "house" + "house" + ... + "house", but the plural of the pronoun "I", that is, "we", is in no way "I" + "me" + ... + "me". "We", for example, is understood as "me" + "you", or "me" + "they", "me" + "you" + "he", in short, "me" + "someone else".

In Turkic languages, pronominal quantity is two-membered: the singular form is contrasted with the plural form. For example, in Azerbaijani, the plural of the first and second persons is expressed in a word with a new phonetic structure in the modern language – the suppletive form, that is, without the suffix *-lar/-lər,* with the morphemes *biz, siz.* The plural of the third person is formed by adding the suffix *-lar* to the pronoun: *onlar.*[9]

As mentioned above, one of the issues of interest in the study of the quantitative category of personal pronouns is the methods of formation of quantitative forms. Various methods of formation of non-singular forms from the singular of personal pronouns have been identified. The main methods are: the phonetic method, which involves the change of the stem, the shift of stress, the morphological method, which involves the use of affixes, the syntactic method, which involves the combination of various roots or *the reduplication of the root,* and supplementation. In some languages, a combination of these methods is also observed.

In modern Finno-Ugric languages, the singular and non-singular quantitative forms of personal pronouns differ mainly in their phonetic composition. In other words, the non-singular quantitative form is formed by *the phonetic method.* Compare: mord. *mon* 'me' – *min´* 'we', *ton* 'you' – *tin´* 'you', *son* 'he/she/it' – sịn´ 'they'. The mixed – phonetic-morphological method is more widespread in Finno-Ugric languages. Compare: fin. *Minā* 'me' – *me* 'we', *hän*

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[9] Kazımov, Q.Ş. Müasir Azərbaycan dili. Morfologiya / Q.Ş.Kazımov. – Bakı: Nurlan, – 2010. – s.138.

'he/she/it'– *he* 'they', udm. *mon* 'me' – *mi* 'we', *ton* 'you' – *ti* 'you'.[10]

The formation of the non-singular form of personal pronouns by *morphological method* is observed in most languages. However, the scope of persons in languages is different. For example, in Azerbaijani and a number of other Turkic languages, the non-singular form covers only the third person. In these languages, the plural form of the third person is formed by adding the plural suffix -*lar /-lər* to its singular form: azerb., *o – onlar*.[11]

Before proceeding to the syntactic expression of the plural of personal pronouns, let us clarify the issue of the presentation of reduplication as a syntactic method in the scientific literature. In the vast majority of languages, reduplication acts as a grammatical device and is considered a phono-morphological method. For example, in most Austronesian languages, reduplication serves to express the plural. This includes both nouns and actions and situations: Indonesian*. rumah-rumah* 'houses' (*rumah* 'house'), *berdentang-dentang* 'to ring' (bell) (*dentang* 'metal sound').[12]

The non-singular (plural) of personal pronouns is formed by *reduplication* in very few languages. In Quechua, reduplication is used for this purpose along with the suffixal method: *pai* 'he' – *pai-pai* 'they'.[13]

The formation of the plural of personal pronouns by means of supplementation is a fairly widespread linguistic phenomenon and is observed in most language families.

One of the issues of great interest is the mutual relations between the quantity system and the methods of formation of personal pronouns and non-singular quantitative forms of nouns (or verbs). As is known, in some languages, the quantity category of nouns is

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[10] Майтинская, К.Е. Местоимения в языках разных систем / К.Е.Майтинская. – Москва: Наука, – 1969. – s.180.

[11] Kazımov, Q.Ş. Müasir Azərbaycan dili. Morfologiya / Q.Ş.Kazımov. – Bakı: Nurlan, – 2010. – s.140.

[12] Агус, Салим.Выражение множественности действий в индонезийском языке // Типология итеративных конструкций. – Ленинград: – 1989. – s.215-216.

[13] Майтинская, К.Е. Местоимения в языках разных систем / К.Е.Майтинская. – Москва: Наука, – 1969. – s.185.

absent or poorly developed, but in the personal pronouns of these languages, this category is developed either in all persons or in some persons. In some languages, while the system of quantitative forms in nouns (or verbs) is two-membered (only singular and plural forms), in personal pronouns these systems are three-membered or even four-membered (singular, plural, dual and even trial).

One of the most interesting and multifaceted aspects of the category of quantity is the quantity of *action and process.* The quantity of action and process appears against the background of various semantic shades (intensity, repetition, etc.).

Action and process can denote both divisible and indivisible quantities. This quantity is expressed in verbs by lexical, morphological and syntactic methods.

In Chapter I, the verbal plural was discussed because it contains models of iterative methods of action, distributive methods of action, continuative methods of action and intensive methods of action. Now let us dwell on them in detail.

V. Dressler suggests that these meanings can be expressed with various grammatical indicators and at the same time without any grammatical indicators, in certain categories of thought, time, etc. and presents them in the following classification:[14]

- iterative methods of action: discontinuous (rare repetition with a noticeable break), repetitive (rarely repeated, with a noticeable break), duplicative (repetition of the action by the same person or by different persons), reversative (reverse movement related to action verbs), frequentative (frequent, regular repetition), conative (repetition of attempts at action), alternative (repetition of opposite-directional actions),

- distributive methods of action: subject distributive (each of a large number of subjects performs the action separately, the actions occur either simultaneously or at different times), object distributive (actions are performed separately with each object, the actions occur either simultaneously or at different times), dispersive (the action

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[14] Dressler, W. Studien zur verbalen Pluralität. Iterativum, Distribitivum, Durativum, Intensivum, in der allgemeinen Grammatik, im Latenischen und Hethitischen / W.Dressler. – Wien: – 1968.

occurs simultaneously in different points of space), diversative (movements of a large number of subjects are directed to different places), ambulative (movement alternately covers different points of space),

- continuous movement methods: habitual (repetition of movement as a habit, inclination, skill), durative (continuous movement), continuative (continuation of a previously started movement),

- intensive movement methods: literally intensive (intensified movement), attenuative (weakened movement), accelerative (fast movement), exaggerative (excessive movement), pejorative (negatively evaluated movement), asseverative (emphasized movement that occurred in the absence of necessary conditions).

There are a number of ways to express iterative action in the world's languages. For example, in Latin, repetition of action is expressed by adding the suffix *-ito* to the end of verbs: *cantito* 'sing often', *ventito* 'come often'. In English, verbs ending in *-er* and *-le* also express similar content: *stutler* 'to stammer', *patter* 'to beat', *chatter* 'to talk a lot'.[15] In French, there is a special group of verbs to express the divisible quantity of action. This group includes verbs such as *bercer* 'to swing' and *battre* 'to beat'.

In Arabic, iterative verbs are usually represented by specific sound combinations that are repeated twice. For example: *zalzala(t)* 'earthquake', *qahqaha(t)* 'laughter', *waswasa(t)* 'inspiration; misguidance'.

One of the most commonly used lexical tools for expressing the quantity of action in the Azerbaijani language is the dual verbs of the *get-gəl, gir-çıx* type. In addition, words and word combinations with time and space meanings such as *hərdənbir*, *orada-burada*, *arabir*, *şəhərbəşəhər*, and adverbs of the type *tez-tez*, *gec-gec*, *az-az* formed by reduplication of adverbs also express the quantity of action / situations.[16]

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[15] Есперсен, О. Философия грамматики / О.Есперсен. – Москва: Изд-во иностранной литературы, – 1958. – s.243.

[16] İskandarova, S. The quantity of an action and aprocess // Науковий Вісник Міжнародного Гуманитарного Університету. Серія: Філология, Випуск 27, – Одеса: – 2017. – s.165.

It should be noted that the quantity of action can be expressed by indicating the specific number of the object, subject, or action even without any morphological indicator in the verb.

The indivisible (indiscrete) quantity of motion is manifested against the background of intensity and continuity (processuality). Unlike the divisible quantity of motion, it is impossible to determine separate phases of the indivisible quantity, since there is no break between these phases and the motion continues as an uninterrupted process. The quantitative meaning expressed by verbs denoting intensive actions is related to the manner of execution of the intensive action (rapid action, exaggerated action, etc.).

Thus, the intensity, continuity / continuity of the action, etc. determine its size and, therefore, characterize it in an indivisible quantitative sense.

The *third chapter* of the dissertation is called *"Non-quantitative quantification of objects and facts"*. *The non-quantitative category of objects* includes three modifier categories. The first category – mensurative characterizes or quantifies objects in themselves. The other two categories – distributivity and collectivity – contrast the object with the multitude. *The mensurative* is a category whose elements characterize the size, volume of an object.

The mensurative usually has three gramms:
- neutrality: normal size,
- diminutive: small size,
- augmentative: large size.

This category is mainly applied to countable nouns, but it can also characterize uncountable nouns. In the latter case, the diminutive is used in the sense of "few", and the augmentative is used in the sense of "many".

As a rule, the diminutive suffix expresses a meliorative, for example, hypocoristic (indicating that the speaker likes it), and the augmentative expresses a pejorative or deprecative (indicating that the speaker dislikes it). Conversely, there may be cases where the diminutive is used in the sense of "unpleasant, hateful", and the augmentative in the sense of "pleasant, amazing". In addition, there may be several diminutives in the language, one of which means

"pleasant", and the other "unpleasant". The same idea can be said about augmentative.

Augmentative measure, as a morphological form of a word, sometimes indicates the intensity, sometimes the measure, and sometimes other determiners are greater. It is the opposite of diminutive measure. Determining a certain object with the augmentative measure, as shown above, can sometimes even create a comical, unpleasant effect. In some languages, the augmentative measure is applied to nouns, and in others to verbs.

(Nominal) distributivity is a category whose elements indicate that the object is concentrated in one place as a whole, or that it consists of a set of elements located at different points in space.

Distributive plural can be expressed in different ways in different languages (with special suffixes, internal inflection, etc.). However, in the same language, distributive plural can be expressed in several ways.[17]

Distributivity has two grammums: neutrality [in one place] ~ distributive.

Distributivity is applied to both countable and uncountable nouns. For example, "water" in the distributive case means "water here and there, water everywhere."

In ancient times, before approaching the multitude of things as the sum of individual things, people apparently perceived this multitude as a complete set. In those times, *the multitude* was most likely understood not as the quantity of things, but as the quality of things and was perceived as various signs. According to L. Levy-Bruhl, any kind of collection of things was engraved in the human memory with all its accuracy, and if there was a certain number deficiency in the collection, primitive man immediately felt it.[18]

According to Turkologists, in the Turkic languages, indicators of collection were preserved mainly in toponyms and ethnonyms.

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[17] Панфилов, В.З. Философские проблемы языкознания (гносеологические аспекты) / В.З.Панфилов. – Москва: Наука, – 1977. – с.246.

[18] Леви-Брюль, Л. Первобытное мышление / Л.Леви-Брюль. – Москва: – 1930. – с.121.

However, the formants at the end of toponyms and ethnonyms were also used in other nouns, expressing ordinary plurality.

A collection of things and phenomena, living beings can also be included in the lexical meaning of the word. For example, Russian. *народ* 'people', *толпа* 'crowd, gathering', *стадо* 'herd', Azerbaijani. *camaat*, *xalq*, *kütlə*, *sürü*, *naxır*, *ilxı*. As mentioned above, such nouns can be used in the plural form with some exceptions. In this case, they denote separate groups. Compare: Russian. *народ – народы* 'peoples', *толпа – толпы* 'groups', *стадо – стада* 'herds', Azerbaijani. *xalq – xalqlar* 'peoples', *kütlə – kütlələr* 'masses', *sürü – sürülər* 'herds'. However, in Azerbaijani, for example, the collective noun *camaat* 'community' is not pluralized.

Intensity is a semantic category that is based on the concept of gradation of quantity in the broad sense of the word. The elements of this category characterize the intensity of the fact. Intensity usually has three main grammatical forms: neutrality (normal intensity) ~ attenuative ~ intensive.

In a number of languages, the intensification of adjectives is realized by a special form called *elative.* Outwardly, this form resembles the superlative (degree of superiority), but unlike it, it expresses the meaning "very", "very much, to a high degree, extremely". For example, French. *richissime* 'very rich'. It should be noted that in French, the superlative cannot be used as an elative.

Aspect II is a category whose elements indicate that the fact is concentrated in one place and at one time, or that it is distributed in space and time. Aspect II is relevant only for facts, or more precisely, for a set of situations. Such a situation (for example, a large number of shots) can be:

- either concentrated, in one place and at the same time (multiple shots),

- or distributive:

Accordingly, aspect II consists of four grammemes:

1) concentrative: the fact is presented as a whole without internal structure,

2) distributive: the fact occurs simultaneously in several places,

3) iterative: the fact occurs in several consecutive moments,

4) distributive-iterative: the fact occurs in several places and at different moments.

Aspect III is a category whose elements characterize the temporal dimension of the fact. Aspect III has three grammemes:

- pointality: the fact is presented as a point on the time axis, that is, as something without a time dimension,

- durative: the fact is presented as something of a certain size,

- habitualis: the fact is described as something that usually, regularly occurs.

The IV aspect category is a category whose grammemes indicate whether the fact is in the process of expansion at a given moment in time. This category has two grammemes:

- progressive: the fact is in the process of expansion,

- non-progressive: the fact is not in the process of expansion.

In fact, *the IV aspect* is not a quantitative category. It characterizes the described fact more in terms of quality. However, since the IV aspect is very close to other aspects both in terms of its semantics and its role in the grammatical systems of specific languages, it was more appropriate to consider them together here.

The grammemes of "progressive" and "non-progressive" usually contrast the forms of dynamic verbs, while the IV aspect is not defined for stative verbs.

Let's look at examples:

Present tense	
Non-progressive:	John sings well (= 'John has a good voice') [characteristic of his ability]
progressive:	John is singing well (at present) [characteristic of his performance at the moment]

The V aspect category is a category whose elements indicate whether an event has reached an internal limit (should or should not reach).

The V aspect category is relevant only for finite verbs. This aspect has two grammemes:

- perfective = perfective mood: the event has reached an internal limit, or at least should reach it,
- imperfective = imperfective mood: the event has not reached an internal limit, moreover, it should not reach it.

Past tense	
perfective mood:	Я оделся 'I got dressed'. Соль раствулися 'The salt melted'. Солнце село 'The sun has set'.
İmperfective mood:	I dressed for a long time. Сол раздной растровялась "Salt was melting slowly". Солнце садилос "The sun was setting".

As can be seen from the examples, the imperfective mode expresses the "unfinished" character of the situation.

Adjective comparison: According to E. Sapir, in the semantics of quantification, the concept of comparison, or more precisely, quantitative gradation (gradation), is at the heart of the concept. The expression X is *heavier* than Y is semantically simpler than the expression X *is heavier than* Y or X is twice as large as Y in weight; the word "five" is meaningful only when it is known that five is greater than four and less than six; the word "much" means "more than the norm", etc.[19] It follows that the meaning "more than ... / relatively more than..." serves to play a very important role in natural languages. It is especially characteristic of the original adjectives and adverbs of merit.

Degrees of comparison: From a logical point of view, four grammatical forms of degrees of comparison are possible: "positive" (no comparison ~ "equal" (same P as ...) ~ "comparative" (more P than ...) ~ "superlative" (most P).

However, unlike Wall, which has four degrees of comparison (we are not aware of such a fact in other languages), in most languages, three degrees are more characteristic for the category of

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[19] Sapir, E. Grading: A Study in Semantics. Philosophy of Science. Vol.11. – 1944.

comparison: "positive" ~ "comparative" ~ "superlative". For example, in English, French, Slavic, Sami, Ural-Altaic and many other languages, the situation is exactly the same:

- eng. big ~bigger ~ the biggest,

- fr. court 'short' ~ plus court 'shorter' ~ le plus court 'the shortest',

- rus. длинный 'long' ~ длиннее 'longer' ~ самый длинный 'the longest'.

Since many languages do not have synthetic means of expression for comparative and superlative, they are expressed in analytical forms. For example, in French, if we do not take into account some exceptions such as bon 'good' ~ meilleur 'better', mauvais 'bad' ~ pire 'worse', the situation is exactly as follows: rouge 'red' ~ plus rouge 'redder' ~ la plus rouge 'the reddest'. The equivalent aussi rouge que 'as red as...' can also be added to this list. In other languages, analytical forms exist alongside synthetic forms.

Absolute use of comparatives: As is known, in a number of languages, the forms of comparatives of adjectives can be used in an intensive sense, without any connection with comparison. For example, the superlative of Latin fort + issim (+us) 'strongest' can simply mean "very (extraordinarily) strong". The term "elative" is used to characterize such cases. In French, the superlative cannot be used in the elative form.

The following scientific propositions are summarized in the *"Conclusion"* part of the dissertation:

The category of quantity, as a category of cognition, was formed in the process of historical development, passing through a number of stages. The traces of those stages that the category of quantity went through in its development from sensory-visual imagery to abstraction are clearly visible in modern languages. Quantity refers not only to objects, but also to facts and situations. The analysis of quantity based on the materials of various languages allows us to come to the following conclusions:

1. Quantification is a quantitative characteristic of reality. It determines the singularity and plurality of counted objects, the gradation of the part and whole, measure, duration and intensity of divisible qualities and processes according to their mutual

relationship, and is based on the antinomy of continuity and discreteness and the operation of logical comparison.

2. Quantifiers - lexical and grammatical indicators - act as units of quantification for objects and facts that are counted, and comparative phonetic, lexical-phraseological and morphological-syntactic indicators - for uncountable substances.

3. Quantification is systematic and occasional, implicit and explicit, depending on its method of expression. Its systematic means of expression in the language are root reduplication, lexical repetitions, internal inflection, plural, comparative and superlative affixes, mensuratives, numerals, quantitative pronouns, quantitative nouns or quantitative names, verbs containing some methods of verbal action, adverbs and quantitative prepositions, as well as some syntactic structures.

4. Occasional quantification of uncountable objects and the formation of a typical combinations with mensuratives should be evaluated as stylistic devices used to increase the expressiveness of speech.

5. The singular form can give a plural meaning in certain contexts, while nouns denoting a group can, out of context, as a lexical unit, denote both plurality and large groups.

6. A collective noun is a carrier of certain knowledge about an object.

7. The category of plurality expressed in both nouns and verbs predetermines the connection of noun and verb categories. Internal verb plurality, which denotes the plurality of the action itself, quantitative multiplicity, is manifested in the system of certain methods of verb action (various iteratives, distributives, including habitualis).

8. Verbal plurality expressed in verbs denoting the durative-distributive-reciprocal method of action also implies the plurality of the noun (Azerbaijani: *yarışmaq* 'to compete', Russian: *переписываться* 'to correspond'). The general lexical meaning of such verbs restricts the use of the names of subjects next to them in the singular. This restriction does not apply only to collective nouns.

9. The basis of intensity as a semantic category is the concept of gradation of quantity in the broad sense of the word.

10. Lexical plural means present quantification in the highest degree of detail (Azerbaijani: *ümman* 'ocean', *qucaq* 'hug', Russian: *море* 'sea', *груда* 'heap') and express the subtlest semantic and pragmatic shades of quantification (Azerbaijani: *bir qucaq çiçək* 'a bunch of flowers').

The main provisions of the research work are reflected in the following published articles and theses of the author:

1. İsimlərdə kəmiyyət kateqoriyasının ifadə formaları // Humanitar elmlərin öyrənilməsinin aktual problemləri. – Bakı: Bakı Slavyan Universiteti, – 2016. №1, – s.60-63.

2. Müxtəlif dillərdə kəmiyyət anlayışının ifadə üsulları // Xarici dillərin tədrisinin aktual problemləri. Respublika Elmi-praktik konfransının materialları. Azərbaycan Dillər Universiteti, 5-6 may 2016-cı il. – Bakı: – 2016. – s.161-164.

3. Topluluq anlayışı və onun dildə təzahürü // Dil və ədəbiyyat. Beynəlxalq elmi və nəzəri jurnal. 4(104). Bakı Dövlət Universiteti, – 2017. – s.214-216.

4. The quantity of an action and a process // Науковий Вісник Міжнародного Гуманитарного Університету. Серія: Філологія, Випуск 27, – Одеса: – 2017. – с.164-166.

5. Müqayisə dərəcələri kateqoriyası və isim // Filologiya məsələləri. Azərbaycan Milli Elmlər Akademiyası, M.Füzuli adına Əlyazmalar İnstitutu. – Bakı: "Elm və təhsil. –2019 s. 34-39.

6. Kəmiyyət anlayışının dil tarixində əksi // Dil və ədəbiyyat. Azərbaycan Dillər Universiteti, – 2019. №3, – s.51-55.

7. Dilçilikdə tək hal və cəm hal oppozisiyası // Dil və ədəbiyyat. Beynəlxalq elmi-nəzəri jurnal. Azərbaycan Dillər Universiteti. – 2020. №1(113), – s.93-96.

8. Faktların kvantifikasiyasının aspekt kateqoriyası çərçivəsində reallaşması // Uluslararası Mesleki ve Teknik Bilimler Kongresi. Nakhchivan University, Azerbaijan, 16-18 october, – 2020; İksad publications, – s.260-266 (Azərbaycanda beynəlxalq konfrans).

9. The Category of Quantity in Different Languages // 12-ci Uluslararası Çinden Adriyatike Sosial Bilimler Kongresi. Faryab Üniversitesi, Afghanistan, – 2020, 23-24 October, – p.27-33 (Xaricdə beynəlxalq konfrans).

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The dissertation is possible to get acquainted with the dissertation in the library of the Institute of Linguistics named after Nasimi of the Azerbaijan National Academy of Sciences.

The electronic versions of the dissertation and the abstract are posted on the official website of the Linguistics Institute named after Nasimi of the Azerbaijan National Academy of Sciences.

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