

# Pragmatic potential of linguistic ecology on the material of scientific texts about the Earth

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**Abstract.** The study aims to describe the functional purpose and pragmatic properties of linguistic ecology based on the material of scientific texts about the Earth, their recognition and correct understanding by foreigners mastering the Russian language. Syntaxemes are used for analysis, which are used both in scientific (more often technical) and colloquial styles, the analogy of which is offered in the block of methodological tasks that consolidate the information received. The described system of exercises for distinguishing constructions with a zero connective, ellipsis and sentences without them allows students who speak Russian as a foreign language at elementary and advanced levels to understand easily the everyday speech of native speakers, as well as master the scientific terminology of the language being studied. Summarizing the experience of work at the stages of pre-university and university education, the authors come to the conclusion that the use of the analyzed models and structures as educational material contributes to the implementation of personality-oriented and communicative approaches in the educational space of the university.

## 1 Introduction

Foreigners studying the Russian language, even at the initial stage of education, are faced with the question: why in some constructions the same is structurally necessary, while in others it is not even explicit, but redundant. The answer to this question lies in the understanding of the distinction between such concepts as the null sign (zero connective, syntactic zero) and ellipsis.

An analysis of the scientific and pedagogical literature devoted to the study of the described models and structures allows us to conclude that at the present stage there is no generally accepted system for distinguishing between the terms *zero lexeme*, *ellipsis* and *construction with a zero connective*, despite the fact that I.A. Baudouin de Courtenay mentioned the term zero lexeme and A. M. Peshkovsky – the syntactic zero at the end of the 19th century.

Thus, the purpose of the article is to describe the functional purpose and pragmatic properties of elliptic models and structures with a zero connection in the process of teaching Russian as a foreign language to students of a technical university. It seems to us

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that the most appropriate way to implement the plan is a specially designed system of exercises.

To achieve this goal, it is necessary to solve a number of problems: 1) describe the functional purpose and pragmatic properties of elliptic models and zero-connective structures; 2) provide a set of exercises for students who speak Russian, both at elementary and advanced levels.

The relevance of the topic we have chosen is determined by the objective need for scientific study of the process of formation of communicative, cognitive and professional competencies.

## 2 Materials and methods

The material for linguistic analysis and interpretation of linguistic phenomena in the proposed study was sentences, according to style, correlated with colloquial or neutral style, as well as constructions characteristic of the scientific style of speech to identify the relationship between the semantics of the sentence and its structure. The method of comparative analysis revealed the distinctive features of elliptical models and sentences with a zero lexeme, with an emphasis on their style. In order to make a choice in the process of a communicative act and to neutralize errors in the process of everyday and scientific communication, the principles of perception by foreigners of the units under study were described by the contrastive method when mastering Russian as a foreign language.

In our work, we apply a competency-based approach, which forms the language, speech and communication competencies of students, which are necessary for their active involvement in the process of communication with native speakers of the Russian language. We believe that the chosen approach allows foreign students to develop skills that allow them to communicate in Russian, which results in the formation of a secondary linguistic personality [1].

## 3 Results

Practicing methodologists working with foreign audiences and teaching Russian as a foreign language understand that the implementation of a communicative approach as part of the intensification of learning is impossible without interdisciplinary integration in mastering all language levels [2-5]. So, for example, insufficient knowledge of phonetic norms leads to errors that affect the assimilation of vocabulary, grammar, word formation:

*Papa dOma;*

*Na etoi ylitse raspolozheny vysotnye domA.*

Separation, in turn, from the context (lexical aspect) sometimes does not allow establishing the locally correct stress in homophone words presented in writing: domA (plural of a noun) - dOma (adverb of place).

Moreover, the lack of a system when using the language introduces chaos in determining the content of the statement, endowing it with isomorphism and homonymy:

For example, the verbally presented construction *Y Ivana brat* for a Russian-speaking person not only does not cause difficulty in determining its semantic plan, but also lifts the pragmatic veil, giving a lot of additional information: *Y Ivana est brat. Brat Ivana zhivet ne c Ivanom. Seichas brat Ivana prishel v gosti k Ivany.*

Such a structural narrowing in the presentation of information, on the one hand, saves speech efforts, and on the other hand, helps to avoid repetition.

Emphasis and expressive punctuation can expand extralinguistic boundaries [6]. So, increasing the intonation on Ivan's word form removes the meaning of belonging from it

and introduces the meaning of location: the brother is now with Ivan, and it is not known for sure whether this is Ivan's brother. Putting an ellipsis at the end of a sentence translates it into the category of elliptical (incomplete) ones that require meaningful scanning of the contextual environment: *Ivan has a brother ... (born, died, received a diploma, etc.)*. Grammar can narrow the circle in the definition of a materially unexpressed predicate. For a foreigner, especially a student at the pre-university level, such extralinguistic aspects of the language being studied are vague, and the above phrase, said by a foreigner (especially out of context), is usually regarded by the teacher as grammatically erroneous, since it supposedly lacks a structurally necessary verbal element. After some explanations, the student quickly learns that in the genitive construction U + genitive, the verb copula must be materially present (even in the present tense). However, such linguistic clarity already in the study of adjectives is quickly replaced by misunderstanding: *Y menya est goluboe platie// Y menya goluboe platie- y mamy—sinee*.

The ellipsis and the zero lexeme are constructions that border on each other, and in relation to the methodology of teaching Russian as a foreign language, their structural recognition helps the language teacher to justify the student the possibility or impossibility of the absence of a language unit in a particular text. Let us turn to examples and define the role of the materially expressed and materially unexpressed verb "to be" in the transmission of explicit and pragmatic information:

1. *Y nego est mashina;*
2. *Y nego novaya mashina;*
3. *Y nego est novaya mashina.*

We believe that constructions with zero and material "is" are semantically different: in possessive syntaxemes with *is*, the emphasis is on the presence of an object (*He has a car*), and in constructions with a zero connective, on its properties (*the car is new*). In sentences with a null sign, a comparison of its components (for example, an object and its properties) is often observed. So, the second example: *He has a new car shows not that He has a new car, but that His car is new*.

It is thanks to the zero link that the additional meaning of presence is removed from the phrase and the language element that determines the quality is semantically singled out [7]. In its absence (in this example, without the word "new"), the sentence becomes grammatically incorrect (you can't say: he has a car). However, with a certain structural distribution and the setting of appropriate punctuation marks in writing and the introduction of emphatic intonation during oral presentation, the copula "is" can be omitted:

1. *He has a car - he will not wait for the bus (the meaning of consequences);*
2. *He has a car, I have a bicycle (the meaning of comparison).*

The examples given justify the assumption that constructions with the obligatory *is* express the existence of a certain object in its pure form, and without there are elliptical sentences and introduce a comparison of one object with another.

In similarly structured phrases, we believe that the main condition for highlighting the zero connective [8] and distinguishing it from the ellipsis is the ability to replace the verb *is* with its form in the past or future tense:

- Ivan is a student. Ivan was (will be) a student - a zero sign;*  
*The bell rang - everything - in places - an ellipsis.*

It should be said that a slightly different approach to the methods of distinguishing between the ellipsis and the null sign should be applied to some prepositional combinations of the scientific style of speech (type, flu remedy, brick wall, etc.), where the introduction of the verb predicate in the future or in the past tense is impossible, but this "impossibility", we believe, should not transfer them to the category of elliptical ones: such lexemes are close to constructions with a zero sign. We list their types in Table 1.

**Table 1.** Zero Signed Constructions.

Preposition	Example	Example
ot	reason	pokrasnenie ot crema
ot iz	consequence quality	temperature of vaktliny zdanie iz kirpicha
ot	aim	lekarstvo ot grippa
na	reason	allergiya na apelsiny
dlya	aim	kirpich dlya oblitsovki

The analysis shows that such constructions are most often found in the contexts of the scientific style of speech, which is characterized by temporal static, and the introduction of the verb connective to be in the future or past tense translates them into a different stylistic level, while removing the generalization from the phrase and blurring the original meaning. Thus, setting the lexeme to be an example Kirpich byl dlya oblitsovki not only translates it into a zone of stylistic neutrality, but also localizes the target value, while adding several others to it, for example, comparisons (the brick was for cladding, but it was used for masonry), highlights with emphatic accentuation (the brick was for cladding, not tiles, for example).

On the other hand, the target prepositional case constructions of the scientific style can be easily transformed into complex sentences, where the introduced union to, concretizing the description of the general patterns of the surrounding reality, takes over the semantic role from the materially represented linking verb element, which begins to perform only the function of a grammatical skeleton:

*Lekarstvo ot grippa-lekarstvo chtoby ne bylo grippa.*

Comparing the two phrases, we note that complex syntaxemes (*to be called complex*) must have a verb in the subordinate part, which, if it is impossible to transform a verbal noun into a verb (*a brick for facing - a brick for facing*), is replaced by a connective to be. This is explained by the fact that in the nature of complex sentences with the conjunction to (*probably for ethno-cultural reasons*) there is a structural requirement when realizing the target meaning in the subordinate part of the infinitive (*I came to see you*) or the past tense verb when realizing the meaning of desire (*I want, for you to come*). With such a structural and semantic difference, these two types of sentences are connected by the fact that in both uses it does not combine with the forms of the present or future tense, which means that in the absence of the main verb, the indicator of the past tense of the subordinate part is the verb to be. Moreover, this indicator is purely grammatical, which excludes such constructions from the list of syntaxes with zero lexemes or ellipsis [9-11].

It should be said that in colloquial speech there are sentences in figurative usage, where to displaces the predicate:

*To no tears!*

*To in a big way!*

We believe that in them the lexeme to occupies a borderline morphological position between the conjunction and the particle and forces us to speak of isomorphism, which is removed by the context.

*To be without tears!* - the predominance of an imperative meaning with a touch of purpose with a materially expressed predicate.

Here, in function, it approaches the formative particle, however, unlike it, it does not tolerate the verb form in the present or future tense after itself.

Compare:

*Let it be on a grand scale! / To be on a grand scale!*

In the first phrase, a softened demand is presented, close to desire, in the second - an order that does not tolerate objections.

We believe that such models are weakly dependent on the context and situation, since they are structurally and semantically free from semantic and formal content of contextual and situational units, and the absence of a predicate in them is a structural norm.

On the other hand, any spoken language (due to its pragmatic potential) tends to save speech efforts, so any phrase initially assumes the possibility of various omissions and abbreviations appearing in it. The presence of materially unexpressed lexemes in a complex sentence is determined by the interaction of explicit or implicit predicates functioning in its composition, which often makes us consider them as elliptical models:

*Tomorrow he leaves - so that without tears!*

We see that the contextual environment of the phrase so that without tears takes it out of the zone of transition between models with ellipsis and zero connective and fixes it in the zone of ellipsis with structural and semantic sufficiency. This idea is confirmed by the impossibility of putting into the construction of the verb to be in any tense; there is a clear semantic localization of the predicate in it: *so that they see off without tears!*

It can be seen that elliptical syntaxemes correlate with its corresponding full variant at the level of associations, within the framework of their paradigm. Due to this, not there is a destruction of logical-semantic relations in the elliptical part. In such constructions, in addition to the possibility of transforming models with a gap into constructions without it, other factors also indicate the presence of an ellipsis, and not a zero connective:

1. The functioning of grammatical units that structurally suggest a gap:  
*I'm going to the store (replenishment is possible only with the verb of movement).*

2. Emphatic accent (intonation highlighting the first part and creating a pause after it):  
*I'm with you // with all my heart!*

Situation, contextuality, homogeneity of the apperceptive basis of communicants, the desire for lexical compression create the basis for the elimination of repetitive or uninformative blocks in a sentence. Such sentences, however, to a better extent than full sentences, reveal their pragmatic potential, thereby enliven the statement, bring dynamism and emotional tension into it.

In non-scientific styles of speech, the means of expressive syntax (more often inversion) can influence the grammatical structure of a written phrase:

*Talking about your academic performance is the reason for our meeting.*

In such sentences, the predicate, expressed by the verb "to be" in the present tense, occupies a certain place in the intonational pattern and theme-rhematic articulation. At the same time, the verb "is" in combination with the phraseologized particle "and" takes on a greater intonation of emphasis, therefore the phrase without a materially expressed predicate (*Talk about your academic performance and the reason for our meeting*) transfers the particle into the category of connecting unions and creates a conflict not only between the connected concepts, but also between the original thematic and rhematic. The lack of relationship between the theory and practice of its use may exacerbate this problem. In this regard, in order to improve speaking skills, it is necessary to create conditions (speech situation) for the implementation of the construction in the communication process.

Possession of the structural features of creating an ellipsis and constructions with a zero sign for native Russian speakers opens the veil in understanding the pragmatic potential of a phrase, and for foreigners it serves as a powerful tool in eliminating grammatical errors and intensifying the development of communication skills.

In this regard, a language teacher working in a foreign audience should introduce tasks during the lesson to distinguish between constructions with a zero lexeme, ellipsis and sentences without them even at the stage of elementary language proficiency [12]. Among these exercises are the following:

1. Choose sentences that characterize a person or his condition. In such syntaxemes, as a rule, there is no copula: *I have blue eyes. I have the flu.*

2. Select sentences that show the presence of the subject in a person. Such constructions always have a linking element in their composition: *I have a brother, my brother has a family.*

3. Insert where necessary, *the verb is.*

4. Say a sentence in the past (future) tense: *I have a temperature, I am a student.*

5. Select and read only those sentences in which the verb requires the past tense (infinitive): *Dad wants his son (finish, finished) university. Dad called his son to (talk, talked) with him.*

6. Indicate the sentences that can be supplemented with the verb "to be": *Don State Technical University ... on Gagarin Square / Mom ... at home.* (sentences with the predicate to be reflect the static nature of the subject).

Advanced students can be offered exercises on perception, identification, substitution and paraphrasing.

1. From a number of verbs, choose one that can complete the sentence: *He stopped: there was an abyss further (and felt, and saw, and understood, and heard, and said ...).*

2. Restore questions that can be answered with phrases: *To the store. In the shop. No. I do not have a brother...*

3. Choose the contexts in which the following phrases (which can end with the following phrases) can be placed: *Don't worry: I'm in a car! It was a wonderful trip! I session...*

When completing tasks to determine the pragmatic potential of a phrase, foreigners may encounter grammatical structures that have no analogues in their native language. In this case, they try to apply a lexical translation, but, as a rule, it does not convey the information originally embedded, which leads, at best, to a distortion of the meaning. To eliminate such errors, the use of the method of translation transformations can be used, which, in the event of a mismatch between structural and grammatical units in the system of the native and studied languages, suggests the possibility of replacing not only individual words or members of a sentence, but often the entire language system, that is, the student must understand that it is not a construction that needs to be translated, but the meaning that is embedded in the phrase through this construction.

## 4 Discussion

Let us dwell on the options for interpreting the terms and present the linguistic and methodological views of some scientists involved in the nature of the phenomena described. The concept of a null lexeme is closely linked to the term "ellipsis", but their distinction has long been controversial in scientific circles. So, by ellipsis, some linguists, adhering to the data of the Linguistic Encyclopedic Dictionary, understand "the omission in a speech or text of one or another member of a sentence, a component of an utterance that is easily restored from the context ... or from a specific speech situation" [13]. This point of view is shared by A. M. Peshkovsky and A. A. Chess. They call sentences with an ellipsis structural variants of full sentences. Other researchers (including V. V. Vinogradov) consider them "peculiar typified forms of sentences in colloquial speech, their special structural types, which do not at all represent violations of the norms of complete sentences" [14]. A. N. Gvozdev integrated the above opinions and classified the described units as two-part complete ones with a zero predicate. Under the zero link in the Dictionary of Linguistic Terms, edited by Akhmanova O. E. a sign is understood that "performs a certain linguistic function without a special sound expression, only through opposition to a pronounced positive element of the same series or paradigm; devoid of formal expression and acquiring linguistic relevance only in relation to the marked member of the opposition" [15]. A. Sh. Bally (following F. De Saussure) in his work "Linguistics and Questions of the

French Language" defines this concept as "a sign that appears without a positive signifier, but with a certain meaning in a certain place in the syntagma" [16]. P. V. Chesnokov dwells in detail on the characteristics of the zero sign in his articles. He rightly notes "that a certain ideal content is assigned not to the missing (zero) units of the language, but to the materially represented units, for which the absence becomes their distinguishing feature" (2007) and an indicator of special significance.

## 5 Conclusion

The conducted research makes it possible to assert that the system of developed exercises, described by us, opens up wide opportunities for more effective construction of the educational process in a foreign audience. The use of the described constructions as a teaching material in the lesson of Russian as a foreign language significantly increases the interest of students, expands their vocabulary, helps to consolidate in the minds of foreigners the patterns of speech behavior of native speakers of the Russian language in various communicative situations, forming communicative, cognitive and professional competencies.

We believe that the theoretical and practical material presented in the article will be useful for practicing teachers, teachers of additional education, as well as students of philological specialties.

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