

The Problem of Language Economy From the Perspective of Language Evolution

*Saidov. Kh. Sh.*¹

Introduction

Observation of languages shows that they have a stable tendency to the "convenience" of pronunciation, which can be considered as the cause of phonetic changes. At the same time, those sounds and syllables that are stable in their use (i.e. they are not compressed further) are perceived as carriers of certain meanings. In other words, the "convenience" of pronunciation is the dominant motivating force of sound change in language functioning under various circumstances. This phenomenon means that the language tends to simplify, moving in the process of its development from complex to simple. This can be observed first of all when converting long words into short ones. For example: *we tellen* → *we tell* ("we talk"). This process can be accelerated by involving a variety of language facts in the simplification system. Such a principle of economy is usually characterized not only quantitatively (only as an increase or decrease in pronouncing effort), but in very close connection with the economy of mental effort of a person.

Main part

Hermann Paul (1846-1921) was one of the first in the world linguistics to draw attention to the **problems of the principle of economy of speech** when dealing with the theoretical views of representatives of the younger grammarians (2019, p.372). It is noteworthy that in this "linguistic catechism" (kaetekizm) of the XIX century, there is even a special Chapter – "the Principle of Economy". In it, H. Paul, speaking about economy in language, points out that it is predetermined by the need for speech communication – "Sparsamkeit im Ausdruck" (Economy in expression) (1958, p.357). Moreover, the linguist points to another tendency of language – the redundancy of certain elements, noting: "The more or less economical use of language means for expressing thoughts depends on the needs. There is no denying, however, that very often language tools are used unnecessarily wastefully. In general, however, language activity is characterized by a certain tendency to thrift" (2019, p. 372).

For the first time in General linguistics, H. Paul considered the principle of economy at the syntactic level. Obviously, the economy of language resources is interpreted by them at this time still quite narrowly. The scientist has in mind only two specific syntactic phenomena with the implementation of the principle of economy – "ellipsis" and "replenishment". Other cases of language economy are not considered by the linguist.

Despite this restriction the notion of linguistic economy by the younger grammarians, the importance of this work cannot be overestimated. H. Paul and younger grammarians, putting the problem of language economy, determined its active research in General and applied linguistics of the XIX – first half of XX century, although younger grammarians have not developed solid linguistic theory of economy of speech. Moreover, this linguistic trend was still alien to such an interpretation of the principle of economy as a general language process.

The Danish linguist Otto Jespersen (1860-1943), one of the greatest linguists of the XIX – early XX century, made significant progress in solving the problem of language evolution and related issues of saving speech efforts.

Studying the development of language as a system, O. Jespersen (1958) states: the evolution of language manifests itself in the fact that some language norms and types of formation of forms die out

¹ Ph.D, Bukhara State University



and others appear, while there are stable trends in the language that order and regulate such a dynamic process.

O. Jespersen pays much attention to the causes of language changes. And the principle of economy that causes these changes is particularly important. The linguist considers its action on a morphological level. Thus, he writes about the predisposition of language to eliminate formal generic differences, about mergers of cases (noting that a firm word order is quite sufficient to characterize the role of a word in a sentence), about the loss of the dual number ("any elimination of previous superfluous differences is an indicator of language progress"), about the tendency to lose the special superlative form ("comparative and superlative degrees express the same idea"), etc. (1958, p. 290). Let us compare, for instance, one of the following examples of the interpretation of "economy of speech" in O. Jespersen: "Languages differ from each other in the sense of economy in the use of temporary forms as well as in other respects. Those languages in which sentences like **I start tomorrow**, employ only one marker (adverb) to express the future tense; others require the speaker to use two markers, for example: **Cras ibo** (I shall start tomorrow). A similar economy of expression is observed in the case of English word combination **My old friend's father** (father of my old friend) where there is only one marker of the genitive case (cf. Lat. *pater veteris mei amici*), or in the case of **ten trout** (cf. Eng "ten men" and Lat. "*decem viri*")" (1958, p.309).

According to O. Jespersen, the whole principle of economy is expressed in artificial languages. For example, Esperanto and Ido appear to be ideal in this respect, because they "combine maximum expressiveness with ease of use of language means".

B. A. Serebrennikov gave a high appreciation to O. Jespersen's linguistic concept: "Comparing the old Indo-European languages with the new ones, O. Jespersen found a number of advantages in the grammatical structure of the latter. Forms have become shorter, requiring less muscular direction and time for their pronunciation, they are fewer, memory is not overloaded with them, their formation has become more regular, the syntactic use of forms reveals less anomalies, the more analytical and abstract nature of forms facilitates their expression, allowing for the possibility of numerous combinations and constructions that were previously impossible, cumbersome repetition, known as agreement, has disappeared, solid word order provides clarity and unambiguity of understanding."

However, the whole process of constructing the concept of O. Jespersen, unfortunately, is clearly focused on the search for facts and confirmation of the superiority of analytical languages over all others. Moreover, this position is supported by a number of linguists. Let's compare the following statement of R. A. Budagov (1965, p. 9): "At the time, the famous Danish linguist O. Jespersen sought to revive the old typological scheme of language development. In the interpretation of O. Jespersen, the "superior languages" were the languages of the analytical structure. And although Jespersen's book "Progress in Language" (1884), where this hypothesis was first presented, observed many subtle private observations, his concept in principle did not differ from the three-step doctrine of A. Schleicher. Only the "terminal point" of the movement has changed: instead of inflectional languages, analytical languages have been replaced."

As for the principle of economy in the understanding of O. Jespersen, the following is obvious: this principle is necessary for the linguist not so much to explain the reasons for the actual language changes, but mainly to show the superiority of analytical languages (primarily English and Danish) over other languages of the world. It seems that this is where the vulnerabilities of the concept of language evolution, which O. Jespersen developed all his life, are revealed.

In order to further characterize the evolutionary theory of O. Jespersen, it is also necessary to note the following: agglutinative languages, which are characterized by a very significant predisposition to economy and a large potential for analyticity, have been missed out of the linguist's field of view. For example, they do not have a category of gender, they express the same form (for example, affixes) of the same meaning, etc., which is also sought by analytical languages, which O. Jespersen considers exemplary. Moreover, to date, linguistics has accumulated so many facts that indicate the well-known conditionality of such concepts as analyticity and synthetism. Indeed, "historically, the types of



language change. As a result, there is a mix of grammatical features. Thus, Latin and old Bulgarian were synthetic (inflectional) languages, while French and modern Bulgarian already show analytical features. Or another example: modern German has more synthetism than English, but more analyticism than Russian" (A. Bushuy, 2005, p. 23).

So, where O. Jespersen firmly relies on a variety of carefully selected language facts, he acts as a subtle interpreter of the principle of economy in speech, but in the first principles of the theoretical construction of his general evolutionary theory, obviously, false philosophical interpretations of the pragmatic sense are negatively affected.

Nevertheless, all these considerations do not detract the higher significance of O. Jespersen's general linguistic theory. Thus, in his "Philosophy of Grammar", he also points out the continuity of the ideas expressed by him with the ideas of H. Paul. However, in contrast to him, who demonstrated the effect of the principle of economy on two concepts only ("ellipsis" and "replenishment"), O. Jespersen's principle of economy can be traced on a huge factual material of such levels as lexical, morphological and syntactic. In other words, in this respect, the work of Jespersen is an obvious step forward in comparison with the research of H. Paul.

In addition, Otto Jespersen's unquestionable merits include the fact that he was one of the first in linguistic science to point out the deep connection between economy and redundancy.

F. de Saussure was also engaged in the principles of language economy, because he was always interested in the General linguistic interpretation of evolutionary changes in language. However, in his works, economy was not specifically singled out and was not terminologically designated. But nevertheless, his constant research practice strongly suggests that the study of this universal linguistic problem is certainly present in the scientist.

So, in particular, F. de Saussure assumed that changes in the language system are due to the desire to reduce the difficulties of pronunciation. The case that increases the difficulties of pronunciation (cf. in prehistoric Latin *agtos, *tęgtos, *ręgtos instead of I.-E. *aktos, *tęktos, etc.), F. de Saussure explains by the fact that at that time the consciousness of the parts of the word and their semantic and functional interaction was still strongly developed.

F. de Saussure pays most attention to the law of least effort. At the same time, he failed to see the complex interweaving of pronouncing and mental efforts, i.e., exactly what constitutes the true essence of the theory of the principle of economy. And only the awareness of the close relationship of phonetic processes (economy of pronouncing effort) and analogy (economy of mental effort), which F. de Saussure attached great importance, later allowed Jan Baudouin de Courtenay (1963) and Y. D. Polivanov (1960) not only fundamentally study, but also comprehensively justify economy as one of the leading factors in the evolution of language.

Joseph Vendryes (1875–1960) also developed the theory of linguistic economy (1937). It was he who wrote the most about the language's desire for abstraction, uniformity, expressiveness, accuracy, clarity, the loss of functionally insufficiently "loaded" grammatical categories, the reduction of excessively long words, the gradual elimination of homonyms from the language, etc.

Joseph Vendryes Indicates the law of least effort, emphasizing the role of generational change in language changes, difficulty-ease of pronunciation of phonemes, analogy and other causes of language changes.

When solving questions of language evolution, J. Vendryes also touched on the principles of economy. Thus, describing phonetic processes (for example, combinatorial changes, epenthesis, accommodation and differentiation), he emphasizes that due to them, the language eliminates difficult-to-pronounce sounds, i.e., it seeks to save pronouncing efforts. For example, an analogy related to the law of least effort helps to eliminate easily forgotten forms, because they are not firmly fixed in memory, thereby satisfying the desire of language to save mental energy.



Further development of the theory of language evolution in the light of economy was carried out (after O. Jespersen and F. de Saussure) Charles Bally (1955). At the same time, he (as O. Jespersen) persistently tried to prove the superiority of analytical languages (in particular, French) over synthetic (German, etc.) languages. It is clear that such an idea is unacceptable. R. A. Budagov's critical statement on this subject (1955, p. 406): "Bally's claim that French is more "sociable" than German cannot be scientifically proved. This conclusion is purely subjective, although some other major linguists (such as Brendal) have tried to support it."

In contrast to F. de Saussure, Ch. Bally pays more attention to the causes of language changes. Thus, contrary to F. de Saussure (1977, p. 140), who believed that the law of least effort "to some extent can explain the cause of the phenomenon or, at least, outline ways to find it", Ch. Bally (1955, p. 393) writes about the automation of speech processes that allow to convey a thought "with maximum accuracy and minimum effort for the speaker and listener".

The merit of Ch. Bally is that he tries to find deep connections between the automation of speech processes and the actualization of economy. At the same time, he proceeded from the situativeness of the flow of spoken speech: "... if we had to express our thoughts in their entirety each time and indicate all the existing relationships between them, then speech communication between people would become impossible. The human mind constantly strives to replace bulky accumulations of speech facts with shorter linguistic symbols," wrote Ch. Bally (1961, p. 321). However, he did not fully develop this idea. But, following F. de Saussure, who believed that it is unusual for any language to have two forms to convey the same meaning, Ch. Bally pointed out that when expressing one idea with one form, a reduction in the effort of the speaker is achieved, and if there are several forms to convey one meaning, you need to spend more mental energy on choosing the necessary language unit.

For the history of the formation of the theory of language economy, the views of Friedrich Kainz (F. Kainz, 1969) are of interest. According to Kainz, language is gradually moving in the direction of increasingly economizing its expressive capabilities. To confirm this, F. Kainz attracts languages developed and "primitive", up to non-written. He comes to the conclusion that "primitive" languages (in contrast to developed ones) have a highly excessive completeness of expressive means (vol.1, 1969, p. 141-142).

Another conclusion of F. Kainz boils down to the following generalization: in the course of its development, the language (under the influence of one of the main factors of language evolution – economy) focuses on getting rid of complex (=component bulky) forms while maintaining simpler, and therefore easy to learn. Such an orientation solely on the factor of economy in language evolution, however, led F. Kainz to a clearly simplified understanding of "redundancy" as "unnecessary retarding ballast" (vol. 2, 1969, p. 110-111), i.e. ignored the fact that redundancy creates a margin of information security, which is so necessary for a language as a specific system of signs.

Similarly, Jan Baudouin de Courtenay made an invaluable contribution to the development of the General evolutionary theory of language and especially the theory of the principle of economy. Due to the works of Jan Baudouin de Courtenay, already in the early twentieth century, the principle of economy becomes one of the most scientifically based theories, one of the most important directions in the General theory of language evolution.

The effect of the economy principle can also be detected when languages are mixed. Baudouin's ideas stand to reason that "when two languages collide and interrelate to each other in a natural way", a language that has more simplicity and certainty and requires less energy, both physical and mental, is more likely to persist and spread more and more. The forms that are simpler and clearer in their composition survive, and the more difficult ones disappear. Most likely, the language that arose from mixing, in his perspective, "is a complex resultant, its component parts leaning towards the simpler features of both languages" (1963, vol. 2, p. 248).

The prominent French scientist André Martinet (1908–1999) did a lot for the further development of the theory of the principle of economy.



The theory of the principle of economy by A. Martinet was not formed from scratch, but is an inevitable derivative of the previous scientific tradition. In his famous work "The Principle of Economy in Phonetic Changes" (M., 1960), A. Martinet directly points to P. Passy, H. Sweet, O. Jespersen, M. Grammon, and others as his immediate predecessors.

Like previous scientists, A. Martinet says that the language is in continuous development, during which there are changes in lexical, phonetic and grammatical order. At the same time, the language seeks to minimize not only physical, but also mental effort in the process of speech. Moreover, unlike previous scientists, A. Martinet draws attention to the fact that the driving force of language changes is the constant contradiction between the needs of human communication and his desire to minimize his mental and physical efforts.

In addition, A. Martinet notes the constant existence in the language of "significant redundancy of the language form, characteristic of all levels of the latter." Redundancy, in his opinion, is a necessary condition for the existence of a language.

The principle of economy of A. Martinet is based on facts, primarily of the phonological order. He believes that the principle of economy is manifested in the fact that each concept has its own expression, consisting of a combination of several sounds. It is impossible to imagine what human auditory and pronouncing capabilities would be needed if each concept were attached to a certain indecomposable sound formation. The principle of economy is also served by the fact, says A. Martinet, that the location of phonemes in relation to each other can be significant.

A. Martinet, as well as Joseph Vendryes (1875–1960) emphasizes that with increasing frequency of phonemes, their distinctive and expressive meaning is either reduced or lost.

From the point of view of the principle of speech economy, phonemes (or combinations of phonemes) may have a greater distinguishing ability than others, depending on their ability to combine with other phonemes.

Developing the ideas of his predecessors, A. Martinet notes the language's desire to simplify phonemes. So, he talks about simplification in some languages and doubled consonants, etc.

Combinatorial changes, according to A. Martinet, are also related to the principle of economy, although he notes that despite the apparent simplicity of combinatorial changes from the point of view of linguistic economy, in fact, the pressure of context on a particular phoneme is still limited.

With the principle of economy, A. Martinet also connects the formation of new words in the language to denote new concepts using the means already available in the language, in particular, word-forming morphemes.

Evidence of the principle of economy in the language, according to A. Martinet, is the presence of words in the language that have a generalizing character. So, it is much more economical to have a single word that has the ability to enter into different relationships with the neighboring word.

The evolution of language is also correlated with the manifestation of economy by André Bourcier (1854-1946), who notes two mutually balancing tendencies in language evolution - economy of effort and the desire to highlight what is necessary. These two trends are evident at all stages of language development. Thus, when considering the sound evolution, A. Bourcier notes three phenomena – 1) the transition of one sound to another, 2) the disappearance of sounds, and 3) the formation of a new (additional) sound. These phenomena are caused by the desire to facilitate pronunciation, which contributes to the disappearance of some difficult-to-pronounce consonant combinations from the language.

A. Bourcier also attaches some importance to the simplification of sounds. In contrast to the predecessors (O. Jespersen, Edward Sapir, etc.), who considered simplification as one of the visual indicators of the overall progress of the language, A. Bourcier (along with Jan Baudouin de Courtenay) connects simplifications of sounds directly with economy. Here he sees a clear desire for uniformity.



Developing the problem of language evolution in his numerous works, Y. D. Polivanov pointed out among its main causes (after Jan Baudouin de Courtenay, who first formulated and linguistically justified the theory of speech economy), the principle of saving pronouncing and mental effort.

As we have noted, the changes occurring in the language, began to be explained by the principle of economy earlier by younger grammarians, in particular H. Paul in his "Principles of the History of Language" (1950).

For the first time, this principle was theoretically justified by Jan Baudouin de Courtenay.

But the principle of economy as a linguistic principle, comprehensively theoretically justified and scientifically developed, we find only in Y. D. Polivanov. It should be noted that the theory of the principle of economy was formed by Y. D. Polivanov not immediately. In 1923, in the article "Phonetic convergences", Y. D. Polivanov justifies the theory of the principle of economy based on the analysis of phonetic convergences.

In this work, Y. D. Polivanov writes that for changes occurring within a single sound of a language, a General principle can be established that determines their direction: "from difficult to easy", therefore, expressed in a tendency to reduce the difficulties (and therefore the total number) of sound-producing works.

And in convergences, the main factor is also the desire for ease in language, "but not to reduce the difficulties of sound-producing works of one language, as in processes of the first kind, but to reduce mental activity."

Y. D. Polivanov, as we can see, already in this work closely connects the desire to reduce the difficulties of sound production with the desire to reduce mental activity. This line-a close interweaving of economy of pronouncing and mental energy, runs through all the works of Y. D. Polivanov, in which he speaks about language economy.

The significance of the principle of economy in the field of mental activity of the speaker is investigated in another work by Y. D. Polivanov "the Problem of Latin script in Turkish scripts", published in the same year (1923): "the specific features of the Novgorod transcription, inherited from early scripts, include the unusual at first glance 1) the absence of large (uppercase) letters, 2) the disuse of punctuation marks.

The first banishment of capital letters is, of course, to be agreed upon primarily for pedagogical benefits: it is clear that memorizing one form of letters instead of two is an economy here."

In the same years, the theory of the principle of economy is considered by Y. D. Polivanov at other levels. In particular, in "Introduction to Linguistics for Oriental universities", published in 1928, in contrast to his previous works, Y. D. Polivanov considered the issues of the principle of economy not only on the phonetic level, but also on the orthoepic, morphological and syntactic.

Later in his works, Y. D. Polivanov develops the theory of the principle of economy at other levels, in particular, at the lexical and graphic levels.

Ideas about linguistic economy were developed later by B. A. Serebrennikov and V. A. Zvegintsev, for example, in the introductory article in A. Martinet's book "The Principle of Economy in Phonetic Changes".

Conclusion

Investigations on the problem of language economy from the perspective of language evolution proved that linguistic theories of the XX-beginning of the XXI century are formed to a greater or lesser extent from the concept of the sign of F. de Saussure, which contains a number of contradictions, suggesting a collision of polar incompatible properties of the object. The principle of "mobility of the sign" conflicts with the doctrine of a balanced system, the principle of "arbitrariness of the sign" - with the theory of "value" [valeur] and the psychology of actualization of both sides of the sign: if the sign is a unity of concept and acoustic image, it is motivated by its place in the language system. On the one



hand, it is a stable given, but on the other, it is an object in the language that does not exclude its transformability, predisposition to variability, which together with other similar phenomena generates the variability of the language as a whole.

The principle of speech economy is one of the leading trends in the development of language as a special type of sign system.

The development of linguistic thought shows that the economy of speech has always been the focus of attention of scientists dealing with the problems of language evolution. At the same time, it is stated that ellipticity (as a manifestation of economy) is one of the main principles of colloquial text generation. In the process of ellipsis, everything that can be omitted in the utterance is omitted. Moreover, this process of saving works in spoken speech at all levels of the language system. From the history of linguistics (general and applied), it is obvious that there is a connection and interdependence between the processes of language evolution and economy in language. This is an objective reality.

LITERATURE:

1. Safarov Sh. Pragmalinguistics. -Tashkent, 2008. — 286 p.
2. Bushuy A. M. Язык и действительность (Language and Reality). - Tashkent: Fan, 2005. - 144p.
3. Rasulov Z. I. Contextual analysis principle of the elliptic sentences (on the basis of English material) URL: <https://cyberleninka.ru/article/n/printsip-kontekstualnogo-analiza-ellipticheskikh-predlozheniy-na-materiale-angliyskogo-yazyka>.
4. Rasulov Z.I. On contextual situational analysis of the elliptical sentences of the English language. Philological sciences. 2010(1-2):173-7.
5. <https://www.psychosocial.com/article/PR260064/13263/>
6. Paul H. Principles of the History of Language. - Alpha Editions, 2019. - 584 p.
7. Paul, Hermann. Deutsche Grammatik. Vieter Band. – Halle (Saale): Max Niemeyer Verlag, 1958. – 425 p.
8. Jespersen O. Philosophy of Grammar. - University of Chicago Press, 1992. - 372p.
9. Budagov R. A. Проблемы развития языка (Problems of Language Development). - M.-L.: Nauka, 1965. - 73p.
10. Serebrennikov B. A. Проблема прогресса в развитии языков // Общее языкознание (The Problem of Progress in the Development of Languages // General linguistics). Moscow: Nauka, 1970, pp. 302-307.
11. Saussure Ferdinand de. The works on Linguistics. — M., 1977. — 696 p.
12. Bally Charles. General Linguistics and the issues of the French language— M., 1955. — 416p.
13. Bourcier André. Basics of the Roman linguistics. –M., 1952. –672 p.
14. Vendryes Joseph. Language: Linguistic Introduction to History.— M., 1937. — 410 p.
15. Kainz F. Psychologie der Sprache. — Bd 1-5. — Stuttgart: Franz Steiner Verlag, 1969. — 384, 370, 390, 299, 448 S.
16. Courtenay Jan Baudouin de. Selected works on General Linguistics. -M., 1963, P.1. — 384 p.; P.2. — 391 p.
17. Polivanov Y. D. Articles on General Linguistics. — M., 1968. — 376 p.

