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Grammatical Rules and Analogy in Natural Morphology

Грамматические правила и аналогия в естественной морфологии

Аннотация

Аналогия играет важную роль в решении проблем, а также в принятии решений, аргументации, восприятии, обобщении, памяти, творчестве, изобретательстве, прогнозировании, эмоциях, объяснении, осмыслении и общении. Аналогия важна не только в обыденном языке и здравом смысле (где пословицы и идиомы дают много примеров ее применения), но и в науке, философии, праве и гуманитарных науках. Тем не менее, в языкознании это понятие вызывает много неясностей. Основной целью моей работы является изучение принципов естественной морфологии исторического изменения болгарского глагола. Эта работа представляет собой «резюме» того, как грамматические правила и аналогии, а также их антитезы растворяются в теории естественной морфологии. Субъектом исследования являются исторические вариации болгарского аориста.

Ключевые слова: *естественная морфология, аналогия, болгарский язык, аорист, глагол, историческое языкознание*

From the very beginning of modern linguistics, the system of a language has been considered to be describable only by grammatical rules and all the exceptions to arise by analogy. This approach has led to the antithesis of the two: rules and analogy. The most important schools of linguistics tend to approach language more and more through 'strict' rules, analogy being used as an explanation only as a last resort. This is especially true of the Young Grammarians, whose representative, Leskien, stated this in connection with sound laws: if we accept any accidental differences that cannot be related in any way to one another, we thereby assert that the language which is the subject of our research is not available for scientific investigation [Leskien 1876: XXVIII]. Later, de Saussure claimed the randomness of linguistic changes, but in terms of grammatical forms he mentioned regular and analogical forms. He believed that the latter are the result of individual association. In theories of formal language inspired by Chomsky, analogy was rightly ignored [Fehér 2013: 68].

On the other hand, analogy completely determines our thinking, our everyday speech and our ordinary logic, as well as artistic expression and the highest scientific activity. Of course, it is applied on many different levels. People often use uncertain, ambiguous, incomplete, or not fully clarified analogies, but the analogy can reach a degree of mathematical precision. From a comparative-historical point of view, analogy is regarded as an individual and accidental, as well as an unsystematic phenomenon. In the introduction to his work on the Kawi language, Humboldt states that

language is not a finished work (*ergon*) but an activity (*energeia*). He says that the dynamism of languages comes from their social character, so that partial phenomena are also considered an intrinsic part of language and changes are an effect of community schemes. Therefore, purely rule-based theories do not (cannot) keep up with the inherent change and diversity of languages, and analogy, or in other words the antithesis of rules, should receive more attention.

A characteristic feature of the late 20th century in linguistics was the emergence of functional alternative trends in addition to the previously dominant models of the structural (or formal) theory of language [LADÁNYI 2005: 17]. These new trends focus on the importance of the two main functions of language (communicative and cognitive functions), as well as the functions related to the systematic correspondences of language, in relation to the formation, functioning and acquisition of structures. One of these recent trends is natural linguistic theory, and within that, Natural Morphology.[1]

In the theory of Natural Morphology, universal grammar does not operate by strict laws but by principles and limitations. Natural linguistic theory views universal grammar as a preference theory in which universal principles predict what structures are ideally preferred in any language, i.e., which structures are preferred by language users. In natural linguistic theory, the concept of naturalness is based on human perception and is linked to the idea of encoding/marking: more natural, or less marked/coded, is what is more easily understood by the human brain. According to this theory, there is a difference between featured and unfeatured, as well as between marked and unmarked [LADÁNYI 1999]. Something that is cognitively and semantically more complex should also be more coded/more marked in its symbolization; and vice versa: something that is cognitively and semantically less complex should be less coded/marked. In this theory, naturalness is not a value but a relation: if X is natural, this means that, on a scale, X is more natural than Y, given the universal grammar or the grammar of a particular language, depending on whether the given principles of naturalness depend on the system of language or not. The theory of markedness comes from the interpretation of Roman Jakobson's work and is the most crucial promotion of natural morphology [DRESSLER et al. 1987: 27].

The original hierarchy of principles established by the proponents of the theory was modified by WHEELER [1993: 109]. His hierarchy is as follows (in descending order):

1. The Principle of System Congruity
2. The Principle of Class Stability
3. The Principle of Avoidance of Counter-Iconicity
4. The Principle of Uniformity and Transparency
5. The Principle of Markedness in Syncretism
6. The Principle of Constructional Iconicity
7. The Principle of Phonetic Iconicity.

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[1] Although natural linguistic theory probably does not belong to the most popular linguistic theories, Livio Gaeta's article "Natural Morphology" in *The Oxford Handbook of Morphological Theory* in 2019 testifies to its relevance.

The principle of system congruity and the stability of inflectional classes are system dependent. Principles that depend on the system have priority over those that do not depend on it. If two or more of these principles conflict, the one higher in the hierarchy will prevail. The effect of these principles can be observed in the historical change of the Bulgarian verb.

During the development of the Bulgarian language, the Old Church Slavic verb categories passed through several important changes, e.g., the dual disappeared completely, the new *a*-conjugation appeared, and a new part of speech, the gerund, emerged [H. TÓTH et al. 2011: 100–101].

In general, the wealth of verb forms from Old Church Slavic has been preserved in Modern Bulgarian as well. The difference between perfective and imperfective aspects of the verb, and also between aorist and imperfect, are completely preserved [IVANOVA-MIRCHEVA – HARALAMPIEV 1999: 131].

The historical development of the aorist and imperfect are closely related. The merger of the endings of the two simple past tenses began already in the Old Church Slavic period. In the history of the Bulgarian language, the earliest examples of the merger of the endings for the second person plural and the second person dual are found. Already in the Old Church Slavic period, the endings for the aorist completely replaced the endings for the imperfect in the second person plural, in the third person dual, and in the second person dual. Thus, a number of Old Church Slavic written documents (both Glagolitic and Cyrillic) do not have the endings -**шете** and -**шета** [MIRCHEV 1963: 193].

Vowel contraction is an important process that began in the Old Church Slavic period and had an influence on the various forms of the imperfect. This process provided further support for the mixing of the endings of the two simple past tenses. The contraction of the vowels -**аа**- into -**а**- and of -**ѣа**- into -**ѣ**- led to the complete merger of the endings for aorist and imperfect in the first person singular and plural.

Thus, five out of nine forms of the verbs became completely identical. Kiril Mirchev believes that the process of this contraction motivated the forms of the imperfect to create their forms from the present stem in order to exclude the coincidence of these forms [MIRCHEV 1978: 194]. Mirchev's theory can be supported by the principle of class stability. According to this principle, the morphological system in its development strives for such types of conjugation that have a clear semantic and phonological motivation, as well as opportunities for an implicative scheme. Between the aorist forms and the imperfect forms, the semantic motivation is quite obvious: one serves to express a perfective past tense, the other a continuative past tense, and in principle, therefore, the differences between them have not disappeared. Examples of the formation of imperfect forms from the present stem can be found in Old Church Slavic written documents, and their number increases in Middle Bulgarian documents. In addition, the imperfect created a new temporal base of its own, which has a thematic vowel with *yat*-alternation, which also confirms the effect of the previously mentioned principle [see GENEVA 2018: 37–40].

In terms of class stability, a morphological system in its development strives for conjugations that have a clear semantic and phonological motivation. Vowel contraction resulted in a lack of clear phonological motivation between aorist and imperfect categories, whereas their semantic motivation was obvious. With the formation of imperfect forms from the present stem, the morphological system tends towards a clearer phonological motivation of the two past tenses. The merger of the ending *–ex* with the imperfect forms has the same purpose.

Final *yer* vowels were in weak position in the first person singular and were consequently dropped. Thus, these endings became identical at a very early stage. Initially, already in the Old Church Slavic period, the ending *-ашете* had disappeared completely, and the aorist ending *-сте* came tube found in its place. This can be attributed to the influence of the aorist. During the Middle Bulgarian period, the ending *-шѫ* could be found instead of *-шѧ* in the third person plural for aorist, but from the 12th century the imperfect and aorist endings became identical: *-ѫ*. H. Tóth claims that this aorist ending arose by analogy with the third person plural imperfect ending [H. Tóth 2011: 135]. After the disappearance of the dual number in the monosyllabic endings for both past tenses *-ѫ-* was more dominant, and the ending *-сте* changed to *-ѫте*. The new ending is more appropriate in the paradigm in accordance with the principle of System Congruity. Despite the drive for conjugations with a clear semantic and phonological motivation, that is, despite the drive for class stability, the aorist and imperfect endings gradually became more similar. In the hierarchy of principles of natural morphology, system congruity is at the highest level, class stability is below it, so the influence of system congruity has been established here. This is also evidenced by the changes in the endings for the imperfect and the aorist.

According to natural language theory, a morphological system will never reach an ideal status, because while a morphological change completes its action, new phonological changes appear, which again generate different morphological variations [Balázs 1999: 254]. So, e.g., after contraction, the imperfect endings began to be added to the present stem, but after a transformation of the verbal conjugation, the endings once again merged.

Regarding the history of the aorist and the imperfect, another important issues the reason for mixing. Did the aorist have an impact on the imperfect? Or vice versa? Or did one change by analogy with the other? From the point of view of natural morphology, we can summarize the following.

The categories of aorist and imperfect gradually got closer to one another, and probably this was an indicator of the changein the first place. These categories disappeared from the Slavic languages, except for South Slavic and Sorbian.

In modern Bulgarian, four of the six forms of aorist and the imperfect merged, except for the second and third person singular morphemes. The stems of the two past tenses are the same for a great number of verbs. In addition to the uniformity of the forms, they have identical stems, the same paradigm of the verb *съм*, and the same temporal orientation. In the Sorbian languages, the imperfective endings are

added to the verbs of imperfective aspect, and the perfective endings are added to the verbs of perfective aspect. In Bulgarian, aorist as well as imperfect forms can be formed both from imperfective and perfective verbs, but the aorist forms of the imperfect aspect are less used. According to class stability, the current situation of aorist and imperfect cannot be maintained, so either the semantic difference will disappear, or the phonological similarities between the forms of the two past times. As the language changes, over time the aorist and the imperfect get closer and closer to each other, but, in all likelihood, the principle of congruity will not let them merge completely in the Bulgarian language.

In the theory of Natural Morphology, all linguistic phenomena, whether a grammatical rule or analogy, regular or irregular, are considered as such: natural linguistic phenomena, which have their connections and effects on all the other morphological phenomena within given system. In Natural Morphology – thanks to the principles and limitations – the description of a language is possible without strict rules and can keep up with the inherent change of languages.

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