Научная статья / Original article УДК 81-114.2 doi:10.37632/PI.2024.53.62.001

Лингвистическая типология и ее приложения

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Аннотация: В статье обсуждается место типологии среди лингвистических дисциплин и указываются области исследования, где может быть применен аппарат современной параметрической типологии. Разрабатывается представление о типологически ориентированном и типологически информированном направлении исследований в области лингвистики конкретных языков и языковых групп, контрастивной лингвистики, ареальной лингвистики, диахронической лингвистики, компьютерной лингвистики, переводоведения.

Ключевые слова: лингвистическая типология, теория языка, ареальная лингвистика, языковое разнообразие, параметрическая грамматика, описание, объяснение, сравнительные категории

Для цитирования: Лютикова Е.А., Циммерлинг А.В. Лингвистическая типология и ее приложения // Типология морфосинтаксических параметров. 2024. Том 7, вып. 2. С. 13–21. (На английском.). doi:10.37632/PI.2024.53.62.001

LINGUISTIC TYPOLOGY AND ITS APPLICATIONS

Ekaterina Lyutikova¹, Anton Zimmerling² ¹Lomonosov Moscow State University / ²Pushkin State Russian Language Institute / ²Institute of Linguistics RAS **Abstract**: We discuss the intersections of linguistic typology with other branches of linguistics and outline several research fields where the implementation of the parametric approach in typology is appropriate. The paper develops the idea of a typologically-oriented and typologically-informed research direction in the field of linguistics of specific languages and language groups, contrastive linguistics, areal linguistics, diachronic linguistics, computational linguistics, and translation studies.

Keywords: linguistic typology, grammatical theory, areal linguistics, language diversity, parametric grammar, description, explanation, comparative concepts

For citation: Lyutikova E., Zimmerling A. Linguistic typology and its applications. *Typology of Morphosyntactic Parameters*. 2024. Vol. 7, iss. 2. Pp. 13–21. doi:10.37632/PI.2024.53.62.001

1. Typology and language diversity

Linguistic typology is an empirical science. It aims at describing the diversity of the world's languages and checking the hypotheses on universal factors that manifest themselves regardless of the genetic relationship of languages and their geographical location [Croft 2018]. Modern linguistic typology develops the program proposed by Joseph Greenberg in the early 1960s. Basing on preliminary observations on the distribution of selected features in the world's languages, Greenberg provided a list of implicative universals like 'if language L has feature p, than it has the feature q' and proposed a procedure of checking them on balanced language samples representing selected languages from different families and areas [Greenberg 1963]. Although Greenberg's samples were small compared to those used in the World Atlas of Language Structures [Dryer, Haspelmath 2013], his approach proved operational and effective.

The followers of Greenberg do not have exclusive rights on the term 'typology'. 'Typology' means 'calculus of types', and linguists occasionally produce collocations like 'typology of the Russian sentence' [Lomov 1994], 'semantic predicate types' [Seliverstova 1982], 'speech act typology', etc. Under standard assumptions, semantics is the *tertium comparationis* of language comparison. To study the variation in formal structure, one must assume that the meaning structure, at least its core, the logical categories, does not vary across the world's languages. The same arguably applies to predicate-argument relations and inventories of semantic roles including Agent, Patient, Experiencer, Stimulus, etc. General predicate taxonomies operating with such ontological concepts as 'eventuality', 'event', 'state', 'action', 'process', 'property', etc. revoke universal notions but pattern with natural language ontology [Moltmann 2022] rather than with the typology of language features in Greenberg's sense. The distinctions between different predicate types, e.g. between states and properties, can be more or less prominent due to the presence or absence of grammaticalized markers. Therefore, the semantics-to-grammar interface is a research field that does not exclude typological analysis.

It makes sense to keep linguistic typology apart from contrastive linguistics. The authors of this paper assume that typology deals with all world's languages or with open classes of the world's languages corresponding to some parameter settings constraining their formal structure, cf. 'SVO languages', 'SOV languages', 'VSO languages', 'verb-second languages' (V2), 'clitic-second languages' (CL2), 'SVO languages with the V2 constraint', 'VSO languages with the CL2 constraint', 'languages that either have V2 or CL2' (2P), etc. Meanwhile, contrastive studies of 2, 3... n languages are not typological if their authors limit themselves to observations on the data and avoid making any generalizations and predictions. This statement does not imply that contrastive studies and descriptive grammars do not contribute to typology. The progress of typology is impossible without improving the quality and quantity of the input data. Here, two methodological concerns arise. For the first, the descriptions of the world's languages must be comparable. Even the basic terms, e.g., 'morph', 'affix', 'root', 'clitic', 'wordform', etc. often refer to different things in different descriptions, while similar phenomena are frequently interpreted differently depending on the chosen theory. E.g., Russian and Belorussian are closely related East Slavic idioms with apparently similar word order conditions. WALS nevertheless classifies Russian as a SVO language, while Belorussian is classified as a language without a dominant word order [Dryer 2013]. This is done based on the estimates provided by [Bivon 1971: 42] for Russian and [Mayo 1993: 294] for Belorussian. The discrepancy can well be motivated by the actual contrast in the profiles of these languages, but it is just as likely that it arises due to different classification principles: Bivon's book (1971) follows the original scheme by Greenberg, who assumed that all languages have a basic word order and considered six theoretically possible orders (SVO, SOV, VSO, OVS, OSV, VOS), while Mayo's chapter (1993) is published 20 years later, when it has become customary to recognize free word order languages as a separate type. The puzzle is that despite the author of the quoted WALS chapter, Matthew Dryer, acknowledges the existence of free word order languages,

he has to stick to [Bivon 1971], unless he opts for some other description of Russian, e.g. [Kovtunova 1976]. For the second, it is desirable to make the apparatus of typology transparent and reduce the number of the so-called comparative concepts, i.e. categories adapted to cross-linguistic comparison [Haspelmath 2010]. It is however not a fast track since the typologists must first convince their colleagues doing research in Slavic, Germanic, Finno-Ugric, Austronesian etc. studies that they should abandon their linguistic traditions and implement the descriptive standard approved by a school in typology.

2. Linguistic typology and its extensions

The papers published in this journal issue demonstrate several extensions of linguistic typology and its interaction with other research fields.

2.1. Typology and descriptive grammars

This line of research is pursued by Sinitsyna [Sinitsyna 2024], who provides new primary data from an understudied Permic idiom — Tatyshly Udmurt. At the same time, her paper contributes to the typology of comparative constructions [Stassen 1985; Bhatt, Takahashi 2011]. Sinitsyna shows that in Tatyshly Udmurt, nominal standards of comparison can be associated with the oblique objects and retain the internal case form. This corresponds to the derived-case comparatives, according to Stassen's classification.

2.2. Typology and areal linguistics

This line of research is represented by Myznikov [Myznikov 2024], who follows the influence of Baltic-Finnic languages on Northern Russian dialects. These dialects display numerous lexical borrowings from Baltic-Finnic. Meanwhile, the borrowing of grammatical features has been overlooked since it is harder to detect. Myznikov proves that Northern Russian dialects borrowed a fragment of the Baltic-Finnic causative morphology and assimilated the borrowed suffixes, which gave rise to new causative verbs derived from Russian roots. Some dialectal causatives were formed already on Russian soil, although they also have external semantic correspondences in the Baltic-Finnic languages. The most frequent use of verbs with a causative formant is attested in Karelia and adjacent areas, which is explained by adstratal contacts with the Vepsian-Karelian dialects. Myznykov's study contributes both to areal linguistics and typology since it proves that grammatical borrowings are occasionally obscured by overt similarities in derivational morphology between the donor and target languages.

2.3. Typology and contrastive linguistics

This path is taken by Balek [Balek 2024], who discusses caritive constructions in two genetically related Slavic languages — Russian and Serbian. The comparative concept of caritive describes non-involvement of a participant (called *absentee*) in a situation, with the non-involvement predication semantically modifying the situation or a participant of a different situation [Oskol'skaya et. al 2020]. Typological surveys of caritive (or 'abessive') constructions mostly focus on adverbial, cf. *come without money* [Stolz et al. 2007], or adjectival uses, cf. *be beardless*, but Balek argues that the definition of caritive is compatible with the meaning of Slavic verbal prefixes *bez-/bes-* and, to some extent, also *obez-/obes-*, and *nedo-*. However, as she admits, the caritive meaning is only weakly grammaticalized in Russian and Serbian verbal morphology.

2.4. Typology and translation studies

This perspective is hinted by Khazanova [Khazanova 2024], who analyzes the use of impersonal predicates ending with *-no*, *-to* in two Ukrainian translations of a Russian novel. Ukrainian is one of the few European languages that license transitive impersonal constructions with participles, other languages being Polish, Lithuanian [Lavine 2010] and Icelandic [Zimmerling 2013], while Standard Russian lacks them. Khazanova shows that Ukrainian *-no*, *-to* forms convey a resultative meaning; they are infrequent and tend to be used in literary language. The differences in the grammatical systems of two closely related idioms along with the stylistic markedness of the impersonal resultative in the target language give the translators an extra chance to emphasize the status distance between the speaker and the actor.

2.5. Typology and computational linguistics

This novel perspective is revealed by Ivoylova [Ivoylova 2024], who discusses the technologies of zero-shot cross-lingual transfer of linguistic annotation in the CoBaLD standard from Russian to genetically related and unrelated languages — Bulgarian, Serbian, Hungarian and Turkish. *Cross-lingual transfer* (CLT) technique is a means used to develop NLP models for low-resourced languages. When labeled data is completely unavailable, it is referred to as *zero-shot transfer learning*, which involves applying a model trained on other data or tasks to new data or tasks. The CLT method yields stable results only if the compared languages have a similar amount of pre-training data for the language model used as a backbone. Ivoylova's results indicate that the quality of the zero shot cross-linguistic transfer from Russian to genetically related South Slavic languages (Bulgarian and Serbian) were quite high and nearly comparable to the quality of automatic annotations for Russian. However the quality of the semantic annotation declines in all four recipient languages due to the presence of functional words, for which no semantic class can be assigned because they are absent from the parser's training data. In other words, the similarity of the morphosyntax of the donor and recipient languages is a crucial factor for zero-shot cross-lingual transfers.

2.6. Typology and metalinguistic issues

Two journal contributions discuss theoretical and methodological issues. The notion of *wordform* belongs to the Russian grammatical tradition and is accepted in several other morphological theories. However, there is no consensus about the conditions under which adjacent morphs make up a higher-level morphological unit. This phenomenon has been noticed by several scholars who used a number of conventional labels referring to similar but not identical language objects — 'univerbates', 'agglomerates', 'amalgams', 'fossils', while Igor Mel'čuk introduced the general term 'secondary wordform' presumably covering all these phenomena [Mel'čuk 1993]. This notion is not a standard part of the typological inventory, but [Plungian 2024] attempts at adding it to the list of comparative concepts and outlines a preliminary typology of secondary wordforms. According to Plungian, such wordforms are the output of local morphologization rules assembling several adjacent units in a text; these units completely lose their syntactic autonomy and may undergo fusion.

The general message of [Haspelmath 2024] is addressed to all members of the linguistic community including typologists. Haspelmath makes two important points: 1) he argues that different kinds of synchronic explanation, e.g. structural, functionalist and generative, are mutually compatible and can with due provisos combine in the descriptions of the same language data; 2) there are no reasons for the ideological divisions in the field of linguistics, and the descriptions of data should be kept free from commitments of linguists to subscribe to any framework and obligations to defend it.

3. Conclusions and perspectives

Linguistic typology throughout its existence and development has had a dual status: empirical and theoretical. On the one hand, typology was seen as a method for obtaining empirical data on parameters and limits of cross-linguistic variation, exploring what is possible and impossible in a natural language. On the other hand, typology claimed its own research program within theoretical linguistics, focusing on phenomena that can only be revealed through cross-linguistic comparison: how the system of linguistic parameters is structured, which characteristics of language systems demonstrate correlations within a language type, and which are independent from each other, what patterns govern language change, and how language types are classified in terms of frequency and stability. Typology as an independent theoretical linguistic discipline was often viewed as competing with theoretical linguistics, particularly formal linguistics, whereby typology as general linguistics or the linguistics as the linguistics of a single language.

It seems that this perception was conditioned by the initial, institutional stage in the development of both modern typology and formal linguistics and is gradually becoming outdated. Alongside in-depth studies of specific languages and contrastive research, typological data are increasingly being utilized in linguistic theorizing. At the same time, typology is more frequently based not on superficial characteristics of languages but rather on a deeply developed analysis of language types in relation to one or a set of linguistic parameters. The typological approach, involving the identification of parameters and their possible values, as well as relationships between parameter values (equivalence, implication, positive correlation, negative correlation), proves useful across various fields of linguistics: in the study of individual languages and language groups, dialectology, areal linguistics, diachronic linguistics, computational and pedagogical linguistics, translation studies, and text linguistics. The authors hope that the articles collected in this issue will serve as good illustrations of typologically oriented and informed research and convince the readers of the prospects of this direction.

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Статья поступила в редакцию 18.12.2024; одобрена после рецензирования 24.12.2024; принята к публикации 25.12.2024.

The article was received on 18.12.2024; approved after reviewing 24.12.2024; accepted for publication 25.12.2024.

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