

# *Trends in Linguistics*

*Studies and Monographs 80*

## *Indo-European and the Indo-Europeans I*

*Thomas V. Gamkrelidze  
Vjačeslav V. Ivanov*



**MOUTON  
DE GRUYTER**

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# Indo-European and the Indo-Europeans

A Reconstruction and Historical Analysis  
of a Proto-Language and a Proto-Culture

Part I  
The Text

*by*  
Thomas V. Gamkrelidze  
Vjačeslav V. Ivanov

*with a Preface by*  
Roman Jakobson †

*English version by*  
Johanna Nichols

*Edited by*  
Werner Winter

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## **Authors' Preface**

The second half of the twentieth century has been marked, in the history of linguistics, by a growth of interest in problems of diachronic linguistics, motivated by the general evolution of linguistic thought in recent decades. Overcoming the Saussurean antinomy of diachrony and synchrony, linguistic science is moving toward a theory with greater explanatory power than purely taxonomic synchronic grammar offers.

The growth of interest in diachronic linguistics has fostered a return to questions that arose in classical Indo-European comparative-historical linguistics, questions that can be posed more clearly now with the aid of new methods of linguistic description developed by various trends in synchronic linguistics and by linguistic typology. Typology is particularly important to contemporary linguistics because it makes it possible to reveal the universal linguistic categories that characterize the deep structures of language, and also to determine the degree of diversification between various language systems. Furthermore, language is a social phenomenon and a part of human culture and therefore closely connected to other aspects of culture. Therefore, both synchronically and diachronically language must be studied together with the other aspects of culture that make up the subject matter of modern cultural anthropology.

This book presents the results of our joint comparative research into the Indo-European languages and the reconstruction of Proto-Indo-European that gave rise to the attested Indo-European languages. Indo-European is studied in this approach in typological comparison to other languages, in particular the geographically adjacent ones with which Proto-Indo-European must have interacted for a long period of time.

The first part of the book presents the results of linguistic analysis — phonological, morphological, syntactic, and areal-dialectological — of Proto-Indo-European. This does not mean that the analysis should be viewed as a systematic survey of the various branches of comparative Indo-European grammar, as is done in the standard handbooks. Rather, the first part is a study of key questions of Proto-Indo-European structure, involving a wide range of facts and yielding a relatively complete picture of this language in its dynamic development and its typological links to other language systems.

The second part gives a relatively full investigation of the Proto-Indo-European lexicon, presented by semantic groups, as well as fragments of Indo-European culture that can be reconstructed from the lexicon; it also describes the culture-historical links of the Indo-European lexicon to a number of languages of ancient Eurasia. This is properly a dictionary of Proto-Indo-

European lexemes presented not in alphabetical order (that can be found in the indexes) but in order of semantic groupings. In contrast to the well-known Indo-European dictionary of Pokorny, in our semantic dictionary each entry presents not only the formal correspondences between cognates which make possible the reconstruction of a protoform, but also the phenomena of material and intellectual culture that are connected with the root in the individual daughter traditions. On this basis a reconstruction is then given for the Proto-Indo-European level.

The final section presents the results of research into the linguistic and culture-historical data relevant to determining the Indo-European homeland and the migratory routes taken by the Indo-European tribes across the Eurasian continent to their historically attested locations.

The range of questions surveyed here should be of interest not only to linguists but also to historians, archeologists, anthropologists, and historians of culture. Given the specialized nature of some parts of the book, especially its linguistic parts, readers may wish to read chapters in various orders depending on their interests. The second part of the book, where culture-historical problems are analyzed from a linguistic perspective, and the final section on migrations can be read without reading the first part (except where explicit cross-references are made). The final section, on migrations, is essentially self-standing and can be read without the others, although the semantic dictionary will be useful for more detailed understanding of the histories of the individual words that support the historical arguments in the final section.

Linguists, on the other hand, may wish to read only the first part and skip the factual details of the second part. Still, the two parts are organically linked, as will be evident, and this is why they are covered by joint indexes. These can be used as a guide or word index by readers interested in particular questions discussed in the book.

The book is the result of joint research begun in 1970. It was produced not by assembling separate chapters written individually by one or the other author, but jointly, by laying out together the conclusions and results of many years of collaborative research that involved joint analysis of particular problems and joint formulations of results.

Throughout the time when the research was being done and the book written, publications have appeared that have been consistent with our claims. Insofar as possible we have taken these into account in the text and bibliography, in the conviction that the sheer quantity of agreement is the strongest confirmation of our analysis. The most recent literature, especially works that appeared in 1983, could generally be taken into consideration only in the Afterword, which surveys some works that directly address or respond to our claims (see also the section entitled 'Addenda and corrigenda' in the Russian original, pp. 1317ff.).

We are pleased to express our gratitude to those who have been involved in

one way or another in discussing and responding to earlier presentations of this work in seminars and reports. We are grateful, first of all, to our teachers, the late G. S. Axvlediani and G. V. Cereteli, for their constant interest in our work in its early stages, and also to V. I. Abaev, A. A. Zaliznjak, V. N. Toporov, T. E. Gudava, I. M. Diakonoff, I. M. Steblin-Kamenskij, S. D. Kacnel'son, and G. V. Stepanov. Among foreign scholars we thank J. H. Greenberg, M. Mayrhofer, O. Szemerényi, C. Watkins, J. Catford, W. P. Lehmann, E. Polomé, E. Hamp, H. Pilch, W. Winter, E. Risch, R. Schmitt-Brandt, A. H. Kuipers, H. Hoenigswald, A. Kammenhuber, A. Morpurgo Davies, M. Gimbutas, W. Cowgill, H. Birnbaum, R. Anttila, R. Austerlitz, K. Strunk, R. Schmitt, K. H. Schmidt, H. Aronson, J. Greppin, J. Nichols.

We should make special note of the extent to which we are indebted to Roman Jakobson — one of the greatest scholars of our times, one of the founders of contemporary linguistics, and the source of many of the ideas that this book is based on. During our work on the book we discussed with him our results and various problems that arose, and this greatly facilitated our analysis and exposition. His constant participation in our work is reflected in his foreword to this book, written when we had completed the manuscript. This foreword is one of his last pieces of writing.

Thomas V. Gamkrelidze  
Vjacheslav V. Ivanov

Tbilisi — Cavkisi — Peredelkino — Moscow  
1970-1983

## Translator's Preface

This book is the first major handbook of Indo-European to be written since the discovery and analysis of Hittite, the first ever with explicit and consistent theoretical grounding, the first whole-scale Indo-European reconstruction in which typology has played a major role, the first attempt to join orthodox comparative reconstruction of Indo-European with an account of the structural and lexical resemblances in other Eurasian and Near Eastern languages, and the first reconstruction of an Indo-European homeland based on all available kinds of linguistic data. In its semantic dictionary and indexes it provides the first Indo-European lexicon of both forms and meanings. The method used is standard rigorous comparative-historical analysis, but the substance of the linguistic reconstruction and the reconstructed homeland are novel.

The Russian original is a well-written, stylistically refined exemplar of an expository tradition that has no analog in contemporary western prose and therefore cannot be captured in English. In the canon in which it is written, the expository strategy and the logical argument proceed from general to particular, seeking to ground the particular in the general. Generalizations are often implicitly treated as premises (rather than as conclusions or hypotheses) and particular facts are shown to follow from them. Hence the expository strategy may be said to emphasize deduction rather than argumentation. For instance, a strategy frequently used in reconstruction is first to show that, on logical and structural-typological grounds, one would expect such and such a structure, property, or phoneme in Proto-Indo-European, and then to show that there exist in the daughter languages forms that can be explained by tracing them back to the expected structure. Thus in I.5.3.2–I.5.3.3 it is shown that the structural typology of Proto-Indo-European is such that one expects to find alienable/inalienable possession and inclusive/exclusive pronouns; then daughter forms are presented that are consistent with a protolanguage that had those oppositions. In this mode of argumentation, a first priority is the structural and typological consistency of the reconstruction, and any conforming cognate evidence in the daughter languages that can be derived from such a reconstruction supports and confirms it. The commoner mode of argumentation in western historical linguistics in recent decades proceeds inductively, arguing that the daughter reflexes demand such-and-such a reconstruction (rather than that they derive from and confirm it), and much less priority is given to typological consistency of reconstructions, which, if brought up at all, would probably have the status of secondary observation on a reconstruction (rather than, as here, an essential logical priority).

Another example involves the reconstruction of the traditional plain voiced stop series of Indo-European as ejectives. In the canon followed here, typological implicational hierarchies and structural patterning in the reconstructed stop inventory — the near-absence of traditional \**b*, here \**p'*; the relative lexical frequencies of the various stop series — are sufficient to reject the received reconstruction. To most American Indo-Europeanists, in contrast, the structural asymmetries of the protolanguage are merely interesting, and the only evidence sufficient for rejecting the received reconstruction would be a demonstration that the daughter reflexes in and of themselves demand a different reconstruction. But the daughter reflexes in themselves do not demand a different reconstruction; most of them are voiced and none are ejective except in one branch, Armenian, and even there glottalization is dialectal. The demonstration given in this book does not focus on the daughter reflexes and the reconstructed phonetics they demand, but rather adduces a great deal of information about structural properties of the comparative Proto-Indo-European reconstruction, the workings of Grassmann's Law as reconstructed both internally and comparatively, and the derivability of the daughter consonantal systems from a proto-system with an ejective Series I. Readers should be aware that the two stances on Proto-Indo-European ejectives are not a matter of individual differences of opinion or debate on phonetics and phonetic change, but rather can be thought of as a minimal pair indicating the different status given to premises and implications, or general and particular, in two different intellectual canons.

The choice of the deductive canon is a felicitous one for the task at hand. The Proto-Indo-European homeland reconstructed here is located at the very periphery or even outside of the present and historically attested ranges of known Indo-European languages (and in fact probably *all* Indo-European homeland reconstructions enjoying any currency among linguists are peripheral or external to the historical Indo-European speech territory). The structural features reconstructed here for Proto-Indo-European include some, notably the phonological system, morphophonemic canon, and word order, that are known to be strongly susceptible to areal influence; and others, such as inclusive/exclusive pronoun oppositions, alienable/inalienable possession, and stative/active verb categorization, that have a broad areal or geographical basis to their distribution. These features are predictably absent from the modern Indo-European languages because of their geographical distribution. If the daughter languages lack ejective stops, Hittite-style word order, etc., it is not necessarily because their ancestors never had them; the geography of their modern distribution — Europe, parts of Southwest Asia, the Indian subcontinent, all areas in which these features are lacking — is sufficient to predict their absence. Therefore it is probably safe to claim that, in principle, for *any* language family whose prehistory is known to have involved extensive migration, the reconstruction of the ancestral grammar should rely more

heavily on implicational hierarchies and other structural arguments than on comparison of the phonetic and grammatical substance of the daughter languages. That is what has been done in this work wherever phonological or grammatical structure is involved.

In the intellectual canon exemplified here, the scientific text itself is not so much a communicative contract between writer and reader, where the writer monitors what the reader is expected to know at a given point in the text, but rather a gnomic statement of existing knowledge. Central findings are presented not as asserted conclusions but rather as premises or presuppositions from which a range of facts follow inevitably. The gnomic text can easily be read by one unfamiliar with the tradition as obscuring the distinction between what is already known and what is being newly established, when in the gnomic canon precisely this confers validity.

The grammatical forms and categories of Russian are well suited to the gnomic canon. Definite and indefinite articles, with which English monitors what the writer expects the reader to know, are lacking. Participial and nominalized verb forms can be, and frequently are, used to presuppose (rather than assert) new findings or conclusions (where presupposition means assimilating them to general knowledge rather than to the reader's expected knowledge). For instance, in I.O.3 (p. lxxxiv of the original) we find what is literally

(The) one-sided and restricted nature of classical historical-comparative Indo-European linguistics lay in the fact that its reconstruction of Proto-Indo-European was the result of exclusively external comparison of the separate daughter systems...

but is translated here as

Classical comparative-historical Indo-European linguistics was one-sided and restricted, since its reconstruction of Proto-Indo-European was based only on external comparison of the separate daughter systems...

The inadequacy of the received reconstruction is the fundamental thesis of the chapter (the Introduction) and a main reason for writing the book. The close translation, like the original, does not assert the inadequacy but merely presupposes it, consistent with the gnomic canon; but the force of the argument is thereby lost to the English reader. I have therefore used freer translations with finite verbs and assertion in such examples (which are numerous).

In expository Russian the paragraph has little or no grammatical status; or, perhaps more accurately, it is not clearly a distinct level from the sentence. In this book, many paragraphs are single sentences; anaphora and other kinds of reduction hold within these paragraph-sentences but usually not between them,



in which respect they resemble English paragraphs; in the occasional instances where anaphora does hold between them, they thereby resemble English sentences but not paragraphs; the scope of certain operators can cross sentence-paragraph boundaries as it can cross sentence (but not paragraph) boundaries in English. Hence paragraphs had to be created in order to make the text readable in English. The decisions as to which paragraph-sentences would function as topic sentences of English paragraphs, which would be joined together in paragraphs, and where paragraph boundaries would be placed in the English version, were all mine and have imposed on the text a form of organization the original did not have.

The Russian text, in having many self-standing and often separately paragraphed sentences, therefore conveys (in Russian) the impression of considerable conciseness: each important claim is reduced to a single self-standing sentence. The opposite is true in a close English rendition, however. Consider the following from I.2.3.2 (pp. 100-101 in the original):

Close rendition:

This development of Indo-European \* $\kappa^h$  in Anatolian often coincides with the reflexes of the palatovelars in *satem* dialects. However, the coincidence in the development of palatovelars in Anatolian and the *satem* languages is only a superficial one, not the result of common internal causes.

Free translation:

This treatment of IE \* $\kappa^h$  partly coincides with the reflexes of palatovelars in the *satem* languages. However, the coincidence is only superficial and not the result of identical internal causes.

It is the paragraph-internal anaphoric reduction rules of English, together with the definite article, that make it possible to reduce *the coincidence in the development of palatovelars in Anatolian and the satem languages* to a simple *the coincidence*.

Since the original presents well-argued content in good style, I have attempted to convey the content accurately in English of good or at least normal style. This has meant loss of the gnomic style in favor of one that monitors what the reader knows and uses assertion in many places where the original uses presupposition. More generally, trying to put good Russian into the very different expository canon of English has weakened the rhetorical integrity of the original. The alternative, however, would be to lose intelligibility and to render good Russian in very odd English. Therefore, I will simply assure the

reader that the Russian original has an integrity and cohesion of style, expository canon, logic, and content that could not be replicated in the translation, and I take responsibility for any distortion or loss of integrity imposed by the translation.

Various substantive changes have been made to the text and forms. The Russian original contains a section of addenda and corrigenda at the end; these have been incorporated into the text and footnotes. Other authorial additions and corrections, and some editorial ones made with the authors' approval, have also been incorporated. The occasional typographical or copying error has been corrected. For most of the cited forms, glosses have simply been back-translated from the Russian glosses in the original; but for a number of them the standard sources have been consulted and those glosses used here. Graphic and other conventions in tables, figures, formulas, phonological rules, and the like have sometimes been adapted to current or more familiar western norms. The original refers to many classics of linguistic analysis in their Russian translations; these have been replaced with references to the English, French, and German originals wherever possible. The original uses good published Russian translations of Homeric citations, and I have used good published English translations (*The Iliad of Homer*, translated with an introduction by Richmond Lattimore [University of Chicago Press, 1951]; and Homer, *The Odyssey*, translated by Robert Fitzgerald [Garden City, New York: Doubleday Anchor Books, 1963]).

The Russian original had separate Cyrillic and Latin bibliographies (since the two alphabets have different alphabetical orders, they cannot be intermingled in alphabetized bibliographies); the translation transliterates the Cyrillic references and merges the two bibliographies. When the author of works in Russian also has publications in a western language, the author's name is spelled here (in all references) as it is in the non-Russian publications; otherwise the last name is simply transliterated. In the original, if one author had (say) three publications from the year 1978, they were referenced as 1978, 1978a, 1978b (rather than, as would generally be done in this country, as 1978a, 1978b, 1978c). The original reference system has been preserved in the translation (apart from changes imposed by merging the bibliographies, as when, say, an author had a 1978 publication in Russian and a 1978 publication in English). In general, I have tried to keep the bibliography as similar as possible to that of the original (apart from merging, addenda, and corrigenda).

Transliteration has been adjusted to current western norms for a few languages (notably regarding the graphies *y*, *i* in Anatolian and Proto-Indo-European). The original uses boldface for all reconstructed Proto-Indo-European forms in the text, but italics in footnotes; the translation uses boldface throughout (correcting occasional other inconsistencies in the original). The original writes \*p[h], \*t[h], \*b[h], \*d[h], etc. to indicate that aspiration was a

phonetically relevant but not distinctive feature of the stops traditionally reconstructed as \*p, \*t, \*bh, \*dh, etc.; the translation uses \*p<sup>h</sup>, \*t<sup>h</sup>, b<sup>h</sup>, \*d<sup>h</sup>, etc., thereby saving two keystrokes and three font changes per token as well as giving the reconstructions a more familiar graphic appearance.

Section and subsection numbers are as in the original (the translation prints the entire section or subsection number, beginning with the chapter number but not including the volume number; the original leaves out the chapter number and also refrains from showing chapter numbers in running headers). Cross-references are to sections or subsections, not (as in the original) to pages. Footnotes are numbered consecutively within chapters (the original numbers them page by page) and include some addenda and corrigenda.

For all of these reasons, the translation can be taken as an updating of the original and an improvement in the graphic and editorial quality of the original, but the Russian prose of the original is still to be considered authoritative as regards wording and precise details of argument. For these same reasons, a reader looking into the Russian original may find it difficult to pinpoint a Russian sentence corresponding exactly to a particular English sentence.

The authors would have liked to change and expand the text in various ways and respond to reviews and other published commentary of the past ten years, the editors wished to add comments of their own, and I myself would have liked to make annotations and adduce further supporting evidence at some points. Such requests have been turned down, since the publisher's original plan was to produce a translation and not a revised second edition. Readers should keep in mind, therefore, that the translation reflects the authors' thinking as of about 1983.

Some of the research into forms and glosses, and innumerable questions on the translation of technical terms from various philological traditions, botanical nomenclature, English-language titles for ancient texts, and the like, as well as standard transliterations of various languages and standard English renditions of place names, personal names, names of some languages, etc. lay far beyond my own expertise, and I owe a large debt of gratitude to those whose expertise and willingness to answer questions have made this translation possible. Edgar Polomé and Winfred Lehmann edited the first drafts of Parts II and I respectively; Werner Winter edited the final draft. Gary Holland has answered countless questions on every aspect of Indo-European. Thomas Gamkrelidze has answered many questions, discussed many technical points, made available proofs and advance copies of the Russian original, and offered institutional hospitality while I worked in the Oriental Institute of the Georgian Academy of Sciences in Tbilisi. Martin Schwartz and Calvert Watkins read and commented on earlier drafts of some chapters. The scholars who have answered my questions on the languages and areas of their expertise are too numerous to be listed, so I thank them all anonymously. Orin Gensler did most of the typeset-

ting and in addition has done proofreading, general troubleshooting, and extensive checking of forms and glosses, as well as assisting with Afroasiatic and Celtic. Marie-Louise Liebe-Harkort kept the project alive with her organizational skills, professional knowledge of every aspect of linguistic publishing, and enthusiasm. Richard Rhodes served as her local representative, organizing the production of final copy including the final formatting and some of the typesetting, down to the actual design of some special font characters. He and Orin Gensler produced the indexes. Thomas Hedden checked botanical and zoological nomenclature, verified and updated bibliography entries, merged the (separately alphabetized) Cyrillic and Latin bibliographies of the original, and helped with various linguistic and philological problems. Mary Rees and Ellen Rosenbaum assisted with computerization, bibliography, and a variety of research tasks. Kenneth Whistler converted disk copies to Macintosh format and made computerization possible in the early stages. Margaret Kabalin and Ruth Shields did technical typing of specialized characters and assisted with the production of the final draft. Joseph Schallert assisted with the first stage of translation. Peter Chang and Richard Rhodes produced the line drawings. My native-speaking Russian colleagues, as always, were generous with their time and their finely-honed intuitions and stylistic and textual sense, and I thank Arkady Alexeev, Olga Astromova, Boris Gasparov, Olga Hughes, and Igor Mel'čuk for their help. My debt of gratitude is enormous in the case of Edgar Polomé and Gary Holland, whose time and expertise were given so unstintingly and so far beyond the call of duty.

Though I could not have done the translation without the help of these colleagues and assistants, the decision to seek out their expertise and to use or not use their advice was always mine. Therefore, I take all responsibility for the felicity and accuracy of the translation and more generally for the scholarly qualities of the English text. I also emphasize that none of the editors and consultants has reviewed all forms cited from his or her language of expertise.

Some of the research assistance was supported by the Center for Slavic and East European Studies and by the Committee on Research, both of the University of California, Berkeley. Some of the translation and consultation with the authors were done in Tbilisi when I was a participant in the 1984 Exchange of Senior Scholars between the American Council of Learned Societies and the Soviet Academy of Sciences, sponsored by the International Research and Exchanges Board.

The Russian original was written in about ten years, and spent another five years in press. The translation and its typesetting have taken ten years because of the size and complexity of the text, the number of specialized symbols and diacritics, the decision to set the text from my draft disk copy, and the range of philological and linguistic expertise required to transliterate, check, gloss, or even simply reproduce the forms. And this is for translating a text that already

existed. Meanwhile, the authors wrote the entire work from scratch, including working out the argumentation, selecting the evidence, and assembling the linguistic data (I call the reader's attention to the fact that citations of Hittite and Luwian data are generally referenced not to secondary sources but to the primary texts and are usually transliterated directly from the cuneiform spelling), as well as overseeing production of a typescript, in the same amount of time it has taken to complete and typeset the translation, and they did it under the highly disadvantaged conditions in which serious scholars worked in the Soviet Union. Furthermore, their published text systematically used three alphabets — Cyrillic for the main text and forms cited from Cyrillic orthographies, Greek for Greek forms, and Latin for all others — in addition to a good number of special symbols, while this translation essentially uses only the Latin alphabet and the special symbols (plus Greek, for lengthy Homeric quotes only); and their published text is remarkably free of errors, typographical and other, for any publication and especially a Soviet one. A preface usually ends with an expression of personal gratitude, but instead of gratitude I will take the opportunity to express my admiration to Thomas Gamkrelidze and Vjačeslav Ivanov for their erudition, their dedication, the magnitude and depth of their research for this project, and the intellectual quality and polish of the Russian original.

Johanna Nichols,  
Berkeley, July 1994

## Foreword

Among the favorite themes and main tasks of linguistics from the last century to the early years of this one were questions of the reconstruction of Proto-Indo-European, and in the world's universities the chief, and usually the only, linguistics department was a department of comparative Indo-European linguistics. It was that epoch whose efforts are summed up in the classic handbooks, efforts directed at revealing the diverse particulars of the common protolanguage underlying the genetically related members of what is known as the Indo-European linguistic family.

During the course of the twentieth century a change in the basic mission of linguistics has made itself felt — on the one hand in the increasing frequency with which technical means and methods developed in Indo-European linguistics were applied to other language families in both the Old and the New World, on the other hand in an increased enthusiasm for the strictly descriptive approach to individual languages without historical comparison either to earlier stages of that language or to related languages. These two spheres of research interests inevitably led to verification and critical reassessment of the inherited methodology.

On the one hand, comparative-historical inquiries concerning the ancestors and interrelationships of various language families deepened and enriched the problematics of linguistic reconstruction, while on the other it was descriptive linguistics that raised fundamental questions about the linguistic system and its regular structure, and in particular laid the groundwork for systematic inquiry into the relation of sound structure and meaning.

A process of integration naturally arises between the expansion of comparative-historical problematics and the commitment of descriptive linguistics to the discovery of systematic structure: the necessity of restricting the tasks of comparative linguistics to strictly genetic comparison falls away, while questions of systematic structure finally go beyond the bounds of descriptive linguistics and find welcome application to the historical past of attested and reconstructed languages.

The first step in this process is to acknowledge the inseparability of the regular system and its changes, which are also regular. The limits of linguistic comparison shift considerably, and new tasks accrue to the study of the general patrimony of linguistic families. The commonalities acquired by the phonological and grammatical structures of languages that are spatially adjacent and enter into areal relations can now be explained. Then there arises the possibility and even the necessity of comparing different linguistic (and chiefly phonological) systems without regard to their genetic or geographical closeness.

As a consequence of the comparative analysis of all these linguistic systems, systematic typological classification grounded on rational principles is now

feasible. In these efforts the facts of living languages, supported by documentation of historical languages, make it possible to check the plausibility of proto-systems reconstructed by the comparative method, and they conclusively identify the most appropriate solutions to difficult problems of reconstruction. In a word, typological comparison renders salutary aid to comparative-historical procedures.

All of these newly discovered or at least newly rethought linguistic principles now confront each concrete linguistic work with inevitable and inescapable demands. Gamkrelidze and Ivanov's *Indo-European and the Indo-Europeans* fulfills in every respect the goal promised in its subtitle, 'A reconstruction and historical typological analysis of a protolanguage and a proto-culture'. The deep shifts and transformations that characterize the stage now attained in linguistics, and in which no small creative role has fallen to these two authors, lie at its methodological foundation. The approaches to particular problems of Proto-Indo-European linguistic antiquity taken by researchers from around the world are brought to bear here, and an appealing answer is given to the various theses that entered scientific currency at the turn of the century. This work stands out not only for its unusual answers to old questions, but in the very way it poses questions and the unprecedented breadth of its thematic horizon.

Consistent with the dialectic removal of the dichotomy of synchrony and diachrony and with the parallel inclusion of spatial diffusion among internal linguistic factors, the book naturally transforms the time-honored, spatially and temporally uniform view of Proto-Indo-European and creates a model of dynamic synchrony which fully comprehends the foundations of the protolanguage, its evolutionary shifts, its internal, regional differentiation, and its recurrent intersections with neighboring linguistic areas. It is the questions of mutual interactions among the dialects of Proto-Indo-European and the relations of the protolanguage to neighboring protolanguages that have given rise to the authors' richly promising work on the geographical definition of the (Southwest Asian) Indo-European homeland and the early migratory routes followed by the various branches of Proto-Indo-European.

The widened range of treatments of two concepts — comparison and system — in modern linguistics is linked to a consistently progressive relativization of all of linguistics and the steady transformation of linguistics into a science of language-internal relations, while the attention of linguists, especially Ivanov and Gamkrelidze, is concerned primarily with the unbreakable mutual connection of parts and whole, especially the central notion of the entire complex problematic: the relation of invariant and variation, the essential theme of all contemporary scientific thought. The dependency of variation on a diversity of contexts becomes all the more clear with the development of the main thesis of contemporary linguistics, which opposes context-free languages, i.e. artificial formal systems, to context-sensitive natural language. Here, of course, variation of form and meaning plays an essential role: both on the sound plane and at various levels of grammatical meaning the systematic extraction of invariants

grows into a central linguistic task.

This entire methodological program is realized in the reconstruction of Indo-European. In breaking the phoneme down into its minimal distinctive components the notion of context, formerly limited to the temporal sequential context of phoneme combinations, has expanded to include simultaneous combinations, and this double assessment of phonological combinations continues to reveal new, previously unstudied typological regularities both within and between the two kinds of combinations. The authors have made notable typological contributions on favored and disfavored combinations of differential components on the axis of simultaneity (see Gamkrelidze's chapter in *Problemy lingvističeskoj tipologii i struktury jazyka*: Institute of Linguistics, Soviet Academy of Sciences, 1977) and on the varieties of symmetrical relations that Ivanov has shown to lie at the foundation of linguistic structure. In particular, the picture of Indo-European consonantism gains novel, internally convincing shape in the work of these authors.

As the problematics of context is developed, the simplistic treatment of stylistic variants as free variants yields to an understanding of style as a context of its own, and the conditions imposed on language by various speech functions are incorporated into the general understanding of context. We are indebted to the authors' initiative in including Indo-European poetics, in particular metrics and the questions of anagrammatic tradition raised by Saussure, among the tasks of linguistic reconstruction.

It is no accident that reconstruction of protolanguage and reconstruction of proto-culture are treated together here as connected parts of a single whole; a consistently holistic approach requires that the reconstructed proto-lexicon be analyzed into semantic fields and the corresponding prehistoric realia be reconstructed through the prism of the Proto-Indo-European lexicon. The notion of the lexicon as a structural system, which has usually lagged behind the phonological and grammatical planes in linguistic work, is reliably grounded here, and in such areas as mythology and ritual it shows the way to systematic application of the comparative method.

In the number and magnitude of the questions it asks and answers it proposes this work occupies a unique place. Fully consistent with the highest standards of contemporary theoretical work, the book in turn will certainly provide valuable impetus not only to linguistic analysts of all schools, but also to specialists in related fields, for instance ethnographers, culture historians, and archeologists. A great deal of fruitful discussion will come forth in international science as a result of this momentous work.

Roman Jakobson



# Contents

Volumes I and II of the text of the original Russian edition have been combined in the English version as Part I; the Bibliography and Indexes are published as Part II.

## I

### Part One

#### The Structure of Proto-Indo-European

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