

Linguistics

The Indo-European Glottalic Theory: A New Paradigm in Indo-European Comparative Linguistics

Thomas V. Gamkrelidze

*Academy Member, G. Tsereteli Institute of Oriental Studies, Tbilisi
Georgian National Academy of Sciences*

Eine neue wissenschaftliche Wahrheit pflegt sich nicht in der Weise durchzusetzen, daß ihre Gegner überzeugt werden und sich als belehrt erklären, sondern vielmehr dadurch, daß die Gegner allmählich aussterben und daß die heranwachsende Generation von vornherein mit der Wahrheit vertraut gemacht ist.

— Max Planck

ABSTRACT. An application of the principles of language typology and linguistic universals to theoretical premises of historical-comparative linguistics and language reconstruction necessities, in general, a reformulation of the goals and tasks of historical linguistics and of linguistic reconstruction, in particular. © 2008 Bull. Georg. Natl. Acad. Sci.

Key words: *diachronic linguistics, reconstruction, new paradigm, glottalic theory.*

The last decades of the previous century were marked in the development of theoretical linguistics by enhanced interest in diachronic linguistic studies, in historical-comparative linguistics in general, and by a return to the traditional problems of nineteenth-century comparative Indo-European studies.

This growing concern with problems of diachronic linguistics derives from the general development of linguistic thought over the past decades. Overcoming the Saussurean antinomy between synchronic and diachronic linguistics, it strives to build a linguistic theory that would have more explanatory power than purely synchronic theories of taxonomic grammar built strictly on the basis of empirical linguistic data.

The ultimate goal of diachronic linguistics is the reconstruction of early linguistic states with a view to elucidating the origin and development of historically attested related language systems. Such a reconstruction of a parent-language state is attained by a comparison of historically attested cognate language systems and by a backward movement from one state to another,

earlier one, until the language state is reached, from which all historically attested cognate language systems can be deduced by application of a definite set of structural transformations. Such transformations then lead us from the original (basic) language system to later language states, which resulted from structural changes that affected it.

Structural transformations postulated in this way may be described as vertical or diachronic (in contrast to horizontal transformations generating new constructions within a system). With the help of these transformations various related language systems are deduced from theoretically postulated basic structural patterns. Because of their explanatory power with respect to language structure, the vertical or diachronic transformations, deducing historically attested forms of a language from certain theoretical constructs assumed to be chronologically earlier stages of these forms (their archetypes), are comparable, in principle, to horizontal transformations deducing observable surface-structure constructions of a language from theoretically postulated

basic constructions forming part of the deep structure of a language.

The problems of modern diachronic linguistics are closely linked with the problems and methods of language typology and the study of linguistic universals – one of the main branches of modern linguistic science.

One of the basic tasks of present-day linguistics is to establish a structural isomorphism of languages and to study general principles underlying language structures. Typological studies are called upon to bring this isomorphism to light, to identify the invariant characteristics of languages, and to identify language universals.

Linguistic research has established so far quite a number of such universals on various levels of language structure, which makes it possible to arrive at conclusions about invariant characteristics of languages, in general.

An application of the principles of language typology and linguistic universals to theoretical premises of historical-comparative linguistics and language reconstruction necessitates, in general, a reformulation of the goals and tasks of historical linguistics and of linguistic reconstruction, in particular.

The principle of typological plausibility, both synchronic and diachronic, of a model postulated for a proto-language provides a new approach to comparative linguistic studies and calls for a revision of traditional views concerning reconstructed proto-systems, in particular those of Proto-Indo-European and its daughter dialects. On the basis of comparative and typological evidence, the traditional and classical threefold system of Proto-Indo-European stops must be given a phonetic reinterpretation, in which the traditional *plain voiced stops* should be viewed as *glottalized*:

I	II	III		I	II	III
(b)	bh	p	⇒	(pʰ)	b ^[h]	p ^[h]
d	dh	t		tʰ	d ^[h]	t ^[h]
g	gh	k		kʰ	g ^[h]	k ^[h]
⋮	⋮	⋮		⋮	⋮	⋮

The stop series in the new interpretation must be defined as: I glottalized, II voiced [aspirate], III voiceless [aspirate], with aspiration in series II and III as a phonetically relevant but phonemically redundant feature.

Such a system of Proto-Indo-European stops reconstructed on the basis of a comparison of the phonemic systems of historically attested Indo-European languages, taking into account the characteristics of universally valid relations of dominance in a phonological system, appears to be – unlike the traditionally reconstructed system – in full agreement with both synchronic and diachronic typological evidence. The system suggested thus seems to be historically more probable than the traditionally reconstructed system of Proto-Indo-European stops.

The new interpretation of the three stop series provides a natural phonological explanation of the functional weakness of the labial phoneme /p/ of the glottalized series I in Proto-Indo-European, which remained unaccounted for in the traditional theory ascribing a feature of voice to this series. Likewise, in the context of the new approach a number of restrictions imposed on the structure of the Proto-Indo-European root are given a natural phonetic-typological interpretation: The absence of roots with two voiced stops of the type **deg-*, **ged-*, a fact well-known in classical comparative linguistics, but lacking a typologically tenable explanation, finds such a natural phonetic explanation in the suggested system of Proto-Indo-European stops with the feature of glottalization in series I – in view of their articulatory-acoustic peculiarities glottalized stops or ejectives tend not to combine with each other within a root, a phenomenon that may be illustrated by ample typological material (cf. the evidence of Amerindian, African, and Caucasian languages with glottalized consonants).

The “Glottalic Theory”, as it is known in current Indo-European comparative studies, takes a fresh look at the linguistic model of Proto-Indo-European and its diachronic transformations leading to the historically attested Indo-European languages.

In the context of the New Theory, these transformations prove to be totally different from those traditionally assumed. The archaic Proto-Indo-European stop inventory turns out to be closer to the inventories traditionally viewed as having undergone later consonant shifts or *Lautverschiebung* (Germanic, Armenian, Hittite), while languages, which were considered to be phonologically conservative (especially Old Indian) prove to have undergone complex phonemic transformations in their consonantism. The traditionally established trajectories of the transformation of the Proto-Indo-European stops into the phonemic units of the individual Indo-European languages change accordingly, acquiring – in the new interpretation of the Proto-Indo-European phonological system – a reverse direction. The basic phonetic laws of classical comparative linguistics, such as Grimm’s Law, Grassmann’s Law, Bartholomae’s Law, etc., receive a different meaning in the light of the new interpretation of the Proto-Indo-European system of stops.

The typological approach to linguistic reconstruction necessitates a radical reevaluation and reformulation of all basic comparative work concerned with Indo-European. Such reevaluation and reformulation, along with a reconstruction of the Proto-Indo-European lexicon in terms of the new phonological pattern, a reconstruction that elucidates the problems of Indo-European *Urheimat* and Indo-European migrations, is contained in the monograph written jointly with Vjačeslav Ivanov

(Gamkrelidze–Ivanov 1984), the English version of which appeared in the series *Trends in Linguistics* under the editorship of Werner Winter.

Of positive appraisals of the Glottalic Theory, a comment by the late Winfred P. Lehmann, dating from 1983, may be mentioned here:

“Major contributions of the past five decades have modified extensively the views on Proto-Indo-European phonology presented in the standard Handbooks by Brugmann, Hirt and Meillet. These contributions result, on the one hand, from a different approach to the parent language, on the other, from two far-reaching theories, the laryngeal theory and the glottalic theory...”

“What had seemed one of the most solid achievements of 19th century linguistics is now modified in every section”.

How different this is from the mood, which reigned at the beginning of the last century when Antoine Meillet, summing up his views on the situation in comparative Indo-European linguistics could make, in his *Introduction* of 1903, the following statement:

“En un sens au moins, il semble qu'on soit parvenu à un terme impossible à dépasser”.

Even the modified version of this statement as formulated by Emile Benveniste in the posthumous 1937 edition of the *Introduction* does not change anything in the established view:

“Même une trouvaille d'espèce inattendue... n'a pas renouvelé l'idée qu'on se fait de l'indoeuropéen; le hittite ... n'oblige à rien changer d'essentiel aux doc-

trines exposées ici; il éclaire nombre de faits, mais il ne transforme pas la théorie générale ...”

The emergence and further development of the *Laryngeal Theory*, founded on the method of internal reconstruction, and the advent of the *Glottalic Theory*, based on the principle of synchronic and diachronic typological verification of comparative reconstructions, have brought Indo-European historical-comparative studies out of this state of theoretical stagnation. The *Glottalic Theory* has been considered, because of its fundamentally different interpretation of the Proto-Indo-European consonant system, as a new “*Paradigm*” (in Thomas Kuhn's sense of the term) in Indo-European comparative linguistics, comparable in its consequences for the views on the development of the individual Indo-European languages to the *Laryngeal Theory*; it has been viewed, along with this theory, as a last step away from the Old Indian pattern as a model for Proto-Indo-European (cf. Mayrhofer 1983: 152-153). However, unlike the *Laryngeal Theory*, the *Glottalic Theory* does not change anything in terms of sound correspondences between historically attested Indo-European languages, and of etymologies based on these correspondences, but it entails a complete revision of the prehistory of these languages, advancing new Indo-European “*Laws*” and new diachronic transformational rules deriving the historically attested stages of the cognate languages from a common prehistoric stage.

All this serves to testify to creativity and a spirit of novelty in Comparative Linguistics in conjunction with achievements of General Linguistics, – a condition that offers a firm guarantee of future new insights and discoveries.

ენათმეცნიერება

ინდოევროპული გლოტალური თეორია: ახალი პარადიგმა ინდოევროპულ შედარებით ენათმეცნიერებაში

თამაზ გამყრელიძე

აკადემიის წევრი, გ. წერეთლის აღმოსავლეთმცოდნეობის ინსტიტუტი საქართველოს მეცნიერებათა ეროვნული აკადემია

შედარებით-ისტორიული ენათმეცნიერებისადმი ენობრივი ტიპოლოგიისა და ენობრივ უნფერსალიათა კვლევის შედეგების მიყენებით შესაძლებელი ხდება ისტორიული ენათმეცნიერების, და კერძოდ, ინდოევროპული შედარებითი ლინგვისტიკის მონაცემთა რადიკალური გადასინჯვა და ახალი ენობრივი

მოდელის წამოყენება. ეს განსაკუთრებით შეეხება საერთო-ინდოევროპული კონსონანტური სისტემის პრობლემას, რომელიც ენობრივი ტიპოლოგიისა და უნივერსალიათა თვალსაზრისით არსებით რეინტერპრეტაციას მოითხოვს. ტრადიციული ინდოევროპული კონსონანტური სისტემის ამგვარი რეინტერპრეტაცია, რომელიც ცნობილია ინდოევროპულ შედარებით ენათმეცნიერებაში „გლოტალური თეორიის“ სახელით, განიხილება როგორც ახალი «პარადიგმა» ინდოევროპულ კომპარატივისტიკაში (ამ ტერმინის თომას კუნისეული გაგებით).

BIBLIOGRAPHY

- T.B. Gamkrelidze, V.V. Ivanov* (1984), *Индоевропейский язык и индоевропейцы. Реконструкция и историко-типологический анализ праязыка и протокультуры, тт. I, II.* С предисловием Р.О. Якобсона. Тбилиси: «Издательство Тбилисского Университета». [*Thomas V. Gamkrelidze, Vjacheslav V. Ivanov* (1984), *Indo-European and the Indo-Europeans. A Reconstruction and Historical Typological Analysis of a Proto-Language and a Proto-Culture* (in two volumes). With a Preface by Roman Jakobson]. English version by Johanna Nichols; Edited by Werner Winter, «Mouton de Gruyter» Berlin – New York, 1995].
- Winfred P. Lehmann* (1983), *Proto-Indo-European phonology. An overview of recent research* (preprint).
- Manfred Mayrhofer* (1983), *Sanskrit und die Sprachen Alteuropas. Zwei Jahrhunderte des Widerspiels von Entdeckungen und Irrtümern* (NAWG, 1983, N5), Göttingen: Vandenhoeck & Ruprecht.
- Meillet, Antoine* (1903), *Introduction à l'étude comparative des langues indo-européennes*, Paris: Librairie Hachette.

Received August, 2007