## INDO-EUROPEAN MASDAR AS THE 3rd PERSON AND yrà IN BALTIC

W.R. Schmalstieg, 1982, while continuing the discussion about the non--nominative origin of the Lithuanian constructions without case agreement [Palmaitis, 1977<sub>1</sub>, Ambrazas, 1979, 205], formally approves my views on the Lithuanian genitive as the reflection of the Indo-European "ergative" [Palmaitis,  $1977_2$ , especially 336-337]. Nevertheless, I cannot believe that the reconstructed stative, or intransitive, \*pek<sup>w</sup>-to may be included in the sentence with the ergative \*patrós, since the author makes \* $pek^{w}$ -tó agree with the absolutive case. In the ergative system \*patér (not \*patrós!) g<sup>w</sup>m-tó can be only an absolutive construction, the same as \*ovi pek<sup>w</sup>-tó, regularly corresponding to the single possible ergative sentence \*ovi pekw-? patrós, \*pekw-? agreeing with the ergative \*patrós. Therefore the reconstruction \*ovi pekw-tó patrós [Schmalstieg, 1982, 131] is nothing else but the tautological transponation of the present-day Lith. \*aviena kepta tevo (cf. real sentences viskas vagių išvogta "everything is stolen by the thieves", brólio láiškas rašýta "there is written some letter by the brother" = "the brother has written a letter" = "a letter is written by the brother"), i.e. of a sentence which nowadays is more "ergative" than the reconstructed one with the factual concord between the predicate and the absolutive actant. Lithuanian neutral-gender participles kèpta, išvogta, rašýta are at least neutral in respect to concord (brólio rašýta vs. láiškas rašýta), meanwhile one can find no ergative language in the world with no concord between the ergative (not absolutive!) actant and the predicate<sup>1</sup>. However if a scholar declares himself being free from the grip of typology, then

<sup>&</sup>lt;sup>1</sup> Schmalstieg, 1982, 121, treats the subject of his reconstructed "ergative" sentence as patient and thus deprives the sentence of the direct object. The reason is as if following: two equal translations are possible, with the active and with the passive voice. Any real ergative known on earth is a case of the agentive grammatical subject, e. g. \*viros in \*patér bhr-tó vir-os, \*patér being absolutive, as one has already seen in \*patér  $g^w m-t \delta$ . Thus Schmalstieg's treatment really means that the logical subject can never be grammatical in such "ergative" sentences and they appear to be usual passive sentences. The main feature differentiating ergative constructions from passive constructions is a concord between the predicate and the ergative actant (which is both logical and grammatical subject in the ergative case), not the absolutive actant (patient).

the use of such grammatical terms as "ergative" or "absolutive" loses its current sense.

The opposition between transitivity and intransitivity is an indispensable feature of the ergative language structure. The two main types of the sentence in it, the ergative and absolutive ones, are characterized of the specific correlation between the transitive, or intransitive, predicate and the actants which switch their roles depending on transitivity or intransitivity. Thus ergativity is the subject of syntax, not of the morphology of cases - cf. "I now propose that the attested nominative case was (except for the \*o-stem) the original indefinite case" [Schmalstieg, 1982, 122]<sup>2</sup>. Transitivity in its turn means that there is a degree in the verbal valency for a real or possible direct object. If a verb does not have this degree, it is intransitive. Therefore such examples as Lith. as kepù (dúong) "I am baking (bread)" in no way illustrate the intransitive use of the verb, the direct object omitted (ibid.). The intransitive sense would be only if I am bread and I am baking as bread. If a verb is transitive, it keeps being transitive with the omitted direct object as well. As for the labile verbs of the type Lith. kepti, Engl. bake, their irrelevance to diathesis (in the sense of valency, not of the use of the direct object) does really reflect that archaic language structure in which the opposition between transitivity and intransitivity did not operate (of course, the same relic can be seen in Lithuanian non-diathetic constructions). That language structure was characterized by the semantical opposition between activity (fientivity) and stativity (inertness) and is known as the so-called "active" structure or, using my term, the fientive structure. In all likelihood it was the very structure of Indo-European traditionally called "ergative" (I have corrected my terms already in 1977<sub>2</sub>, 331<sup>4</sup> and 1978<sub>2</sub>, 27). In any way it would be inconvenient to speak about some stage having "no transitive verbs, only intransitive verbs" [Schmalstieg, 1982, 119], intransitivity existing as a member of the binary opposition.

While constructions of the type Lith. senų miškai mylėta, čia grų̃bų būta, vagos reikia išarti are always in the centre of attention, such type of the missing concord as Lith. nėrà kas daro "there is nothing to do" or nėrà kadà važiúoja "there is no (time) to ride" (with a 3rd person finite form, not with a participle!) remains unconfronted with the first one. In 1977<sub>1</sub>, 116, I have mentioned the possibility that the finite forms might have developed from the mylėta-like predicates by joining personal formants. Now I derive the finite forms from the ancient infinite mas-dar-form which is synonymously reflected in the infinite (mylėta, mýlima) forms as well as in the finite form of the Baltic 3rd person (daro, važiúoja) [cf. Ambrazas, 1979, §183].

<sup>&</sup>lt;sup>2</sup> For the history of the signatic case-ending, see Palmaitis, 1979; for the redistribution of case morphemes, cf. Palmaitis,  $1977_2$ .

Masdar (Arab "source") is a gerund-like verbal noun used in languages with no infinitive (as Afro-Asiatic or Kartvelian). It corresponds to our a) noun, b) infinitive, c) finite form, as in the following examples:

- a) (1) (our) being a fraid of death = (our) fear of death;
- b) (2) I wish your coming here = I wish you to come here;
- c) (3) I hear her crying = I hear that she cries.

All these gerunds are not masdars since the infinitive is possible to substitute them, cf. also.

(4) being a fraid of death is natural = to a fraid of death is natural.

There is no such substitution in languages without the infinitive, therefore the verbal noun in view (the masdar) [which joins objects in the same way as in (1) and (4)] is included in the system of the verb there.

The syncretism of the functions a, b, c may be traced in the Baltic 3rd person which is unique in two respects: number is neutralized in it; it has no marker except in the athematic forms: "The form of the so-called 3rd person does not point out to the agent by any grammatical means; it is an impersonal finite form naming a mere action which does not belong to the participants of the communication" [Žulys, 1974]. That the both Baltic peculiarities are an archaism and not an innovation was firstly stated by V. Mažiulis, 1958, and V. Pisani, 1958. Then A. Savčenko, 1960, and V. Toporov, 1961, 1962, supported this idea, later accepted by J. Kazlauskas, C. Watkins, F. Bader, Viač. Ivanov a.o. V. Toporov considers the ending of the 3rd person a bare-stem ending, J. Kazlauskas emphasizes that "the functions of the 3rd person in Baltic might have been fulfilled by the prehistorical bare stem" and that "once the form of the 3rd person meant not the participation in the act of speech, but an action in general without any connection with a person" [Kazlauskas, 1968, 303, 302]. Not involving himself in the polemic, J. Stepanov, 1981, conjectures this form to be a relic of the Balto-Slavic participle of the injunctive-aorist. Unfortunately this view (it is destined to rehabilitate the traditional statement about the reduction of the final -t in Baltic<sup>3</sup>) is not proved as not confronted with the results of contemporary investigations. Nevertheless, it seems worth mentioning that J. Stepanov, 1982<sub>2</sub>, collates the form of the Baltic 3rd person with the predicative adjective and

<sup>&</sup>lt;sup>3</sup> Its relics are supposed in the interjections of the type Lith. spùst, trùkt, žibt. However, this -*t* is not an evidence of the ancient \*-*ta*. As A. Girdenis has mentioned, the corresponding forms in South Aukshtaytian end in -c < \*-ti, e. g. krùśc [Zinkevičius, 1966, 443].

the passive participle of the "neutral gender". Examples of this kind are typical of Lithuanian:

- (5) mán tévas mótina brangù "father and mother are dear to me";
- (6) čia tėvų dirbta, dirbama "here the fathers (or: parents) have worked, work" vs.;
- (7) čia tėvai dirbo, dirba "here the fathers worked, work".

By confronting the synonymous sense of the sentence (7), with the finite forms, and that of the sentence (6), with the infinite ones (participles), one may see the nominal equivalence of the 3rd person form as of the masdar-like gerund in the instance (1).

In Baltic the 3rd person form may be infinitive-equivalent and nominal-equivalent at the same time, cf. dialectal:

- (8) nėrà kadà dirba "there is no time for work, to work";
- (9) nėrà kadà važiúoja "there is no time for ride, to ride";
- (10) nėrà kas dãro "there is no doing, nothing to do";
- (11) Latv. nav kas ēd "there is nothing of food, nothing to eat".

The literary norm demands infinitives in all the instances:

- (12) nėrà kadà dirbti;
- (13) nėrà kadà važiúoti;
- (14) nėrà ką darýti;
- (15) nav ko ēst.

By comparing the synonymous sense of (8) and (12), (9) and (13), (10) and (14), (11) and (15) one may see the gerund-like functioning of the 3rd person form as in the instance (3), and therefore – the nominal and infinitive equivalence of this form similarly to the masdar-like gerund in the instances (1), (2).

The masdar character of the 3rd person form is especially evident in Latvian debitives which are nothing also but noun-clauses with the indirect case of the ancient relative / demonstrative particle: man (ir)  $j\bar{a}$ -raksta ("I have to write") literally means "(what is) for me (that is) of the (that) writing".

More evidence of the masdar character of the Baltic 3rd person may be drawn, namely the material evidence. A number of  $\bar{a}$ -stem verbal nouns formally correspond to the finite forms in Lithuanian and Latvian. Such verbal nouns as Lith.  $s\tilde{a}kymas$ , Latv. tèikšana "saying" have much older equivalents of the radical derivation Lith. sakà, Latv. teika. The two latter correspond to the  $\bar{a}$ -stem finite form of the 3rd person: Lith. sakà < \*saká vs. the 3rd pers.  $s\tilde{a}ko < *sak\tilde{a}$  "he says, they say", cf. also klausà < \*klaũsá "hearing" vs. the 3rd pers. klaũso < \*klaũsã "he hears, they hear"; kaità < \*kaĩtá "change" vs. the 3rd pers. kaĩto < \*kaĩtã "he changes, they change", etc. Since the ancient length results in the acute tone in Baltic, in the both instances only one form is to be reconstructed: \*\*saká, \*\*klaũsá, \*\*kãītá, etc. The circumflex metatony is due to the barytone character of the verbal form: the acute length (later shortened in accordance with Leskien's law) in unstressed finals was fixed while having a stressed allomorph (the idea of A. Girdenis), e.g. šárka after šakà < \* sakā. If a barytone form had no oxytone allomorph, the opposition of tones became neutralized in the final which was no more perceived acute, was not shortened in Leskien's epoch and thus was reinterpreted as circumflex, cf. žẽmė (though -ė was later generalized, mostly in derivatives). The form of the 3rd person was barytone and its final was reinterpreted as circumflex.

By analogy with the  $\bar{a}$ -stems, the *a*-stem verbal nouns may be conjectured corresponding to the *a*-stem verbal forms. The later generalization of the  $\bar{a}$ -stem pattern is not surprising, especially after Leskien's epoch: Lith. 3rd pers.  $s\bar{e}ka$  "he follows, they follow" vs.  $seka < *seka \leq **seka$  "sequence", Latv. 3rd pers.  $t\bar{e}ic < *teik-ja$  "he says, they say" vs.  $te\bar{i}ka < *teik\bar{a} \leq *t\bar{e}ika$ .

Are the reconstructed verbal nouns  $**sak\dot{a}$ ,  $**kl\tilde{a}us\dot{a}$ ,  $**k\tilde{a}it\dot{a}$ , \*\*seka,  $**t\tilde{e}i-ka$  really masdars? The gerund-like character of the 3rd person is shown above and it is known that the gerund-like verbal noun functions as masdar if there is no infinitive in a language. No unified infinitive form can be reconstructed for Indo--European and even for Baltic. Thus West-Baltic infinitives are of the *u*-stem, meanwhile in East Baltic they are of the *i*-stem: Pruss. dat. / loc. -*twei*, -*twi*, nom.acc. "supine" -*tun*, but Lith. -*ti*, Latv. \*-*tei* (or \*-*ti* if -*ties* is a result of later generalization). The absence of the infinitive form points out to the absence of the infinitive in Common Baltic. The said is sufficient to conclude that the form of the 3rd person represented in Baltic languages is a masdar form of the Common--Baltic and Indo-European epochs.

It may be shown that the similar form was a base for the 1st and the 2nd persons as well, and not only in Baltic. The synonymy of the nominal predicates in the sentences (5) and (6), uniformly expressed by the "neutral gender", as well as the synonymy of the finite predicate in (7) and the nominal predicate in (6), permits the collation of the finite predicate in (7) with the nominal predicate in (5). According to J. Stepanov, 1982, the predicates in (5), (6) represent the stative perfect. This conforms to V. Ivanov's verbs of the 2nd endings' series resulting in the Baltic thematic paradigm 1 sg. \*-o-H, 2 sg. \*-e(+ imperat. -i), 3. \*-o [Ivanov, 1981, 59]. I reinterpret it for Baltic (and Indo-European, Palmaitis, 1979, 20) as 1 sg. \*-*a*<sup>+</sup>-*H*, 2 sg. \*-*e*(-*i*), 3. \*-*a*, \*-*a* / -*e* being apophonic variants of the bare-stem final. Nesite demonstrates a kind of possessive conjugation of nouns, cf. keššari-mi "in my hand", keššari-ti "in thy hand", etc., alike to the same phenomenon in Siberian languages [Ivanov, 1981, 70]. Just in the similar way the Indo-European masdar had to produce the stative (V. Ivanov's the 2nd) and the fientive ("active", V. Ivanov's the 1st) verbal paradigms: masdar + the inertive ("inactive")-case pronominal forms (the stative paradigm) vs. masdar + the fientive-case pronominal forms (the fientive paradigm) [Palmaitis,  $1978_1$ ].

The formal correspondence to the radical Baltic (Indo-European) masdar is found in Kartvelian which is distinguished by its extraordinary isomorphism to Indo-European [Gamqrelize, Mačavariani, 1965, Schmidt, 1965, 1969, 1979, Mačavariani, 1970, Melikišvili, 1977, 1979, 1980]. In Georgian the radical masdar type is Baltic-like: čama "eating" (čams "he eats"), cvla "change" (cvlis "he changes"), etc. Caucasian parallels remind us of R. Gauthiot's conjecture connecting East-Baltic Lith. yrà, Latv. ir "is, are" (a nominal form, since the verbal one would end in unstressed -o) with Armenian  $ir < * \bar{i}r\bar{a}$  "matter". This form is known in Svan, while the root r – as well in North-Caucasian languages. The increasing total of gleanings seem to support the idea of G. Cereteli [Gamqrelize, Mačavariani, 1965, 023, 045; 1982, 12] about the Indo-European origin of Kartvelian which was caucasized to a larger degree than Armenian was. In much later times the same has happened to the Ossetic branch of Iranian which underwent the similar caucasization. Thus Kartvelian preserves the less of Indo--European features, Armenian keeps looking Indo-European, meanwhile Ossetic is apparently Iranian. Besides that, Kartvelian has been in contact with Indo--European from the very beginning of its Caucasian history, so that no criterion has existed up to recently to distinguish what words were ancient borrowings from Indo-European and what were hypothetically common. It is the law of T. Gamqrelize-V. Ivanov which appears to be this criterion. According to it, the three series of Indo-European stops are to be reinterpreted in the following way: tenues as voiceless (with facultative aspiration), mediae as voiceless glottalized, and mediae aspiratae as voiced (with facultative aspiration) [cf. Gamqrelize, Ivanov]<sup>4</sup>. Thus Georgian tiqa "clay", which corresponds to Nesite tekan, Tokharian tkam, Greek metathetic χθών, IE. tradit. \*dheghom, is borrowed because of its voiceless t- instead of d-=IE. \*d(h) as well as because of its voiceless q- instead of g = IE. \*g(h) (some Proto-Greek source is to be suspected for *tiqa*). On the other hand, Svan gom "earth" precisely reflects the Baltic-Indo-European \*ghem-.

It is very interesting that almost all Kartvelian-Indo-European lexical correspondences (borrowings or not) are represented in Baltic. Did the "Baltic" Indo-European

<sup>&</sup>lt;sup>4</sup> V. Neroznak (Сравнительно-историческое изучение языков разных семей. – М., 1981, c. 41) points to P. Hopper as a subsequent and independent founder of this theory in 1973, though it was independently stated in the same publication "Конференция по сравнительно-исторической грамматике индоевропейских языков", М., 1972, by T. Gamqrelize and V. Ivanov (p. 15–18) and by O. Shirokov (p. 92–94) who is mentioned by V. Neroznak as an author of the non-existent article of 1976 (p. 40 vs. 314). cf. also Melnichuk, 1977, p. 36–?

centre [Schmid, 1978, Toporov, 1981] move to Europe via the Caucasus fromits North-Mesopotamian motherland<sup>5</sup> [Gamqrelize, Ivanov]? Sometimes coincidences with Baltic are astonishing. Not speaking about such curiosities as Svan gego = Lith. gegà, Georgian Khevsurian, Tushin, Mokhevian guguța = Lith. gegùtė "cuckoo", Georgian *curbela* = Lith. siurbėlė "leech" (Georgian words look as if they were borrowed from Lithuanian dialects!), two Kartvelian words have apparent parallels only in Baltic and only in East Baltic, namely Svan *īra* "(it) will be" and Georgian *did-i* "big".

The latter seems to be reduplicated, as well as its Baltic cognate \*didja-, and is obscure in Indo-European as well as in Kartvelian (the relation of Svan 3yad "big"  $<*_{ij}$  - with "palatalized" d-? - to Georgian did- is hypothetical). If Georgian diax "yes", (< \*dia- $\gamma a$  because of) dia $\gamma a$ -c "surely yes" comes from an oath--word similar to English by God!, Arab bi-llāh!, then one might confront Georgian \*di(d)-/\*dia- "\*great", "\*magnificent"; "\*majesty" with IE \*dy-/\*dey- "light", "sky"  $\rightarrow$  "God" and thus suspect borrowing (Kartvelian  $d \neq IE$ . tradit. \*d = \*t) of the archaic religious term from Indo-European. If so, the reduplication to express magnificence becomes clear. It is true that Lith. didis, Latv. dižs mean "magnificent", while in the sense of "big" Lithuanian uses the -elja derivative didelis though Latvian has guite different word for it: liels (for derivatives cf. also with the suffixal root n Lat. dī-v-īnus "divine" and Av. daē-nā "religion", Lith.-Latv. dai-na "song", "folk-song", originally "\*ritual hymn with dancing"<sup>6</sup>. Here one more curiosity is not to be omitted: Georgian dideba "glory" - Lith. didýbe "majesty" due to the correspondence between the abstracts' suffixes Georgian -oba, -eba and Baltic--Slavic \*-bhā, \*-bhjā.

As for Baltic  $*ir\bar{a}$ , it on the contrary seems to be loaned to Indo-European from Kartvelian Svan-like \*(H-)i-r-a, r being Common-Kartvelian root "to be", i versional formant, a - vocalization of the bare-stem ending. In Svan, as well as in Georgian, medial verbs may form the future with the versionizer *i*-. Since futural patterns differ even in the history of Georgian, no future paradigm can be reconstructed for Common Kartvelian. So originally \*Hira had no futural sense and was borrowed in "Baltic" Indo-European and Armenian as a masdar.

To elucidate the prehistory of Baltic  $*ir\tilde{a}$  means to elucidate the origin of the corresponding Svan form: what is the nature of (the versionizer) i-, why is it long

<sup>&</sup>lt;sup>8</sup> Among other things cf. the identic goblin plots in North-European and Kartvelian folk-lore. The very word for goblin in Baltic, Lith. *kaũkas*, Latv. *kauks*, Pruss. *cawx*, is connected with mythologically personified mount [Toporov, 1980] and related to Germanic word "high": it is Gothic *hanhs* "high", from which just Gk. Καύκασος originates.

<sup>•</sup> V. Urbutis, 1981, 54 f. (also "Baltistica", 1972, 124 f.) seems to be the first to allude to the cognation between *dainà* and *didis*.

and is the initial "laryngeal" to be reconstructed there as it is expected according to the accepted views on Proto-Indo-European phonetics? Because of the frames of the article I immediately pass on to the theme and propose some new solutions to kartvelologists without explication of the basic terms and concepts. The formants x-, h- before the versionizer *i*- are attested correspondingly in Old Georgian khanmet and haemet texts, cf. x-i-.qo h-i-.qo, "was", x-i-kmna, h-i-kmna "became". The origin of these x, h (let us sign them as "laryngeal" \*H) is obscure, since the both represent the so-called objective formant of the indirect 3rd person (identic to the subjective formant of the 2nd person) and its appearance in monovalent verbal forms with no indirect object is a mystery. According to Maya Mačavariani (personal letter of 18.03.1982), the versionizer i, as well as a, are generalized from the corresponding case-endings of the pronominal forms. The dative forms in -i coalesced with the corresponding verbal forms at the same time as the non-dative forms in -a did, e.g. the lst pers. non-dat. \*ma (cf. IE apoph. \*me), dat. \*mī < \*mai (cf. IE \*mai/\*mei), the 3rd pers. non-dat. \*Ha, dat. \*Hi < \*Hai. The pronouns having coalesced with the verbal stems, the pronominal roots were generalized as personal formants (\*m-, \*H- in our instance), while the case-vocalism of the pronominal stems received new functions: those of the category of version. Since \*i was the exponent of the former dative, the forms with \*i began to signalize the dative of the actant: the lst pers. \*mi- "for me...", the 2nd pers. \*gi- "for thee...", the 3rd pers. \*Hi- "for him". Such signalizing is intravert - intraversion orients a situation (any kind of verbal content) to the communicant, i. e. to the 1st or the 2nd person, the 3rd person following the paradigm of the communicating persons [Mačavariani, 1980]. Verbs with the series \*m-, \*g-, \*H- of the personal formants are agent as well as patient in Kartvelian. The other series of the personal formants is only agent, the exponent of the dative is impossible in it: the 1st pers. \*Hw(a)-, the 2nd pers. \*H(a)- (sporadically without (a) after its abstraction in accordance with the former series). Since after generalizing the pronominal roots as verbal formants the segment \*i preserved its dative meaning, a possibility arose to use it for intravert orientation by introducing \*i instead of \*a in the latter series which earlier expressed only the extravert (from the communicant) orientation: the 1st pers.  $*Hw(a) \rightarrow *Hwi$ , the 2nd pers.  $*H(a) \rightarrow *Hi$ . Such intraversionization meant that the situation turning back to the actant, i. e. it meant a reflexivization: "for myself", "for thyself". For the 3rd person the only \*i was to be used. However, the opposition between \*Hi- "for him" and \*i "for himself" (without the pronominal root) had no supporting precedent in the other persons. Thus \*Hi- received the reflexive meaning, since another pattern "for him" had already developed from the lst pers. \*Hw (+a consonant)- purely phonetically: \*HwC- = \*HuC- "I for him"  $\rightarrow$  "he for him" after reinterpreting \*H- as the formant of the 3rd person of the series \*m-, \*g-, \*H-.

Up to now there is no difference in expressing "I for him" and "he for him" in Svan (xo-) and Georgian (u-) the modern literary writing vu- in the 1st person is artificial and does not conform to the pronunciation). In this way the new versionizer -u- came into being, which is possible only in the 3rd person where it is synonymous with the formant \*H- (cf. Geor. h- < s- in (mo-)s-dis = (mo-)(\*h-)u-dis "it happens to him"). The allomorphism of \*H- and \*-u- caused \*H- to be interpreted as the formant of the indirect person. Thus the same \*H- in the reflexive \*H-i- became undesirable and vanished as having no motivation. There are the relics of this \*H- which are testified in Old Georgian khanmet and haemet texts.

Another archaism is represented in Svan where the form  $\bar{i}ra$  shows the archaic length  $\bar{i}$ . The length of the intraversionizer  $*\bar{i}$  in Kartvelian was outside semantical length-oppositions. This, as well as the absence of length in the extraversionizer Svan -o-, was the reason of shortening *i*- in Svan.

One can see the transparent semantical parallel of the Baltic "masdar" ira to Armenian *ir* "matter" in nowaday Lithuanian and Latvian expression kas yr(a)? kas *ir*? "What is the matter?".

## REFERENCES

Ambrazas, 1979 – Ambrazas V. Lietuvių kalbos dalyvių istorinė sintaksė. – V.: Mokslas, 1979.

Gam.qrelize, Ivanov — Гамкрелидзе Т. В., Иванов Вяч. Вс. Индоевропейский язык и индоевропейцы. — Тбилиси: Изд-во Тбилисск. гос. ун-та, 1982, т. 1, 2 (in print).

Gam.qrelize, Mačavariani, 1965, 1982 – Gam.qrelize T., Mačavariani G. Sonanţta sisţema da ablauţi kartvelur enebši. – Tbilisi: Mecniereba, 1965; The German version: Sonantensystem und Ablaut in den Kartvelsprachen. – Ars Linguistica. Tübingen: Gunter Narr, 1982, N 10.

Ivanov, 1981 — Иванов Вяч. Вс. Славянский, балтийский и раннебалканский глагол. Индоевропейские истоки. — М.: Наука, 1981.

Каzlauskas, 1968 — Kazlauskas J. Lietuvių kalbos istorinė gramatika. — V.: Mintis, 1968. Klimov, 1983 — Климов Г. А. Принцицы контенсивной типологии. — М.: Наука, 1983.

Mačavariani, 1970 – Mačavariani G. I. The System of the Ancient Kartvelian Nominal Flection as Compared to Those of the Mountain Caucasian and Indo-European Languages. – In: Theoretical Problems of Typology and the Northern Eurasian Languages / Ed. by L. Dezső and P. Hajdú. Budapest: Kiadó, 1970.

Маčavariani, 1980 — Mačavariani M. Kcevis kategoriis sakitxisatvis. Summary: К вопросу о категории версии. — Иберийско-кавказское языкознание, 1980, т. 22.

Mažiulis, 1958 — Мажюлис В. Заметки к вопросу о древнейших отношениях балтийских и славянских языков. — Вильнюс: Гос. изд-во полит. и науч. лит-ры, 1958.

Melikišvili, 1977 — Меликишвили И. Г. Перфект в общекартвельском и общеиндоевропейском. — Конференция "Ностратические языки и ностратическое языкознание: Тез. докл. М.: Ин-т славяноведения и балканистики АН СССР, 1977.

Melikišvili, 1979 — Melikišvili I. Marcvlis agebis zogadi p.rincip.i da xšulta ganaçileba saertokartvelursa da saertoindoevrop.ulši. Summary: Общий принцип строения слога и структуры корня в общекартвельском и общеиндоевропейском. – Изв. АН ГССР. Сер. яз. и лит-ры, 1979, № 4.

Melikišvili, 1980 — Меликишвили И. Г. Структура корня в общекартвельском и общеиндоевропейском. — ВЯ, 1980, № 4.

Palmaitis,  $1977_1$  – Palmaitis L. Dėl baltų kalbų nenominatyvinės praeities. – Baltistica, 1977, II priedas.

Palmaitis,  $1977_2$  – Palmaitis L. Notes on the Development of Baltic Declension. – Baltistica, 1977, t. 13, Nr. 2.

Palmaitis, 1978<sub>1</sub> — Палмайтис М. Л. Опыт реконструкции общебореальной морфологии в уральско-индоевропейско-афразийском аспекте. — LP, 1978, Nr. 21.

Palmaitis 1978<sub>2</sub> – Palmaitis L. Tipologinės pastabos dėl giminės kategorijos formavimosi. – Baltistica, 1978, t. 14, Nr. 1.

Palmaitis, 1979 – Palmaitis L. Proto-Indo-European Vocalism and the Development of the Indo-European Declensional Models. – IF, 1979, Bd 84.

Pisani, 1958 – Pisani V. L'indoeuropéen reconstruit. – Lingua, 1958, Nr. 7.

Savčenko, 1960 — Савченко А. Н. Проблема происхождения личных окончаний глагола в индоевропейском языке. – LP, 1960, № 8.

Stepanov, 1981<sub>1</sub> — Степанов Ю. С. Балто-славянский инъюнктив и сигматические формы. — Baltistica, 1981, t. 17, Nr. 2.

Stepanov, 1981<sub>2</sub> – Степанов Ю. С. Имена, предикаты, предложения. – М.: Наука, 1981.

Schmalstieg, 1982 – Schmalstieg W. R. The Shift of Intransitive to Transitive Passive in the Lithuanian and Indo-European Verb. – Baltistica, 1982, t. 18, Nr. 2.

Schmid, 1978 – Schmid W. P. Indogermanistische Modelle und osteuropäische Frühgeschichte. – In: Akademie der Wissenschaften und der Literatur, Abhandlungen der Geistesund sozialwissenschaftlichen Klasse. Mainz, 1978, Bd 1.

Schmidt, 1965 – Schmidt K.-H. Indogermanisches Medium und Satawiso im Georgischen. – Revue de Kartvélologie, 1965, vol. 23.

Schmidt, 1969 – Schmidt K.-H. Zur Thmesis in den Kartvelsprachen und ihren typologischen Parallelen in indogermanischen Sprachen. – In: Tbilisi University to George Akhvlediani. Tbilisi: University Publishers, 1969.

Schmidt, 1979 – Schmidt K.-H. Die vorgeschichtlichen Grundlagen der Kategorie "Perfekt" im Indogermanischen und Südkaukasischen. – In: Arnold Čikobavas. Tbilisi: Mecniereba, 1979.

Торогоv, 1961 — Топоров В. Н. К вопросу об эволюции славянского и балтийского глагола. — В кн.: Вопросы славянского языкознания. М., 1961, т. 5.

Торогоv, 1962 — Топоров В. Н. О некоторых архаизмах в системе балтийского глагола. — IJSLP, 1962, vol. 5.

Торогоч, 1980 – Топоров В. Н. Прусский язык. Словарь І-К. – М.: Наука, 1980.

Торогоv, 1981 — Топоров В. Н. Категория времени и пространства в балтийское языкознание. — В кн.: Балто-славянские исследования 1980. М.: Наука, 1981.

Urbutis, 1981 – Urbutis V. Baltų etimologijos etiudai. – V.: Mokslas, 1981.

Zinkevičius, 1966 – Zinkevičius Z. Lietuvių dialektologija. – V.: Mintis, 1966.

Žulys, 1974 – Žulys V. Bendrinės lietuvių kalbos veiksmažodžių asmens galūnės. – Kalbotyra, 1974, t. 26 (1).