The Proto-Kartvelian and Proto-Indo-European Common Typological Feature: An Active Alignment (?)

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Abstract

The split-ergativity of the Kartvelian languages defined by the TAM categories and verb classes' restrictions is represented as a result of hierarchically organized changes of linguistic structures. Various levels of hierarchies reflecting dynamic synchronic processes of linguistic structuring are interpreted as the stages of minor-syntactic constructions' development based on the 'appearance' of certain grammatical categories (Telicity, Transitivity, TAM, S/O). The hierarchies reveal that the Proto-Kartvelian alignment system is semantically oriented an active one. Taking into consideration the reconstruction of Proto-Indo-European alignment as an active one (Gamkrelidze & Ivanov 1994/95) it seems possible to speak about a typological closeness of those proto-languages that further developed in different ways giving nowadays either the nominative (IE) or ergative (K) languages.

1. Introduction

Comparative-historical linguistics makes it possible to represent diachronic changes of conceptualization and linguistic structuring of reality. Changes of a language system mirror changes within various social-cultural spheres of human being such is art, religion, ethnic traditions, economy, civilization, culture, etc. On the basis of the comparative-historical methodology, a reconstructed proto-language and it's diachronic development helps us to get complete information about the historical existence of the speakers including ecological environment (fauna, flora, geographic surrounding, climate) and human habitation, and migration in the environment as well as culture in the broadest sense (including both, material and spiritual culture).

In this respect the most decisive are syntactic constructions, which reflect various models of linguistic structuring and create some picture of linguistic "world view".

Syntactic constructions are built on the basis of a verb and its argument structure. Number of arguments (resp. Nouns) is defined by a verb valency and can be maximum four; e.g. in Georgian some constructions with two dative nouns can be interpreted as an argument structure showing four nouns formally linked with a verb:

- (1) *mi-m-i-k'er-a* *ma-n* *me* *γil-i* *kaba-s//-ze*
 PV-IO.1-OV-sew-AOR.S.3.SG s/he-ERG 1.SG.DAT button-NOM dress-DAT//[DAT]-on
 'S/he sewed me a button on (my) dress.'

Various types of formal relations between a verb and its arguments are cross-linguistically specific and bilateral: a verb can define arguments' form (resp. cases) while arguments themselves can trigger a verb form (resp. person-triggering markers).

Thus, arguments' case patterns and verb concord models (resp. alignment type of a concrete language) define the basic frame of a simple syntactic construction that can be reconstructed on the basis of morphological reconstructions reflecting the grammatical relations between a verb and arguments.

2. The Proto-Kartvelian Alignment System

2.1. The Main Models of Case Patterns in the Kartvelian Languages

In the Kartvelian languages (Georgian, Megrelian, Laz, Svan) structures of simple syntactic constructions are defined by the verb valency and three main models of arguments' case patterns.

I. *Nominative pattern*: {A-argument is represented in Nominative (*-i/-o), B-argument – in Dative (*-s), C-argument – in Dative (*-s)}¹;

(2)	Georgian:	<i>k'ac-i</i>
man-NOM	<i>saxl-s</i>
house-DAT	<i>a-g-eb-s</i>
NV-build-THM.-PRES.S.3.SG
"A man builds a house."				
(3)	Megrelian:	<i>k'oč(i)</i>
man.NOM	<i>'ude-s</i>
house-DAT	<i>o-g-an-s</i>
NV-build-THM.-PRES.S.3.SG
"A man builds a house."				
(4)	Laz:	<i>k'oči-k</i>
man-ERG	<i>oxori</i>
house.NOM	<i>k'od-um-s</i>
NV-build-THM.-PRES.S.3.SG
"A man builds a house."				
(5)	Svan:	<i>māre</i>
man.NOM	<i>kor-s</i>
house-DAT	<i>a-g-em</i>
NV-build-THM(PRES.S.3.SG)
"A man builds a house."				

II. *Ergative pattern*: {A – in Ergative (*-ma/m)², B – in Nominative (*-i/o), C – in Dative (*-s)};

(6)	Georgian:	<i>k'ac-ma</i>
man-ERG	<i>saxl-i</i>
house-NOM	<i>a-a-g-o</i>
PV-NV-build-AOR.S.3.S
"A man built a house."				
(7)	Megrelian:	<i>k'oč(i)-k(i)</i>
man-ERG	<i>'ude</i>
house.NOM	<i>da-g-u</i>
PV-build-AOR.S.3.SG
"A man built a house."				
(8)	Laz:	<i>k'oči-k</i>
man-ERG	<i>oxori</i>
house.NOM	<i>do-k'od-u</i>
PV-build-THM.-AOR.S.3.SG
"A man built a house."				

¹ The reconstructed case markers here and below are given in accordance to the works by Oniani (1978, 1989) and Machavariani (2002).

² A reconstruction of the ergative case is the most problematic as all Kartvelian languages show various allomorphs:

Georgian: /-ma/-/m/∞/-n/

Megrelian: /-k/

Laz: /-k/

Svan: /-d// /-em/-/em/∞/-nem/

Conventionally, we indicate it as */ma/.

- (9) Svan: *māre-m* *kor* *ad-g-e*
 man-ERG house.NOM PV-build-AOR.S.3.SG
 "A man built a house."

III. Dative pattern: {A – in Dative (*-s), B – in Nominative (*-i/o), [C disappears as an argument of a verb and transforms into a Prepositional Phrase]};

- (10) Georgian: *k'ac-s* *saxl-i* *a-u-g-i-a*
 man-DAT house-NOM PV-SINV.3.CV-build-PF-OINV.3(SIVN.3.SG)
 "A man has built a house."

- (11) Megrelian: *k'o-s* *ude* *du-g-ap-u(n)*
 man-DAT house.NOM PV(SINV.3)CV-build-THM-OINV.3(SIVN.3.SG)
 "A man has built a house."

- (12) Laz: *k'oči-k* *oxori* *u-k'od-un*
 man-ERG house.NOM (SINV.3)CV-build-THM-OINV.3(SIVN.3.SG)
 "A man has built a house."

- (13) Svan: *māra-s* *kor* *x-o-g-em-a*
 man-DAT house.NOM SINV.3- CV-build-THM-IONV.3(SINV.3.SG)
 "A man has built a house."

2.2. Restrictions of the Case Patterns

The case-marking patterns are determined by the verb (conjugation) class in interaction with its tense/aspect/mood (resp. TAM categories) properties. Following the Georgian grammatical tradition TAM categories based on their morphosyntactic features are classified into three series: Series I: Present (Indicative and Subjunctive), Future (Indicative and Subjunctive), Imperfect, Conditional; Series II: Aorist Indicative, Subjunctive-II; Series III: Present Perfect, Past Perfect, Subjunctive III. The Kartvelian verbs are divided into four conjugation classes: class I mainly involves active transitive verbs (including derived causatives); class II involves dynamic-passives; class III involves active-intransitive verbs; and class IV contains constructions with an experiencer (resp. affective) and static-passive (including, so called, medio-passive) verbs (Compare with Shanidze (1973) and Harris (1981)).

Conjugation classes can be defined by the features of Transitivity, Dynamicity, Telicity.

Table 1.
Conjugation classes

Verb classes	Transitivity	Dynamicity	Telicity
I-class: Affected objects	+	+	+
II-class: Achievements	–	+	+
III-class: Active processes	–	+	–
IV-class: All others (Agentive states, Passive states, Experiencer)	–	–	–

The conjugation classes together with the series determine different case patterns shown below in the tables 2-4.

Table 2.
Georgian and Svan

	Series I			Series II			Series III		
Arguments	A	B	C	A	B	C	A	B	C
Class I	NOM	DAT	DAT	ERG	NOM	DAT	DAT	NOM	(PP)
Class II	NOM	-----	DAT	NOM	-----	DAT	NOM	-----	DAT
Class III	NOM	-----	DAT	ERG	-----	DAT	DAT	-----	(PP)
Class IV (static) (experiencer)	NOM	-----	DAT	NOM	-----	DAT	NOM	-----	DAT
	DAT	-----	NOM	DAT	-----	NOM	DAT	-----	NOM

Table 3.
Megrelian

	Series I			Series II			Series III		
Arguments	A	B	C	A	B	C	A	B	C
Class I	NOM	DAT	DAT	ERG	NOM	DAT	DAT	NOM	(PP)
Class II	NOM	-----	DAT	ERG	-----	DAT	NOM	-----	DAT
Class III	NOM	-----	DAT	ERG	-----	DAT	DAT	-----	(PP)
Class IV (static) (experiencer)	NOM	-----	DAT	ERG	-----	DAT	NOM	-----	DAT
	DAT	-----	NOM	DAT	-----	NOM	DAT	-----	NOM

Table 4.

Laz

	Series I			Series II			Series III		
Arguments	A	B	C	A	B	C	A	B	C
Class I	ERG	NOM	DAT	ERG	NOM	DAT	DAT	NOM	(PP)
Class II	NOM	-----	DAT	NOM	-----	DAT	NOM	-----	DAT
Class III	ERG	-----	DAT	ERG	-----	DAT	DAT	-----	(PP)
Class IV (static) (experiencer)	NOM	-----	DAT	NOM	-----	DAT	NOM	-----	DAT
	DAT	-----	NOM	DAT	-----	NOM	DAT	-----	NOM

2.3. Verb Concord in Kartvelian

The Kartvelian language has two types of verbal person affixes denoting the person agreement; so called, the V-type and M-type affixes.

Georgian:

	V-type			M-type		
	sing.	pl.		sing.	pl.	
I	v-	v- -t		m-	gv-	
II	-	- -t		g-	g- -t	
III	-s,-a,-o	-n,-en,-an, -nen, -es		h,-s,-ø- ø-	h,-s,-ø- (-t) ø-	

Megrelian:

	V-type			M-type		
	sing.	pl.		sing.	pl.	
I	v-	v- -k		m-	m- -t, -n,-(n)en,-an,-es	
II	-	- -k		g-	g- -t, -n,-en,-(n)an,-es	
III	-s,-n,-o	-an,-a, -n,-na(n), -es		ø-	ø-	

Laz:

	V-type			M-type		
	sing.	pl.		sing.	pl.	
I	v-	v- -t		m-	m- -t, -n,-(n)en,-an,-es	
II	-	- -t		g-	g- -t,-n,-(n)en,-an,-es	
III	-s,-n,-u	-n,-(n)an, -es		ø-	ø-	

Svan:

	V-type				M-type		
	sing.	pl.			sing.	pl.	
I-excl.	(x)û-/m	(x)û-/m-	-d		m-(ŋ)-	gû-	
incl.		l-(ŋ)-	-d			n-(ŋ)-	
II	x-	x-	-d		ž-	ž	-x
III	l-/s,-a,-e	l-	-x		*h-,x-	*h-	-(x)

Traditionally the V-type affixes are considered to be the subject markers, while the M-type are qualified as the object markers. However, this is not always the case: In the Perfect³ tense forms and also with the affective (psychological) verbs, the subject appears with the M-type and the object with the V-type affixes. For that reason most Georgian scholars qualify these forms as the inersive ones.

To avoid such inconsistency of functional interpretations, it seems better to analyze these markers without any functional qualification, simply by their relation to cases.

1. Noun in the Dative always triggers the M-type affixes;
2. Noun in the Ergative always triggers the V-type affixes;
3. Noun in the Nominative triggers either
 - (a) V-type (if there is no ergative linked with the verb as well), or
 - (b) M-type (in case there is an ergative linked with the verb), or
 - (c) Zero (if both ergative and dative appear in the construction).

2.4. Interpretation of the Case Patterns and Verb Concord Models

On the basis of semantic-functional analysis of above presented models some regularities can be observed:

1. The first or second personal pronouns (I or II) in all Kartvelian languages have no case endings. As for a verb concord, they behave similarly as Ergative, Nominative or Dative nouns. Consequently, we can speak about

³ The Kartvelian Perfect demonstrates an additional semantic nuance: “apparently”, “it seems”, “probably”. It represents the following aspectual situation: The speaker sees the result of an action, (s)he does not pay any attention to Ag (or (s)he is not sure; or (s)he does not actually know; or (s)he merely forgets, who was the Agent of the action), but because of the actually presented result (Patient), (s)he says, what “apparently” happened; e.g. *dauxat'avs* ‘It seems that (s)he has drown’, *ucxovria* ‘Apparently (s)he has lived’, *augia* ‘Apparently, (s)he has built it’, and so on.

I/II Ergative (always triggers V-type person markers), I/II Dative (always triggers M-type person markers) and Nominative (triggers either M-type, or V-type, or $\emptyset$ -.)

2. Constructions with an affective verbs and experiencer subject (class IV-experiencer) are the most consecutive; they always exhibit the Dative system: an experiencer (A) that functionally might be qualified as the subject is represented by the Dative case and a stimulus (C) – as the object, consequently, represented by the Nominative case;
3. The ergative is the only case strictly linked to one and only one grammatical function: if ergative, then the subject. Any other case is polyfunctional: the Nominative refers either to a subject or a (direct)-object; the Dative represents an indirect object, a subject-experiencer and class I or class III verbs' subject in series-III, also, a direct object in series I (except Laz).
4. The ergative construction appears if two conditions are met – the ergative construction arises if and only if:
 - (i) a verb is of class I (transitive) or class III (intransitive-atelic);
 - (ii) a verb is in the series II.

Thus, there is a split-ergativity (Dixon 1979, Harris 1981) in the Kartvelian languages: Nominative and Ergative constructions are distributed and defined by the verb-classes and TAM categories. The restrictions are functioning in the Kartvelian languages variously:

- *Megrelian keeps to only (ii)*: Any kind of verbs in series II trigger the ergative case pattern and, consequently, follow the V-type verb concord models, while any kind of verbs in series I show the nominative construction;
 - *Laz – only (i)*: Any kind of transitive (or broadened along the activity category⁴ intransitive-atelic) verbs trigger the ergative case pattern and, consequently, follow the V-type verb concord models, while all other kind of verbs show the nominative construction; and this regularity is canonical for all series;
 - *Georgian and Svan case patterns are defined by the both, (ii) and (iii), restrictions*: Only transitive or broadened along the activity category intransitive-atelic verbs, and only in series II show the ergative construction, while all other cases show the nominative construction.
5. Interpretations of morphosyntactic variations according to syntactic functions are more complicated (see 6.) and cannot be defined simply by syntactic functions: there are no unequivocal, simple correspondences

⁴ See the work by Winfried Boeder, who analyses the Georgian "ergative construction" as not being the typical one but as a construction broadened along the activity category (Boeder 1979); also, the work by Irine Melikishvili (Melikishvili 2012).

between the syntactic functions and cases. It seems better to analyze the formal models according to the semantic roles that can be differentiated by the semantic feature 'Free Will of Arguments'. The feature 'Free Will' is regarded as the main characteristic feature for describing and distinguishing the semantic roles:

- Agent – +[FW] (an argument who acts and controls an action);
- Addressee/Experiencer/Agent_{unknown} – -[FW] (an argument who does not control an action);
- Patient – Ø (an argument who is under an action and its controlling is logically excluded; so, for the patient the feature 'Free Will' is redundant).

According to this feature the appearance of different verb concord models can be described by the following hierarchically organized rules I>II>IIIa/>IIIb/>IIIC/>IIId:

- I *An argument whose free will is not included in a situation (or it is unknown whether its free will is included or not) triggers the M-type affixes. (Semantically such are: Addressee, Experiencer, and an actually 'unknown' Ag of Perfect tense forms);*
- II *An argument that acts according to its free will triggers the V-type affixes (such is Ag).*
- III *An argument left after the application of I>II rules, triggers either*
 - a) *The V-type, if it is only argument linked with a verb (P); or*
 - b) *The V-type, if other argument's free will is not meant in a situation (constructions: {P-Ad}, or {P-Exp}, or {P-unknownAg}); or*
 - c) *The M-type, if other argument's free will is meant in a situation (construction Ag-P);*
 - d) *Zero, if both other arguments (with +[FW] and with -[FW]) are linked with a verb (construction : {Ag-P-Ad}).*

Taking into account all above given discussion, a reconstruction of ergative alignment is well-grounded, yet, it is difficult to define one function and to reconstruct one morpheme for the ergative case (see reference 2).

Yet, there exists another restriction as well:

- (iii) *an argument must be the third person represented either by the third Personal Pronoun or a Noun.*

The last restriction functions in every Kartvelian language and this regularity leads us to suppose that Kartvelian languages, first of all, strive for formal markedness of I/II versus III persons dichotomy and the arguments for such an interpretation are the following (Asatiani 1999):

1. *Case patterns:* I and II pronouns are undifferentiated according to the cases, while III (pro)nouns show very developed case systems: there are seven functionally and formally differentiated cases in Georgian and Laz, nine cases – in Megrelian, six cases – in Svan;
2. *Verb concord:* I/II person singular always triggers *prefixes* in verb forms, while III person either singular or plural – mostly *suffixes* (except Svan);

3. *Variation of III person allomorphs*: Allomorphs of I/II are pure and mostly defined by various phonetic processes, while III person allomorphs are rich; they are morphologically restricted and defined by various features: animateness, active-passive opposition, tense-mood differences, functionally defined competitive situations and so on;

4. *Number agreement*: I/II person always agrees with a verb in number, while III person is semantically and functionally more restricted from this point of view;

5. *Main function of polypersonality* of the Kartvelian verb is *the obligatory formal markedness of I/II persons*: the person markers of I/II persons (despite their functions – as subjects so objects) are always presented in verb forms in combinations with III person;

6. *Category of version*: if an action is directed/oriented to I/II person, a verb has *-i- prefix; while in case an action is directed/oriented to III person, a verb has either *-i- (when III person is subject) or *-u- (when III person has functional qualification of indirect object);

7. *Category of direction*: if an action is directed towards I/II persons, verb forms are denoted by one kind of prefixes (so called, preverbs) expressing direction, while other kind of preverbs are used in case an action is directed towards III person.

The arguments show that in the Kartvelian languages the tendency of formalization of person dichotomy is in privileged position and the dominant category which defines the process of linguistic structuring of events is the deictic anchoring: first of all, the grammaticalization of *I/II versus III dichotomy* is decisive. Appearance of nominative or ergative constructions are restricted and characteristic mostly for III person subsystem, first of all, defined by the semantic roles and the semantic feature 'Free Will of Arguments'. The tense-mood, telicity, transitivity and functional S/O categories play an important role as well.

We offer to represent the alignment systems of Kartvelian languages as hierarchically organized subsystems reflecting the restrictions and morphosyntactic features that define the appearance of case patterns and verb-concord models.

The hierarchies are defined according to the priority given to marked categories during the surface realizations. They reflect dynamic synchronic processes of linguistic structuring of relations existed between a verb and its arguments.

We suppose that the hierarchies can explain diachronic linguistic processes as well: Various levels of hierarchies could be interpreted as the stages of minor-syntactic constructions developed on the basis of appearance of certain grammatical categories (S/O, TAM, telicity):

I-II stages – I/(>II):III – Morphosyntactic models are defined through the dichotomy of communicative act participants – Georgian/Megrelian/Laz/Svan;

III stage – [+FreeWill](Ag):[-FreeWill](Ad):Ø(P) – Morphosyntactic models are defined through the opposition of semantic roles (Ag:Ad:P) – Laz;

IV stage – [+Aorist];[-Aorist] – Morphosyntactic models are defined through the opposition of TAM categories – Georgian/Megrelian/Svan;

V stage – Subject:Object – Morphosyntactic models are defined through the syntactic functions – Georgian/Megrelian/Svan.

Supposedly, development of constructions might be the result of some changes of Kartvelians' world cognition that is reflected by the changes of certain linguistic structures creating a picture of linguistic "world view". Cognitive broadening of a world goes from a speaker (resp. I person, Ego Space) via a listener (resp. II person, close to Ego Space) to other world around (resp. III person, Alter Space). Entities of a world that are conceptually more close to a speaker are conventionally excluded from an Alter Space and included into the Ego Space in accordance with the Silverstain's hierarchies (Silverstain 1976): I Person/>II Person (I/II stage)>Humans (III stage) >Animates />Actives (IV stage) and developed in accordance with the specific linguistic cognition of the Kartvelians reflecting by the rising of grammaticalized semantic-functional oppositions: Active-transitive and Intransitive-telic verbs are opposed Inactive-intransitive and Intransitive-atelic verb forms (IV stage). Consequently, step by step, first of all active constructions and afterwards broadened ergative constructions have arisen (V stage):

Figure 1.

3. Proto-Indo-European as a Language of Active Alignment

Thomas Gamkrelidze and Viacheslav Ivanov have reconstructed the Proto-Indo-European language as a language of active alignment (Gamkrelidze, Ivanov 1994/95). Very briefly, their arguments for such a reconstruction are based on the analysis of following data:

- The formation of **-os* and **-om* genitive and their correlation with the binary classification of nouns into active and inactive;
- The nominative **-os* and accusative **-om* as original markers of active and inactive noun classes;
- Doublet verb lexemes as a reflexes of the binary semantic classification of nouns into active and inactive;
- The two series of verbal endings, **-mi* and **-Ha*, associated with active and inactive arguments;
- The suffix **-nth*'s interpretation as a marker of membership in the active class.

These and some other arguments lead the authors to the conclusion (Gamkrelidze, Ivanov 1994/95: 238):

"It is clear that a basic structural-semantic principle of early Indo-European was a binary classification of nouns into active and inactive based on the character of their denotata. The active class included nominal formations referring to people, animals, trees, and plants, i.e. those whose denotata are alive, while the inactive class referring to objects lacking life cycles."

Afterwards they are developing their reasoning: Naturally active denotata are cognitively broadened and inanimate objects viewed by speakers as expressing the active principle or endowed with the capacity for action are structurally unifying: **-s*, **-os* turns into the marker of active class (correspondently, of an structurally active argument of a verb) and **-om*, **-t'*, **-th*, **-kh*, **-Ø* becomes the marker of the inactive class (correspondently, of an structurally inactive argument of a verb):

Active: <i>*-s/*-os</i>	→	Active (A): <i>*-s/*-os</i>	
Genitive: <i>*-om</i>		{	Inactive (In): <i>*-om</i> , <i>Ø</i>
Structural inactive: <i>*-[o]m</i>			Structural-syntactic inactive (<i>A_{in}</i>): <i>*-m/*-om</i>

Further development of constructions in the Indo-European languages is presented as a process of changes of linguistic "world view": Semantically oriented Active Constructions have been transformed into the functionally oriented Nominative Constructions⁵.

If the authors' diachronic analysis of the Proto-Indo-European alignment system changes are concurred then some general results could be established.

⁵ Cf. Gamkrelidze, Ivanov (1994/95: 273): "The breakdown of the active/inactive dichotomy in nouns and the rise of the transitivity opposition in verbs bring about the rise of subject-object relations and triggers the functional identification of the originally inactive argument of a one-place verb with the historically active argument of one-place (intransitive) and two-place (transitive) verbs. Thus the inactive argument of a one-place intransitive verb is syntactically opposed to the former structural inactive with two-place verbs, which becomes the case (accusative) of the direct object of a transitive verb. From the Proto-Indo-European active type shown in figure 4 we get the typical morphosyntactic structure of the accusative type, shown in figure 5" (see Figure 2 in this article).

Figure 2.

4. Conclusions

- (a) The Proto-Indo-European alignment system can be qualified as an Active/Inactive one;
- (b) The Proto-Kartvelian alignment system (actually, V stage of its development) is qualified as an Active/Inactive one;
- (c) Both systems show that a semantically oriented system is transferred into a functionally oriented system;
- (d) This common typological feature raised in various backgrounds has differently developed in Proto-Indo-European and Proto-Kartvelian.

- (e) The different resulted systems supposedly are implied by various cognitive processes in progress reflecting their specific way of linguistic structuring.

Figure 3.

References

- Asatiani, R. 1999. Markedness and the Dominant Category. The Proceedings of 3rd and 4th Symposium on Language, Logic and Computation. Amsterdam: ILLC Publications.
- Asatiani, R. 2008. Directions of Diachronic Developments of the Kartvelian Languages. Bulletin (Moambe), vol. II, no.1. Tbilisi: Georgian Acad. Press, 135-139.
- Boeder, W. 1979. Ergative Syntax and Language Change: The South Caucasian Languages. In P. Plank (ed.). London, 435-480.
- Dixon, R.M.W. 1979. Ergativity. Cambridge: Cambridge Un. Press.
- Gamkrelidze, T. and Ivanov, V. 1994/95. Indo-European and the Indo-Europeans. A Reconstruction and Historical Analysis of a Proto-Language and a Proto-Culture, 2 vols. English version by J. Nichols, with a Preface by R. Jakobson, Berlin-New York: Mouton de Gruyter.
- Harris, A.C. 1981. Georgian Syntax. A study in relational grammar. Cambridge: Cambridge University Press.
- Harris, A.C. 1985. Diachronic syntax: the Kartvelian case. Syntax and Semantics, 18. New York: Academic Press.
- Harris, A.C. 1991. Mingrelian. The Indigenous Languages of the Caucasus, Vol.1, The Kartvelian Languages, Delmar-New York: Caravan Books, 315-394.
- Holisky, D.A. 1991. Laz. The Indigenous Languages of the Caucasus, Vol.1, The Kartvelian Languages, Delmar-New York: Caravan Books, 395-472.

Kartozia, G. et al. 2010. megrulis lingvist'uri analizi [Linguistic analysis of Megrelian]. Tbilisi: Meridian.

Machavariani, G. 1966. k tipologicheskoy kharakteristike obshekartveljskogo jazyka [Typological Characteristics of the Proto-Kartvelian Language]. Voprosy jazikoznaniya, No.4. Moskva. 60-70.

Machavariani, G. 2002. kartvelur enata šedarebiti gramat'ik'a (lekciebis k'ursi) [Comparative grammar of the Kartvelian Languages (Lecture course)]. Tbilisi.

Melikishvili, I. 2012-forthcoming. Two Sets of Georgian Person Markers as the Expression of the Opposition Active/Inactive. In: Special Issues on Georgian in the Typological perspective, The Journal of language Typology and Universals/ Sprachtypologie und Universalienforschung (STUF).

Oniani, A. 1989. kartvelur enata šedarebiti gramat'ik'is sak'itxebi (saxelta morfologia) [The issues on the Kartvelian language' comparative grammar (Noun morphology)]. Tbilisi.

Oniani, A. 1998. svanuri ena [Svan Language]. Tbilisi: PU press.

Shanidze, A. 1973. kartuli enis gramat'ik'is sapuzvlebi, I, [Fundamentals of the Grammar of the Georgian Language, I]. Tbilisi: TSU Press.

Sirverstain, M. 1976. Hierarchy of Features and Ergativity. In: R.M.W. Dixon (ed.): Grammatical Categories in Australian Languages. Canberra: Australian Institute of Aboriginal Studies.

Topuria, V. 1931. svanuri ena, I. zmna [Svan Language, I. A verb]. Tbilisi.