

Kevin Tuite

26 Applicative constructions in Kartvelian

Abstract: Two types of applicative constructions—benefactive and superessive (or locative)—occur in all four languages of the Kartvelian family (Georgian, Svan, Mingrelian and Laz). The principal marker of Kartvelian applicatives is a single-vowel morpheme preceding the verb root (“preradical vowel”). In this chapter, the two types of applicatives are illustrated with examples from Georgian and its sister languages. The applicatives are compared to “version”, a grammatical category commonly employed in Kartvelian linguistics, which indicates the orientation of the action denoted by the verb either toward the referent of the subject, or that of the indirect object. Also presented are *applicativa tantum* with lexically-specified benefactive or superessive applicative markers; double applicatives; and morphological and syntactic lookalikes. The chapter includes a discussion of the origin of the preradical vowels which mark applicatives in Kartvelian. Whereas the applicative markers of other language families tend to come from adpositions or serial verbs, no such source can be identified for Kartvelian preradical vowels, which are clearly very ancient in this language family.

1 The Kartvelian language family

Kartvelian or South Caucasian is one of the three language families endemic to the Caucasus region, along with the Abkhaz-Adyghean or West Caucasian family, and the Nakh-Daghestanian or East Caucasian family. Despite numerous attempts, no conclusive demonstration has yet been made that these families are genetically related to each other, nor to any known languages spoken elsewhere (Tuite 2008; Comrie 2008; Daniel and Lander 2011). The Nostratic hypothesis, according to which Kartvelian is distantly related to Indo-European, Uralic, Altaic and several other Eurasian families, remains controversial (Klimov 1991, Manaster Ramer 1995).

The Kartvelian family comprises four languages, all spoken in or adjacent to the Transcaucasian republic of Georgia. With close to 4 million speakers (Ethnologue: 3,898,550), Georgian is by far the largest language in the family, and the only one with a long tradition of use in writing, since at least the 5th century AD. Numbers for the other Kartvelian languages cannot be ascertained with precision. In Georgian censuses since Soviet times, speakers of any Kartvelian language are counted as Georgian speakers. Estimates of the size of the Mingrelian (a.k.a. Megrelian) speech community, based

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in western Georgia, range from 300,000 to 500,000 (Ethnologue: 345,530). Almost all speakers of Laz are in northeastern Turkey, and estimates of their numbers vary from 22,000 (Ethnologue) to over 20 times that many (Holisky 1991; Lacroix 2009; Kavakli 2015). Svan is the outlier in the Kartvelian family, having separated from the proto-language as early as the Bronze Age. The speech community is estimated at between 14,000 (Ethnologue) and 50,000 (Gippert 2005). Both Laz and Svan are considered to be “threatened” languages by Ethnologue, that is, the number of speakers is believed to be declining.

Comparative work on Kartvelian goes back to the 19th century, and several etymological dictionaries have been compiled (Klimov 1964; Fähnrich/Sarjveladze 2007). In terms of morphology and syntax, the four languages share a significant number of traits, especially with respect to the structure of the verb, but also some striking differences in case marking and person/number agreement (Harris 1991; Boeder 2005).

The Kartvelian verb is primarily agglutinative (with some morphophonemic complexity, especially in Svan). Its basic architecture can be described in terms of morphemic zones centered around the root (Zone I, slot 0, in Table 1). Zone II, the verb stem includes the root and a string of suffixes (mostly of VC shape) encoding valence, *Aktion-sart*, and verbal plurality. For the most part, Zone II elements occur in participles and verbal nouns as well as finite verbs. Bracketing the stem are the zone III morphemes, which include tense, aspect and mood suffixes limited to finite verbs (slots 8 and 9), and the preradical vowels (slot –1) which will be discussed in detail in the remainder of this chapter. Zone III in turn is flanked by person and number markers (slots –2 and 10), which can reference one or two clausal arguments. The outermost layer includes preverbs denoting direction, orientation and/or aspect, and clitics (especially abundant in Old Georgian and Svan).

Table 1: The internal structure of the Kartvelian verb.

Slots	–4, –3	–2	–1	0	1 to 7	8, 9	10	11
I. root				Root				
II. stem formants					causative/ passive, verbal plurality, series marker			
III. verb class, tense/mood			“version”			imperfect, tense/ mood		
IV. person and number		person					person/ number	
V. clitics and preverbs	preverbs, clitics							clitics

Here is a Georgian verb composed of morphemes from all five zones:

$v[\check{s}e^{-4}_{-IV}[v^{-2}_{-III}[e^{-1}_{-II}[[b^0]-m^2-ev^3-in^5-eb^6-o^7]-d^8-e^9]-t^{10}]]$
 PVB-S1-PRV-bind-SM-CAUS-CAUS-SM-EXT-IMPF-OPT-PL
 ‘were we to let ourselves be bound to it’

Of particular relevance for the analysis of Kartvelian applicatives are the morphemes in slots –2 and –1. The personal prefixes in slot –2 are commonly separated into sets of “subject” and “object” markers, as shown in Table 2:

Table 2: Person prefixes in the Old Georgian and Svan verb (slot –2).

Old Georgian		Svan	
“Subject”			
1st	v-	1SG	xw-
		1EXCL	xw-
		1INCL	/-
2nd	x/h/∅-	2nd	x-
3rd	—	3rd	—
“Object”			
1SG/EXCL	m-	1SG	m-
		1EXCL	n-
1INCL	gw-	1INCL	gw-
2nd	g-	2nd	j-
3rd	x/h/∅-	3rd	x/∅-

However, only one prefix at a time can occupy slot –2, with the sole exception of S1 v- + O3 x/h- (in Georgian only). Which prefix appears is conditioned by hierarchies of syntactic role (O > S) and person (1,2 > 3). For example, in the Svan verb *j-i-t'q'b-e* [O2-PRV-roast-PRS] ‘I/he/she roasts it for you’, the only person marker is O2 *j-*, which could just as well be analyzed as a marker of both 2nd-person object and 1st- or 3rd-person subject. In this respect, the Kartvelian person-prefix system resembles the inverse/direct or hierarchical person-marking systems of Algonquian and some other New World languages (Zúñiga 2006; Tuite 2021), but in the glosses, the traditional designations of these prefixes as “subject” (S) and “object” (O) markers will be used.

The principal markers of applicatives are the preradical vowels (henceforth, PRV) in slot –1 (see Table 3). The Mingrelian and Laz reflexes of *a- and *e- reflect regular sound correspondences. The irregular correspondence between the Svan prefix *o-*, and *u-* in the other languages, remains unexplained.

Table 3: PRVs in the Kartvelian languages and the reconstructed ancestral language.

Proto-Kartvelian	Georgian	Svan	Mingrelian	Laz
*a-	a-	a-	o-	o-
*i-	i-	i-	i-	i-
*u-	u-	o-	u-	u-
*e-	e-	e-	a-	a-

Georgian is well known for its intricate system of case-marking and agreement. Transitive verbs and a large class of “active” intransitives assign different cases to their subjects and direct objects according to tense and aspect, whereas the remaining “inactive” intransitives assign nominative case in all tenses. In the present-series tenses (Series I: present, future, imperfect, conditional, present and future conjunctive), case is assigned according to a nominative-accusative pattern, with dative case marking both direct and indirect objects. In the aorist-series paradigms (Series II: aorist and optative), however, transitive and active intransitive verbs assign ergative case to the subject and nominative to the direct object. Since inactive intransitives do not undergo this shift of case-assignment properties, the resulting alignment can be characterized as split-S or active (Harris 1990; Tuite 2017). Finally, in the perfect-series tenses (Series III: present perfect, pluperfect, perfect conjunctive), the clause undergoes “inversion” (Shanidze 1953/1980 § 241; Harris 1981: 117–127): the subject takes many of the attributes of an indirect object (dative case, object agreement in the verb), whereas the direct object is assigned nominative case and is linked to subject agreement.

(1) Georgian

a. Series I: present

bič'-i leks-s Ø-u-c'er-s deda-s
 boy-NOM poem-DAT O3-PRV-write-PRS.S3SG mother-DAT
 ‘The boy writes a poem for his mother.’

b. Series II: aorist

bič'-ma leks-i da-Ø-u-c'er-a deda-s
 boy-ERG poem-NOM PVB-O3-PRV-write-AOR.S3SG mother-DAT
 ‘The boy wrote a poem for his mother.’

c. Series III: present perfect

bič'-s leks-i da-Ø-u-c'er-i-a ded-is-tvis
 boy-DAT poem-NOM PVB-O3-PRV-write-PERF-S3SG mother-GEN-for
 ‘The boy apparently wrote a poem for his mother.’

Svan morphosyntax is very similar to that of Georgian, as far as split-S patterning and inversion are concerned. Mingrelian and Laz, although closely-related languages, diverge in interesting ways from Georgian and from each other. In Mingrelian, the

so-called ergative ending has become for all intents and purposes the aorist-series allomorph of the nominative, since it occurs with all types of intransitives, regardless of their semantic traits (e.g. *dzapi-k dačxir-s kimtič'u* [thread-ERG fire-DAT was.burnt] ‘the thread was burnt up in the fire’; Q’ipshidze 1914: 11). As for Laz, split-S alignment has been extended to almost all tenses (Lacroix 2009), including those of the present series, in most dialects; whereas case-marking of core arguments has disappeared completely in the Ardeşen varieties (Kutscher, Mattissen and Wodarg 1995).

2 Applicatives in Kartvelian

In this section I will present the two types of applicatives which I ascribe to the Kartvelian languages. Both are what Zúñiga and Creissels label as “D-applicatives”, in that they accord indirect-object status to less prominent arguments.

2.1 Applicatives and the category of “version”

In most previous work on applicatives in the Kartvelian languages, the object of investigation is defined according to criteria specific to syntactic frameworks in the GB/Minimalist tradition (McGinnis 2004; Lomashvili 2010; Öztürk 2013; Bondarenko 2015; Nash 2017). While these criteria are not necessarily relevant to the approach I take here, two of the constructions the above-mentioned authors classify as applicative are identified as such in this chapter as well. One characteristic common to all inventories of applicatives in Kartvelian is their grounding in the grammatical category known as “version” (*G kceva*). This term was coined by Shanidze (1920, 1925) a century ago, and has been employed in almost all descriptive and pedagogical grammars of Georgian published since then. In his initial definition of version, Shanidze (1925), drawing upon earlier classifications of Kartvelian valence-marking phenomena, such as those of Uslar (1861/1887) and Marr (1925: 136–141), distinguished five types of version, signaled by PRVs: (i) “objective” (*sasxviso* ‘for another’) in /i/ and /u/; (ii) “subjective” (*sataviso* ‘for oneself’) in /i/; (iii) “superessive” (*sazedao* ‘for upon’) in /a/; (iv) *satanao* ‘for taking along’, to designate indirect object markers unaccompanied by a PRV (which I will label as “unmarked version”); and (v) “neutral” (*saarviso* ‘for no one’) for the basic construction. Some years later, Shanidze (1953/1980 § 393) revised his definition of version, shifting the focus from valence to the signalling of a relation of “possession” (*k’utvnileba*) or “designation” (*danišnuleba*) between the theme (the direct object of a transitive verb or the subject of an intransitive verb), on the one hand, and the indirect object or agent, on the other (see also Boeder 1969, 2021). Version in this newer sense was reduced to a three-way contrast among objective, subjective and neutral versions. The superessive was assigned to a new category, called “situation” (Shanidze 1953 § 434), and the

unmarked *satanao* was reanalyzed as a sub-type of the neutral version. Here are examples of each type of version, as well as neutral version, in Georgian and Svan (there is no distinct unmarked version in Svan):

(2) Georgian and Svan

a. Basic construction (neutral version)

G *kali* *c'eril-s* Ø-*c'er-s*
 S *zuräl* *läir-s* *ä-yr-i*
 woman:NOM letter-DAT PRV-write-S3SG.PRS/PRS¹
 'The woman writes a letter.'

b. Objective version, 1st p. indirect object

G *kali* *c'eril-s* ***m-i-c'er-s***
 S *zuräl* *läir-s* ***m-i-yr-i***
 woman:NOM letter-DAT O1SG-PRV-write-S3SG.PRS/PRS
 'The woman writes a letter **for me**.'

c. Objective version, 3rd p. indirect object

G *kali* *c'eril-s* *bavšv-s* Ø-***u-c'er-s***
 S *zuräl* *läir-s* *bepšw-s* ***x-o-yr-i***
 woman:NOM letter-DAT child-DAT O3-PRV-write-S3SG.PRS/PRS
 'The woman writes a letter **for the child**.'

d. Subjective version

G *kali* *p'irjvar-s* ***i-c'er-s***
 S *zuräl* *st'ārun-s* ***i-yr-i***
 woman:NOM CROSS-DAT PRV-write-S3SG.PRS/PRS
 'The woman makes the sign of the cross (lit. writes the cross **on herself**).'

e. Superessive version

G *kali* *saxel-s* *kva-s* Ø-***a-c'er-s***
 S *zuräl* *žaxa-s* *bač-s* ***x-ä-yr-i***
 woman:NOM name-DAT stone-DAT O3-PRV-write-S3SG.PRS/PRS
 'The woman writes her name **on the stone**.'

f. Unmarked version

G *kali* *c'eril-s* *bavšv-s* ***s-Ø-c'er-s***
 woman:NOM letter-DAT child-DAT O3-PRV-write-S3SG.PRS/PRS
 'The woman writes a letter **to the child**.'

Of the above-mentioned types of version, only two correspond to applicatives in the strict sense advocated by Zúñiga and Creissels: objective, which will be labelled as “benefactive applicative” in this chapter, and superessive. Subjective and unmarked ver-

¹ In all these examples, the Georgian verbal suffix *-s* denotes person, number, role, and present tense; the Svan verbal suffix *-i* only denotes present tense.

sions represent what Zúñiga and Creissels designate as morphological and syntactic lookalikes, respectively, and will be discussed in Section 4 (Table 4).

Table 4: Shanidze’s versions and the associated applicatives.

PRV	version (Shanidze 1925)	this chapter
*i-/ *u-	objective (<i>sasxviso</i>)	benefactive applicative, § 2.2
*a-	superessive (<i>sazedao</i>)	superessive applicative, § 2.3
*i-	subjective (<i>sataviso</i>)	(morphological lookalike, § 4.1)
Ø-	unmarked (<i>sataao</i>)	(syntactic lookalike, § 4.2)

2.2 Objective version

2.2.1 The benefactive applicative

Shanidze’s objective version (*sasxviso kceva*) is identified as a type of applicative in all studies of Kartvelian morphosyntax that employ the term “applicative”, whatever the author’s theoretical orientation might be. One of its more noteworthy features is the allomorphy of the PRV, which is *i- with 1st and 2nd person indirect objects, and *u- with 3rd person objects (except in Svan, which has 3rd-person *o-*). Compared to the basic construction, the benefactive applicative takes an additional argument, which has the characteristics of an indirect object: it is assigned dative case and is linked to object agreement in the verb.

With respect to semantics, Boeder (2021 § 3.6.17) identifies two types of indirect objects added in the benefactive applicative construction, which he labels “allative/ adessive” and “beneficiary/experiencer”. The first type of applied object denotes a referent toward, near or at which the action occurs. Here is a passage from an Old Georgian translation of the Book of Genesis which contains two such constructions:

(3) Old Georgian

da-a-g-eb-s ‘spreads/lays sthg. out’ > *da-m-i-g-eb-s* ‘spreads/lays sthg. out **for/ before me**’

dg-a-s ‘stands’ > *m-i-dg-a-s* ‘stands **near/by me**’

da da-Ø-u-g-o mat da čam-es. xolo twit c’ina
and PVB-O3-PRV-set-PST.S3SG 3PL:DAT and eat-PST.S3PL but self before
Ø-u-dg-a mat xe-sa kweše

PVB-O3-PRV-stand-PST.S3SG 3PL:DAT tree-DAT beneath

‘(He brought butter and milk and the calf that he prepared), and he set these **before them**, and they ate. But he stood **nearby before them** under a tree.’ (Gen 18:8)

The beneficiary/experiencer type of indirect object denotes the one for whose benefit, detriment or interest the action occurs. Here are two more Old Georgian examples:

(4) Old Georgian

ay-a-šen-eb-s ‘builds sthg.’ > *ay-m-i-šen-eb-s* ‘builds sthg. **for me**’
ay-Ø-u-šen-a *mun* *abraam* *sak’urtxevel-i* *upal-sa*
 PVB-O3-PRV-build-PST.S3SG there A.[ERG] altar-NOM lord-DAT
 ‘Abraham built an altar there **to the Lord**.’ (Gen 12:7)

(5) Old Georgian

mo-drek’s ‘bends sthg.’ > *mo-m-i-drek’s* ‘bends sthg. **to/for me**’
mo-m-i-drik’e *me* *sarc’q’wal-i* *šeni*
 PVB-O1-PRV-bend-PST.S1/2 1SG waterjug-NOM 2SG.POSS[NOM]
 ‘Lean down your water-jug **for me** (so that I may drink).’ (Gen 24:14)

(6) Svan

twep-n-i ‘is lost’ > *m-i-twp-en-i* ‘is lost **to me**’
isk’wi *iybāl* *ešiy* *dem* *ǰ-i-twep-n-i*
 your fate[NOM] nonetheless not O2-PRV-lose-INTR-SM
 ‘Your fate will nonetheless not be lost **to you**.’ (TK 644)

(7) Svan

sgur ‘sits’ > *m-i-sgur* ‘sits **by/next to me**’
dārǰəl *nensga* *x-o-sgur-x*
 D.[NOM] between O3-PRV-sit-PL
 ‘Darǰil sits **between them**.’ (TK 654)

The benefactive applicative in Laz and Mingrelian covers essentially the same semantic range as that of Georgian and Svan. In his grammar of Laz, Lacroix (2009: 492–495) identifies recipient and deputative types of beneficiary, and also maleficiaries (see also Gérardin and Rostovtsev-Popiel 2016):

(8) Laz

- a. *k’od-um-s* ‘builds sthg.’ > *m-i-k’od-um-s* ‘builds sthg. **for me**’
sumi-s-ti *ayi-ayi* *oxoyi* *d-Ø-u-k’od-u-doren*.
 three-DAT-ADD one-one house:NOM PVB-O3-PRV-build-AOR.S3SG-INDIREV
 (Someone told me) ‘He built a house **for each of the three of them**.’
- b. *nax-um-s* ‘washes sthg.’ > *m-i-nax-um-s* ‘washes sthg. **for me**’
mo-m-č-i *do* *ma* *do-g-i-naxv-a-ya*
 PVB-O1-give-S1/2 and 1SG PVB-O2-PRV-wash-OPT-QUOT
 (She said) ‘Give me (the clothes) and I will wash them **for you**.’

- c. *ntxo-um-s* ‘digs sthg.’ > ***m-i-ntxo-um-s*** ‘digs sthg. **for me**’
k’ui ***g-i-ntxo-es*** *nek’na-s* *tudele*
 hole:NOM O2-PRV-dig-AOR.S3PL door-DAT under
 ‘They dug a hole **for you** under the door.’ (in order to throw you in it)

The benefactive applicative construction is not only of relatively high frequency in the Kartvelian languages, it is productive, and can readily be formed from new verbs, if the context is appropriate. Here are some recent examples from the Georgian-language social media. The verbs are all of recent coinage, and—to the dismay of grammarians and purists—commonly used by young people in oral and electronic communication.

- (9) Georgian
a-mesij-eb-s ‘sends a text message’ > ***m-i-mesij-eb-s*** ‘sends a text message **to me**’
Gabriel-ma ***da-m-i-mesij-a*** *sad* *xar* *amden* *xan-s?*
 G-ERG PVB-O1-PRV-message-AOR.S3SG where you.are so-long time-DAT
 ‘Gabriel texted **me**: “where have you been all this time?”’
- (10) Georgian
a-laik-eb-s ‘likes a post/photo (on social media)’ > ***m-i-laik-eb-s*** ‘likes **my** post/photo’
roca *vinme* *mo-m-c’on-s* *da* *is* *sxva-s*
 when someone:NOM PVB-O1-like-S3SG and that:NOM other-DAT
Ø-u-laik-eb-s *pot’o-s*
 O3-PRV-like-SM-S3SG photo-DAT
 ‘when I am attracted to someone, and that person likes **someone else’s** photo’
- (11) Georgian
link’-av-s ‘supplies sthg. with a hyperlink’ > ***m-i-link’-av-s*** ‘**sends me** the link to sthg.’
dye-s ***da-g-i-link’e*** *es* *unda* *nax-o*
 day-DAT PVB-O2-PRV-link-AOR.S1/2 this:NOM must see-OPT.S1/2
 ‘Today I sent **you** the link to it, you have to see this.’

Within the GB camp, there has been a side debate over whether Georgian objective version constitutes a “low” or “high” applicative. Leaving aside the theory-specific details, the distinction comes down to whether the applied object is primarily linked to the theme argument, or to the verb phrase as a whole. Shanidze’s later, narrower definition of version, as a relation of possession or designation between the theme and the applied object, would seem to support the low-applicative interpretation. Lomashvili (2010: 150) argued for this position, characterizing the core semantics of the benefactive applicative as one of “transfer of possession” between the two arguments. Bondarenko (2015), on the other hand, analyses the Georgian benefactive as a high applicative, although on the basis of syntactic, not semantic, criteria. Finally, Öztürk (2013, 2016)

segments the benefactive applicative of the Pazar dialect of Laz into both types, depending on the role of the applied object: Beneficiary indirect objects are generated by a high applicative configuration, whereas recipient and goal indirect objects (Boeder's allative/adessive) are the output of low applicatives.

2.2.2 *Applicativa tantum* with lexically-specified benefactive markers

In addition to verbs with contrasting basic and benefactive-applicative forms, Georgian and its sister languages have a certain number of verbs for which the basic form contains objective version markers.

(a) Primary statives in objective version. Most such benefactive *applicativa tantum* are intransitive verbs with DAT-case experiencer subjects (Table 5). These cluster in the semantic fields of cognition and positive emotions, whereas the primary statives with no PRV or the PRV *a-, on the whole, denote psycho-physiological states, negative emotions and possession (cf. M. Mach'avariani 1987: 33–34).

Table 5: Cognate primary statives with benefactive-applicative markers.

Meaning	Georgian	Zan	Svan
'I love sb./sthg.'	<i>m-i-q'var-s</i>	<i>m-i-ʔor-s</i>	--
'I prefer sthg.'	--	<i>m-i-sx-un-u</i>	<i>m-i-cx-a</i>

(b) Transitive verbs with lexically-specified objective version, but no indirect object. Shanidze (1953/1980 § 400) identified a small number of Georgian bivalent transitive verbs with benefactive-applicative markers in their basic forms, such *da-Ø-u-k'rav-s* 'plays sthg. (instrument or piece of music)', which in most varieties of Modern Georgian take no indirect object, despite the apparent O3 marking.

2.3 Supressive version

2.3.1 The superessive applicative

The superessive applicative, expressed by the PRV *a- (= o- in Mingrelian and Laz), is less common and less productive than the benefactive applicative, but it is by no means rare. This construction typically indicates that the described action took place on a surface, denoted by the applicative indirect object. According to Boeder (2021 § 3.6.17.vi), the superessive applicative "is connected with a specific relationship between the subject/direct object and the indirect object: a part-whole relationship . . . , a close

attachment . . ., a continuous physical or emotional pressure on sth/sb . . ., or a nuisance”. With respect to (13) below, Rostovtsev-Popiel (2015) specified that the choice of the superessive construction, rather than the basic construction with a postpositional object, implies a degree of prominence or foregrounding of the site of contact: “It is more or less obvious that the horns are to be added in this case on top of the heads of the people painted on the pictures, not on their sides, shoulders etc.”.

(12) Old Georgian

ps-am-s ‘urinates’ > Ø-*a-ps-am-s* ‘urinates **on sthg.**’

mo-v-sp’-o *ierobuam-is-i* *romel-i* Ø-*a-ps-m-i-d-e-s*

PVB-S1-destroy-OPT J.-GEN-NOM which-NOM O3-PRV-piss-SM-EXT-IMPF-OPT-S3SG

k’edel-sa

wall-DAT

‘I will destroy him of Jeroboam, that pisses **against the wall.**’ (III Kings 14:10)

(13) Georgian

xat’av-s ‘paints/draws sthg.’ > Ø-*a-xat’av-s* ‘paints/draws sthg. **on sthg.**’

bavšv-eb-ma ***p’ort’ret-eb-s*** *rk-eb-i* *mi-Ø-a-xat’es*

child-PL-ERG portrait-PL-DAT horn-PL-NOM PVB-O3-PRV-paint-AOR.S3PL

‘The children drew horns **on the portraits.**’ (Rostovtsev-Popiel 2015)

(14) Mingrelian

č’k’ad-ən-s ‘hammers sthg.’ > Ø-*o-č’k’ad-an-s* ‘hammers sthg. **onto sthg.**’

k’učxi-s *ečdoxut-xuti* *putiani* *nal-ep-i*

foot-DAT 25-each *pood* horseshoe-PL-NOM

ku-m-m-o-č’k’ad-i-a

PVB-PVB-O1-PRV-hammer-S1/2-QUOT

(The magic horse said): ‘Nail 25 *pood* (= 400 kg!) horseshoes **onto** each of **my** feet.’

(Xubua 1976: 167)

(15) Svan

a. *sgur* ‘sits’ > *x-a-sgur* ‘sits **on sthg.**’

katal *ži* *x-a-sgur* ***ləgr-ol-s***

chicken:NOM up O3-PRV-sit egg-PL-DAT

‘The hen is sitting **on the eggs.**’ (TK 575)

b. *bəḍ-n-i* ‘is poured, [liquid] falls’ > *x-a-bəḍ-n-i* ‘is poured, falls **on sthg.**’

mananay *bal-ar-s* *x-a-bəḍ-n-i*

dew:NOM leaf-PL-DAT O3-PRV-pour-INTR-SM

‘Dew falls **on the leaves.**’ (TK 139)

As regards present-day usage with new verbs, the superessive is less frequent, but can occur when the context calls for it:

(16) Georgian

a-st'ep'ler-eb-s 'staples sthg.' > *Ø-a-st'ep'ler-eb-s* 'staples sthg. **to sthg.**'
dana-m q'ur-is bibilo-ti mi-Ø-a-st'ep'ler-a k'edel-s
 knife-ERG ear-GEN lobe-INST PVB-O3-PRV-staple-AOR.S3SG wall-DAT
čven-i temo
 our-NOM T.[NOM]
 'The knife stapled our Temo **to the wall** by his ear-lobe.'

In Svan, the superessive applicatives formed from ablauting intransitive verbs have the PRV *e-* rather than *a-*, as in the other Kartvelian languages (Table 6). This is most likely an innovation in Svan, although its cause remains unclear (Topuria 1967: 49–50; Tuite 2021):

Table 6: Svan superessive applicatives: paired root intransitives in *e-* and transitives in *a-*.

Ablauting intransitive with PRV <i>e-</i>	Transitive with PRV <i>a-</i> (superessive applicative)
<i>x-e-šgb-en-i</i> 'slips off from sthg.'	<i>x-a-šgb-e</i> 'tears sthg. from sb./sthg.'
<i>x-e-t'q'wp-en-i</i> '(skin) comes off from sb./sthg.'	<i>x-a-t'q'wp-e</i> 'tears sthg. (skin, body part) off from sb./sthg.'
<i>x-e-q'wl-en-i</i> 'departs from sb./sthg.'	<i>x-a-q'wl-e</i> 'separates sthg. from sb./sthg.'

Unlike the benefactive applicative, the superessive can be marked by morphological changes other than the addition of a PRV. In Georgian, Mingrelian and Laz, the formation of the superessive applicative of many transitive verbs is accompanied by a change of the series marker (SM, slot 6), a morpheme which occurs in the present-series stem of most verbs. The Mingrelian verb in (14) above illustrates this phenomenon, as does its Georgian cognate (Table 7). The preverb is also different in many superessive verbs. The preverb *mi-* is especially common in Georgian superessives, as in (13) and (16).

Table 7: Series marker change in the superessive applicative.

basic transitive (SM *-aw-)	superessive (PRV *a- + SM *-ew-)
G. <i>č'ed-(av)-s</i> 'forges, hammers sthg.'	G. <i>a-č'ed-eb-s</i> 'forges, nails sthg. <u>onto sthg.</u> '
M. <i>č'k'ad-an-s</i>	M. <i>a-č'k'ad-an-s</i>
G. <i>par-av-s</i> 'covers'	G. <i>a-par-eb-s</i> 'covers sb./sthg. <u>with sthg.</u> '
M. <i>por-un-s</i>	M. <i>a-por-an-s</i>

2.3.2 *Applicativa tantum* with lexically-specified superessive markers

As was the case with the benefactive applicative, there are verbs of different types with the PRV *a- which, at least from a synchronic standpoint, cannot be considered the output of applicativization.

(a) Primary statives with lexically-specified PRV *a-. Alongside the primary statives which have the form of benefactive applicatives (§ 2.2.1 above), there are a small number of primary statives with the PR *a-. Here are some examples with cognate roots in two or more Kartvelian languages (Table 8):

Table 8: Primary stative verbs in *a-.

	Georgian	Mingrelian	Svan
'I lack sthg.'	<i>m-a-k'l-i-a</i>	<i>m-o-rk'-u-n</i>	<i>m-a-k'l-i</i>
'I want sthg.'	—	<i>m-o-k'-on</i>	<i>m-a-k'u</i>

(b) Trivalent transitive verbs with lexically-specified PRV *a-. Lacroix (2009: 463, 525) identified several trivalent transitive verbs in Laz with basic forms in the superessive, such as *dolo-Ø-o-kun-am-s* 'puts sthg. (clothes) on sb.'; and *mo-Ø-o-k'id-am-s* 'hangs sthg. on sthg.'. Georgian has many superessive *applicativa tantum*, most of which have meanings implying transfer, e.g. *a-dzl-ev-s* 'gives sthg. to sb.', *a-c'vd-i-s* 'hands/passes sthg. to sb.', *a-bar-eb-s* 'entrusts sb./sthg. to sb.', *a-dar-eb-s* 'compares sb./sthg. to sb./sthg.'.

(c) Bivalent transitive verbs with lexically-specified PRV *a-, but no indirect object. An archaic class of bivalent transitive verbs, many of them with nonsyllabic roots, take the PRV *a- in their basic "neutral version" form (Shanidze 1953/1980 § 458). Primary *a-transitives cluster around the meanings of (i) building, setting up; (ii) touching; (iii) bringing into contact (e.g., flame to a candle, a brush dipped in paint), which makes it likely that the *a- prefix in these verbs is cognate with the superessive applicative marker. Here are some verbs of this type with cognate roots in Georgian and Mingrelian (Table 9):

Table 9: Cognate primary *a-transitives in Georgian and Mingrelian.

	Georgian	Mingrelian
*a-g-ew- 'builds'	<i>a-g-eb-s</i>	<i>o-g-an-s</i>
*a-gz-ew- 'lights, incites'	<i>a-gz(n)-eb-s</i>	<i>o-rz-an-s</i>
*a-c'(w)-ew- 'dips'	<i>a-c'-eb-s</i>	<i>u-c'u-an-s</i>
*a-x-ew- 'touches'	<i>a-x-eb-s</i>	<i>o-x-u(n)</i> 'concerns'

2.3.3 The PRV *a- and transitivity

The most productive use of the prefix *a- in the Kartvelian languages would appear at first to have nothing to do with superessive meaning. Along with certain suffixes, the PRV *a- is a component of derived transitives and causatives. The *a-prefixed derivatives of monovalent verbs, nouns and other parts of speech are bivalent transitives

without indirect objects, such as these Georgian examples: *a-c'ux-eb-s* 'bothers, causes to worry' < *c'ux-s* 'is worried'; *a-lamaz-eb-s* 'beautifies' < *lamaz-* 'beautiful'; *a-ortkl-eb-s* 'makes evaporate' < *ortkl-* 'steam'. Those derived from transitives are causatives with an indirect object denoting a second agent or instigator: *a-c'er-in-eb-s* 'causes to write' < *c'er-s* 'writes'; *a-č'm-ev-s* 'feeds' < *č'am-s* 'eats' (G. Mach'avariani 1988; M. Mach'avariani 1987: 87–115). The possibility of a deeper diachronic link between these two functions of the PRV *a—supressive and transitivity—will be discussed below (§ 5).

2.4 Applicatives in the Series III tenses

The morphological and syntactic distinction between the applicative and basic constructions for both types of applicatives presented above is maintained in all tenses except those of Series III (Shanidze 1953/1980 §§ 403, 410, 435). In all Kartvelian languages, transitive verbs, as was mentioned in § 1, undergo “inversion” in the present-perfect and other Series III tenses, that is, the subject is marked like the indirect object of a benefactive applicative, as far as case and agreement are concerned. One consequence of inversion is the neutralization of the morphological and syntactic signs of applicativization, and in fact of all four types of version identified in § 2.1 above. The applicative indirect objects and their associated PRVs are replaced by postpositional phrases which do not agree with the verb (Table 10):

Table 10: Basic and applicative transitive verbs in Series I and Series III.

	Series I (present)	Series III (present-perfect)
Basic	<i>v-t'ex</i> 'I break sthg.'	<i>mo-m-i-t'ex-av-s</i> 'I have broken sthg.'
Benefactive APPL	<i>v-Ø-u-t'ex</i> 'I break sthg. for sb. '	<i>mo-m-i-t'ex-av-s mis-tvis</i> [3SG:GEN-for]
Superessive APPL	<i>v-Ø-a-t'ex</i> 'I break sthg. on sthg. '	<i>mo-m-i-t'ex-av-s mas-ze</i> [3SG:DAT-on]
Subjective version	<i>v-i-t'ex</i> 'I break sthg. for myself '	<i>mo-m-i-t'ex-av-s čem-tvis</i> [1SG:GEN-for]
Unmarked version	<i>v-s-t'ex</i> 'I break sb.'s sthg.'	<i>mo-m-i-t'ex-av-s mis-tvis</i> [3SG:GEN-for]

In morphosyntactic terms, the present perfect of a transitive verb such as G *c'er-*, M *č'ar-*, S *ir-* 'write' is a bivalent resultative-passive, with an indirect object referring to the agent. The verb forms G *m-i-c'er-i-a*, M *m-i-č'ar-u-n*, S *mīra* < *m-i-ir-a* could, according to the context, be interpreted as either benefactive applicatives of stative verbs ('it is written for me, in my (e.g. book), etc.'), or as present perfects of a transitive verb ('I have written it'). As for applicative intransitive verbs, they too undergo neutralization in Series III (Shanidze 1953/1980 § 410). For example, both the benefactive *Ø-u-t'q'd-eb-a* 'sthg. breaks for/on sb.', and superessive *Ø-a-t'q'd-eb-a* 'sthg. breaks on/off from sthg.', have the same present-perfect *mo-s-t'q'd-om-i-a*.

3 Stacking/combination of voice operations

In the Kartvelian languages, verbs which have undergone other types of valence-altering operations, such as intransitivization and causative formation, can subsequently be applicativized. It is also the case that certain types of applicative verbs can undergo a second applicativization.

3.1 The PRV *e-

So far, nothing has been said concerning the fourth of the PRVs in Table 3, *e-. The primary function of this vowel is to form the bivalent counterparts of intransitives which have the PRV *i- in their basic forms, in order “to relate the action/event/state to a new participant in a way that the latter becomes either directly or indirectly involved” (Gérardin and Rostovtsev-Popiel 2016). The resulting verbs typically govern a theme in the NOM case and an indirect object, although the latter often has many of the syntactic privileges of a grammatical subject. In terms of their relation to basic forms, three subtypes can be distinguished: intransitivized applicatives, applicativized intransitives, and primary *e- verbs.

3.1.1 Intransitives formed from applicativized transitives

These are most commonly superessive applicatives and quite frequent in the Old Georgian corpus, e.g.

(17) Old Georgian

mi-Ø-a-axl-eb-s ‘brings sb./sthg. near to sb./sthg.’ > *mi-Ø-e-axl-eb-i-s* ‘approaches, nears **sb./sthg.**’

da mi-Ø-e-axl-a iak’ob isak’s

and PVB-O3-PRV-near-AOR.S3SG J.[NOM] I.-DAT

‘And Jacob went near **to Isaac.**’ (Gen 27: 22)

(18) Svan

x-o-cwm-i ‘smears sthg. on/for sb./sthg.’ > *x-e-cwm-i* ‘sthg. is smeared **on sb./sthg.**’

äpicer-s ulmaš-är-s ži-ad-x-e-com-ën-a² nacmun

officer-DAT moustache-PL-DAT PVB-PVB-O3-PRV-smear-PASS-AOR grease:NOM

‘Grease was smeared **on the officer’s moustache.**’ (TK 234)

² The surface form is *žäxcomān*.

3.1.2 Applicatives of *i-intransitives

Another common use of the PRV *e- is to form applicatives from intransitives with the PRV *i-. The distinction between benefactive and superessive applicatives is neutralized in this case. Here are two examples formed from passive verbs:

- (19) Old Georgian

še-i-cvl-eb-i-s ‘is changed’ > *še-Ø-e-cvl-eb-i-s* ‘**sb.**’s sthg. is changed; sthg. is changed **for sb.**’

q’ovel-i ese ... codvil-ta še-Ø-e-cval-o-s borot’-sa šina
all-NOM this sinner-OBL.PL PVB-O3-PRV-change-OPT-S3SG evil-DAT in
‘All these things . . . are turned into evil **for sinners.**’ (Ecclesiasticus 39:27)

- (20) Svan

i-dgär-i ‘dies’ > *x-e-dgär-i* ‘**sb.**’s (relative) dies; sb. dies (accidentally) **by sb.**’s action’
*dina-s diutwra ad-x-e-dag-an*³
girl-DAT stepmother:NOM PVB-O3-PRV-die-AOR
‘**The girl’s** stepmother died.’ (TK 193)

- (21) Laz

i-čod-e-n ‘ends, is finished’ > *Ø-a-čod-e-n* ‘**sb.**’s sthg. is finished, sthg. ends **for sb.**’
bič’i-s xorci d-Ø-a-čod-u
boy-DAT meat:NOM PVB-O3-PRV-end-AOR.S3SG
‘The meat ended **for the boy** (i.e. the boy had no more meat).’ (Lacroix 2007)

Primary medial verbs in *i- can also form applicatives in *e-. This formation is especially common in Svan, less so in Old Georgian, Mingrelian and Laz (Lacroix 2007).

- (22) Old Georgian

i-glov-s ‘mourns’ > *Ø-e-glov-s* ‘mourns **sb.**’
da Ø-e-glov-d-a mas egwip’t’e sameoc-da-at dye
and O3-PRV-mourn-IMPF-S3SG 3SG:DAT Egypt:NOM 60-and-10 day
‘And Egypt mourned **him** seventy days.’ (Genesis 50:3)

- (23) Svan

i-mzir ‘prays’ > *x-e-mzir* ‘prays **for sb.**’
megza x-e-mzir-x naywžurgezl-äš lipširi-s
family:DAT O3-PRV-pray-PL male-child-GEN multiply-DAT
‘They prayed for an abundance of sons **for the family.**’ (TK 451)

³ The surface form is *atdagan*.

3.1.3 Primary verbs in *e-

Each of the Kartvelian languages has a sizeable, and productive, set of intransitive verbs in *e- derived from noun, adjective and verb stems. Shanidze (1953: 299–301) groups these into verbs of possibility (*šesadzlebloba*), assessment (*mičneva*) and mood (*guneba*). Here are examples of each kind:

- (24) Laz: possibility

gam-i-l-e-n ‘goes out’ > *gama-Ø-a-l-e-n* ‘**sb./sthg. can** go out’

gama-g-a-l-e-n

PVB-O2-PRV-go-SM-S3SG

‘**You can** go out, **are allowed** to go out.’ (Lacroix 2007)

- (25) Georgian: assessment

pot’ošop’-i ‘Photoshop’ > *Ø-e-pot’ošop’-eb-a* ‘(photo) seems altered by software **to sb.**’

cot’a m-e-pot’ošop’-eb-a es surat-i

little O1-PRV-photoshop-SM-S3SG this picture-NOM

‘**I have a slight impression** that this picture was photoshopped.’

- (26) Georgian: mood

myer-i-s ‘sings’ > *Ø-e-myer-eb-a* ‘**sb. feels like** singing’

m-e-myer-eb-a da v-i-myer-i

O1-PRV-sing-SM-S3SG and S1-PRV-sing-SM

‘**I feel like** singing, and I will sing.’ (title of poem by Vazha-Pshavela, 1903)

3.2 Applicatives of causatives

In principle, Kartvelian causatives should have the same range of applicatives as ordinary transitive verbs. For bivalent causatives formed from intransitive verbs, this is more or less the case. As for trivalent causatives of transitive verbs, Makharoblidze (2012: 155–156) provides conjugation tables for quadrivalent benefactive applicatives such as *v-u-šen-eb-in-eb* ‘I am making him/her/it build it (for him/her/it)’. In practice, such verbs are uncommon. Shanidze (1980 § 428–429) provides some examples from Georgian literary sources:

(27) Georgian

c'er-s 'writes sthg.' > *a-c'er-in-eb-s* 'makes sb. write sthg.' > ***m-i-c'er-in-eb-s*** 'makes sb. write sthg. **for me**'

kavtarishvil-ma sigel-i mikel teodat'e-s švil-s

K.-ERG charter-NOM M. T.-GEN son-DAT

da-m-i-c'er-in-a

PVB-O1-PRV-write-CAUS-AOR.S3SG

'Kavtarishvili had Mikel, son of Theodate, write a charter **for me**.' (Iese Osesshvili c. 1770)

3.3 Double applicatives

In addition to being applied to verbs that have undergone valence change through passivization or causativization, applicatives can also be layered on verbs that are themselves the product of applicativization. Double applicatives are not common, especially those that result in quadrivalent verbs. In general, they consist of a benefactive applicative superimposed on a superessive applicative (Shanidze 1953/1980 §§ 402, 411, 416, 442; Harris 1981: 99–100, 286; Singer 2003; Lomashvili 2005: 205–207), as in this example:

(28) Georgian

c'eb-av-s 'glues sthg.' > *Ø-a-c'eb-eb-s* 'glues sthg. to sthg.' > ***m-i-c'eb-eb-s*** 'glues sthg. to **my** sthg.'

viyaca-m ertmanet-s c'ebo-ti mi-m-i-c'eb-a

someone-ERG each.other-DAT glue-INST PVB-O1-PRV-glue-AOR.S3SG

tit-eb-i

finger-PL-NOM

'Someone stuck **my** fingers together with glue.' (T. Jangulashvili *Mnatobi* #5, 1986)

In present-day usage, double applicatives with two indirect objects tend to be avoided, with the object of the inner applicative marked by a postposition rather than the bare dative case (Lomashvili 2005: 205–207), e.g.

(29) Georgian

k'er-av-s 'sews sthg.' > *Ø-a-k'er-eb-s* 'sews sthg. onto sthg.' > ***m-i-k'er-eb-s*** 'sews sthg. onto **my** sthg.'

yil-i p'ijak'-ze // (p'ijak'-s) mi-m-i-k'er-a

button-NOM jacket-**on** jacket-DAT PVB-O1-PRV-sew-AOR.S3SG

'She sewed a button **onto** my jacket.'

In principle, verbs that are the product of benefactive applicativization cannot undergo the same operation a second time, but some apparent exceptions have been attested (Singer 2003). The few examples attested in Georgian are applicatives of benefactive *applicativa tantum*, that is basic verbs which contain the functionless or invariant PRV *u- (see § 2.2.2 above). The verb *da-Ø-u-k'rav-s* 'plays sthg. (instrument or piece of music)', which contains a functionless O3 marker, can undergo the addition of a beneficiary argument (Boeder 1968: 120–121):

(30) Georgian

Ø-u-k'r-av-s 'plays sthg.' > ***m-i-k'r-av-s*** 'plays sthg. **for me**'
git'ara-ze da-gv-i-k'r-a *ramdenime simyera*
 guitar-on PVB-O1PL-PRV-play-AOR.S3SG several song:NOM
 'He played **us** several songs on the guitar.'

According to Shanidze (1953/1980 § 414), in earlier times, and in some conservative Georgian dialects, the indirect-object marker of *da-Ø-u-k'rav-s* referred to the instrument played. In this example from the Khevsurian dialect, spoken in the northeastern highlands, the benefactive applicativized form is quadrivalent, with a direct object designating the piece that is performed, an indirect object denoting the instrument, and another indirect object denoting the beneficiary. In this context, the O3 marker in the basic form is functional but invariant, since the referent is necessarily inanimate, thus 3rd person:

(31) Georgian

Ø-u-k'r-av-s 'plays sthg. on sthg.' > ***m-i-k'r-av-s*** 'plays sthg. on sthg. **for me**'
pandur-s da-m-i-k'ar-Ø
 pandur-DAT PVB-O1-PRV-play-AOR.S1/2
 'Play the *pandur* [name of instrument] **for me!**' (Shanidze 1953/1980 § 414)

Öztürk (2013, 2016) elicited sentences in the Pazar variety of Laz, which appear to result from two operations of benefactive applicativization, should the basic form of this verb be bivalent (as is Arhavi Laz *o-şku-me* 'sends/releases sb./sthg.'; Lacroix 2009: 437, 445):

(32) Laz

o-şk-u 'sent sb./sthg.' > *Ø-u-şk-u* 'sent sb./sthg. to sb.' > ***Ø-u-şk-u*** 'sent sb./sthg. to sb. **for sb.**'
Xordza-k Ali-s k'oçi-s bere Ø-u-şk-u.
 woman-ERG A.-DAT man-DAT child:NOM O3-PRV-send-AOR.S3SG
 'The woman sent the child to the man for Ali.'

There are nonetheless semantic constraints: the first applied object must denote a recipient, and the second a beneficiary.

4 Morphological and syntactic lookalikes

As mentioned above (§ 2.1), the Kartvelian subjective version and unmarked (*satanao*) version do not correspond to applicatives as defined in this volume. In the case of subjective version, the morphology undergoes change, by addition of the PRV *i-*, but the surface syntax remains the same, in that no overt argument is added. Unmarked version, by contrast, is characterized by the addition of an indirect object, but without any change to the morphology of the verb (other than the addition of an object marker).

4.1 Subjective version

Alongside its function as the marker of objective version with 1st- and 2nd-person indirect objects, the PRV **i-* also marks subjective version (*sataviso kceva*). The contrast between the basic and subjective version constructions is limited to transitive verbs. The Kartvelian subjective version indicates that the action is performed by the referent of the subject (1) on his/her own body, or clothing, or an object he/she is carrying; or (2) for the subject's own benefit, in some sense (Shanidze 1953/1980 § 396). Although it is sometimes described as the reflexive counterpart of the benefactive applicative (e.g. Bondarenko 2015), the semantic range of the subjective version is wider. Boeder (2021 § 3.6.17 vi) notes that it “occurs with any reflexive indirect object. It neutralizes the opposition between objective version, superessive version and unspecified indirect objecthood [= unmarked version—KT]”. The reflexive applicative construction has the same valence as the basic construction, at least as far as surface structure is concerned (more on this below).

(33) Old Georgian

tes-av-s ‘sows sthg.’ > *i-tes-av-s* ‘sows sthg. **for oneself**’

mk'-i-s ‘mows, reaps sthg.’ > *i-mk'-i-s* ‘mows, reaps sthg. **for oneself**’

Ø-*i-tes-e-t* *ipkl-i* *da* *ek'al-sa* *mo-Ø-i-mk'-i-t*

S2-PRV-SOW-AOR-S1/2PL wheat-NOM and thorn-DAT PVB-S2-PRV-reap-SM-S1/2PL

‘You sowed (**for yourselves**) wheat but will reap (**for yourselves**) thorns.’

(Jeremiah 12:13)

(34) Svan

a-ti ‘mows sthg.’ > *i-ti* ‘mows sthg. **for oneself**, in **one's own** fields’

k'wecen-s *našt'ak-wš* *xw-i-ti-d*

wheat-DAT sickle-INST S1EXCL-PRV-mow-S1/2PL

‘We mow (**for ourselves**) wheat with sickles.’ (TK 275)

(35) Mingrelian

k'vat-un-s 'cuts sthg.' > *i-k'vat-un-s* 'cuts **one's own** sthg. (e.g. body part)'

k'it-i *gi-i-k'vat-u* *xam-it*

finger-NOM PVB-PRV-cut-AOR.S3SG knife-INST

'He cut **his (own)** finger with a knife.'

In his grammar of Laz, Chikobava (1936/2008: 119–121) stated that the use of the subjective version in that language was limited to situations where the referent of the grammatical subject acted on his/her own body; in other words, the Laz subjective version could be described more accurately as the reflexive counterpart of superessive or unmarked version. Whereas Georgian *i-c'er-s* usually means 'writes (down) for oneself' (e.g. takes notes, records something), its Laz cognate *i-č'ar-up-s*, according to Chikobava's informants, "would be used if one started to write on one's own body, and who would ever do that?" (Chikobava 1936/2008: 120). This restriction on the semantic range of the subjective version may not (or no longer) apply to the present-day dialects of Laz. While most of Lacroix's examples of verbs in the subjective version, collected from contemporary Laz speakers in Turkey, are consistent with Chikobava's observation, he also recorded instances with benefactive or possessive meaning, e.g.

(36) Laz

ma oxoi *b-i-k'od-um*

1SG house:NOM S1-PRV-build-SM

'I build a house **for myself**.' (Lacroix 2012)

As was noted previously for the benefactive applicative, the subjective version is commonly used in all Kartvelian languages, and readily appears with newly-minted verbs:

(37) Georgian

a-pot'ošop'-eb-s 'uses software to modify (image)' > *i-pot'ošop'-eb-s* 'uses software to modify **one's own** (image)'

sax-is *k'an-s* *i-pot'ošop'-eb-s*

face-GEN skin-DAT PRV-photoshop-SM-PRS.S3SG

'She photoshops **her (own)** facial skin.'

Unlike the other constructions presented here, the subjective version in *i- does not add an indirect object to the surface structure of the clause. This has led to an interesting divergence of opinion concerning how to classify this construction. Beginning with Shanidze, most linguists have grouped it in the same category as the benefactive applicative, either under the heading of "version", or as a type of applicative ("reflexive applicative", according to Lomashvili 2010: 191ff and Bondarenko 2015). With respect

to valence change, Boeder (1968) noted that the subjective version construction can be paraphrased with a benefactive or another type of applicative and an explicit reflexive indirect object, e.g.

- (38) Georgian: reflexive applicative (bivalent) = benefactive applicative (trivalent)
- | | | | | | | |
|---|---------------|---|------------------|---------------|--------------|--------------|
| <i>v-i-k'rep</i> | <i>vašl-s</i> | = | <i>v-u-k'rep</i> | <i>vašl-s</i> | čem-s | tav-s |
| S1-PRV-pick | apple-DAT | | S1-PRV-pick | apple-DAT | my-DAT | head-DAT |
| 'I pick myself an apple.' = 'I pick an apple for my self (lit. my head).' | | | | | | |

On this basis, the Kartvelian subjective version / reflexive applicative has been analyzed as a construction with an implicit indirect object ("*impliziten i-Dativ*") that is coreferential with the grammatical subject (see also Harris's "Coreferential Version Object Deletion", 1981: 95–99; Harris 1991: 46).

Shanidze also noted significant semantic overlap between the subjective version and certain uses of the middle voice in Indo-European languages such as Greek and Sanskrit (1953/1980 § 417; see also Schmidt 1965). Lacroix (2009: 456–483; 2012) takes this observation a step further, and classifies the PRV *i- as the morphological marker of middle voice in Kartvelian. He therefore separates subjective-version transitives from the applicatives, and groups them with the large class of Kartvelian intransitive verbs also marked by the PRV *i-, which cover the semantic domains of: passive (G *i-c'er-eb-a* 'is written'), potential (*i-č'm-eba* 'can be eaten'), anticausative (*i-c'v-eb-a* 'burns (INTR)'), autocausative (*i-ndzr-ev-a* 'moves (INTR)'), and antipassive (*i-yeč'-eb-a* '(person or animal) chews in a leisurely or annoying manner'; Tuite 2002). Taken together, subjective-version transitives and *i-prefixed intransitives cover most of the meanings associated by Kemmer (1993) with the middle voice on a cross-linguistic basis.

4.2 Unmarked version

It was mentioned at the outset of this chapter that Shanidze, in his initial definition of the category of version, included a type he labelled *satanao* 'for taking along', which specified an indirect object but without the addition of a PRV to the verb morphology. Such verbs occur in Laz and Mingrelian as well as Georgian, but not in Svan. In the Svan cognates of verbs with unmarked version, the PRV *a-* or *o-/i-* appears after the indirect-object marker, e.g. G *m-q'id-i-s*, S *măq'di* < *m-a-q'id-i* 'sells sthg. to me'; G *m-c'er-s*, M *m-č'ar-un-s*, S *mīyri* < *m-i-ir-i* 'writes (and sends) sthg. to me'. In my view, there are grounds for hypothesizing that Svan lost a distinction between indirect objects with and without PRVs, which has been retained in its sister languages (Tuite 2021).

Turning to Georgian, Laz and Mingrelian, the verbs in unmarked version can be divided into two groups. On the one side are those for which unmarked version represents their basic form, that is, fundamentally trivalent transitives (e.g. G *mo-m-c-em-s*

‘will give sthg. to me’) and bivalent intransitives (e.g. G *m-dzul-s* ‘I hate sb./sthg.’). Such verbs do not have a more basic form which lacks an indirect object, i.e. there are no such verbs as †*mo-c-em-s* ‘will give sthg.’ or †*dzul-s* ‘sb./sthg. is hateful’. The second, larger, group comprises verbs in unmarked version for which there exist basic forms lacking an indirect object. The principal semantic fields associated with verbs taking PRV-less indirect objects are: (i) transfer, transmission or taking, with the indirect object denoting addressees or recipients (Jorbenadze 1983: 219–226); and (ii) action implying body contact, often violent, with the indirect object denoting the participant intimately effected by the action. Here are some examples from Old Georgian and Mingrelian:

(39) Old Georgian

k’wet-s ‘cuts sthg.’ > *m-k’wet-s* ‘cuts **my** sthg. (esp. body part)’

mo-g-k’wet-o-s *parao* *tav-i* *šeni* *šen-gan*
 PVB-O2-cut-OPT-S3SG pharaoh[ERG] head-NOM 2SG.POSS[NOM] 2SG-from
 ‘Pharaoh will cut off **your** head from you.’ (Gen 40: 19)

(40) Mingrelian

č’ar-un-s ‘writes sthg.’ > *m-č’ar-un-s* ‘writes (and sends) sthg. **to me**’

minje-s *me-Ø-č’ar-a* *dzyabi-k*
 owner-DAT PVB-O3-write-AOR.S3SG girl-ERG
 ‘The girl wrote **to the owner**.’ (Xubua 1976: 74)

According to Shanidze (1953/1980 § 440) and Deeters (1930: 79–80), the semantic range of PRV-less indirect objects overlaps that of superessive objects marked by the PRV *a-, as attested by parallel Old Georgian translations of the same Biblical passage (e.g., *da=h-k’wet-a* /*da=Ø-a-k’wet-a* ‘threw him down [to the ground]’, Mark 9: 20). Nonetheless, comparison of a corpus of verbs which allow both superessive and unmarked indirect objects reveals consistent semantic differences between the two, especially as regards the animacy of the applied object. The unmarked version has a strong association with animate arguments (possessors of body parts, experiencers), whereas the superessive applicative covers a broader semantic range, including verbs denoting physical movement or removal from an inanimate surface (Table 11).

Table 11: Contrasting superessive and unmarked version in Georgian.

Root	Superessive applicative	Unmarked version
<i>glej/glij-</i> ‘tear’	<i>mo=Ø-g-glij-a</i> ‘tore sthg. (e.g. knob) <u>off</u> sthg.’	<i>mo=h-glij-a</i> ‘tore sthg. <u>off sb.’s</u> body (e.g. hat off head, mask off face)’
<i>t’q’d-</i> ‘break (INTR)’	<i>mo=Ø-a-t’q’d-a</i> ‘sthg. (e.g. handle) broke <u>off</u> sthg.’	<i>mo=s-t’q’d-a</i> ‘ <u>sb.’s</u> sthg. (e.g. fingernail, arm) broke’

When used with some verbs of transfer or communication, the unmarked version “can be more or less synonymous” with the benefactive; e.g. G *m-q'ep-s* / *m-i-q'ep-s* ‘it barks at me’ (Boeder 2021 § 3.6.17.ix).

Although somewhat less common than the other version types, an Internet search has yielded at least one newly-created Georgian verb which allows the unmarked version:

(41) Georgian

p'ost'-av-s ‘posts sthg. (on social media)’ > *m-p'ost'-av-s* ‘posts sthg. **to me**’

me ro uk've mo-g-p'ost'-e, k'ide mo-g-p'ost'-o?

1SG that already PVB-O2-post-AOR.1/2 again PVB-O2-post-OPT

‘Since I already posted it **to you**, do I have to post it **to you** again?’

5 The origin of the Kartvelian applicative markers

In his crosslinguistic survey of applicatives, Peterson (2007: 123) identified two primary sources of applicative morphology: adpositions and serial verbs. Other sources, such as body-part nouns, have been proposed for the applicative morphemes of certain languages, but Peterson (2007: 140–141) considers the arguments unconvincing. The PRVs which mark Kartvelian applicatives, however, have no evident link to any such lexical category. The most promising path toward elucidating the origin of the preradical vowels was suggested initially by Topuria (1947) and Vogt (1974), who pointed to evidence that the PRVs were not limited to finite verbs in Proto-Kartvelian. The prefixes *a- and *i- occur in participles and a small number of nouns, as in the following examples from Georgian (Table 12):

Table 12: PRVs in verbs, participles and nouns (Georgian)

	*a- (root -xl- ‘touch’)	*i- (root -s(v)r- ‘shoot’)
Finite verbs (“version”)	<i>a-xl-eb-s</i> ‘touches’	<i>i-svr-i-s</i> ‘shoots’
Participle in s-	<i>s-a-xl-</i> ‘house’ (‘site of closeness’)	OG <i>s-i-sr-a</i> ‘shooting’
Nouns (frozen prefix)	<i>a-xl-a-</i> ‘close, near’	<i>i-sar-</i> ‘arrow’ (‘it is shot’)

Of special interest for reconstructing the original functions of the PRVs is a small, archaic class of vowel-initial nouns based on verbal roots (Fähnrich and Sarjveladze 2007: 27–28, 210). The initial vowels in these nouns appear to be frozen PRVs, a hypothesis which draws support from their meanings. In the *a-prefixed nouns, one detects a semantics of space and attachment (*a-xl-o* ‘near’ < ‘touching sb./sthg.’), corresponding to the core uses of the superessive applicative marker; whereas the *i-prefixed nouns, when compared to their verbal roots, have middle-voice or passive meaning (G *i-sar-*, L *i-sij-* ‘arrow’ < ‘ce qui est lancé’; see Vogt 1974 and Klimov 1964: 102) (Table 13).

Table 13: Georgian nouns with frozen PRVs

Form	Noun	Verb
*a-		
a-√-Ø	a-lag- ‘place, position’ (‘is arranged on it’)	a-lag-eb-s ‘arranges’
a-√-il-	a-dg-il- ‘place’ (‘is put on it’)	a-dg-am-s ‘puts on’
a-√-o	a-s-o ‘(body) limb, member; letter’ (‘is affixed to it’)	a-sv-am-s ‘sets on, affixes’
*i-		
i-√-Ø	i-gav- ‘parable, fable, riddle’ (‘it resembles’)	h-gav-s ‘resembles’
	i-k’ank’el- ‘zigzag line’ (‘it shivers’)	k’ank’al-eb-s ‘shivers’
i-√-al-	i-dum-al- ‘secret, unspoken’ (‘is kept silent’)	dum-s ‘is silent’
	i-pk-l- ‘autumn-sown wheat’ (‘is ground [into flour]’)	pkv-av-s ‘grinds’

In a recent essay on the origins of the Kartvelian category of version, I argue that it emerged from an older distinction between the primary PRVs *a- and *i-, which was correlated with the TRAJECTORY or ORIENTATION of the action denoted by the verb (Tuite 2021). The PRV *a- was primarily associated with locative or superessive meaning—situating an event on a surface or target—from which emerged its link to transitivity, in the sense of action directed toward a goal (§ 2.3.3). Jorbenadze (1983: 115–122) characterized the core meaning of the PRV *i- as “reflexivity” or “turning back” (*uk’uk-cevitoba*), as reflected in the clusters of meanings linked to this prefix: (i) attributes associated with the middle voice, such as intransitivity, reflexivity, passive/antipassive; (ii) “introversion” as understood by M. Mach’araviani (1987), that is, orientation toward either the grammatical subject (subjective version) or a speech-act participant (1st or 2nd person objects of benefactive applicatives). The PRVs thus indicate the TRAJECTORY of the denoted activity vis-à-vis the referent of the subject, and secondarily, the speech-act participants. The primary contrast of (intro-/extra-vert) trajectory also has implications for the animacy of the participant toward which the trajectory is oriented, and the valence of the associated verb, as summarized below (Table 14):

Table 14: Contrasting characteristics of PRVs *a- and *i-.

	*a-	*i-
Trajectory	subject → affected surface (superessive, transitive; EXTRAVERSION)	subject ↗ (orientation toward grammatical subject, speech context; INTROVERSION)
Animacy	inanimate	human
Valence	adds argument (superessive, causative)	replaces overt actant with implicit reflexive

The secondary PRVs *u- and *e- can be considered specialized alternants of *i- in particular contexts. The PRV *e- marks the addition of a dative-case argument to an *i-medial or *i-intransitive verb: *i-cin-i-s* ‘laughs’ > *e-cin-i-s* ‘laughs at her/him/them’. The PRV *u-, which signals a 3rd-person non-reflexive argument for benefactive applicative verbs,

could be characterized as “indexically creative” in Silverstein’s (1976) sense. Whereas *i- is linked to the highly-presupposable referents associated with the speech context (speaker and addressee), and the content of the utterance (the grammatical subject), the prefix *u- entails the addition of a new argument outside of this circle.

6 Conclusion

Two types of applicatives can be ascribed to the Kartvelian languages: benefactive and superessive. Here is a summary of their principal characteristics:

Morphology

The morphological marker associated with both types of applicatives is a preradical vowel (PRV), which intervenes between the person prefixes and the verb root. In the case of benefactive applicatives, the prefix is *i- with a 1st- or 2nd-person indirect object, and *u- in the 3rd person. This alternation cannot be explained on phonological grounds, and might reflect the semantic feature of introversion (§ 5). Applicativized verbs have the same inflectional paradigms as their base counterparts, but the distinction between the basic construction and the two types of applicatives is neutralized in the Series III tenses (present-perfect, pluperfect, etc.; § 2.4).

Syntax

- Both types of applicatives are “D-applicatives”, which add an indirect object to the construction. Kartvelian applicatives can combine with other valence-altering transformations, such as causative and intransitivization. Double applicatives are possible under certain restrictions.
- The superessive, unlike the benefactive applicative, can bring about morphological changes other than the addition of a PRV (§ 2.3.1). It is also less strict with respect to the marking of applied objects, which not infrequently appear as objects of postpositions rather than indirect objects in the dative case (Boeder 1968: 112; Aronson 1982: 75; Kojima 2012: 230). This is especially common in verbs that would otherwise have two indirect objects (§ 3.3).

Semantics

The Kartvelian applicative types have semantic associations, which are reflected in the names assigned to them: benefactive and superessive. Although applicative constructions can be paraphrased by basic constructions with postpositional phrases—and indeed, this becomes a necessity in the Series III tenses, for which distinctions of applicativity are neutralized (§ 2.4)—subtle contrasts between applicative and basic constructions have been noted (§ 2.4).

Lookalikes

Kartvelian subjective version has the morphological attributes of an applicative, in that it is signalled by the addition of a PRV, but it has the same surface valence as the basic construction. This has led some linguists to analyze it as a type of applicative with an implicit reflexive indirect object, whereas others compare it to the middle voice (§ 4.1). Unmarked or *satanao* version, by contrast, has the syntactic attributes of an applicative, but not the morphology, since it is not associated with a PRV or any other marker (§ 4.2). Valency-neutral lexically-specified PRVs occur in particular classes of verbs, which were presented above. Of particular relevance for understanding the evolution of applicative morphology in Kartvelian are transitive verbs with basic forms containing the PRVs *a- and *i-, as well as a handful of vowel-initial nouns with what appear to be frozen PRVs, discussed in § 5.

Abbreviations

ADD	additive
AOR	aorist
CAUS	causative
DAT	dative
ERG	ergative
EXCL	exclusive
EXT	extension
GEN	genitive
IMPF	imperfect
INCL	inclusive
INDEVID	indirect evidential
INST	instrumental
INTR	intransitive
NOM	nominative
O	object
OBL	oblique
OPT	optative
PASS	passive
PERF	perfect
PL	plural
POSS	possessive
PRS	present
PRV	preradical vowel
PST	past
PVB	preverb
QUOT	quotative
S	subject
SG	singular
SM	series marker
TK	Topuria & Kaldani (2000)

References

- Aronson, Howard I. 1982. On the status of version as a grammatical category in Georgian. *Folia Slavica* 5(1–3). 66–80.
- Boeder, Winfried. 1968. Über die Versionen des georgischen Verbs. *Folia Linguistica* 2. 82–152.
- Boeder, Winfried. 2003. The South Caucasian languages. *Lingua* 115(1–2). 5–89.
- Boeder, Winfried. 2021. Grammatical sketch of Georgian. Unpublished manuscript, version 5.8.21a.
- Bondarenko, T. I. 2015. Bitranzivnye glagoly i aplikativnye konstrukcii ot perexodnyx glagolov v gruzinskom jazyke [Ditransitive verbs and applicative constructions from transitive verbs in Georgian]. In E. A. Ljutikova, A. V. Cimmerling & M. B. Konoshenko (eds.), *Tipologija morfosintaksičeskix parametrov* [Typology of morphological parameters: Proceedings from the international conference], Vol. 2, 25–46. Moscow: MPGU Press.
- Chikobava, Arnold. 1936. *Č'anuris gramat'ik'uli analizi t'ekst'ebitur* [A grammatical analysis of Laz, with texts]. Tbilisi: Mecniereba. (Reprinted in *Šromebi* III.)
- Comrie, Bernard. 2008. Linguistic diversity in the Caucasus. *Annual Reviews in Anthropology* 37. 131–143.
- Daniel, Michael & Yuri Lander. 2011. The Caucasian languages. In Johan van der Auwera & Bernd Kortmann (eds.), *The languages and linguistics of Europe: A comprehensive guide*, 125–157. Berlin: Mouton de Gruyter.
- Deeters, Gerhard. 1930. *Das kharthwelische Verbum: vergleichende Darstellung des Verbalbaus der südkaukasischen Sprachen*. Leipzig: Markert und Petters.
- Fähnrich, Heinz & Zurab Sarjveladze. 2007. *Kartwelisches etymologisches Wörterbuch*. Leiden: Brill.
- Gérardin, Hélène & Alexander Rostovtsev-Popiel. 2016. Valency and valency change in the Caucasus. Paper presented at the Higher School of Economics, Moscow, 28–30 November.
- Gippert, Jost. 2008. Endangered Caucasian languages in Georgia. In David K. Harrison, David S. Rood & Arienne Dwyer (eds.), *Lessons from documented endangered languages*, 159–194. Amsterdam: John Benjamins.
- Harris, Alice C. 1981. *Georgian syntax: A study in relational grammar*. Cambridge: Cambridge University Press.
- Harris, Alice C. 1990. Georgian: A language with active case marking. *Lingua* 80. 347–365.
- Harris, Alice C. 1991. On the history of the Kartvelian languages. In Alice C. Harris (ed.), *The indigenous languages of the Caucasus: Kartvelian*, 7–83. Delmar, N.Y.: Caravan Press.
- Holisky, Dee Ann. 1991. Laz. In Alice C. Harris (ed.), *The indigenous languages of the Caucasus: Kartvelian*, 395–472. Delmar, N.Y.: Caravan Press.
- Jorbenadze, Bessarion. 1983. *zmnis xmovanp'repiksuli c'armoeba kartulši* [Vowel-prefix formation of the verb in Georgian]. Tbilisi: Tbilisi State University Press.
- Kajaia, Otar. 2004. *Megrul-kartuli leksik'oni* [Mingrelian-Georgian Dictionary]. Tbilisi: Nek'eri.
- Kavakli, Nurdan. 2015. Novus Ortus: The awakening of Laz language in Turkey. *Idil Journal of Art and Language*, 4(16). 133–146.
- Kemmer, Suzanne. 1993. *The middle voice*. Amsterdam: John Benjamins.
- Klimov, G. A. 1964. *Etimologičeskij slovar' kartvel'skix jazykov* [Etymological dictionary of the Kartvelian languages]. Moscow: Nauka.
- Klimov, G. A. 1991. Some thoughts on Indo-European-Kartvelian relations. *Journal of Indo-European Studies* 19. 325–348.
- Klimov, Georgij A. 1998. *Etymological dictionary of the Kartvelian languages*. Berlin: Mouton de Gruyter.
- Kojima, Yasuhiro. 2012. Version and object marking in Georgian verbs. In Wataru Nakamura & Ritsuko Kikusawa (eds.), *Objectivization and subjectivization: A typology of voice systems*, 221–235. Suita, Osaka: National Museum of Ethnology.
- Kutscher, Silvia, Johanna Mattissen & Anke Wodarg. 2012. *Das Mutafi-Lazische* (Arbeitspapier Nr. 24, Neue Folge). Cologne: Institut für Sprachwissenschaft der Universität zu Köln.

- Lacroix, René. 2007 The preroot vowel *a-* in the Laz verb. Unpublished manuscript, Université Lumière Lyon 2.
- Lacroix, René. 2009. *Description du dialecte laze d'Arhavi: Grammaire et textes*. Lyon: Université Lumière Lyon 2 dissertation.
- Lacroix, René. 2011. Ditransitive constructions in Laz. *Linguistic Discovery* 9(2). 78–103.
- Lomashvili, Leila. 2010. *Morphosyntax of complex predicates in South Caucasian languages*. Tucson: University of Arizona dissertation.
- Mach'avariani, Maia. 1980. *kcevis k'at'egoriis sak'itxisatvis* [On the category of version]. *Iberiul-k'avk'asiuri enatmecniereba* 22. 39–66.
- Mach'avariani, Maia. 1987. *Kcevis gramat'ik'uli k'at'egoriis semant'ik'a* [The semantics of the grammatical category of version]. Tbilisi: Mecniereba.
- Mach'avariani, Givi. 1988. *k'ausat'ivis k'at'egoria kartvelur enebši* [The category of the causative in the Kartvelian languages]. *Iberiul-k'avk'asiuri enatmecniereba* 27. 62–106.
- Makharoblidze, Tamar. 2012. *The Georgian verb* (Studies in Caucasian Linguistics 20). Munich: LINCOM.
- Manaster Ramer, Alexis. 1995. On 'Some thoughts on Indo-European-Kartvelian relations'. *Journal of Indo-European Studies* 23. 195–208.
- Marr, N. Ja. 1925. *Grammatika drevneliteraturnogo gruzinskogo jazyka* [Grammar of the Old Georgian literary language]. (Materialy po jafetičeskomy jazykoznaniju XII [Materials on Japhethic linguistics XII]). St. Petersburg: Akademija.
- Marr, N., & M. Brière. 1931. *La langue géorgienne*. Paris: Firmin-Didot.
- McGinnis, Martha. 2004. Lethal ambiguity. *Linguistic Inquiry* 35(1). 47–95.
- Nash, Léa. 2017. The structural source of split ergativity and ergative case in Georgian. In Jessica Coon, Diane Massam & Lisa Travis (eds.), *The Oxford handbook of ergativity*, 175–200. Oxford: Oxford University Press.
- Öztürk, Balkiz. 2013. Low, high and higher applicatives: Evidence from Pazar Laz. In Victoria Camacho-Taboada, Ángel L. Jiménez-Fernández, Javier Martín-González & Mariano Reyes-Tejedor (eds.), *Information structure and agreement*, 275–295. Amsterdam: John Benjamins.
- Öztürk, Balkiz. 2016. Applicatives in Pazar Laz. Paper presented at the South Caucasian Chalk Circle, University of Chicago Research Center, Paris. 22 September 2016.
- Öztürk, Balkiz. 2021. Transitive unergatives in Pazar Laz. *Glossa* 6(1). 1–24.
- Peterson, David. 2007. *Applicative constructions*. Oxford: Oxford University Press.
- Q'ipšidze, I. *Grammatika mingrel'skago (iverskago) jazyka s xrestomatijeju i slovarem* [Grammar of the Mingrelian (Iberian) language with chrestomathy and a dictionary]. St. Petersburg: Akademia Nauk.
- Rostovtsev-Popiel, Alexander. 2015. Subjects of decreased control in Kartvelian anticausatives. Paper presented at *Diversity Linguistics: Retrospect and Prospect*, University of Mainz / MPI EVA, May 1–3.
- Schmidt, Karl Horst. 1965. Indogermanisches Medium und Sataviso im Georgischen. *Bedi Kartlisa* 19–20. 129–135.
- Shanidze, Ak'ak'i. 1925/1981. *kartuli zmnis sakcevi* [The category of version of the Georgian verb], reprinted in *Txulebani, II. kartuli enis st'rukt'urisa da ist'oriis sak'itxebi* [Collected works, II. Issues in the structure and history of the Georgian language], 375–401. Tbilisi: Mecniereba.
- Shanidze, Ak'ak'i. 1953/1980. *kartuli gramat'ik'is sapudzvebi, I: morpologia* [The fundamentals of Georgian grammar I: morphology]. Tbilisi: Tbilisi State University Press.
- Silverstein, Michael. 1976. Shifters, linguistic categories, and cultural description. In Keith Basso & Henry A. Selby (eds.), *Meaning in anthropology*, 11–55. Albuquerque: University of New Mexico Press.
- Singer, Kora. 2003. On double dative constructions in Georgian. In Dee Ann Holisky & Kevin Tuite (eds.), *Current trends in Caucasian, East European and Inner Asian linguistics. Papers in honor of Howard I. Aronson*, 349–362. Amsterdam: John Benjamins.
- Topuria, Varlam 1947/2002. *xmovantavkartovani saxelebi* [Vowel-prefixed nouns]. In Varlam Topuria, *Šromebi III* [Works III], 92–101. Tbilisi: Kartuli Ena.

- Topuria, Varlam. 1967. *svanuri ena, 1: zmna* [The Svan language, 1: Verb]. Tbilisi: Mecniereba.
- Topuria, Varlam & Maksime Kaldani. 2000. *svanuri leksik'oni*. [Svan dictionary]. Tbilisi: Kartuli Ena.
- Tuite, Kevin. 2002. Deponent verbs in Georgian. In Wolfram Bublitz, Manfred von Roncador & Heinz Vater (eds.), *Philologie, Typologie und Sprachstruktur. Festschrift für Winfried Boeder zum 65. Geburtstag*, 375–389. Frankfurt am Main: Peter Lang.
- Tuite, Kevin. 2004. Early Georgian. In Roger D. Woodard (ed.), *Cambridge Encyclopedia of the World's Ancient Languages*, 967–987. Cambridge: Cambridge University Press.
- Tuite, Kevin. 2008. The rise and fall and revival of the Ibero-Caucasian hypothesis. *Historiographia Linguistica* 35(1). 23–82.
- Tuite, Kevin. 2017. Alignment and orientation in Kartvelian (South Caucasian). In Jessica Coon, Diane Massam & Lisa Travis (eds.), *The Oxford handbook of ergativity*, 1114–1138. Oxford: Oxford University Press.
- Tuite, Kevin. 2021. *On the origin of Kartvelian version*. (Studies in Caucasian Linguistics 22). Munich: LINCOM.
- Uslar, P. K. 1861/1887. Grammatičeskij očerk svanetskago jazyka [Grammatical sketch of the Svan language]. *Ėtnografija Kavkaza. Jazykoznanie, I. Abxazskij jazyk. Otdel II* [Ethnography of the Caucasus. Linguistics, I. The Abkhaz Language], 103–120. Tbilisi: Upravlenie Kavkazskago Učebnago Okruga.
- Vogt, Hans. 1974. Notes d'étymologie géorgienne. *Norsk tidsskrift for sprogvidenskap* 28. 103–111. (Reprinted in *Studia Caucasologica* II. 513–521.)
- Xubua, Mak'ar. 1976. *Megruli t'ekst'ebi* [Mingrelian texts]. Tbilisi: Tbilisi State University Press.
- Zúñiga, Fernando. 2006. *Deixis and alignment: Inverse systems in indigenous languages of the Americas*. Amsterdam: John Benjamins.