Applicative Constructions in Kartvelian
Kevin Tuite

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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.

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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 & 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 c. 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 in western Georgia, range from 300K to 500K (Ethnologue: 345,530). Almost all speakers of Laz are in northeastern Turkey, and estimates of their numbers vary from 22000 (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 14000 (Ethnologue) and 50000 (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 the diagram below). Zone II, the verb stem includes the root and a string of suffixes (mostly of VC shape) encoding valence, Aktionsart, 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 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	1-7	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:

EXAMPLE: $^{V}[\text{še}^{-4}\,^{IV}[\text{v}^{-2}\,^{III}[\text{e}^{-1}\,^{II}[^{I}[\text{b}^{0}]\text{-m}^{2}\text{-ev}^{3}\text{-in}^{5}\text{-eb}^{6}\text{-o}^{7}]\text{-d}^{8}\text{-e}^{9}]\text{-t}^{10}]]$
PV-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 below:

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

Old Georgian		Svan	
"Subject"			
1st	v-	1sg	xw-
		1excl	xw-
		1incl	l-
2nd	x/h/Ø-	2nd	x-
3rd	—	3rd	—
"Object"			
1sg/excl	m-	1sg	m-
		1excl	n-
1incl	gw-	1incl	gw-
2nd	g-	2nd	ǰ-
3rd	x/h/Ø-	3rd	x/Ø-

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 *ǰ-i-t'q'b-e* [O2-PRV-roast-PRS] "I/he/she roasts it for you", the only person marker is O2 ǰ-, 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 NOM 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 DAT case marking both direct and indirect objects. In the aorist-series paradigms (Series II: aorist and optative), however, transitive and

active intransitive verbs assign ERG case to the subject and NOM 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: 117-27): the subject takes many of the attributes of an indirect object (DAT case, object agreement in the verb), whereas the direct object is assigned NOM case and is linked to subject agreement.

(1a) 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"

(1b) Series II: aorist

bič'-ma	*leks-i*	*da-Ø-u-c'er-a*	*deda-s*
boy-ERG	poem-NOM	PV-O3-PRV-write-AOR.S3sg	mother-DAT

"The boy wrote a poem for his mother"

(1c) Series III: present perfect

bič'-s	*leks-i*	*da-Ø-u-c'er-i-a*	*ded-is-tvis*
boy-DAT	poem-NOM	PV-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 NOM, 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 et al. 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 (NB. there is no distinct unmarked version in Svan):

(2a) Basic construction G *kal-i*　　　　*c'eril-s*　　*Ø-c'er-s*
(neutral version)　　　　S *zuräl*　　　　*läir-s*　　*ä-yr-i*
　　　　　　　　　　　　　woman:NOM　letter-DAT　PRV-write-(S3sg).PRES
　　　　　　　　　　　　　"The woman writes a letter"

(2b) Objective version, G *kal-i*　　　　*c'eril-s*　　***m-i****-c'er-s*
1st p. indirect obj.　　　S *zuräl*　　　　*läir-s*　　***m-i****-yr-i*
　　　　　　　　　　　　　woman:NOM　letter-DAT　O1sg-PRV-write-(S3sg).PRES
　　　　　　　　　　　　　"The woman writes a letter **for me**"

(2c) Objective version, G *kal-i*　　　　*c'eril-s*　　<u>*bavšv-s*</u>　　***Ø-u****-c'er-s*
3rd p. indirect obj.　　　S *zuräl*　　　　*läir-s*　　<u>*bepšw-s*</u>　　***x-o****-yr-i*
　　　　　　　　　　　　　woman:NOM　letter-DAT　child-DAT　O3-PRV-write-(S3sg).PRES
　　　　　　　　　　　　　"The woman writes a letter **for the child**"

(2d) Subjective version G *kal-i*　　　　*p'irǰvar-s*　***i****-c'er-s*
　　　　　　　　　　　　S *zuräl*　　　　*st'ārun-s*　***i****-yr-i*
　　　　　　　　　　　　　woman:NOM　cross-DAT　PRV-write-(S3sg).PRES
　　　　　　　　　　　　　"The woman makes the sign of the cross (lit. writes the cross **on herself)**"

(2e) Superessive version G *kal-i*　　　　*saxel-s*　　<u>*kva-s*</u>　　***Ø-a****-c'er-s*
　　　　　　　　　　　　S *zuräl*　　　　*žaxa-s*　　<u>*bač-s*</u>　　***x-ä****-yr-i*
　　　　　　　　　　　　　woman:NOM　name-DAT　stone-DAT　O3-PRV-write-(S3sg).PRES
　　　　　　　　　　　　　"The woman writes her name **on the stone**"

(2f) Unmarked version G *kal-i*　　　　*c'eril-s*　　<u>*bavšv-s*</u>　　*s-**Ø**-c'er-s*
　　　　　　　　　　　　　woman:NOM　letter-DAT　child-DAT　O3-PRV-write-(S3sg).PRES
　　　　　　　　　　　　　"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 Zuñiga & Creissels: objective, which will be labelled as "benefactive applicative" in this chapter, and superessive. Subjective and unmarked versions represent what Zuñiga & Creissels designate as morphological and syntactic lookalikes, respectively, and will be discussed in section 4.

Table 4. Shanidze's versions and the associated applicatives

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

2.2. Objective Version. 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.

2.2.1. The Benefactive Applicative. 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) OG 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	PV-O3-PRV-set-S3sg.PST		them:DAT	and	eat-S3pl.PST	but self	before
***Ø-u**-dg-a*			*mat*	*xe-sa*		*kweše*	
PV-O3-PRV-stand-S3sg.PST			them: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) OG aɣ-a-šen-eb-s "builds sthg" > aɣ-**m-i**-šen-eb-s "builds sthg **for me**"

*aɣ-**Ø-u**-šen-a*	*mun*	*abraam*	*sak'urtxevel-i*	***upal-sa***
PV-O3-PRV-build-S3sg.PST	there	Abraham:ERG	altar-NOM	lord-DAT

"Abraham built an altar there **to the Lord**" (Gen 12:7)

(5) OG 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*	*šen-i*
PV-O1-PRV-bend-S1/2.PST	1sg(DAT)	water.jug-NOM	thy-NOM

"Lean down your water-jug **for me** (so that I may drink)" (Gen 24:14)

(6) S twep-n-i "is lost" > **m-i**-twp-en-i "is lost **to me**"

isk'wi	*iɣbäl*	*ešiy*	*dem*	*ǰ-i-twep-n-i*
your(sg)	fate:NOM	nonetheless	not	O2-PRV-lose-INTR-SM

"Your fate will nonetheless not be lost **to you**" (TK 644).

(7) S sgur "sits" > **m-i**-sgur "sits **by/next to me**"

därǰəl	*nensga*	*x-o-sgur-x*
Darjil:NOM	between	O3-PRV-sit-PL

"Darjil 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: 492-5) identifies recipient and deputative types of beneficiary, and also maleficiaries (see also Gérardin & Rostovtsev-Popiel 2016):

(8a) L   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   PV-O3-PRV-build-AOR.S3sg-RPSP (2nd-hand speech)
      (Someone told me) "He built a house **for each of the three of them**"

(8b) L   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*
      PV-O1-give-S1/2   and   1sg   PV-O2-PRV-wash-OPT-QT
      (She said) "Give me (the clothes) and I will wash them **for you**"

(8c) L   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) G   a-mesiǰ-eb-s "sends a text message" > **m-i**-mesiǰ-eb-s "sends a text message **to me**"
      Gabriel-ma *da-m-i-mesiǰ-a*   *sad*   *xar*   *amden xan-s?*
      G-ERG   PV-O1-PRV-message-AOR.S3sg   where   you.are   so-long time-DAT
      "Gabriel texted **me**: 'where have you been all this time?'"

(10) G   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 PV-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) G link'-av-s "supplies sthg with a hyperlink" > **m-i**-link'-av-s "**sends me** the link to sthg"
      dγe-s   *da-g-i-link'-e*   *es*   *unda nax-o*
      day-DAT   PV-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-applicative 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. 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"	m-i-q'var-s	m-i-ʔor-s	—
"I prefer sthg"	—	m-i-sx-un-u	m-i-cx-a

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 as <u>da-Ø-u-k'rav-s</u> "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. Superessive Version.
2.3.1. The Superessive applicative is expressed by the PRV *a- (= o- in Mingrelian and Laz). The superessive applicative 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) OG 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-id-e-s*
 PV-S1-destroy-OPT   Jeroboam-GEN-NOM which-NOM   O3-PRV-piss-SM-IMP-OPT-S3sg
 k'edel-sa
 wall-DAT
 "I will destroy him of Jeroboam, that pisses **against the wall**" (III Kings 14:10)

(13) G 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   PV-O3-PRV-paint-AOR.S3pl
 "The children drew horns **on the portraits**" (Rostovtsev-Popiel 2015)

(14) M 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   ku-m-**m-o**-č'k'ad-i-a*
 foot-DAT   25-each   *pood*   horseshoe-PL-NOM   PV-PV-O1-PRV-hammer-S1/2-QT
 (The magic horse said): "Nail 25 *pood* (= 400 kg!) horseshoes **onto** each of **my** feet" (Xubua 167)

(15a) S 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)

(15b) S bə̄d-n-i "is poured, [liquid] falls" > **x-a**-bə̄d-n-i "is poured, falls **on sthg**"
      mananay   *bal-ar-s*   *x-**a**-bə̄d-n-i*
      dew:NOM   leaf-PL-DAT   O3-SupV-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) G   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***   *čven-i*   *temo*
      knife-ERG   ear-GEN lobe-INST PV-O3-PRV-staple-AOR.S3sg   wall-DAT   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. 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 e-	transitive with PRV a- (superessive applicative)
x-e-šgb-en-i "slips off from sthg"	x-a-šgb-e "tears sthg from sb/sthg"
x-e-t'q'wp-en-i "(skin) comes off from sthg/sb"	x-a-t'q'wp-e "tears sthg (skin, body part) off from sb/sthg"
x-e-q'wl-en-i "departs from sb/sthg"	x-a-q'wl-e "separates sthg fromsb/sthg"

Unlike the other Kartvelian applicatives, 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 <u>mi-</u> 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. č'ed-(av)-s "forges, hammers sthg" M. č'k'ad-ən-s	G. <u>a</u>-č'ed-<u>eb</u>-s "forges, nails sthg <u>onto sthg</u>" M. <u>o</u>-č'k'ad-<u>an</u>-s
G. par-av-s "covers" M. por-un-s	G. <u>a</u>-par-<u>eb</u>-s "covers sb/sthg <u>with sthg</u>" M. <u>o</u>-por-<u>an</u>-s

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. Primary stative verbs in *a-

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

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. Cognate primary *a-transitives in Georgian and Mingrelian

	Georgian	Mingrelian
*a-g-ew- "builds"	a-g-eb-s	o-g-an-s
*a-gz-ew- "lights, incites"	a-gz(n)-eb-s	o-rz-an-s
*a-c'(w)-ew- "dips"	a-c'-eb-s	u-c'u-an-s
*a-x-ew- "touches"	a-x-eb-s	o-x-u(n) "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; **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- — superessive 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. Basic and applicative transitive verbs in Series I and Series III.

	Series I (present)	Series III (present-perfect)
basic	v-t'ex "I break sthg"	mo-m-i-t'ex-av-s "I have broken sthg"
benefactive appl	v-**Ø-u**-t'ex "I break sthg **for sb**"	mo-m-i-t'ex-av-s **mis-tvis** [3sg:GEN-for]
superessive appl	v-**Ø-a**-t'ex "I break sthg **on sthg**"	mo-m-i-t'ex-av-s **mas-ze** [3sg:DAT-on]
subjective version	v-**i**-t'ex "I break sthg **for myself**"	mo-m-i-t'ex-av-s **čem-tvis** [1sg:GEN-for]
unmarked version	v-**s**-t'ex "I break **sb's** sthg"	mo-m-i-t'ex-av-s **mis-tvis** [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 <u>m-i-c'er-i-a</u>; M <u>m-i-č'ar-u-n</u>; S <u>mīra</u> {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 <u>Ø-u-t'q'd-eb-a</u> "sthg breaks for/on sb", and superessive <u>Ø-a-t'q'd-eb-a</u> "sthg breaks on/off from sthg", have the same present-perfect <u>mo-s-t'q'd-om-i-a</u>.

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 that 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 & 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. <u>Intransitives formed from applicativized transitives</u> (most commonly, superessive applicatives). These are quite frequent in the Old Georgian corpus, e.g.

(17) OG 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   PV-O3-PRV-near-AOR.S3sg Jacob:NOM Isaac-DAT
   "And Jacob went near **to Isaac**" (Gen 27: 22)

(18) S 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*   *žäxcomān* {ži-ad-**x-e**-com-ēn-a}   *nacmun*
   officer-DAT moustache-PL-DAT PV-PV-O3-PRV-smear-PASS-AOR grease:NOM
   "Grease was smeared **on the officer's moustache**" (TK 234)

3.1.2. <u>Applicatives of *i-intransitives</u>. 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) OG 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   PV-O3-PRV-change-OPT-S3sg   evil-DAT   in
　　"All these things … are turned into evil **for sinners**" (Ecclesiasticus 39:27)

(20) S i-dgär-i "dies" > **x-e**-dgär-i "**sb's** (relative) dies; sb dies (accidentally) **by sb's action**"
　　dīna-s   *diutwra*   *atdagan* {ad-**x-e**-dag-an}
　　girl-DAT   stepmother:NOM   PV-O3-PRV-die-AOR
　　"**The girl's** stepmother died" (TK 193)

(21) L 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   PV-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) OG i-glov-s "mourns" > **Ø-e**-glov-s "mourns **sb**"
　　*da   **Ø-e**-glov-d-a*   ***mas***   *egwip't'e   sameoc-da-at dɣe*
　　and   O3-PRV-mourn-IMP-S3sg   him:DAT   Egypte:NOM   60-and-10   day
　　"And Egypt mourned **him** seventy days" (Genesis 50:3)

(23) S i-mzir "prays" > **x-e**-mzir "prays **for sb**"
　　meɣza   ***x-e**-mzir-x*   *naɣwžurgezl-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)

3.1.3. <u>Primary verbs in *e-</u>. 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:

POSSIBILITY
(24) L gam-i-l-e-n "goes out" > gama-**Ø-a**-l-e-n "**sb/sthg can** go out"
　　*gama-**g-a**-l-e-n*
　　PV-O2-PRV-go-SM-S3sg
　　"**You can** go out, **are allowed** to go out" (Lacroix 2007)
ASSESSMENT
(25) G 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"
MOOD
(26) G mɣer-i-s "sings" ⇒ **Ø-e**-mɣer-eb-a "**sb feels like** singing"
　　***m-e**-mɣer-eb-a*   *da   v-i-mɣer-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) G   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**"

> *kavtarišvil-ma   sigel-i   mikel teodat'e-s švil-s   da-**m-i**-c'er-in-a*
> K.-ERG   charter-NOM   M.   T.-GEN   son-DAT PV-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) G   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"

> *viɣaca-m   ertmanet-s   c'ebo-ti   mi-**m-i**-c'eb-a   tit-eb-i*
> someone-ERG each.other-DAT glue-INST PV-O1-PRV-glue-AOR.S3sg 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) G   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"

> *ɣil-i   p'iǰak'-**ze** // (p'iǰak'-**s)**   mi-m-i-k'er-a*
> button-NOM   jacket-**on**   jacket-**DAT**   PV-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 §2.2.1 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) G   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 simɣera*
> guitar-on PV-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 IO 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) G   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   PV-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) L   o-šk-u "sent sb/sthg" > Ø-u-šk-u "sent sb/sthg to sb" > **Ø-u**-šk-u "sent sb/sthg to sb **for sb**"
     Xordza-k   *Ali-s*   *k'oçi-s*   *bere*   *Ø-u-şk-u.*
     woman-ERG Ali-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) OG 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 PV-S2-PRV-reap-SM-S1/2pl
     "You sowed **(for yourselves)** wheat but will reap **(for yourselves)** thorns" (Jeremiah 12:13)

(34) S   a-tī "mows sthg" > **i**-tī "mows sthg **for oneself**, in **one's own** fields"
     k'wecen-s   *našt'ak-wš*   *xw-**i**-tī-d*
     wheat-DAT   sickle-INST   S1excl-PRV-mow-S1/2pl
     "We mow **(for ourselves)** wheat with sickles" (TK 275)

(35) M 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   PV-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 <u>superessive</u> or unmarked version. Whereas Georgian <u>i-c'er-s</u> usually means "writes (down) for oneself" (e.g. takes notes, records something), its Laz cognate <u>i-č'ar-up-s</u>, 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) L *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) G 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) G REFLEXIVE APPLICATIVE (BIVALENT)   BENEFACTIVE APPLICATIVE (TRIVALENT)
  *v-**i**-k'rep*   *vašl-s*   =   *v-**u**-k'rep*   *vašl-s*   ***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-ɣeč'-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. mäq'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 sthg/sb"). 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 "sthg/sb is hateful". These verbs are not the result of applicativization. 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) OG k'wet-s "cuts sthg" > **m**-k'wet-s "cuts **my** sthg (esp. body part)"
　　　*mo-**g**-k'wet-o-s*　　*parao*　　*tav-i*　　*šen-i*　　*šen-gan*
　　　PV-O2-cut-OPT-S3sg Pharaoh:ERG　head-NOM　your-NOM　2sg-from
　　　"Pharaoh will cut off **your** head from you" (Gen 40: 19)

(40) M č'ar-un-s "writes sthg" > **m**-č'ar-un-s "writes (and sends) sthg **to me**"
　　　minǰe-s　　*me-**Ø**-č'ar-ə*　　*dzɣabi-k*
　　　owner-DAT　　PV-O3-write-AOR.S3sg　girl-ERG
　　　"The girl wrote **to the owner**" (Xubua 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 10. Contrasting superessive and unmarked version in Georgian.

root	Superessive applicative	Unmarked version
gleǰ/gliǰ- "tear"	mo=Ø-a-gliǰ-a "tore sthg (e.g. knob) off sthg"	mo=h-gliǰ-a "tore sthg off sb's body (e.g. hat off head, mask off face)"

t'q'd-	mo=Ø-a-t'q'd-a "sthg (e.g. handle)	mo=<u>s</u>-t'q'd-a "<u>sb</u>'s sthg (e.g. fingernail, arm)
"break" (intr)	broke <u>off sthg</u>"	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 <u>m-q'ep-s</u> / <u>m-**i**-q'ep-s</u> "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) G 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 PV-O2-post-AOR.1/2   again   PV-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 11. PRVs in verbs, participles and nouns (Georgian)

	*a- (root –xl- "touch")	*i- (root –s(v)r- "shoot")
finite verbs ("version")	a-xl-eb-s "touches"	i-svr-i-s "shoots"
participle in s-	s-a-xl- "house" ("site of closeness")	OG s-i-sr-a "shooting"
nouns (frozen prefix)	a-xl-o- "close, near"	i-sar- "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 & Sarjveladze 2007: 27-28, 210). The initial vowels in these nouns appear to be frozen PRVs, a hypothesis which draws support from their meanings.

Table 12. 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 the *a-prefixed nouns, one detects a semantics of space and attachment (<u>a-xl-o</u> "near" < "touching sthg/sb"), 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. <u>i-sar-</u>, L. <u>i-si̯-</u> "arrow" < "ce qui est lancé"; Vogt 1974, Klimov 1964: 102).

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 <u>trajectory</u> or <u>orientation</u> 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'ukcevitoba*), 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 <u>trajectory</u> 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 13. 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 <u>at her/him/them</u>". 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:

(i) Morphology. The morphological marker associated with both types of applicatives is a pre-radical 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.; §2.6)

(ii) 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 (§3.4).

(iii) 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 (§2.6) — subtle contrasts between applicative and basic constructions have been noted (§2.4).

(iv) 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 oject, 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- (§2.4.2 c) and *i- (§2.3.2), as well as a handful of vowel-initial nouns with what appear to be frozen PRVs, discussed in §4.

Acknowledgments

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