

CURRENT TRENDS IN  
CAUCASIAN, EAST EUROPEAN  
AND INNER ASIAN LINGUISTICS  
PAPERS IN HONOR OF HOWARD I. ARONSON

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## KARTVELIAN SERIES MARKERS

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### 0. *Grammatical ‘perversity’ in Georgian.*

At some point during my study of the Georgian language under his direction, Howard Aronson presented me with one of the key paradoxes of Kartvelian linguistics. From the perspective of a speaker of a Standard Average European language, the abundant morphology of Georgian and its sister languages is distributed in a fashion that seems to defy the logical principles we naively project onto grammars. On the one hand are what appear to be allomorphic variants which simply have to be memorized by the learner. The classic Indo-European languages, of course, are notorious for the seeming arbitrariness of their declensional and conjugational classes, so this came as no surprise for me. But on the other hand there is the perplexing — some might call it perverse — appearance of systematically ambiguous forms throughout the morphology, especially that of the verb. In recent years Howie has occupied himself for the most part with the second of these puzzles (e.g. Aronson 1984). What I propose here is to look at an instance of the former type of grammatical ‘perversity’, one that my teacher himself examined in one of his earlier publications on Kartvelian linguistics. As a result of this study, I have been obliged to backpedal a bit from a too-hasty lumping of these suffixes into one category, and silently reproach myself — not for the first time — that I shoulda listened to Howie ...

The paradigms (or ‘screeves’) of the Kartvelian verb are traditionally grouped into three series according to their morphological, syntactic and semantic features. (A so-called ‘Series IV’, occurring in Zan (Laz- Mingrelian) and some West Georgian dialects, will not be discussed here). The three series are attested in all Kartvelian languages. The distribution of verb forms among the series in Early Georgian and Svan is shown in Table 1, and the association between series and the phenomenon of case shift is shown in Table 2. (Those verbs — mostly but not exclusively transitive — which undergo case shift will be referred to as Class A verbs; those that do not are grouped into Class P).

	LINEAR/DURATIVE (SERIES I)	PUNCTILIAR (SERIES II)	RESULTATIVE (SERIES III)
STEM	*series marker (or ablaut)	*no series marker	*stative-passive
non-past	present (Gn.) present iterative (Sv.) future (Sv.) imperfective evidential	(Gn.) permansive	present perfect
past	imperfect (Sv.) conditional	aorist	pluperfect
modal	imperfect conjunctive	optative	pluperfect conjunctive

Table 1: *Early Georgian and Svan verb paradigms*

SERIES	CLASS A (“TRANSITIVE”) VERBS	CLASS P (“INTRANSITIVE”) VERBS
<b>I:</b>	<i>mama-j ze-sa x-p’ov-eb-s</i> father-ABS son-DAT O3-find-SM-S3sg “The father finds (his) son”	<i>ze-j x-i-p’ov-eb-i-s</i> son-ABS O3-PASS-find-SM-SM-S3sg “The son is being found”
<b>II:</b>	<i>mama-man ze-j p’ov-a</i> father-ERG son-ABS find-S3sg “The father found (his) son”	<i>ze-j x-i-p’ov-a</i> son-ABS O3-PASS-find-S3sg “The son was found”
<b>III:</b>	<i>mama-sa ze-j x-u-p’ovn-i-e-s</i> father-DAT son-ABS O3-OBV-find-SM-AM-S3sg “The father has found (his) son”	<i>ze-j p’ov-eb-ul ars</i> son-ABS found is “The son has been found”

Table 2: *Case shift in Early Old Georgian*  
SM = series marker; AM = aspect/mood vowel

SM	PRESENT	AORIST	PRESENT PERFECT
<b>-eb-</b>	<i>mo=i-y-eb-s</i> “takes, receives”	<i>mo=i-y-o</i>	<i>mo=m-i-y-eb-I-E-s</i> [Jn 10:18] <i>mo=g-i-y-I-E-s</i> [Jer.-3 (11th c.)]
<b>-ev-</b>	<i>gan=a-bn-ev-s</i> “scatters”	<i>gan=a-bn-i-a</i>	<i>gan=u-bn-ev-I-E-s</i>
<b>-em-</b>	<i>mo=s-c-em-s</i> “gives”	<i>mo=s-c-a</i>	<i>mo=u-c-em-I-E-s</i> (MGeo <i>mi=u-c-I-a</i> )
<b>-ob-</b>	<i>s-cn-ob-s</i> “acknowledges” <i>da=a-p’q’r-ob-s</i> “seizes”	<i>cn-o</i> <i>da=a-p’q’r-a</i>	<i>u-cn-ob-I-E-s</i> (MGeo <i>u-cvn-I-a</i> ) <i>da=u-p’q’r-I-E-s</i> [Lk 13:7]
<b>-op-</b>	<i>h-q’[v]-op-s</i> “does”	<i>q’[v]-o</i>	<i>u-q’-op-I-E-s</i> (MGeo <i>u-q’v-I-a</i> )
<b>-i-</b>	<i>da=sž-i-s</i> “judges”	<i>da=saž-a</i>	<i>da=u-sž-I-E-s</i>
<b>-Ø-</b>	<i>s-č’am-Ø-s</i> “eats”	<i>č’am-a</i>	<i>u-č’am-I-E-s</i>
<b>-av-</b>	<i>da=s-tes-av-s</i> “sows”	<i>da=tes-a</i>	<i>da=u-tes-AV-s</i>
<b>-am-</b>	<i>še=i-rt’q’-am-s</i> “girds [belt]”	<i>še=i-rt’q’-a</i>	<i>še=u-rt’q’-AM-s</i>

Table 3: *Class A aorists and present-perfects in Old Georgian*

### 1. Series markers

One important morphological characteristic common to all Kartvelian languages is the use of thematic suffixes, called series markers (henceforth SMs), to distinguish Series I stems from the Series II stems formed from most verbal roots (Table 3). Some of these SMs appear as well in the present perfect

(Series III). Each Kartvelian language has a half-dozen or so SMs with little functional differentiation among them. Georgian and the two Zan languages have largely cognate sets, whereas many of those employed in Svan cannot be related to morphemes of comparable function elsewhere in Kartvelian (Table 4). The correlation between these suffixes and the Series I / Series II aspectual distinction has led linguists to propose that the series markers once denoted such interrelated phenomena as imperfective (linear) aspect (Aronson 1979; Palmaitis & Gujejiani 1986:60), the antipassive voice (Heath 1976), and verbal plurality (Harris 1985, Tuite 1992).

Tuite	Harris 1984	GEORGIAN	SVAN	MINGRELIAN	LAZ
PK *-ew	CGZ *-ev	-ev, -eb	-e	-ap [-an]	-ap
CGZ *-v-ev	CGZ *v-ev	-ob / -op	—	-u-an	?
?CGZ *-ob	CGZ *v-ev	-ob	—	-op	-op
PK *-am/-em	CGZ *-av	-am	-em	-um	-um/-im
PK *-aw	CGZ *-av	-av	-a	-u[m]/-əm	-u[m]
PK *-ej	(unclear)	-i	-i	-e	-e
???	—	—	-e:l	—	—
???	—	—	-e:sg, -e:šg	—	—
???	—	—	-er	—	—

Table 4: *Kartvelian series markers*

CGZ = Common Georgian-Zan; PK = Proto-Kartvelian

### 1.1 *The allomorphy of series markers*

Still unexplained, however, is the allomorphy of series markers. Aronson assumes that a multiplicity of these morphemes existed in the protolanguage; then, as now, “the choice of present formant [= series marker — KT] would have been basically lexical” (1979:304). An innovative counterproposal was put forward by Alice Harris (1984, 1985:189-208). In her view, the allomorphy is of relatively recent date. She noted that all of the Georgian and Zan SMs, save one, have the phonological form -VB [V = vowel, B = any labial consonant]. The sole exception is the Georgian SM -i, with cognates in Svan and Zan, to be discussed later in this paper. All of the -VB SMs, Harris asserts (1985:194), are the descendants of a single common ancestor which she reconstructs as \*-ew. The different forms attested in Zan and Georgian are the product of an ablaut-like vowel alternation between /a/ and /e/, rounding caused by a preceding \*-w- (sometimes part of the preceding root), and the “somewhat haphazard” evolution of labial consonants in the Zan and Georgian dialects (Harris 1985:191). This brings about a state of affairs in which “it is not possible to set up a one-to-one correspondence between any Georgian SM and any Zan SM. For example, verbs that have Zan -up/um/un, or their free

variants with /i/ or /ə/ vocalism, may correspond to Georgian verbs that take no SM (Ø), to Georgian verbs that take *-av*, or to Georgian verbs that take *-i*” (Harris 1985:193). While I agree with most aspects of Harris’ analysis, and especially her important proposal to link the origin of certain SMs to verbal plurality marking, I believe Aronson was correct in refusing to put all Georgian and Zan -VB SMs in the same basket, and derive them from a single source. A close analysis of the data on SMs in Old Georgian, Zan, and the non-literary Georgian dialects indicates that, while a great deal of phonetic modification and analogical spread has most certainly taken place, a fairly strong correlation between individual Georgian and Zan SMs can be established, and therefore reconstructed at least as far back as Common Georgian-Zan [CGZ].

### 1.2 *Series markers in the Georgian dialects*

The data on SMs in the non-standard Georgian dialects, as presented in Jorbenadze’s monograph (1989) and other sources (Zhghent’i 1936; Ch’inch’arauli 1960; Dzoc’enidze 1973; Imnaishvili 1974; Nizharadze 1975; Salaridze 1978; K’ublashvili 1985), does indeed give one the impression of considerable variation, both within and among dialects. This not entirely unexpected, given the high degree of functional overlap, approaching pure allomorphy, among most of the SMs in the modern Kartvelian languages. Further confusing matters is the instability of labial consonants noted by Harris, evidence of which crops up throughout the Kartvelian-speaking territory. Nasalization of labials is especially common. Speakers of the Ingilo and Ach’arian dialects, on the extreme eastern and western frontiers of Georgia, pronounce StdGeo *venaxi* “grapevine” and *vic’ro* “narrow” with an initial /m/ (*menaxi*, *mic’ro*), as do many speakers from the interior of the country (Jorbenadze 1989:347, 548). Kartlians and Imeretians say *k’idem* rather than StdGeo *k’idev* “again”, and so forth. On the other hand, *bru(n)de* “crooked” [StdGeo *mrude*] is attested in K’axeti to the east and Ach’ara to the west, so it would appear that no simple directionality of variation can be established. Vowels, on the other hand, seem to shift in a more regular fashion — certainly more so than in the case of the labials — in most of the dialects surveyed. Once these factors are taken into consideration, there emerge from the data two particularly widespread tendencies affecting the correlation between verb roots and SMs. In the vast majority of other cases, the correlation is the same as in Old Georgian.

(i) In most lowland dialects, including the modern literary language (based principally on Kartlian), the SM *-av* (or *-am*, in those dialects where nasalization of labials has occurred) appears in many or most verbs which lack SMs in OGeo or the more conservative mountain dialects. Some verbs that lack a SM

in literary Georgian appear with *-av* or *-am* in the lowland dialects. Compare Xevsur *tib-s* “mows”, *recx-s* “washes”, *qoc-s* “slaughters” with StdGeo *tib-av-s*, *recx-av-s*, *xoc-av-s*; or StdGeo *c'er-s* “writes”, *q'ep-s* “barks” with K'axetian *c'er-am-s*, *q'ep-am-s*. It is important to note that no other SM alternates with  $-\emptyset$  in this way, not even *-eb*, which is by far the most frequently-used SM.

(ii) The distribution of the SM *-i* has shifted in two dialect regions. In east-central Georgia (Kartli and K'axeti), verbs which employ *-i* in the standard language use *-av/m* (*i-q'id-am-s* “buys”, *zard-am-s* “raises”; cf. StdGeo *i-q'id-i-s*, *zrd-i-s*). In the western dialects Gurian and Ach'arian, by contrast, *-i* appears in verbs the standard counterparts of which use *-ob* or no SM: *c'er-i-s* “writes”, *čkar-i-s* “hurries” (StdGeo *c'er-∅-s*, *čkar-ob-s*). The cited examples are either lexically atelic medioactive verbs, or transitive verbs frequently used with atelic aspect.

### 1.3 Series markers in Zan and Georgian

The most convincing evidence for formally, and semantically, distinct SMs in prehistoric Kartvelian comes from outside of Georgian. A comparison of Georgian roots with their cognates in Zan in the etymological dictionary of Fähnrich & Sarjveladze (1990) reveals an impressive number — often the majority — of cognate roots paired with cognate SMs (see also Natadze 1959).

	GEORGIAN	MINGRELIAN	LAZ	SVAN
<b>1. CGZ *-w-ew</b>	<b>-ob</b>	<b>-u-an/-u-ap</b>	?	—
*dn-	<i>v-a-dn-ob</i> “I melt sthg”	<i>v-o-din-u-an-k</i> “I lose sthg”	<i>kago=v-o-ndin-ap</i>	li-n-e (masdar)
*t'(e)p-	<i>v-a-t'p-ob</i> “I warm sthg”	<i>v-o-t'əb-u-an-k</i>	<i>b-o-t'ub-in-am</i>	—
*wlt'-	<i>da=vlt'-ob-a</i> “escape”	<i>rt'-u-ap-a</i>	<i>o-mt'-in-u</i>	li:-t'w
*mqw-	<i>da=mqw-eb-a</i> > MdGeo <i>da=mxoba</i> “overturn”	<i>v-o-xu-an-k</i> (< ... <i>-xw-u-an-k</i> )	—	li-nqw-e
<b>2. CGZ *-ob</b>	<b>-ob</b>	<b>-op</b>	<b>-op</b>	—
*q'war-	<i>q'war-ob-s</i> “loves”	<i>?or-op-a</i> (masdar)	<i>q'or-op-s</i>	—
<b>3. PK *-am</b>	<b>-am</b>	<b>-um</b>	<b>-um/-im</b>	<b>-em</b>
*b-	<i>v-a-b-am</i> “I attach sthg”	<i>b-um-ap-a</i> (masdar)	<i>k'oc'o=b-um-u</i> (masdar)	li-b-em
*cw-	<i>v-i-cw-am</i> “I put on”	<i>c-un-ap-a</i>	<i>o-c-on-u</i>	li-cw-em
*sw-	<i>v-u-sw-am</i> “I set, place”	<i>s-um-al-a</i>	<i>o-s-um-u</i>	—
*s'w-	<i>v-sw-am</i> “I drink”	<i>š-um-ap-a</i>	<i>o-š-um-u</i>	[-šw-]

Table 5: Georgian and Zan series markers with cognate verb roots

It would appear that the phonetic changes mentioned above, leading to the coalescence of *-av* and *-am*, *-eb* and *-em* and the like in some dialects, are of

relatively recent date. The Mingrelian cognates of Georgian verb roots that select *-ob* appear with the cognate SM *-u-an* (with the evident exception of activity verbs, which take *-ob* in Georgian and *-op* in Zan; this latter may have been borrowed from Georgian). The CGZ ancestor of Georgian *-am*, although it is merging with *-av* in many modern dialects, can be easily separated from the ancestor of the latter on the basis of comparison with Zan (Tables 5 & 6).

PK	GEORGIAN	MINGRELIAN	LAZ
<i>t'ex-</i> subgroup	1. alternates between SM <i>-av</i> & $\emptyset$		
* <i>racx-</i>	<i>racx-v-a</i> “count” <i>v-h-racx-[av]</i> / <i>v-racx-e</i>	<i>k'o=rocx-u-a</i> <i>v=k'o=rocx-ən-k</i>	<i>o-k'o=rocx-u</i> <i>b=k'o=rocx-up</i>
* <i>t'ex-</i>	<i>t'ex-a</i> “break” <i>v-h-t'ex-[av]</i> / <i>v-t'ex-e</i>	<i>t'ax-u-a</i> <i>b-t'ax-ən-k</i>	<i>o-t'ax-u</i> <i>b-t'ax-um</i>
* <i>c'ler-</i>	<i>c'er-a</i> “write” <i>v-s-c'er-[av]</i> / <i>v-c'er-e</i>	<i>č'ar-u-a</i> <i>v-č'ar-ən-k</i>	<i>on-č'ar-u</i> <i>b-č'ar-um</i>
<i>qan-</i> subgroup	2. always (?) with SM <i>-av</i>		
* <i>k'(a)r-</i>	<i>k'r-v-a</i> “bind, affix” <i>v-h-k'r-av</i> / <i>v-k'ar</i>	<i>k'ir-u-a</i> <i>k'ir-un-s</i>	<i>o-k'or-u</i> <i>b-k'or-um</i>
* <i>p(a)l-</i>	<i>pl-v-a</i> “bury” <i>v-h-pl-av</i> / <i>v-pal</i>	<i>pul-u-a</i> <i>v-pul-un-k</i>	<i>o-mpul-u</i> <i>m-pul-um</i>
* <i>q(a)n-</i>	<i>qn-v-a</i> “plough” <i>v-h-qn-av</i> / <i>v-qan</i>	<i>xon-u-a</i> <i>v-xon-un-k</i>	

Table 6: Georgian verbs with SM *-av* and their Zan cognates  
[verbal noun (masdar), 1sg present (and aorist)]

The distinction is particularly clear when one compares the masdar (nominalized) forms of the verb; cf. Geo. *v-a-b-am* “I bind”, masdar *b-m-a*, Ming. *v-o-b-un-k*, masdar *b-um-ap-a*; Geo. *v-h-k'r-av* “I affix”, masdar *k'r-v-a*, Ming. *v-k'ir-ən-k*, masdar *k'ir-u-a*. The case of Georgian verbs with the SM *-av* is central for the arguments to follow, and therefore merits a brief digression. On the basis of evidence from the different stages of the literary language, and from the dialects, we can provisionally divide the verbs in *-av* into two subsets: those which are always attested with a SM in Series I, and those which take *-av* in some dialects,  $\emptyset$  in others (i.e. the verbs discussed in (i) of the previous section). The alternation between SM *-av* and  $\emptyset$  is observable as far back as Old Georgian, as shown in the following two excerpts from medieval manuscripts. In the first, the verb root *-racx-* “count” is used without a SM in Series I, in the second it is accompanied by *-av*:

*romeli-igi racx-d-a mat* “who counted them” [Isaia 33:18 (Jerusalem), 11th c.]  
*ertbamad a-h-racx-AV-s* “he counts it likewise” [Ath.-11 147v, 10-11th c.]

In order to look further back in time, we must make use of comparative data from Zan. As illustrated in Table 6, the Zan counterparts of both types of

Georgian *-av*-verbs almost always select the SM *-um/-un/-ən*, i.e. the SM cognate with *-av* (Proto-Kartvelian [PK] *\*\*-aw* > PZan *\*-ow* > *\*-uw* > *-um/-un/-ən* (Deeters 1930:124-5; Danelia 1976; Mach'avariani 1988)). Within the Georgian-Zan branch of Kartvelian, the association between verb root and SM across languages is especially consistent in the case of CGZ *\*-aw*. It follows that Old Georgian verb roots such as *t'ex-* and *c'er-*, although not used with a SM, hark back to ancestral forms which bore some association with the SM *-av*. Therefore the appearance of *-av* in conjunction with these roots in the modern dialects is no recent phenomenon, but on the contrary rooted deep in the prehistory of Georgian and its sister languages. The two sets of Georgian *-av* verbs go back, according to Gamq'relidze & Mach'avariani (1965:262-5), to formally distinct verb conjugations in PK. The *t'ex-* subgroup traces its descent from Gamq'relidze & Mach'avariani's Thematic type (1), with an athematic Series I stem opposed to a lengthened-grade Series II stem:

	PK	OLD GEORGIAN	MINGRELIAN	SVAN
present 1sg:	<i>*h-w-ber</i> "I blow"	<i>v-ber-[av]</i>	<i>v-bar-un-k</i>	<i>a-be:l-e</i>
aorist 1sg:	<i>*w-be:r-e</i>	<i>v-ber-e</i>	<i>v-bar-i</i>	<i>čw-ad=be:l-e</i>

The members of the second subgroup, with obligatory *-av* in Series I, derive from PK Class A verbs (Athematic type (4)) with thematic Series I and a-grade, athematic Series II stems:

	PK	OLD GEORGIAN	MINGRELIAN	SVAN
present 1sg:	<i>*h-w-qn-aw</i> "I plough"	<i>v-qn-av</i>	<i>v-xon-un-k</i>	<i>xw-a-qn-i</i>
aorist 1sg:	<i>*w-qan</i>	<i>mo=v-qan</i>	<i>do=v-xon-i</i>	<i>o-qan</i> { <i>a-xw-qan</i> }

The extension of the SM *\*-aw*, rather than some other, to the *t'ex-* verbs at a very early stage, no later than CGZ, might be interpreted to imply that they must have shared some feature with the *qan-* verbs, which were coupled with the SM *\*-aw* at an even earlier period. What could this feature have been? In a ground-breaking article on Kartvelian aspect, Mach'avariani (1974:129-130) offers the proposal that, since the opposition between Series I and Series II was one of durative vs. punctiliar aspect, those verb roots which were semantically punctiliar appeared in their base form in Series II and added a durativizing suffix (the SM) to form their Series I stems. Verb roots such as *t'ex-* and *c'er-*, associated with athematic Series I and thematic Series II stems, did not employ a SM in Series I because "the root itself expresses durative aspect" (*tvit puze gamoxat'avs diurat'iul asp'ekt's*). In a recent paper I have offered an alternative explanation, according to which the *t'ex-* and *qan-* conjugations stem from a common pattern, which in its earliest reconstructable stage was characterized



by a mobile dynamic accent. At this time unaccented vowels were susceptible to reduction or loss, resulting in the ablaut pattern of the *qan-* verbs. Later in the PK period, the accent became weaker, with less contrast between accented and unaccented vowels, and no longer shifted between the Series I and II stems. The *t'ex*-type of conjugation dates from this second stage (Tuite 1998):

STAGE A: strong, mobile accent, reduction or less of unaccented vowels

Type *q(a)n-* : (present) *\*x-w-qan-áw* > *x-w-qn-aw*

(aorist) *\*w-qán-e* > *w-qan-Ø*

STAGE B: weak, fixed accent

Type *t'ex-* : (present) *\*x-w-t'éx-aw* (> *x-w-t'ex-Ø* in some Geo. dialects)

(aorist) *\*w-t'éx-e*

The innovation of Series I stems such as *xw-t'ex-Ø* “I break sthg” without the SM *-aw* in some dialects, including the Old Georgian literary language, may have resulted from purely structural considerations (with a thematic aorist, the SM was no longer the primary means for distinguishing the Series I stem from the Series II stem), and/or from the continued effect of the accent. (Cf. the loss or reduction of the SMs in a handful of Old Georgian stative verbs: *\*ǰ-ev-s* > *ǰes* “sthg lies”; *\*x-u-ǰ-ev-s* > *\*xuǰs* > *(x)uc* “sthg lies to/for sb = sb has sthg”; *\*x-u-q-am-s* > *(x)uqms* “sb wants sthg”; *\*x-a-dg-a[v]-s* > *\*xadgas* > *(x)adgs* “sthg stands on sthg” (Suxishvili 1976:43-44)).

## 2. *SMs and ablauting verbs*

The vocalic alternation i/e is well-attested in the Georgian and Svan verbal systems, and can be reconstructed for at least a late stage of PK. In a recent article on Kartvelian ablauting verbs (Tuite 1998), I argued that the existence of two Series I stems for this class of verbs in Georgian (cf. standard Georgian *v-drek-Ø*, dialectal. *v-drik'-av* “I bend it”; std. *v-k'reč'-Ø*, dial. *v-k'rič'-av* “I cut it [hair]”; std. *v-čxvlet'-Ø*, dial. *v-čxvlit'-av* “I poke, prick it” (Shanidze 1953 §452; Jorbenadze 1975:132-135)) is not due to a relatively recent innovation in nonstandard Georgian, as is often supposed, but is in fact quite ancient in Kartvelian. The Zan cognates of Georgian ablauting verbs have Series I stems of the type *\*drik'-aw* (see Table 9). The hypothesis receives further support from the presence in Svan of two subgroups of ablauting verbs, Type □ with thematic Series I stem with root vocalism /i/, and Type □ (only preserved in a handful of verbs) with athematic Series I stem with root vocalism /e/. My proposed reconstruction of the morphology of ablauting verbs in Proto-Svan is shown in Table 8, contrasted with that of Mach'avariani 1986. In Table 9 I give my reconstruction of the Series I stems of ablauting verbs for all three Kartvelian branches, as presented in the article mentioned above (Tuite 1998).

GEORGIAN		MINGRELIAN	
CLASS A	CLASS P	CLASS A	CLASS P
<i>šret'-Ø-s</i> “sb extinguishes sthg”	<i>šrt'-eb-i-s</i> “sthg is extinguished, goes out”	<i>škirit'-ən-s</i> ( <i>&lt; *škrit'-ow-s</i> <i>&lt; **šrit'-aw-s</i> )	<i>škirt'-u-n</i> ( <i>&lt; *škrt'-ow-n</i> <i>&lt; **šrt'-aw-n</i> )
<i>drek'-Ø-s</i> “sb bends sthg”; ModG <i>drik'-av-s</i>	<i>drk'-eb-i-s</i> “sthg bends”	<i>dirik'-ən-s</i> ( <i>&lt; *drik'-ow-s</i> <i>&lt; **drik'-aw-s</i> )	<i>dirk'-u-n</i> ( <i>&lt; *drk'-ow-n</i> <i>&lt; **drk'-aw-n</i> )
<i>c'q'wed'-Ø-s</i> “sb cuts off sthg”; ModG <i>c'q'vit'-av-s</i>	<i>c'q'(w)d'-eb-i-s</i> “sthg is cut off, interrupted”	<i>č'q'vid'-ən-s</i> ( <i>&lt; *č'q'uid'-ow-s</i> <i>&lt; **c'q'uid'-aw-s</i> )	<i>č'q'ord'-u-n</i> ( <i>&lt; *č'q'ud'-ow-n</i> <i>&lt; **c'q'ud'-aw-n</i> )

Table 7: Presents of ablauting verbs in Georgian and Mingrelian.

	Georgian	Svan (Type □)	Svan (Type □)	Proto-Svan (Mach'avariani)	Proto-Svan (Tuite 1998)
Class A present	<i>v-drek'-Ø</i> / <i>v-drik'-av</i> “I bend sthg”	{ <i>xw-t'ix-e</i> } “I return sthg”	{ <i>xw-ter-Ø</i> } “I recognize sb/sthg”	<i>*xw-t'ex-Ø</i>	<i>*xw-t'ex-Ø</i> / <i>*xw-t'ix-aw</i>
Cl. A aorist	<i>v-drik'-e</i>	{ <i>a-xw-t'ax</i> }	{ <i>a-xw-tax</i> }	<i>*a-xw-t'ix-e</i>	<i>*a-xw-t'ix-i</i>
Cl. P present	<i>v-drk'eb-i</i>	{ <i>xw-t'ex-en-i</i> }	{ <i>xw-ter-en-i</i> }	<i>*xw-t'ex-en-i</i>	<i>*xw-t'ex-en-i</i>
Cl. P aorist	<i>v-derk'-Ø</i>	{ <i>a-xw-t'ex-Ø</i> }	{ <i>a-xw-ter-Ø</i> }	<i>*a-xw-t'ex-Ø</i>	<i>*a-xw-t'ex-Ø</i>

Table 8: Ablauting verbs in Proto-Svan

CLASS A (TRANSITIVE)	
athematic Series I stem, root vowel /e/	Series I stem in *-aw, root vowel /i/
G. <i>drek'-Ø-s</i> “sb bends sthg”	G. <i>drik'-aw-s</i>
M. <i>zan'-Ø-s</i> <i>&lt; *zel'-Ø-s</i> “sb kneads sthg”	M. <i>dirik'-ən-s</i> <i>&lt; *drik'-aw-s</i>
S. <i>ter-Ø</i> “sb recognizes sb/sthg”	S. <i>t'ix-e</i> “sb returns sthg” <i>&lt; ?Proto-Svan *t'ix-aw</i>
CLASS P (MONOVALENT INTRANSITIVE)	
Series I stem in *-ej	Series I stem in *-aw
G. <i>drk'-eb-i-s</i> <i>&lt; *drk'-Ø-ej-s</i>	G. <i>drk'-eb-o-d-</i> <i>&lt; *drk'-[eb]-aw-d-</i>
M. —	M. <i>dirk'-u-n</i> <i>&lt; *drik'-aw-n</i>
S. <i>t'ex-en-i</i> <i>&lt; *tex-[en]-ej-</i>	S. —
CLASS P (PASSIVE)	
Series I stem in *-ej	Series I stem in *-aw
G. <i>x-i-drik'-eb-i-s</i> <i>&lt; *x-i-drik'-ej-s</i>	G. <i>x-i-drik'-eb-o-d-</i> <i>&lt; *x-i-drik'-[eb]-aw-d-</i>
M. <i>i-dirik'-e-n</i> <i>&lt; *[x]-i-drik'-ej-n</i>	M. <i>i-dirik'-u-n</i> <i>&lt; *[x]-i-drik'-aw-n</i>
S. <i>i-t'i:x-i</i>	S. ( <i>?*i-t'i:xaw</i> )
CLASS P (PASSIVE OF STATE)	
Series I stem in *-ej	Series I stem in *-aw
G. <i>x-a-pen-i-e-s</i> “it is spread”	G. —
M. —	M. <i>č'ar-u-n</i> <i>&lt; *x-c'er-aw-n</i> “it is written”
S. <i>x-a-t'ix</i> <i>&lt; *x-a-t'ex-i</i>	S. <i>ter-a</i> <i>&lt; *ter-aw-</i>

Table 9: Series I stems of ablauting verbs in Georgian, Mingrelian and Svan

### 3. *The series marker \*-ej*

As noted above, the only Georgian-Zan SM which is not of the form -VB is *\*-ej* (Georgian *-i-*, Zan *-e-*), a cognate of which also appears in Svan (*-i-*).

	GROUP 1		GROUP 2		
<i>series markers in Proto-Kartvelian, Georgian, Zan and Svan.</i>	<i>*-ej</i> G. <i>-i-</i> Z. <i>-e-</i> S. <i>-i-</i>	<i>*-aw</i> G. <i>-av-</i> Z. <i>-u(n)/ə(n)</i> S. <i>-a-</i>	<i>*-am/-em</i> G. <i>-am/em</i> Z. <i>-um-</i> S. <i>-em-</i>	<i>*-ew</i> G. <i>-eb/ev-</i> Z. <i>-ap/an-</i> S. <i>-e-</i>	<i>others</i> G. <i>-ob/op ...</i> Z. <i>-u-an ...</i> S. <i>-e:sg/e:l ..</i>
Class A Series I	ge, <i>SV</i>	GE, ZA	ge, sv, za	GE, SV, ZA	ge, sv, za
Class A Series III	GE	GE, SV, ZA	ge	—	—
thematic passives of state	GE, SV	GE, SV, ZA	—	—	—
permansive-habitual	GE	—	—	—	—
potentialis passive	(GE, SV), ZA	—	—	—	—
stem-final SM in Series I stems of passives	GE, SV, ZA	(ge), ZA	—	—	—

Table 10: *Distribution of series markers in the Kartvelian languages*  
(SV = principal marker; *SV* = frequent ; sv = infrequent ; — = absent)

The contexts in which the descendants of *\*-ej* appear overlap to a considerable degree with those where the SM *\*-aw* is employed. For this reason, and for others which will become apparent further on, *\*-ej* and *\*-aw* will be classed together as “Group 1” SMs, as distinct from *\*-am/em*, *\*-ew*, and the others (Group 2). As shown in Table 10, the daughters of *\*-ej* — if indeed the latter was a single morpheme in PK — have taken on a wide variety of functions, especially in Georgian. Some of these functions will be discussed briefly here.

(a) *potentialis passives in -e (Zan), -i (Geo, Svan)*. The Mingrelian verb distinguishes two types of prefixal passives: a dynamic passive of the type *i-nax-uu-n* “it is being washed” [Geo. *irecxeba*], and a so-called potentialis, such as *i-naxv-e-n* “it can be washed, it is washable” [Geo. *šeižleba (ga)irecxos*]. As Chikobava (1937) noted, Georgian and Svan prefixal passives can cover both meanings, dynamic and potentialis, though without a change in form (Geo. *ič’meba, ismeba* [Early Georgian *xič’m-eb-i-s, xism-eb-i-s*] = Svan *i:m-i, itwn-i* “one can eat, drink it; it is edible, potable”). It would appear that the PK verbal system included a passive of the structure *\*i-√-(ew)-ej* the semantic range of which included potentiality (Tuite 1998). The suffix in the Mingrelian dynamic passive contains the descendant of the SM *\*-aw*, which has undergone the Zan vowel shift: *i-nax-u-u-n* < Proto-Zan *\*i-nax-aw-ow-n* < PK *\*i-√-(ew)-aw-*. One trace of the passive-forming function of *\*-aw* is

retained in Georgian, incorporated into the Class P imperfect-stem formant *-o-d-* (compare the transitive imperfect-stem formants *-d-* or *-i-d-*). Rogava (1954) recognized in the element *-o-* the cognate of the Zan Class P passive formant *-u-*, i.e. PK *\*-aw* (see also Gamq'relidze & Mach'avariani 1965:274-5). An Old Georgian passive imperfect such as *x-i-drik'-eb-o-d-a* "sthg was being bent" would go back to *\*x-i-drik'-[ew]-aw-d-a*, with the same stem morphology as the antecedent of the Mingrelian passives in *i-√-u-u-*. It is not yet clear whether the presence of two SMs, one from Group 2, followed by one from Group 1 (*\*-ew-aw*, *\*-ew-ej*) is an innovation of the Georgian-Zan subgroup, or is of earlier origin.

(b) *Class A verbs with SM \*-ej*. The Zan morpheme *-e-*, descended from *\*-ej*, has a far more limited distribution than its Georgian and Svan cognates. The Zan SM *-e-* is restricted to Class P verbs, including true passives and statives (e.g. Zan *o-r-e-n* "is" < PK *\*a-r-ej-*; cf. Geo. *a-r-i-s*, Svan *æ-r-i*), if, as I believe, the SM *\*-ej* and the permansive marker *\*-ej* were originally one and the same (Mach'avariani 1988). The Georgian and Svan SM *-i-* appears in Class A verbs as well; in Svan *-i-* is one of the two major SMs, along with *-e-*. The Class atelic (activity) verbs of both languages frequently take the SM (and erstwhile permansive marker) *-i-*, whereas their Zan equivalents employ *-an/ap* < *\*-ew*, e.g. Georgian *k'iv-i-s*, Svan *k'i:l-i* "screams" (but Ming. *rk'il-an-s*); Geo. *zu-i-s*, Svan *zu:l-i* "weeps, sobs" (but Ming. *zul-an-s*). In Georgian, there are three principal formal types of transitive Class A verbs which employ the SM *-i-*, these being (a) verbs with nonsyllabic roots in Series I, typically terminating in the sonants /l/ or /r/, with /a/ vocalism in all of the aorist forms (e.g. pres. *tl-i-s* "whittles, peels", aor. 1sg *v-tal-e*, aor. 3sg *tal-a*; pres. *txr-i-s* "digs", aor. 3sg *txar-a*); (b) verbs with nonsyllabic roots in Series I terminating in the sonants /n/ or /r/, with /e/ vocalism in the 1st and 2nd-person aorist forms only (e.g. pres. *cr-i-s* "sifts", aor. 1sg *v-cer-Ø*, aor. 3sg *cr-a*; pres. *pšvn-i-s* "crumbles, pulverizes", aor. 1sg *v-pšven-Ø*, aor. 3sg *pšvn-a*); (c) stable-root verbs with a more-or-less frozen stem-final formant *-n-*: *gzav-n-i-s* "sends" (cf. *gza* "road"), *varcx-n-i-s* "combs" (cf. *sa-varcx-al-i* "comb") (Shanidze 1953 §454; Melikischwili 1978). All of these subgroups are evidently old in Kartvelian. Types (a) and (b) reflect ancient accent shifts similar to that of the *qan-* type of verbs with SM *\*-aw* (e.g. pres. *v-pšvn-i* < *\*x-w-pšwen-éj*; aor. *v-pšven* < *\*w-pšwén-e*). A handful of type (a) verbs, interestingly, are attested in Old Georgian with non-syncopated present stems. Cf. Modern Georgian *šl-i-s* "spreads" and Old Georgian *šal-av-s*, with the same vocalism in Series I and II, and a SM cognate with that of its Zan counterpart (Ming. *škil-ən-s* < *\*šl-aw-s*) (Imnaishvili 1968:49). The *-n-* suffix

found in type (c) is attested in many of the Zan and Svan cognates of these verbs as well, e.g. Geo. *k'ort'-n-i-s*, Ming. *k'irt'-on-ən-s*, Svan *a-k'ərt'-ən-e* “preens, plucks, perforates”. The Zan languages show no trace of the SM *\*-ej* in the conjugation of Class A verbs. Gamq'relidze & Mach'avariani (1965: 238) note the frequent correspondence of Georgian *-i-* to Zan *-ən/un-* (see Table 11), and wonder if Zan once had a Class A SM descended from *\*-ej* which had been “driven out” of the morphology by functionally-equivalent SMs (*ibid*, 254 note 1). The evidence just presented from the morphology of Class P verbs demonstrates the close semantic proximity of *\*-aw* and *\*-ej* (although Mingrelian attests to a meaning distinction between them). In view of this pattern, the correspondences shown in Table 11 should not come as a total surprise. However they might differ as to meaning or function in certain contexts, *\*-aw* and *\*-ej* obviously group together as against the other SMs (i.e. those listed as Group 2 in Table 10).

VERBS WITH NON-ALTERNATING ROOTS (ATHEMATIC PRESENT AND THEMATIC AORIST IN OLD GEORGIAN) — T'EX- TYPE WITH FIXED ROOT ACCENT			
Common Georgian-Zan (and Proto-Kartvelian?)	Old Georgian	Zan (Mingrelian)	Svan
* <i>xw-č'éd-aw</i> / (?...-ej)	<i>v-č'ed-Ø</i> “I forge sthg”, aor. <i>v-č'ed-e</i>	<i>b-č'k'ad-ən-k</i>	<i>xw-a-šk'æ:d-i</i>
* <i>xw-č'ám-aw</i>	<i>v-č'am-Ø</i> “I eat sthg”, aor. <i>v-č'am-e</i>	<i>b-č'k'um-un-k</i> / <i>b-č'k'un-Ø-k</i>	————
* <i>xw-tél-aw</i>	<i>v-tel-Ø</i> “I trample sthg”, aor. <i>v-tel-e</i>	<i>b-tal-ən-k</i>	<i>xw-i-tl-e</i> (ablauting)
* <i>xw-xwét'-aw</i>	<i>v-xwet'-Ø</i> “I scrape sthg”, aor. <i>v-xwet'-e</i>	<i>b-xwat'-ən-k</i>	<i>xwit'-e</i> { <i>xw-xwit'-e</i> } (ablauting)
VERBS WITH NON-SYLLABIC ROOT IN SERIES I (THEMATIC PRESENT) — QAN- TYPE WITH MOBILE ACCENT			
* <i>xw-š(a)l-éj</i> / ...-áw	<i>v-šl-i</i> “I spread, unfold sthg”, aor. <i>v-šal-Ø</i>	<i>b-škil-ən-k</i>	<i>mə-rš-i</i> { <i>xw-rš-i</i> }
* <i>xw-tx(a)r-éj</i> / ...-áw	<i>v-txr-i</i> “I dig sthg”, aor. <i>v-txar-Ø</i>	<i>b-txor-ən-k</i>	<i>xw-æ-št-xr-i</i>
* <i>xw-z(a)rd-éj</i> / ...-áw	<i>v-zrd-i</i> “I raise sb”, aor. <i>v-zard-Ø</i>	<i>b-rd-ən-k</i>	<i>xw-i-rd-i</i>
* <i>xw-γrγ(e)n-éj</i> / ...-áw	<i>v-γrγn-i</i> “I gnaw sthg”, aor. <i>v-γrγen-Ø</i>	<i>b-γirγon-ən-k</i>	————
* <i>xw-prckw(e)n-éj</i> / ...-áw	<i>v-prckwn-i</i> “I peel sthg”, aor. <i>v-prckwen-Ø</i>	<i>b-purckon-ən-k</i>	————
* <i>xw-q(a)n-áw</i> / (?...-éj)	<i>v-qn-av</i> “I plough sthg”, aor. <i>v-qan-Ø</i>	<i>b-xon-ən-k</i>	<i>xw-a-qæn-i</i>

Table 11: *Series I stems of qan- and t'ex- type verbs*

#### 4. Group 1 series markers, passives of state, and the present-perfect stem

In this section I will examine the morphology of the Series III paradigms of Kartvelian Class A verbs. This series merits special attention because of its relatively recent origin (compared to Series I and II), its relation to various types of stative verbs, and its formal heterogeneity. With regard to origins, it is evident that the Series III paradigms arose from the appropriation of formally passive verb forms into the Class A conjugation to denote resultativity (present state resulting from past action) and in many cases evidentiality (present state used to infer past action) (Natadze 1955; Schmidt 1962, 1979; Harris 1985: 271-295). The most likely proximal sources for the morphology of the Class A Series III paradigms are the passives of state, which are formally identical — or nearly so — to the former in all Kartvelian languages (see 12 & 13 below).

	CLASS A TRANSITIVE	CLASS P INTRANSITIVE
stative	<i>m-i-c'er-i-e-s</i> “it is written in my X”	<i>c'er-il ar-s</i> “it is written”
passive	<i>m-e-c'er-a</i> “it was written in my X”	<i>c'er-il x-i-q'o</i> “it was written”
Series III	<i>(da=)m-i-c'er-i-e-s</i> “I have written it” <i>(da=)m-e-c'er-a</i> “I had written it”	<i>(da=)c'er-il ar-s</i> “it has been written” <i>(da=)c'er-il x-i-q'o</i> “it had been written”

Table 12: *Statives and Series III paradigms in Old Georgian*

Stative passives and Class A present-perfect stems in the various Kartvelian languages include the suffixes shown in Table 13 (Pshav, Xevsurian and Tushetian are particularly conservative dialects of spoken in northeast Georgia (Baramidze 1977; Cocanidze 1978; Ch'inch'arauli 1960; Uturgaidze 1960)).

		CLASS A PRESENT PERFECT	STATIVE / PASSIVE
Early Georgian	1. <b>-i-e-</b> 2. <b>-av-</b> 3. <b>-am-</b>	1. <i>še=x-u-p'q'r-i-e-s</i> “has seized sb/st” 2. <i>da=x-u-marx-av-s</i> “has buried sb/st” 3. <i>da=x-u-b-am-s</i> “has bound sb/sthg”	1. <i>x-u-p'q'r-i-e-s</i> “holds” 2. <i>x-k'id-av-n</i> “hangs” 3. — ( <i>x-u-b-n</i> “is bound”)
Pshav, Tushetian, Xevsurian	<b>-av-i-</b>	<i>gama=u-b-av-(i-s)</i> “has bound sb/sthg to sthg”	<i>h-b-av-(i-s)</i> “is bound, attached”
Svan	1. <b>-a</b> 2. <b>[+lg]</b>	1. <i>otrek'a</i> {ad-x-o-rek'-a} “has hung sthg” 2. <i>x-o-di:g-a</i> “has extinguished sthg”	1. <i>x-o-rk'-a</i> “sb's sthg hangs” 2. <i>i-di:g-i</i> “is extinguished (by sb)”
Mingr.	<b>-u-</b>	<i>u-č'k'om-u-n</i> “has eaten sthg”; <i>m-i-č'ar-u-n</i> “I have written sthg”	<i>a-č'k'om-u-n</i> “sb's sthg is eaten” <i>č'ar-u-n</i> “sthg is written”
Laz	<b>-u-</b>	<i>(u-č'k'om-u-n</i> “has eaten sthg”)	<i>u-y-u-n</i> “sb has sthg”

Table 13: *Class A present-perfect paradigms in Kartvelian*

As can be seen, different suffixes are employed in Georgian, Zan and Svan; furthermore, the literary Georgian language employs three allomorphs of the present-perfect formant. I will demonstrate here that the two Proto-Kartvelian morphemes whose descendants I class as Group 1 series markers, *\*-aw-* and *\*-ej-*, had as one of their primary functions the derivation of stative passives from transitive verb roots. The stative and present-perfect formants of Georgian, Svan, Laz and Mingrelian are descended from these suffixes.

Let us consider the role played by SMs in the construction of these paradigms. In Old Georgian, most Class A verbs formed their present perfects by the addition of the compound suffix *-i-e-* to either the Series I or Series II stem (more on this below). The exceptions are Class A verbs with the series markers *-av-* and *-am-*, which appear to double as present-perfect formants. As a result, forms such as *da=x-u-marx-av-s* are potentially ambiguous, since they could be construed as either presents (“sb buries sb’s sb [relative]”) or present-perfects (“sb has buried sb”). The particular semantic trait of *-av-* which led to its becoming an allomorph of the present-perfect formant *-i-e-* evidently predates the separation of Class A Series III from the stative conjugation, in view of the presence of *-av* in many stative verbs.

PK	GEORGIAN	SVAN	LAZ-MINGRELIAN
<b>1. statives in *-aw-</b>	<i>x-k'id-av-s</i> “has, holds” <i>x-in-av-s</i> “likes” <i>x-e-s-av-s</i> “hopes” <i>dg-a-s</i> “stands” (<?* <i>dg-aw-s</i> )	<i>ter-a</i> “is visible” (< * <i>ter-aw</i> ) <i>x-o-rk'-a</i> “sb’s X hangs” <i>x-æ:-b</i> (< * <i>x-e-b-aw</i> ) “is tied”	<i>b-u-n</i> “is tied” (< PZan * <i>b-ov-n</i> < PK * <i>*x-b-aw-n</i> ) <i>m-i-čk-u-(n)</i> “I know” <i>dg-u-n</i> “stands”
<b>2. root statives. *-Ø-</b>	<i>x-u-q'var-s</i> “loves” <i>x-č'ir-s</i> “cares” <i>čan-s</i> “is visible”	<i>sgu(:)r</i> “sits” <i>x-o-č'ir</i> “needs”	[Mgr] <i>u-?or-s</i> “loves” [Lz] <i>no=k'ir-s</i> “is tied” <i>ʔun-s</i> “has”
<b>3. per-mansive -present in *-ej-</b>	(a) STATIVES IN -I- : <i>a-r-i-s</i> “is” <i>x-e-šin-i-s</i> “fears” (b) STATIVES IN -I-E- : <i>x-g-i-e-s</i> “is, exists” <i>x-u-p'q'r-i-e-s</i> “holds”	<i>æ-r-i</i> “is” <i>x-o-r-i</i> “has”	STATIVES IN -E (< * <i>aj</i> < * <i>ej</i> ) <i>o-r-e-n</i> “is” <i>x-e-n</i> “sits”

Table 14: *Stative verb classes in Kartvelian*

Consider the formal classes of Kartvelian statives shown in Table 14. The Svan suffix *-a* in statives such as *ter-a* “is visible” can be linked to an ancestral *\*-aw-* in straightforward fashion given the abundant evidence for loss of final consonants in Proto-Svan (e.g. PK \**taw-* “head” > PSvan \**šdaw* > Sv. *šda* “ear [of corn]” (Fähnrich & Sarjeladze 1990:142)). Monosyllabic statives with

lengthened vowels, such as *x-æ:-b* “is tied” (?< *\*x-e-b-aw*) and *x-æ:-z* “sthg lies on sthg” may have had the same suffix at one time; its subsequent loss led to compensatory lengthening and lowering of the version vowel (Topuria 1967:208; Tuite 1997). As for the Zan languages, Danelia (1976) argued that the *-u-* suffix in stative verbs such as *b-u-n* “it is tied”, *tas-u-n* “it is sown” goes back to Proto-Zan *\*-ov-* < PK *\*-aw*, via the Zan vowel shift (cf. PK *\*mc'q'aw-* “cherry laurel” > PZ *\*mc'q'ow* > Laz *mc'u* (Fähnrich & Sarjveladze 1990:228)). We can therefore reconstruct a PK series marker *\*-aw-* which, due to its meaning, was selected to form stative verbs from transitive verb roots, although it also appears with what are evidently primary stative roots (e.g. Georgian stative verb *dg-a-s* “stands”, which almost certainly goes back to *\*dg-aw-s*, cf. Mingrelian *dg-u-n* “stands” (Suxishvili 1976:43-44)). The distribution of *\*-aw* has shifted in some of the daughter languages. Whereas in Svan, *-a*, the reflex of *\*-aw*, is limited to statives (e.g. *x-a-žx-a* “is called sthg [e.g. name]”, *x-u-γw-a* “has”) and to present perfects, the Zan cognate *-u-* is selected by both stative verbs and certain groups of passives (e.g. Mingr. *v-t'əb-u-k* “I become warm”, *i-č'ar-u-u-n* “it is written”).

#### 4.1 *Root and derived statives*

The verb roots of PK can be divided into two principal groups according to their fundamental lexical aspect, as reflected in their formal properties. The class of atelic verb roots includes basic statives and activity verbs, which — like atelic verbs in many languages — had defective paradigms. More precisely, Kartvelian atelics did not systematically oppose Series I and Series II forms; indeed, it may have been the case that in PK these verbs made exclusive use of forms coming from one or the other series but never from both (Shanidze 1982:134-8; Tuite 1994). Telic verb roots appeared, in principal, in the full range of Series I and II paradigms. The inventory of statives in Proto-Kartvelian included both basic (or root) statives and those derived from transitive roots through passivization. Root statives either had no SM (*\*čan-s* “is visible”, *\*x-u-q'war-s* “loves”), or the so-called permansive suffix *\*-ej-* (*\*a-r-ej-s* “is”, *\*q'iw-ej-s* “crows”). The signification of this suffix has been determined primarily on the basis of evidence from Old Georgian, which made use of several permansive verb forms (Chikobava 1948). In the conjugation of telic verbs, *-i-* (< *\*-ej-*) appeared in several paradigms whose primary function was to indicate habitual, regular occurrences or eternal truths, e.g. *mas x-u-rkw-i c'arved da c'ar=vid-i-s* “I tell him ‘go’, and he goes” [Mt 8:9 (Xanmet'i gospels, Kajaia 1984)]. In the more reduced range of paradigms available to atelic verbs, the permansive forms the unmarked present indicative



of verbs such as *q'iw-i-s* “crows”, which seem not to have had Series I paradigms in the language of the oldest texts (the past indicative was formally an aorist — *katami q'iv-a* “the cock crowed” [Lk 22:60] — rather than an imperfect, as was the case for most atelic verbs) (Tuite *in press*). The primary formant deriving statives from telic roots was evidently *\*-aw*, since its daughter forms have this function in all attested Kartvelian languages (Fig 14). In Georgian *-av* alternates with *-i-e* in this role; their distribution seems arbitrary, but a curious fact may point the way toward understanding its motivation at an earlier stage of the language.

STATIVES IN -AV-		STATIVES IN -I-E-	
Class A (Group 2 SM <i>-eb, -ev, -ob</i> )	Stative in <i>-av</i>	Class A (Group 1 SM <i>-av</i> )	Stative in <i>-i-e-</i>
<i>a-k'id-eb-s</i> “hangs”	<i>h-k'id-av-s</i>	<i>s-tes-[av]-s</i> “sows”	<i>s-tes-i-e-s</i>
<i>a-tr-ob-s</i> “makes drunk”	<i>h-tr-av-s</i> “is drunk”	<i>h-k'ec-[av]-s</i> “folds”	<i>a-k'ec-i-a</i> ( <i>*..i-e-s</i> )
<i>i-tn-ev-s</i> “enjoys”	<i>h-tn-av-s</i> “likes”	<i>h-pl-av-s</i> “buries”	<i>h-pl-i-e-s</i>
<i>a-zin-eb-s</i> “puts to sleep”	<i>s-zin-av-s</i> “sleeps”	<i>h-beč'd-av-s</i> “stamps”	<i>a-beč'd-i-a</i> ( <i>*..i-e-s</i> )
<i>a-γvi3-eb-s</i> “awakens”	<i>h-γvi3-av-s</i> “is awake”	<i>h-mos-av-s</i> “puts on”	<i>h-mos-i-e-s</i> “wears”

Table 15: *Georgian statives and Class A presents in -av*

Consider the lists of Georgian statives and Class A presents in *-av* given in Table 15. For whatever reason, those Georgian Class A verbs with Series I stems in *-av* always form statives (if they have one) in *-i-e*; conversely, statives in *-av* employ roots the Class A Series I stems of which employ a SM other than *-av*. It may have been the case, at an earlier stage of the Georgian language or perhaps CGZ, that *-i-e* served to derive statives from lexically telic-durative stems, the Class A Series I stems of which were formed with the SM *\*-aw*. The direction of derivation was the opposite for verbs such as *h-γvi3-av-s*: the stative forms appear to be basic, and the Class A stems secondary. The Series I forms of the latter employ the telic-punctiliar SMs *\*-ew* or *\*-w-ew*, and have neutral version in *-a-*.

#### 4.2 *Statives and present perfects*

It cannot be determined at this point whether *\*-aw* was the sole stativizer in PK, or whether it had a second stative formant comparable to Georgian *-i-e*. If the latter was true, the descendants of *\*-aw* would have pushed their allomorphs aside in Zan and Svan to become the sole formant of derived statives. (This may also have occurred in the conservative Pshavian and Xevsurian dialects, where all present-perfects and statives take the compound suffix *-av-[i]-*, as in Table 4. Whether the generalized use of the latter

compound suffix represents an innovation or an archaism cannot be determined.) If *\*-aw* was the only stativizer in PK, then *-i-e* represents an innovation of prehistoric Georgian, perhaps contemporaneous with the elaboration of distinctly Georgian verbal paradigms employing the permansive formant, such as the imperfect iterative. (A couple of words concerning the Georgian stative formant *-i-e*: Whereas most Kartvelologists accept Chikobava's identification of the initial element with the permansive vowel *-i-* (Chikobava 1948), there is great uncertainty concerning the second vowel. Topuria (1955) identified this *-e-* with the homophonous 1st & 2nd person aorist suffix, both of which originally marked the past-indicative tense. Those who have looked into the matter more recently prefer to leave the question of the origin of the second element of the stative formant *-i-e* unresolved (Ch'umburidze 1976; Suxishvili 1976:25)). In any event, at a later stage of PK certain of the stative passive forms were incorporated into the Class A conjugation as present perfects, i.e. verb forms indicating a state of affairs resulting from an earlier action or event. Paradigm recruitment of this sort, in which verb forms associated with one transitivity class cross over to another, seems to have occurred numerous times in the history of the Kartvelian languages, and is still underway in Georgian and Svan (Tuite 1996, 1997). The appropriation of ancient stative passives as transitive present perfects led to a certain degree of analogically-driven restructuring of the morphology, involving SMs in particular. I will conclude by mentioning three such changes here:

(i) As was mentioned above, those Georgian Class A verbs which took the SM *-av* always formed their statives in *-i-e-*, e.g. present *da=m-i-marx-av-s* "sb buries my sb [relative]" vs. stative *m-i-marx-i-e-s* "my sb [relative] lies buried". In the present perfect, however, these verbs retain their Series I SM as stem formant, rather than *-i-e-*; *da=m-i-marx-av-s* can also mean "I have buried sb". The double duty of *-av* as SM and as present-perfect stem formant, hitherto regarded as a morphological curiosity (and currently undergoing analogical levelling in modern Tbilisi Georgian), goes back to its double function as stativizer and SM in PK, followed by morphological realignment after the consolidation of Series III as an integral part of the Class A conjugation.

(ii) With the exception of *\*-aw*, SMs never appear in derived statives. As shown in Table 5, SMs sometimes appear, sometimes not, in Georgian present-perfect stems in *-i-e-* (there is a tendency to eliminate them in modern Georgian present perfects, with the exception of the SMs *-eb* and *-ev*). Interestingly enough, the same variation has been described in Svan (e.g. the present perfects of *ə-g-em* "builds, erects" in the Upper Bal [*x-o-g-a*] and Lent'ex [*x-o-g-em-a*] dialects (Topuria 1967:170-171)) and Zan (e.g. the alternate Laz

present perfects of *zir-op-s* “sees”: *u-zir-u-n* and *u-zir-am-u-n* (Holisky, in Harris 1991:433)). Here again, it appears that recruitment into the Class A conjugation has led to extension of Series I formants to the present perfect.

(iii) There is as yet no good explanation for the use of the SM *-am* as a present-perfect stem formant, exactly paralleling the uses of *-av* in Georgian (see Table 13). This is apparently a recent development, since the PK ancestor of Georgian *-am* did not show any behavior distinguishing it from the other SMs. In particular, it is never attested as a stative formant. The phonological similarity between *-av* and *-am* may have influenced the latter to take on some of the functional characteristics of the former.

##### 5. *The Group 2 series markers*

We turn now from atelic verb roots once again to those of telic lexical aspect. Reference was made earlier to Mach’avariani’s assertion that Kartvelian telic roots can be further subdivided into those whose fundamental aspect was punctiliar, and those of durative aspect (1974:129-130). The former derived their Series I stems through addition of a SM, whereas the Series I stems of the latter were unmarked or took the SM *\*-aw* (Table 16). Although her studies on the morphology of aspect drew almost exclusively upon Modern Georgian data, certain of Holisky’s (1979, 1981) conclusions might contribute to our understanding of how this category was represented in early Kartvelian. Holisky demonstrated that Modern Georgian telic verbs include both durative (‘accomplishment’) and punctiliar (‘achievement’) aspectual types, the difference between these two relating principally to what might be called the temporal contour of the semantic representation, as deployed in the structuring of discourse. The contours associated with accomplishments proceed towards a ‘built-in endpoint’, which need not however be reached (*Mary was writing the letter, when a knock at the door interrupted her*). The contours associated with achievements, by contrast, place particular emphasis on the endpoint, without which the described event cannot even be said to have occurred (*??Mary was finding her pen, when a knock at the door interrupted her*). In Modern Georgian, verbs denoting achievements “do not constitute a morphological class”, whereas those relating to the two atelic groups — states and “activities” (corresponding to Kartvelian medioactives) — do (Holisky 1981:141). Would this have also been true of PK? Speculating about the subtleties of meaning distinctions in a language one does not speak natively is not an easy enterprise; it is far riskier when the object of study is a dead language represented by a body of texts, and immeasurably more so when one is engaged in the reconstruction of the semantic system of an unattested ancestral language spoken

perhaps five or six millenia ago. It is evident that PK verb stems formed with the Group 2 series markers (\*-ew, \*-am/-em, and several only attested in Svan: -e:sg, -e:šg, -e:l, etc.) contrasted in terms of aspect with those formed by the addition of \*-aw or \*-ej. Aspectual minimal pairs formed in this way are not easy to come by, but one set of paired verbs attested both in Georgian and Mingrelian might shed some light on the matter. Numerous verbs with a Series I stem in \*-aw (or Ø) permit the derivation of stems with the preverbs *mi-* (in Georgian) or *kimi-/kimk'a-* (in Mingrelian). These preverbs serve in general to indicate motion toward a specific endpoint; in this context they denote specifically the affixing of an object onto some kind of surface. At the same time the SM is replaced by \*-ew, e.g. Geo. č'ed-Ø-s “forges, hammers” *mi=a-č'ed-eb-s* “forges, nails sthg onto sthg” (= Ming. č'k'ad-ən-s, *kimk'a=č'k'ad-an-s*); Geo. *k'er-av-s* “sews” *mi=a-k'er-eb-s* “sews sthg onto sthg”; Ming. č'ar-ən-s “writes sthg”, *kimi=o-č'ar-an-s* “writes sthg on sthg”. The change in SM is likely to be linked to a shift in aspectual characteristics: verbs such as *k'er-av-s* are telic durative, whereas their derivatives in *mi=a-√-eb-* are telic punctiliar, with a focus on the moment of attachment.

In Table 16 is shown what I believe the principal aspectual classes of the PK verb to have been. The primary distinction was between atelic and telic verb stems. The former comprised statives and medioactives; these could be either root atelics, with no SM, or atelics derived from telic roots by the addition of \*-aw or \*-ej. (Statives in \*-ej may have included a second suffix \*-e, whence the Georgian statives in *-i-e*). As was mentioned in §4.1 above, atelics had defective paradigms, being limited to either Series I or Series II forms, but not both. The present and past-indicative of Series-I-only atelics (e.g. \*č'an-s “is visible”) corresponded formally to the present and imperfect of telic verbs, whereas the present and past-indicative of Series-II-only atelics (e.g. \*q'iw-ej-s “crows”) corresponded formally to the permansive and aorist of telic verbs. Telic verb stems were subdivided by aspect into punctiliar and durative classes. I put forth here the hypothesis that the Group 2 SMs were added to telic punctiliar roots. These suffixes would have had a specifically durativizing force and, at least at an early stage of PK, have been more derivational than inflectional in nature. Telic durative roots, by contrast, formed their Series I stems by the addition of Group 1 SMs, or by ablaut. The use of Group 1 SMs betokens a certain semantic affinity between telic durative and atelic aspectual classes in PK. The Georgian evidence, mentioned above, points to a functional distinction between \*-aw and \*-ej. Telic durative roots which employed the former in Series I utilized the latter to form their statives, whereas the statives of telic punctiliar roots took the SM \*-aw.

series	ATELIC (STATIVE & MEDIOACTIVE)	TELIC PUNCTILEAR	TELIC DURATIVE (NON-ABLAUTING)	TELIC DURATIVE (ABLAUTING)
durative (Series I)	root atelics, Ser. I only: *čan-s “is visible” thematic (Group 1 SM): *dg-aw-s “stands” *x-tes-ej-(e)-s “is sown”	Group 2 SMs *x-dg-am-s “is putting, setting sthg”	Group 1 SMs: *x-tes-aw-s “is sowing”	Group 1 SMs: *x-drek'-s/ *x-drik'-aw-s “is bending”
punctilear (Series II)	root atelics, Ser. II only: *q'iw-ej-s “crows”	*dg-ej-s “puts, sets sthg”	*tes-ej-s “sows”	*drik'-ej-s “bends”

Table 16: *Proto-Kartvelian verb types*

### 5.1 Subgroups of Group 2 series markers

The Group 2 series markers can be divided into two groups, based on formal characteristics of their associated verb stems. The relevant morphological features are root shape, accent placement and the neutral-version marker. With regard to root shape, Georgian Class A verbs which take the SMs *-am* and *-em*, and Svan verbs with the SMs *-em*, *-e:sg*, *-e:šg*, *-e:l* and a handful of rarer ones, have non-syllabic roots. In most cases the roots are vowelless in all three Series; some Georgian verbs with the SM *-am* undergo, in some varieties of Old Georgian, insertion of /a/ or /e/ in the 1st and 2nd-person aorist, e.g. present *i-rtx-am-s*, S1sg aorist *gan=v-i-r(a)tx* “I stretched out [e.g. hand]” (Jorbenadze 1988). As was shown above for some verbs in *-av*, the conjugation of Georgian Class A verbs in *-am* and *-em* gives evidence of an earlier mobile accent. In addition to athematic aorists, many of these verbs appear to have undergone an accent shift between the 1st/2nd-person and 3rd-person stems in the past-indicative (aorist and imperfect) paradigms (cf. Gamq’relidze & Mach’avariani (1965:273)):

	IMPERFECT (SM <i>-AM</i> )	IMPERFECT (SM <i>-AV</i> )
S1sg	<i>x-v-a-b-em-d</i> “I was binding” < * <i>x-w-a-b-ám-ej-d-(e)</i>	<i>x-v-k'l-ev-d</i> “I was killing” < * <i>x-w-k'l-áv-ej-d-(e)</i>
S2sg	<i>x-a-b-em-d</i>	<i>x-k'l-ev-d</i>
S3sg	<i>x-a-b-m-id-a</i> < * <i>x-a-b-am-éj-d-a</i>	<i>x-k'l-v-id-a</i> < * <i>x-k'l-av-éjd-a</i>
	AORIST (SM <i>-AM</i> )	AORIST (SM <i>-AV</i> )
S1sg	<i>x-v-a-b</i> “I bound” < * <i>x-w-á-b-(e)</i>	<i>v-k'al</i> “I killed” < * <i>w-k'al-(e)</i>
S2sg	<i>x-a-b</i>	<i>x-k'al</i>
S3sg	<i>x-a-b-a</i> < * <i>x-a-b-á</i>	<i>k'l-a</i> < * <i>k'al-á</i>

Table 17: *Old Georgian verb forms with mobile stress in the past-indicative paradigms*

Similar person-linked accent shifts occur in the Svan past-indicative paradigms (Tuite 1997), which attests to their long pedigree in Kartvelian. It cannot be as yet ascertained whether the accent shift was primary, or whether it

reflects an older distinction between 1st/2nd-person stems without person-marking suffixes, and 3rd-person stems with a final suffix indicating both person and number (S3sg *-a*, S3pl *-es* in Georgian; the Svan equivalents have not yet been reconstructed with certainty). If the former situation was the case, the 1st/2nd-person suffix would have been the same *-e* morpheme occurring in the aorist paradigms of fixed-accent verbs (Table 11). A handful of *-am* and *-em* verbs retain what must have been an archaic alternation between 1st/2nd-person forms with version vowel and 3rd-person forms without, doubtless due to an accentual shift similar to that just discussed (cf. Gamq'relidze & Mach'avariani (1965:324-5)):

AORIST (SM -EM)		AORIST (SM -AM)
S1sg	<i>x-v-e-c</i> "I gave" □ <i>*x-w-é-c-(e)</i>	<i>x-v-a-rkw</i> "I said" □ <i>*x-w-á-rkw-(e)</i>
S2sg	<i>x-e-c</i>	<i>x-a-rkw</i>
S3sg	<i>x-c-a</i> □ <i>?*x-e-c-á</i>	<i>x-rkw-a</i> □ <i>?*x-a-rkw-á</i>
	(present <i>x-v-c-em</i> □ <i>?*x-w-e-c-ém</i> "I give"	<i>x-v-rkw-am</i> □ <i>?*x-w-a-rkw-ám</i> "I say")

There is no evidence for a comparable accent shift in Georgian verbs with the SMs *-eb* and *-ev* (< *\*-ew*). Although formally distinct in Georgian, there are no grounds for reconstructing distinct CGZ or PK antecedents for *-eb* and *-ev*. Their Zan cognate is *-ap/-an* (Deeters 1930:127; Fähnrich & Sarjveladze 1990:111-2), and their Svan cognate is *-e* (Deeters 1930:128; Osidze 1982; Mach'avariani 1988). Most Georgian, Svan and Zan stems which take the SM *\*-ew* are evidently of nominal or adjectival origin (Shanidze 1953 §§458, 461). Some however have the phonological shape of primary verbal roots, being non-syllabic or even consisting of a single consonant. Another morphological feature serves to distinguish them from verb stems employing other SMs. The grammars of all Kartvelian languages include a category known as 'version', marked by a vowel placed immediately before the verb root. (On the semantics of version see especially Boeder 1968, Aronson 1982). Neutral version is marked by the absence of a prefix for all verb types except those with SM *\*-ew*, which employ the same version prefix (*-a-*) as that which ordinarily marks so-called 'superessive' version. The latter category is associated with the placing in contact of an entity with a surface (e.g. *cecxls c'q'als v-a-sxam* "I pour water on the fire"); the verbs in in *mi=a- -eb-* mentioned earlier in this section are prototypical examples of superessive version. It may have been the case, although I am far from being able to demonstrate it, that neutral version in *\*a- -ew-* owes its origin to a semantic extension of superessive version, on the basis of similar aspectual characteristics (i.e. telic punctiliar aspect).

Series Marker	GROUP 1				GROUP 2		
	*-ej	*-aw	ablaut	∅ (*-aw)	*-am/-em	-e:sg, -e:šg, &c.	*-ew
<i>Georgian</i>	∅	∅	∅	∅	∅	—	<b>-a-</b>
<i>Svan</i>	∅	∅	∅	∅	∅	—	<b>-a-</b>
<i>Zan</i>	—	∅	∅	∅	∅	∅	<b>-o-</b>

Table 18: *Neutral-version prefixes for different groups of verbs*

Not discussed here are the Georgian SMs *-ov/-ob/-op*, the diverse origins of which await detailed study. Verbs taking these markers include: (i) the derived transitives of root Class P verbs (e.g. *x-a-cx-ob-s* “sb bakes sthg” < ? \**x-a-cxw-eb-s*; cf. *cxw-eb-i-s* “sthg bakes”); (ii) denominal and delocutive medioactives in *-ov/-ob*, e.g. *creml-ov-i-n* “weeps”, *mɣdel-ob-s* “serves as priest”; (iii) Class A verbs with root-final /w/, e.g. *š-ob-s* “gives birth” < ? \**x-šw-eb-s*; cf. *šv-il-* “child, offspring”); (iv) the remaining Class A verbs in *-ob*, the roots of many of which terminate in labial consonants, e.g. *a-p'-ob-s* “splits”, *gm-ob-s* “denounces” (see list in Shanidze 1953 §459). Some of these at least may have originally had the SM \*-ew, the vowel of which underwent rounding under the influence of a preceding labial consonant.

### 5.2 Summary of types of series markers

The two groups of SMs, each with two subgroups, are summarized in Table 19. The semantic contributions of the two groups of SMs to the stems in which they appear are divergent to the point of being polar opposites. Group 2 SMs distinguish durative verb forms — such as the present and the imperfect — from the punctilear Series II paradigms (aorist, optative and permansive). They also change the morphosyntactic frame of the clause, from ergative-absolutive to nominative-accusative, that is, they function as antipassivizers (Table 2). The association between durative aspect and antipassive voice has been observed in many languages of the world, contrasting with the link between stative aspect and passive voice (Heath 1976; Cooreman 1994). The paradox of Group 1 SMs, which must remain a paradox at this stage of the investigation, is that they give every indication of operating simultaneously as passivizers and antipassivizers: they fulfill the former function in the context of statives, present perfects and certain types of Class P verbs; they fulfill the latter function as SMs for Class A verbs.

	SEMANTICS	ASPECT OF THE VERBAL ROOT	EXAMPLES (GEORGIAN)	EXAMPLES (SVAN)
<i>Group 1</i>				
*-ej	potentialis, permanentive, passive of state	(1) atelic (2) telic durative	<i>q'vir-i-s</i> "shouts" <i>t'ir-i-s</i> "weeps" <i>šl-i-s</i> "spreads" <i>txr-i-s</i> "digs" <i>gzav-n-i-s</i> "sends"	<i>q'u:l-i</i> "shouts" <i>ə-sq'-i</i> "makes" <i>ə-rm-i</i> "holds"
*-aw	passive of state, resultative	(1) atelic (2) telic durative	<i>h-k'id-av-s</i> "hangs" <i>s-zin-av-s</i> "sleeps" <i>k'rič'-av-s</i> "cuts [hair]" <i>čxvlič'-av-s</i> "pokes"	<i>x-a-q'-a</i> "has" <i>x-o-rk'-a</i> "sthg hangs" <i>bič'k'w-e</i> "cracks" <i>kwic-e</i> "cuts"
<i>Group 2</i>				
*-am/-em -e:sg, -e:šg, -e:l, etc.	antipassive, durative	telic punctiliar (primary verbal roots, non-syllabic)	<i>s-c-em-s</i> "gives" <i>a-b-am-s</i> "binds" <i>i-cv-am-s</i> "puts on [clothing]"	<i>x-o-γ-e:šg-i</i> "takes" <i>i-tx-e:l-i</i> "finds" <i>a-nqw-em</i> "topples"
*-ew	antipassive, durative	telic punctiliar (primary verbal roots, non-syllabic; derived verbal roots, syllabic)	<i>a-tr-ev-s</i> "drags" <i>a-γ-eb-s</i> "opens" DERIVED: <i>a-k'wm-ev-s</i> "incenses" <i>a-bral-eb-s</i> "blames"	<i>a-ma:r-e</i> "prepares" <i>a-k'r-e</i> "opens" DERIVED: <i>a-mx-e</i> "rejuvenates"

Table 19: *Meaning and function of Kartvelian thematic suffixes (series markers)*

## 6. Conclusion

In an important article on the morphology of Kartvelian causatives, written in 1954 but not published until 1988, Mach'avariani identified three unresolved problems to which he wished to accord special priority. All three of them hinge on the identification of the semantics of SMs. Although this paper has done more in the way of asking questions than in providing satisfactory answers to them, it would be nonetheless instructive to review Mach'avariani's list in the light of the reconstruction of the category of series markers presented here. (Mach'avariani's original formulation has been rephrased according to the terminology used in this paper):

(a) *The relation between telic and atelic verbs with the same SMs.* Group 1 SMs occur in the Series I forms of both atelic and telic durative verbs, thus setting these two aspectual types of verbs apart from the telic punctiliar class (Table 20). In the case of both atelic and telic durative verb stems, forms with \*-aw or \*-ej alternate with athematic Series I stems. Root (athematic) atelic verbs are generally descended from primary statives and medioactives, whereas most of those with a SM were derived from nominal or telic verbal



roots. The alternation between thematic and athematic Series I stems for telic durative verbs (both ablauting, e.g. \**x-drek'-Ø-s* / *x-drik'-aw-s*, and non-ablauting, e.g. \**x-c'er-Ø-s* / *x-c'er-aw-s*) goes back at least as far as the CGZ period. However, it cannot as yet be ascertained whether the two Series I stems were semantically-equivalent dialect variants, or if they had distinct meanings. It should be noted here that some atelic verbs did appear with Group 2 SMs (mostly *-ob* and *-eb*) in Old Georgian. Although their number has grown considerably since that time, they formed a relatively small set of denominal and delocutive verbs in the earliest attested stage of the language (e.g. *va-eb-s* “wails” < *vaj* “alas! woe!”; *mep-ob-s* “reigns” < *mepe* “king”; Suxishvili 1976: 29-33).

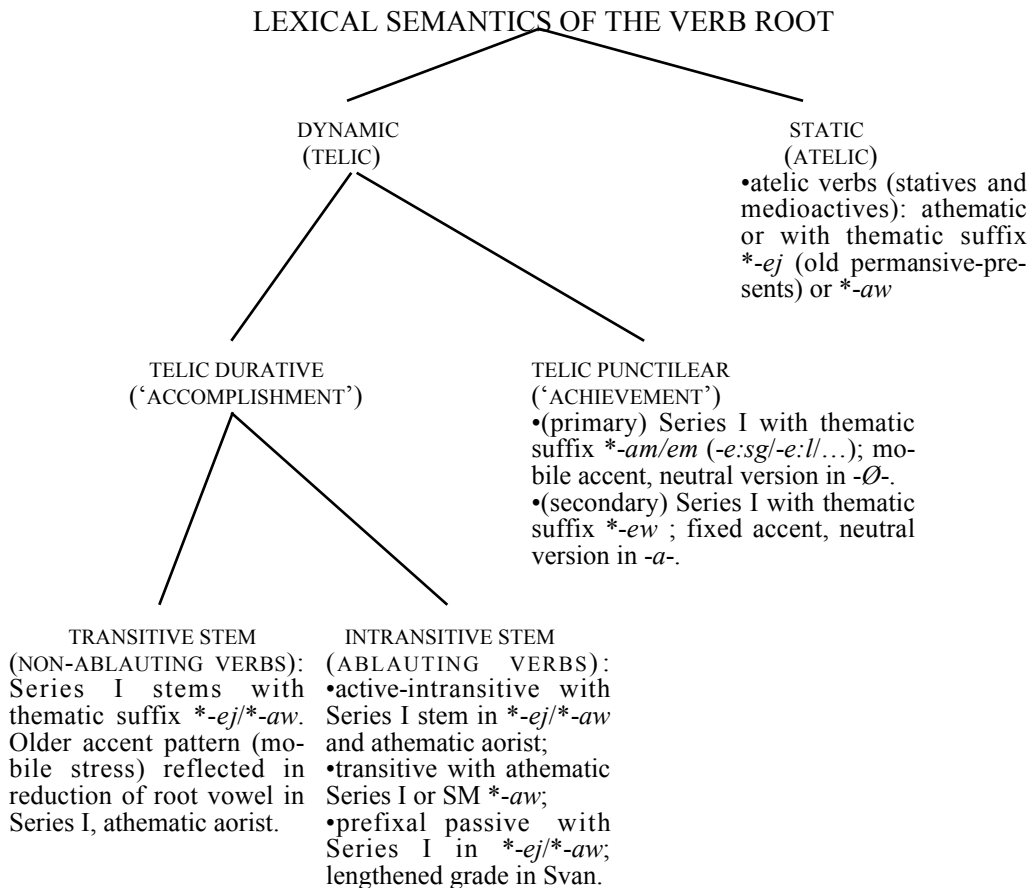


Table 20: *Morphology and lexical aspect of Proto-Kartvelian verbs*

(b) *The relation between root atelic verbs and those formed with SMs.* I have proposed here, as a hypothesis for further investigation, that the group of

root atelic verbs included both those without any SM, and those in *\*-ej-*. The latter were atelics which only formed Series II forms; the present in *\*-ej-* was formally equivalent to the Old Georgian permansive of atelic verbs. In view of what was just mentioned concerning Old Georgian atelics in *-ob*, *-ov*, *-ev* and *-eb*, there might have been, in fact, three subgroups of atelic verbs in early Kartvelian: (i) root atelics; (ii) atelics derived from telic verbal roots (Group 1 SMs *\*-aw* or *\*-ej*); (iii) atelics derived from nominal roots or expressives (Group 2 SMs *\*-ew*, *\*-w-ew*).

(c) *The relation between active voice (i.e. Class A telic verbs) and transitivity.* This remains one of the most vexing areas of investigation in Kartvelian historical morphology. Of particular concern to the arguments presented here is the type of morphosyntactic transformation effected by the addition of a SM to a Class A verb. Most Kartvelologists agree that the morphology and syntax associated with Series I verb forms, and in particular the phenomenon of case shift (Table 2), are the effects of a PK antipassive transformation, of which the SMs were the primary markers (Aronson 1979; Harris 1985). The early Kartvelian antipassive converted transitive Class A verbs into intransitives, which assigned absolutive case to their agent NPs (whereas the untransformed transitive verbs, the ancestors of the Series II forms, assigned ergative case). If, as I claim here, the ancestors of the SMs were of diverse origins, we are left with the problem of accounting for the antipassivizing force shared by all SMs, both Group 1 and Group 2. Among the latter as well, not all appear to have been genuine antipassive formants at their earliest reconstructible stage. Alice Harris (1984) and I (Tuite 1992) have argued that the formal resemblance between the SM *\*-ew* and the phonologically- identical Georgian-Zan nominal plural suffix is unlikely to be a mere coincidence. Both suffixes are descended from an earlier pluralizer of more general use which signalled durative aspect when added to verbal stems, and collective plurality when added to nouns. The primary semantic feature of this morpheme would have been aspectual in nature, with valence change as at most a secondary affect when *\*-ew* was added to verbs. It might even have acquired the latter function subsequent to its assimilation to the same class of morphemes as the original antipassivizers (*\*-am/-em*, and perhaps the antecedents of Svan *-e:sg*, *-e:šg*, *-e:l*, etc.). By the term ‘original antipassivizers’ I refer to the earliest core of the series-marker category, these being morphemes which had intransitivization as one of their primary functions, along with that of signalling durative aspect. In the course of the PK period, various aspect-marking suffixes coalesced around this core of ancient antipassivizers:

1. the verbal/nominal pluralizer (durativizer) \*-ew,
2. stative/resultative \*-aw,
3. stative/permansive \*-ej.

Each of the new SMs also acquired the antipassivizing force of \*-am/em, whatever other roles they performed. This accompanied the *paradigmatization* of what was to become Series I, as various atelic/non-punctiliar verb stems came to be perceived as being in more-or-less systematic opposition to the Series II stems. The antipassivized syntactic frame came thereby to be one of the obligatory accompaniments of Series I, to the point that the old stativizers \*-aw and \*-ej acquired this new function in the context of Series I verb stems. As is the case with passive morphology in Georgian, which can take on an evidently antipassivizing force with certain verbs (*i-k'bin-eb-a* “bites”, *i-loc-eb-a* “prays”, *i-c'er-eb-a* “writes” [as well as “is being written”]; Shanidze 1953 §366, Tuite 2002), the stativizing suffixes \*-aw and \*-ej underwent a comparable extension of their range of uses, contradictory as it might seem with their functions in other contexts.

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