

Paradigm recruitment in Georgian.

8th Conference on the Non-Slavic languages in what used to be the USSR (Chicago, 1993)

Kevin Tuite — Université de Montréal

0. Introduction. In a discussion of the formal correspondences among the screeves of what one would consider (or what grammarians and lexicographers would consider) the same verb in Modern Georgian, Aronson [1989: 15] noted that “the degree of grammaticalization of the Georgian [verbal] paradigm has not gone as far as it has in other languages, e.g. the languages of Western Europe.” The extent of “paradigmatization” is particularly weak in Series 3 (the perfect series, comprising the present perfect [evidential], pluperfect and sometimes other screeves).

In this paper I propose to rummage through some of the less-often explored corners of Georgian morphology, and explore this question of paradigmization further. In particular I will look for evidence of what might be termed “paradigm recruitment”, by which I mean the appropriation of verbal forms from another conjugation class to fill out the paradigm of a given type of verb. The examples I will present come from the Georgian perfect series (Series 3), which gives every indication of being of more recent origin than the present (Series 1) and aorist (Series 2) screeves. Verb forms from the three series, as they were attested in Old Georgian, are shown in {1}. The Series 3 forms of I Conjugation verbs apparently originated as stative passives, which themselves evidently “borrowed” forms from the relative II Conjugation. The Series 3 forms of II Conjugation verbs developed quite recently, and indeed were still coalescing in the Old Georgian period [Arabuli 1984: 83-89].

{1} Georgian screeves (relative I and II Conjugation of *cχ*- «anoint, smear», without preverbs)

Series 1	<i>present</i>	<i>imperfect</i>	<i>conjunctive 1</i>	
I Conj	s-cχ-eb-s	s-cχ-eb-d-a	s-cχ-eb-d-e-s	
II Conj	e-cχ-eb-i-s	e-cχ-eb-od-a	e-cχ-eb-od-e-s	
Series 2	<i>[permansive]</i>	<i>aorist</i>	<i>conjunctive 2</i>	
I Conj	s-cχ-i-s	s-cχ-o	s-cχ-o-s	
II Conj	e-cχ-i-s	e-cχ-o	e-cχ-o-s	
Series 3		<i>pluperfect</i>	<i>[conjunctive 3]</i>	<i>present perfect</i>
I Conj		e-cχ-o	e-cχ-o-s	u-cχ-i-a
II Conj		s-cχ-eb-od-a	s-cχ-eb-od-e-s	s-cχ-eb-i-a

The four conjugation classes of Georgian verbs are distinguished by two cross-cutting parameters: (a) whether or not they assign the ergative case in the aorist series [more precisely,

whether or not they are **case-shifting** verbs]; (b) the manner of forming the future and other perfective-aspect screeves (verb forms)

{2} Case-shifting and non-case-shifting conjugation classes (Modern Georgian)

	<i>case-shifting</i> [assigns ERG in Series 2]	<i>non-case-shifting</i> [cannot assign ERG]
<i>future = present + preverb:</i>	I Conj. a-χar-eb-s «sb makes sb happy»	II Conj. u-χar-d-eb-a «sb becomes happy»
<i>future stem ≠ present stem:</i>	III Conj. χar-ob-s «sb rejoices»	IV Conj. u-χar-i-a «sb is happy»

The formation of the perfect series screeves of two verb types will be discussed: [A] relative II Conjugation verbs (intransitive verbs with indirect objects); [B] indirect I Conjugation verbs (transitive verbs with dative subjects [in the present series]). In the first instance to be discussed, a II Conjugation (non-case-shifting) verb paradigm has appropriated its Series 3 forms from a case-shifting paradigm. The second case is its mirror image: a case-shifting paradigm which is in the course of absorbing verb forms from a II Conjugation paradigm in order to fill out its full complement of screeves. The opposite directions taken by these two verb types in their evolution toward paradigmatic completeness are associated with an important difference in their semantics: the indirect I Conjugation verbs in question are aspectually **telic** (narrative focus on a change of state in the described event), and the relative II Conjugation verbs are **atelic**. The preference for what were originally I Conjugation perfects on the part of atelic verbs and vice-versa can be linked with, I believe, other evidence concerning the stereotypic aspectual characteristics of the Georgian verb classes.

1. Paradigm recruitment. The phenomenon of paradigm recruitment in Georgian bears a certain resemblance to the coalescence of once-distinct paradigms that has given rise to suppletive stem alternations in the conjugation of verbs such as English “go”, the principal parts of which derive from the Old English verb *gān*, except for the preterite *went*, which once belonged to a separate verb [*wendan* “wend, turn, go”] {3}.

{3} Coalescence of two paradigms into one [English]

present 3sg	<i>gæð</i>	<i>wendeð</i>		<i>goes</i>
preterite 3sg	<i>eode</i>	<i>went</i>	□	<i>went</i>
participle	<i>gān</i>	<i>wendan</i>		<i>gone</i>

Unlike the sporadic development of suppletive conjugational paradigms such as in {3}, the instances of paradigm recruitment to be analyzed here are systematic, in that semantically-characterizable classes of verbs are involved. (It is also the case that the coalescing paradigms are built from the same root, so there is no suppletion in the strict sense). The semantics will be discussed presently. The two patterns of coalescence are shown in {4}: e-tamaš-eb-a «sb plays with sb» is a relative II Conjugation verb, the paradigm of which includes a formally III Conjugation perfect; and a-belat'-eb-s «sthg makes sb bald» is an example of an indirect I Conjugation verb in the course of appropriating a II Conjugation perfect.

{4} Coalescence of case-shifting and non-case-shifting paradigms [Georgian]

	<i>II Conjugation</i>		<i>III Conjugation</i>
Present	e-tamaš-eb-a «sb plays with sb»		tamaš-ob-s «sb plays»
Pres. perf.	s-tamaš-eb-i-a	□	<u>u-tamaš-n-i-a</u>
	<i>II Conjugation</i>		<i>I Conjugation</i>
Present	belat'-d-eb-a «sb becomes bald»		a-belat'-eb-s «sthg makes sb bald»
Pres. perf.	<u>ga-belat'-eb-ul-a</u>	□	ga-u-belat'-eb-i-a

2. Relative II Conjugation Verbs. The relative II Conjugation verbs are formally intransitive (they lack a direct object) but nonetheless predominantly bivalent — the majority of verbs of this type govern a subject and an indirect object. The evolution of the Series 3 screeves of this verb class in Georgian and the other Kartvelian languages is a particularly interesting story (which I will save for another occasion, however). My discussion here will be limited to a particular subgroup of relative II Conjugation verbs which are termed “comitatives” by Aronson 1982: 209.¹ These verbs are associated with certain III Conjugation verbs denoting activities, and their basic meaning is “to do X with [the collaboration of] somebody.” The pair given in {4} are typical of the class; some other pairs of III Conjugation activity and II Conjugation comitative verbs are in {5}.

¹Shanidze [1953 §372, p 315] refers to them as «deponents» (i.e. formally intransitive verbs with transitive semantics), since they can sometimes take a second indirect object corresponding to the direct object of the paired III Conjugation verb (compare: [II Conjugation] mas pexburts vetamašebi «I play football (Ind obj) with him/her» vs. [III Conjugation] pexburts vtamašob «I play football (Dir obj)». This underlying transitivity is sometimes reflected in the case marking in the aorist series [Tschenkéli 1958: 430-2; Harris 1981: 270-73].

{5} Comitative relative II Conjugation verbs [Georgian]

<i>III Conjugation activity verb</i>	<i>II Conjugation comitative</i>
v-aršiq'-ob «I flirt, court»	v-e-aršiq'-eb-i «I flirt with sb, court sb»
v-lap'arak'-ob «I speak»	v-e-lap'arak'-eb-i «I speak with sb»
v-k'amat-ob «I argue»	v-e-k'amat-eb-i «I argue with sb»
v-čχub-ob «I quarrel»	v-e-čχub-eb-i «I quarrel with sb»

According to the morphological patterns of its conjugation class, the present perfect² of the comitative relative II Conjugation verb e-tamaš-eb-a ought to be s-tamaš-eb-i-a. Georgian speakers, however, reject this form, using instead the same present perfect as for the III Conjugation verb tamaš-ob-s, with the indirect object expressed by an oblique NP (mistvis), as would be expected for a case-shifting verb in Series 3:

{6} Series 1, 2 & 3 forms of comitative relative II Conjugation verbs [Georgian]

	<i>III Conjugation</i>	<i>II Conjugation</i>
Present	tamaš-ob-s is <NOM>	e-tamaš-eb-a is mas
Aorist	i-tamaš-a man <ERG>	e-tamaš-a is mas
Pres. perf.	u-tamaš-n-i-a mas <DAT>	(s-tamaš-eb-i-a is mas) <u>u-tamaš-n-i-a mas mistvis</u>

One might assume that forms such as stamašebia cannot be produced at all, but this is not, in fact, the case. The most authoritative Georgian dictionaries (*Kartuli enis ganmart'ebiti leksik'oni* and Tschenkéli 1960-1974) recognize the existence of these Series 3 screeves, but they must be preceded by a preverb, and their meaning is different. The relative II Conjugation verbs in {5} are actually polysemous — in addition to their comitative meaning («do X with sb»), they can also be used as inchoatives («**begin** to do X with sb»). When employed with this latter sense they must add a preverb in the future, Series 2 and Series 3 screeves, and their conjugation is consistent with that of a relative II Conjugation verb. This second meaning is accompanied by an aspectual shift: inchoatives are telic verbs par excellence, in that they spotlight a change of state (the beginning of an activity). The obligatory presence of a preverb in the Series 2 and 3 screeves is likewise associated with this change of aspect, in view of the fact that one of the principal functions of preverbs in Modern Georgian is to signal telic aspect (more

²In the following discussion I will be using the present, aorist and present perfect screeves as representatives of Series 1 [imperfective only], Series 2 and Series 3 respectively. What is said for the present perfect can be assumed to apply in the case of the pluperfect and the (rarely used) perfect conjunctive screeves, unless specified otherwise.

on this in §4). The purely comitative II Conjugation verbs, like the III Conjugation with which they are paired, are of atelic aspect: they represent an essentially homogeneous temporal contour, without any highlighting of distinct transition points (on the telic/atelic distinction in Georgian, see especially Holisky 1981a,b). The two Series 3 patterns for the verbs in {5}, one typical of the III Conj, the other of the II Conj, are shown in {7}

{7} Comitative II Conjugation verbs — definitions (abridged) from Tschenkéli 1960-1974.

<i>relative II Conj. present</i>	<i>present perfect I</i>	<i>present perfect II</i>
v-e-aršiq'-eb-i	m-i-aršiq'-n-i-a «j-m den Hof machen»	ga-v-Ø-aršiq'-eb-i-var «beginnen j-m den Hof zu machen»
v-e-tamaš-eb-i	m-i-tamaš-n-i-a «mit j-m (et.) zu spielen»	ga-v-s-tamaš-eb-i-var «beginnen mit j-m zu spielen»
v-e-k'amat-eb-i	m-i-k'amat-n-i-a «mit j-m debattieren»	še-v-h-k'amat-eb-i-var «mit j-m e-e Debatte beginnen»
v-e-lap'arak'-eb-i	m-i-lap'arak'-n-i-a «mit/zu j-m sprechen»	da-v-h-lap'arak'-eb-i-var «beginnen mit j-m zu sprechen»
v-e-čχub-eb-i	m-i-čχub-n-i-a «mit j-m streiten/ zanken»	c'a-v-s-čχub-eb-i-var «mit j-m im Streit geraten»

Relative II Conjugation comitative verbs are also employed by Mingrelian and Svan speakers. In both languages, as in Georgian, the Series 3 screeves of these verbs are identical to those of the corresponding III Conjugation (i.e. case-shifting) verbs. Once again, the II Conjugation verbs involved are of atelic aspect.

{8} Comitative II Conjugation verb “play [with sb]” in Georgian, Mingrelian and Svan

	<i>III Conj. pres.</i>	<i>comitative II Conj. pres.</i>	<i>III Conj. & rel. II Conj. pres. pf.</i>
<i>Georgian</i>	tamaš-ob-s	e-tamaš-eb-a	u-tamaš-n-i-a
<i>Mingrelian</i>	laʔap-en-s	o-laʔap-u	u-laʔap-u
<i>Svan</i>	i-šdr-æ1	x-e-šdr-æ1	x-o-šdr-al-a

3. Indirect transitive verbs. A small but not insignificant set of Georgian Ist conjugation verbs are characterized by indirect syntax, i. e. the syntactic subject is crossreferenced by morphological object markers in the verb, and vice-versa, in the present/future and aorist series. I have discussed the semantics and syntax of indirect transitive verbs elsewhere (Tuite 1987), and here I will focus on one aspect of their morphology.

{9} Indirect transitives (syntactic subject = morphological direct object)

da-a-elm-eb-s	sthg makes sb cross-eyed
da-a-k'ut'-eb-s	sthg makes sb crippled
ga-a-p'irkuš-eb-s	sthg puts sb in a bad mood
ga-a-rind-eb-s	sthg makes sb mute
ay-a-t'q'in-eb-s	sthg makes sb ecstatic
da-a-pikrian-eb-s	sthg makes sb pensive
ay-a-prtovan-eb-s	sthg thrills sb
a-a-caχcaχ-eb-s	sthg makes sb tremble

Many of these verbs appear in the dictionaries paired with intransitive (II conjugation) verbs of apparently identical meaning, except for the syntax (e.g. *mas sicxe tentavs* [her/him-DAT heat-NOM it.wearies.sb] “the heat wearies him/her”; and *is sicχisgan itenteba* [s/he-NOM heat-from sb.becomes.weary] “s/he grows weary from the heat”). In fact, speakers appear not to regard these parallel forms as composing two separate paradigms, but rather as elements of a single paradigm with a degree of morphological and syntactic variability in it. In the present tense, the I conjugation is preferred, or even the only option available (when both agent and patient are to be expressed as surface NPs). Both I and II conjugation forms are possible in the future and aorist screeves (informants vary in their preferences), but in the perfect series, as a rule, the II conjugation form is preferred, with the I conjugation equivalent deemed awkward or unacceptable. This coalescence of indirect transitive and (direct) intransitive forms into a single paradigm is especially strong for telic (change-of-state) verbs; the effect is less pronounced in the case of atelic stative verbs (e.g. *me am c'ign-s da-v-u-int'ereseb-i-var* [I this book-DAT it.has.interested.me] “this book has interested me”; and *me am c'ign-it da-v-int'ereseb-ul-var* [I this book-INST I.have.been.interested] lit. “I have been interested by this book”, are both acceptable ways of saying “I have been interested in this book”, with the latter slightly preferred). While doing research in Tbilisi in 1985-86, I asked two of my informants to indicate their preferred forms for the perfective screeves of several indirect transitive verbs. The results for five verbs are summarized in {10}. Note that the perfect of the corresponding II Conjugation verb is the preferred — or even the only acceptable — form for the indirect transitives of telic aspect. The I Conjugation perfects are more likely to be acceptable if the verb has a stative meaning (i.e. is aspectually atelic).

{10} Preferences for I and II Conjugation forms of indirect transitives [Georgian]

<i>verb</i>	<i>Future</i>	<i>Aorist</i>	<i>Pres. perf.</i>
m-a-elm-eb-s «sthg makes me crosseyed»	II > I	II >> I	II
m-a-belat'-eb-s «sthg [e.g. age] makes me lose my hair»	I	I = II	II > I
m-a-bru-eb-s «sthg makes me dizzy»	<u>II > I</u>	<u>II > I</u>	<u>II > I</u>
m-a-k'oxt'av-eb-s «sthg [clothing] looks good on me»		I > II	I = II
m-a-k'virv-eb-s «sthg [e.g. news] surprises me»	I	I > II	I > II

{11} Preferences for I and II Conjugation forms of a-elm-eb-s «sthg makes sb crosseyed»

<i>I Conjugation (transitive)</i>		<i>II Conjugation (intransitive)</i>
<i>Present</i> <u>maelmebs</u>	>	velmdebi
<i>Future</i> damaelmb	<	<u>davelmdebi</u>
<i>Aorist</i> ?damaelma	<<	<u>davelmdi</u>
<i>Pres Pf</i> ??[davuelmebivar]	<<<	<u>davelmebulvar</u>
«sthg makes me crosseyed»		«I become crosseyed [because of sthg]»

4. Aspect and conjugation class. The facts concerning the recruitment of screeves from one paradigm into another presented in the previous two sections indicate that aspect figures into the equation. In the case of the aspectually atelic II Conjugation comitative verbs, the Series 3 screeves have been recruited from the case-shifting III Conjugation (even as their telic inchoative twins retain the II Conjugation perfects). In the case of the indirect transitives just discussed, an instance of what I believe is the not-yet-completed consolidation of two paradigms into one, it is precisely the telic members of the group which manifest the strongest preference for II Conjugation perfects.

{12} Verb form and aspect (perfect series)



This asymmetry in the aspectual associations of Georgian verb classes has been noted before. Dee Ann Holisky (1978, 1981b) has shown that the four formal categories of Georgian verbs we have been calling conjugation classes correspond quite well with the four aspectual categories defined by Zeno Vendler and David Dowty:

{13} Conjugation classes and aspect (Modern Georgian)

	<i>case-shifting</i> [assigns ERG in Series 2]	<i>non-case-shifting</i> [cannot assign ERG]
<i>future = present + preverb:</i>	I Conjugation accomplishment verbs	II Conjugation achievement verbs
<i>future stem ≠ present stem:</i>	III Conjugation activity verbs	IV Conjugation stative verbs

Typical accomplishment verbs in English would be “teach,” “break_{tr},” “kill,” “give”; some typical achievement verbs are “learn,” “break_{intr},” “die,” “arrive,” “stand up”. Accomplishment and achievement verbs are both considered to be telic, as distinct from the fundamentally atelic activity verbs and statives which predominate in the Georgian III and IV Conjugations. Examples of stative verbs include: “have,” “know,” “[be] stand[ing]” and activity verbs: “sing,” “gallop,” “glow,” “misbehave”.

The statistical association between the II Conjugation and telic aspect, on the one hand, and between the III Conjugation and atelic aspect, on the other, is very strong, and makes the assimilation of an originally III Conjugation perfect into the paradigm of an (atypically) **atelic II** Conjugation verb easier to understand. If one follows this line of reasoning, than one would expect that the case of the indirect transitive verbs just described would indicate that as a class Georgian II Conjugation verbs are also perceived to be more telic than their I Conjugation counterparts.

There is strong evidence that this is indeed the case. For I and II Conjugation verbs in particular, the directional prefixes known as “preverbs” can be used to mark aspect. Setting aside the temporal and spatial/orientational meanings also conveyed by these prefixes, aspectually telic verb forms with preverbs are opposed to atelic forms without. The aspectual distinction is especially clear in the case of Series 2 screeves (aorist and optative [conjunctive 2]).³

One of the primary uses of the formal distinction between Series 1 and Series 2 screeves — marked by a suffix in the Series 1 verb forms (the “series marker” or “present/future stem formant”), and sometimes by ablaut of the root vowel — is at the level of narrative structuration. The (Series 1) imperfect commonly denotes that a given event or state coincided with, or temporally framed, another event (‘extended’ aspect). The (Series 2) aorist is employed, in contrast, to indicate that the event in question is temporally bounded relative to other narrated

³In Series 1, preverbs also signal tense (preverbless present vs. preverbed future) and mood (preverbless imperfect vs. preverbed conditional; cp. the French conditional, which is likewise a “future in the past”).

events or time references (‘bounded’ aspect) [see Mach’avariani 1974; Met’reveli 1988].⁴ For many verbs, furthermore, the aorist and imperfect, and other Series 1 and 2 screeves, can appear with or without a preverb. As was mentioned a short while before, this prefix signals telic aspect. There are, therefore, four past-indicative screeves corresponding to four theoretically possible combinations of the aspectual features [extended vs. bounded] and [telic vs. atelic]:⁵

{14} Aspectual distinctions in Series 1 and 2 past indicative screeves in Modern Georgian

ASPECT:	EXTENDED	BOUNDED
ATELIC:	[Series 1 stem] (imperfect)	[Series 2 stem] (atelic aorist)
TELIC:	[Preverb] + [Series 1 stem] (conditional/habitual)	[Preverb] + [Series 2 stem] (telic aorist)

The frequency of usage and semantic markedness of the above forms are different for each of the conjugation classes. In the modern Georgian dialects, preverbed aorists are the norm for I Conjugation verbs (which are predominantly telic, representing an action as having a significant point of transition or completion), though preverbless forms can be used when the speaker wishes to emphasize that portion of the event preceding its completion (or to denote noncompletion, in the appropriate context). This semantic opposition is occasionally exploited in Georgian proverbs and sayings (“the chicken *pecked and pecked* [atelic aorists □ focus on ongoing activity], and finally *pecked out* [telic aorist □ focus on accomplishment] the knife that will be used to kill it” [Shanidze 1953: 272]) or in passages such as the following, from Vazha-Pshavela’s short story “The jays’ wedding”:

itmina didxans, magram veyar mo=itmina

“He *resisted* (temptation) [atelic aorist □ focus on duration] a long time,
but (finally) could no longer *resist* [telic aorist □ focus on termination]”

For III Conjugation verbs, almost all of which are atelic, the markedness relationship is reversed: preverbless aorists are more common than preverbed forms (which specifically denote that the activity occurred over a short period of time, or only once, and then ended). Compare, for

⁴In Old Georgian (5th-11th centuries) the semantic correlates of the Series 1/2 formal opposition were somewhat different: The Series I screeves were aspectually durative or LINEAR (*xazovani*), while those verb forms built on Series II stems expressed PUNCTILIAR (*c’ert’ilebrivi*) aspect. An event could be represented as extending over a period of time, or the narrative spotlight could be directed at a salient point, i.e. a change of state [Mach’avariani 1974, Tuite in press].

⁵The same formal and semantic oppositions apply for the conjunctive/optative mood as well.

example, *ilap’arak’a* “s/he spoke” [atelic aorist] and *da=ilap’arak’a* “s/he began to speak” [telic aorist □ focus on change of state] or *c’a=ilap’arak’a* “s/he spoke a few words, spoke for a short while” [telic aorist □ event represented as point in time].

As for II Conjugation verbs, Georgian linguists concur that preverbless Series 2 forms are extremely rare, and simply unacceptable in most cases. This is especially true of the *d*-suffixed (*doniani vnebiti*) II Conjugation verbs, almost all of which are inchoatives [Mach’avariani 1974: 119; Met’reveli 1988: 145].⁶

{15} Series 1 and 2 past indicative screeves in Modern Georgian (unmarked aorist underlined)

<i>IMPERFECT (SERIES 1)</i>	<i>AORIST (SERIES 2)</i>
<p><i>III Conjugation:</i> <i>k’i-od-a</i> “was yelling” — — —</p>	<p>unmarked: <u><i>i-k’ivl-a</i></u> “yelled” telicized: <i>da=i-k’ivl-a</i> “cried out, gave a yell”</p>
<p><i>I Conjugation:</i> <i>c’er-d-a</i> “was writing” condit/habitual: <i>da=c’er-d-a</i> “was writing”</p>	<p>atelicized: <i>c’er-a</i> “wrote [focus on activity]” unmarked: <u><i>da=c’er-a</i></u> “wrote [focus on completion]”</p>
<p><i>II Conjugation:</i> <i>i-c’ereb-od-a</i> “was being written” condit/habitual: <i>da=i-c’ereb-od-a</i> “was being written”</p>	<p>unacceptable: (*<i>i-c’er-a</i>) “was written [focus on activity]” <u><i>da=i-c’er-a</i></u> “was written [focus on completion]”</p>

As is shown in {15}, the relative markedness of preverbless (atelic) Series 2 forms is different among the Modern Georgian conjugation classes. These forms are unmarked for most III Conjugation verbs, possible (albeit marked) for most I Conjugation, and unacceptable for most II

⁶The only example I know of a II Conjugation atelic aorist occurs in the following proverb: *oblis puri cxvao, cxvao, gvian gamo=cxvao, magram k’argad gamocxvao*. “The orphan’s bread *baked and baked* [atelic aorists □ focus on ongoing activity]; it *baked* [telic aorist □ focus on accomplishment] late (i.e., it took a long time to become completely baked), but it *baked* well.” [Shanidze 1953: 272].

cxv-eb-a ‘bake’ is a “root” II Conjugation verb, an apparently very ancient morphological class, the semantic features of which differ in several respects from those of the more numerous prefixal-passive and suffixal-inchoative II Conjugation verbs [Harris 1985: 60-61].

Conjugation verbs. These data from another domain of Modern Georgian morphology corroborate the associations between conjugation class and aspect deduced from the patterns of Series 3 screeve recruitment by relative II Conjugation and indirect I Conjugation verbs.

To conclude: Series 3, the newest of the three Kartvelian verb series, is something like a newly-formed star. While most of the raw material has been pulled by gravity into a well-structured mass, clouds of gas still in the process of coalescence remain at the periphery. But even there all is not chaos: the strong associations between morphology (the conjugation classes, preverbs) and aspect are continuing to mold verb forms into paradigms.

ACKNOWLEDGMENTS.

The fieldwork reported on in this paper was undertaken at Tbilisi State University in the years 1985-1986. I gratefully acknowledge three colleagues from that institution for providing me with grammatical judgments and insights on the workings of their native language: Docents Shukia Apridonidze, Nani Ch'anishvili and Meri Nik'olaishvili. Thanks also to the organizations which supported my nine months of research in Georgia: the International Research and Exchanges Board, the Fulbright-Hays foundation and the Ministry of Higher Education of the USSR.

REFERENCES.

- Arabuli, Avtandil. 1984. *mesame series nak'vteulta c'armoeba da mnišvneloba zvel kartulši*. (The formation and meaning of Series 3 forms in Old Georgian). Tbilisi: Metsniereba.
- Aronson, Howard. 1982. *Georgian: a reading grammar*. Columbus, Ohio: Slavica.
- Aronson, Howard. 1989. Inflection vs. derivation in Georgian conjugation. *The Non-Slavic Languages of the USSR: Linguistic Studies, Third Series*. ed. by H. Aronson, pp 1-19. Chicago: Chicago Linguistic Society.
- Harris, Alice C. 1981. *Georgian syntax: a study in relational grammar*. New York: Cambridge University Press.
- Harris, Alice C. 1985. *Diachronic syntax: the Kartvelian case (Syntax & Semantics 18)*. New York: Academic Press.
- Holisky, Dee Ann. 1978. Stative verbs in Georgian and elsewhere. *Classification of grammatical categories*, ed. by B. Comrie, pp. 139-162. Edmonton, Alberta: Linguistic Research.
- Holisky, Dee Ann. 1981a. *Aspect and Georgian medial verbs*. Delmar, NY: Caravan Press.
- Holisky, Dee Ann. 1981b. Aspect theory and Georgian aspect. *Tense and aspect (Syntax and semantics 14)*, ed. by P. Tedeschi and A. Zaenen, pp. 127-144. New York: Academic.

- Mach'avariani, Givi. 1974. aspekt'is k'at'egoria kartvelur enebši (The category of aspect in the Kartvelian languages). Kartvelur enata st'rukt'uris sak'itxebi 4: 118-141.
- Met'reveli, Teimuraz. 1988. aspekt'is šesc'avlis ist'oriidan kartulši. (From the history of the study of aspect in Georgian), Dzveli kartuli enis k'atedris shromebi 27: 136-53.
- Shanidze, Ak'ak'i. 1953. *kartuli gramat'ik'is sapuzvlebi, I: morfologia*. (The fundamentals of Georgian grammar I: morphology). Tbilisi: TSUG.
- Tschenkéli, Kita. 1958. *Einführung in die georgische Sprache*. Zürich: Amirani Verlag.
- Tschenkéli, Kita. 1960-1974. *Georgisch-deutsches Wörterbuch*. Zürich: Amirani Verlag.
- Tuite, K. 1987. Indirect transitives in Georgian. Proceedings of the 13th annual meeting of the Berkeley Linguistics Society *BLS* 13, pp 296-309.
- Tuite, K. in press. Aorist and pseudo-aorist for Svan atelic verbs. (to appear in *The Non-Slavic Languages of the USSR: Linguistic Studies, Third Series*, ed. by H. Aronson, Chicago: Chicago Linguistic Society, 1993)