

# Shifting patterns of Georgian verb morphology: diachrony and dialectology

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## I. Introduction

If there is one single feature of Georgian that stands out to linguists, it is its system of verb agreement<sup>1</sup>. It is not so much the categories to which agreement is sensitive, so much as the distribution of desinences in verb forms that has troubled linguists the most. Syntactic arguments that ‘ought’ to be expressed, and can be expressed under regular circumstances, fail to do so. In much of her work, Nash has sought to explain such superficially surprising mismatches in Georgian and other languages by examining different properties of wordhood at the syntax-morphology interface (Nash-Haran 1992, Jakubowicz et al 1998, etc.).

In this paper, I will seek to extend the empirical reach of this line of inquiry by examining a number of less well-studied phenomena in Georgian over the course of its long written history, as well as a number of highly divergent nonstandard dialects of the modern language. This will look at both features that lead to an aggregate increase in morphological complexity, such the decline of tmesis in preverbs and their ultimate grammaticalization onto the verb, allowing for the possibility of ‘trapped morphology’ in the terms of Harris and Faarlund (2006). While such processes result in a net *increase* of morphological complexity, there also exist countervailing *declines* in morphological complexity in other ways, such as with the loss of *-(e)n* plural number agreement. Then there are cases of ‘ambivalent’ grammaticalization, such as clitic agreement and aspectual-modality markers (=q’e, =mca, =dzi) which never quite ‘made it’, as well as various phonological changes in dialects which have had some rather serious knock-on effects to verb morphology. Georgian verbal morphology will be seen to be not a fixed unchanging template, but a kaleidoscope of multisystemic, ongoing morphological change.

## II. The changing nature of Georgian verb morphology

To put diachrony into perspective, it is first important to describe the basics of the modern synchronic system familiar from previous literature. Georgian exhibits a complex system of verbal polysynthesis in which verbs agree not just with person and number of subject and object arguments but also show features of tense, aspect, modality, voice, evidentiality or informational status, and ventivity (or motion toward a deictic center).

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<sup>1</sup> Except where otherwise noted, this paper follows the Leipzig Glossing Conventions, with the following notable exceptions: ‘1/2’ refers to first or second person subject or object agreement; PVB = ‘preverb’; PRV = ‘preradical vowel’, often an indication of voice; and TH = ‘thematic suffix’. Old and Modern Georgian may be glossed slightly differently due to changes in the morphological system.

(1)

1a	1b	2	3	4
Preverbs	Ventive	Personal Prefixes	Preradical Vowel	<i>ROOT</i>

5	6	7	8	9	10	11
II. Conj. (PASS)	Thematic suffix	Causative	Imperfect, Cond., Conj.	Screeve marker	3 <sup>rd</sup> Person	- <i>t</i> Plural

Various kinds of dependencies exist between these affixal positions, some of them outbound. The ventive prefix *mo-* occurs primarily only in the context of an exterior directional preverb (*še-mo-*, *ča-mo-*, *ga-mo-*, *mi-mo-*, *da-mo-*, *c'a-mo-* etc.), while first and second person indirect object agreement markers often occur in the presence of a following *i-* preradical vowel (*m-i-*, *g-i-*, which contrast with third person *-u-*). These kinds of dependencies shown in (2) however have not drawn the focus of most researchers.

- (2) a.    *ga-mo-g-i-gzavn-i-d-i-t*  
         PVB-VENT-2-PRV-send-TH-IMP-3SG-PL  
         'I was sending it off to y'all'
- b.    *še-g-i-c'q'vet'-in-e-t*  
         PVB-2-PRV-cut.off-CAUS-AOR3SG-PL  
         'I interrupted him for y'all.'

Thus in (2a), the ventive prefix *mo-* can only occur in the context of a preceding, external preverb *ga-*; there are other verbs where *mo-* can occur on its own (and hence is a distinct affix), but not in this case.

		V-SET	M-SET
1 <sup>st</sup>	SG	v-...-(i/e/o/a)	m-
	PL	v-...-(i/e/o/a)-t	gv-
2 <sup>nd</sup>	SG	∅/x-...-(i/e/o/a)	g-
	PL	∅/x-...-(i/e/o/a)-t	g-...-t
3 <sup>rd</sup>	SG	-s/a/o	∅/h-/s-
	PL	-en/-es/-nen...	∅/h-/s-

**Table 1. V-set and M-set argument markers**

### §2.1 Morphological Blocking in modern literary Georgian

Rather, it has been the interaction between agreement markers. Traditionally these have been called either subject and object agreement markers, or the somewhat less analytically presumptive *v*-set and *m*-set markers (as in Table 1; in some treatments, the *h*- and *s*- third person markers are treated as a separate *h*-set). The issue is that even though verbs are interpreted as if they reflected both sets of markers at the same time (with transitive and some intransitive predicates), their actual exponence on the verb overlaps, such that in some slots on the verb only one of the two sets may be visible on the surface form in a given position of the verb. This is most noticeable in paradigms which combine first and second person arguments where only the exponent of the second person may surface in the slot no. 2:

<i>Obj. →</i>						
<i>Subj. ↓</i>	1 <sup>st</sup> <i>sg</i>	<i>pl</i>	2 <sup>nd</sup> <i>sg</i>	<i>Pl</i>	3 <sup>rd</sup> <i>sg</i>	<i>Pl</i>
1 <sup>st</sup> <i>sg</i>			<b>g-nax-e</b>	<b>g-nax-e-t</b>	<b>v-nax-e</b>	<b>v-nax-e-t</b>
<i>Pl</i>			<b>g-nax-e-t</b>	<b>g-nax-e-t</b>	<b>v-nax-e-t</b>	<b>v-nax-e-t</b>
2 <sup>nd</sup> <i>sg</i>	<b>m-nax-e</b>	<b>gv-nax-e</b>			nax-e	nax-e
<i>Pl</i>	<b>m-nax-e-t</b>	<b>gv-nax-e-t</b>			nax-e-t	nax-e-t
3 <sup>rd</sup> <i>sg</i>	<b>m-nax-a</b>	<b>gv-nax-a</b>	<b>g-nax-a</b>	<b>g-nax-a-t</b>	nax-a	nax-a
<i>Pl</i>	<b>m-nax-es</b>	<b>gv-nax-es</b>	<b>g-nax-es</b>	<b>g-nax-es</b>	nax-es	nax-es

**Table 2. Aorist Screeve Paradigm of *xedva* ‘see’**

Thus although *v*- consistently marks the presence of a first person argument and *g*- likewise registers a second-person argument, we see *g-nax-e* ‘I saw you’, not *\*v-g-nax-e*, despite the latter having a perfectly licit consonant cluster in Georgian. This kind of phenomenon of morphological

blocking has been discussed at some length in the previous theoretical literature (Nash-Haran 1992; Anderson 1992; Halle and Marantz 1993; Stump 2001; Wier 2011).

What has been less often noted in the non-Kartvelological literature (though see Wier 2011, Ch. 4) is that other such blocking patterns exist, with a different arrangement of features, and in other slots of the verb, and that some of these other patterns of blocking have been less stable over the history of Georgian as a language. While the second-person prefix *g-* outranks the first person *v-* in prefix morphology, the *-t* plural suffix (see for example Table 2) which marks first or second person plural arguments only outranks some of the third-person suffixal positions. In Table 2 for example, we see *g-nax-a-t* [2-see.PF-AOR.3SG-1/2PL] ‘he saw y’all’, where *-t* is postposed after the third person aorist agreement marker. In the modern literary language, this is not true of the present tense paradigms where *-s* marks the analogous third person present subject, where we see *g-nax-av-t* [2-see.PF-TH-1/2PL] ‘he will see y’all’, not \**g-nax-av-s-t* [2-see.PF-TH-3SG-1/2PL] ‘he will see y’all’. The *-s* could be registered, but *-t* blocks its expression. The modern literary language also never marks a *-t* for first or second person plural when the prefixal position combines both person and number, e.g. *gv-nax-a* [1PL-SEE.PF-AOR.3SG] ‘he saw us’, \**gv-nax-a-t*, \**gv-nax-t*, nor where the subject is third person plural ending is *-en/-es*, e.g. *g-nax-es* [2-see.PF-AOR3PL] ‘they saw you/y’all’. The *-t* suffix is simply blocked from expression in these contexts, leading to the following hierarchies:

- |   |   |  |
|---|---|--|
| (3) a. 3 <sup>rd</sup> PL PRES/AOR subject <i>-en/-es</i>           | > | 1 <sup>st</sup> / 2 <sup>nd</sup> PL subject or object <i>-t</i> |
| b. 1 <sup>st</sup> / 2 <sup>nd</sup> PL subject or object <i>-t</i> | > | 3 <sup>rd</sup> SG PRES subject <i>-s</i>                        |
|   |   | <i>but not: 3<sup>rd</sup> SG AOR subject <i>-a</i></i>          |

Thus it is not the case that one can say of a morphosyntactic feature that it always *globally* blocks any other given feature; one must speak of how particular (combinations of) features interact in very specific paradigms and in very specific slots on the verb.

## §2.2 Diachronic changes in morphological exponence

To add even further complexity to an already bewildering setup, the precise relationship these features have had to one another has changed over the centuries. Thus the above-mentioned generalization of whether *-t* blocks the expression of *-s* (in 3b) was not always true in earlier centuries. We find examples like (4)-(5):

- (4) ... da barbaroz-ta      gv-a-ku-s-t      c’ina      aǵdgomoba-ta  
and infidel-GEN.PL    1PL-PRV-have.INAN-3SG-1/2PL      before enemy-GEN.PL  
‘and we have before the infidel enemies...’ (III Macc 3:17, *Bakar’s Bible*; 1743)
- (5) xolo      romel-ta      ara      u-xil-av-s-t      gemo      mat-i  
but      which-DAT.PL    not      PRV-see-TH-3SG-1/2PL    taste.NOM      3PLPOSS-NOM  
‘but which their [sense of] taste does not distinguish’ (*Epistles*; ca. 970-980)

The most well-documented of these changing patterns of morphological expression is the set of so-called *xanmet’i* (‘having superfluous *x*-prefixes’) and *haemet’i* (‘having superfluous *h*-prefixes’) texts that date from the 5<sup>th</sup>-7<sup>th</sup> centuries and 8<sup>th</sup>-9<sup>th</sup> centuries respectively (see for example the discussion

in Fähnrich 1994). These texts get their names from the distribution of the desinence of third person<sup>2</sup> indirect object markers, *x-* or *h-* depending on period (Tuite 2008).

- |              |                                    |             |                 |              |
|--------------|------------------------------------|-------------|-----------------|--------------|
| (6) Xanmet'i | mi- <u>x</u> -u-g-o                | P'etr'e da  | <u>x</u> -rkw-a | Iesu-s       |
|              | PVB-3-PRV-answer-AOR.3SG           | Peter and   | 3-say-AOR.3SG   | Jesus-DAT.SG |
| Haemet'i     | mi- <u>h</u> -u-g-o                | P'et're and | <u>h</u> -rkw-a | Iesu-s       |
| Hadish Gos.  | mi-Ø-u-g-o                         | P'et're and | Ø-rkw-a         | Iesu-s       |
|              | 'Peter answered and said to Jesus' |             |                 |              |

In most contexts, these markers pattern in the same slot as the *m*-set described above, and so allow for forms like *mi-m-i-g-o* 'he answered me' and *mi-g-i-g-o* 'he answered you' parallel to those in (6). In contexts including both a first person subject and a third person indirect object however we exceptionally see exponents of both arguments:

(7) Fifth century *xanmet'i* texts (Fähnrich 1994)

- a. x-w-a-rkw  
3-1-PRV-tell  
'I told him'
- b. x-w-e-sav  
3-1-PRV-hope  
'I hope'

Gamq'relidze (1979) and Tuite (1998) argued that this situation descends from a yet earlier situation before the first attested texts in which the exponent of the first person was *xw-*, as it is still in the related Svan language, and then this was reanalyzed as two single-phoneme markers of object *x-* and subject *w-/v-* -- that is, literal fissioning of markers. These markers in later centuries in turn started to show up in reversed position with increasing frequency:

- |                                      |   |
|--------------------------------------|---|
| (8) a. da mere v-h-k'itx-e           | (Martyrdom of St. Eustatius, Ch. 4; 550 AD) |
| and then 1-3-ask-AOR.1/2             |   |
| 'and then I asked him'               |   |
| b. da v-h-k'itx-av k'ac-sa mas       | (Sinai Lectionary, text 50; 864 AD)         |
| and 1-3-ask-TH man-DAT.SG the.DAT.SG |   |
| 'and I ask the man'                  |   |

Here, in (8a) and (8b) we see the first person marker *v-* followed by the third person marker *h-*, the reverse of earliest ordering seen in (7). Over a period of several centuries, both the *x-* and *h-* markers become attenuated and then disappear altogether in most verb forms of most verbs. Although they are thus an example of morphologically conditioned sound-change, this process did not actually represent a loss of the morphological slot. A small number of verbs (notably 'be' and 'go') retain an initial second-person *x-* in some paradigms (*x-ar* 'you are', *c'a-x-val* 'you will go').

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<sup>2</sup> Previous literature suggests the shift from Xanmet'i to Haemet'i texts affected the *x-* prefixal slot as a whole, both in its function as a third person object agreement marker as well as in its function as a second person subject agreement marker (e.g. in Shanidze 1920). This seems not to be the case: there are no instances of a *x>h* shift for second person markers, only for the third person object.

## §2.3 Tmesis-loss and the grammaticalization of preverbs

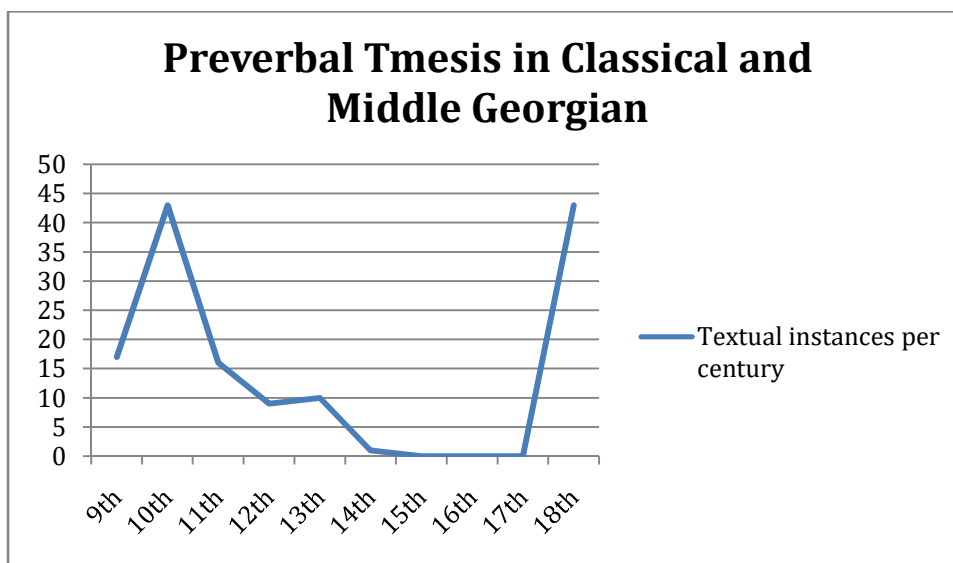
Also well-known, though less often commented upon, was the tmesic behavior of preverbs in the evolution from Old to Middle Georgian. Georgian preverbs mostly evolved from independent adverbs or nouns of position or orientation (Harris 2003; Cherchi 1994, 1997):

- (9) a. ga(n)- ‘outwards’ PK \*gan- ‘wide(ly), broad(ly)’  
 b. da- ‘down’ PK \*dab- ‘arable land, field’ (Shanidze 1973: 261)  
 c. še- ‘in(ward)’ PK \*šowa- ‘middle, inside’: \*šowa > \*ša- > še- (Gamq’relidze 1959: 54)  
 c. c’a(r)- ‘off, away’ perhaps related to PK \*c’ar- ‘race, hurry’  
 d. šta-/ča- ‘down’ from še- ‘in’ and da- ‘down’: \*še-da > \*šda- > šta > ča-

As a consequence of this, preverbs often show up with extraneous material inside their expected slot on verbs, including conjunctions, personal and interrogative pronouns, and adverbial clitics of various kinds, and with varying numbers of intervening material:

- (10) One intervener (*Histories and Praises of the Royal Crown*, ca. 12<sup>th</sup> c)  
 še=ra=vid-es did-i ser-i še=mzad-es  
 in=what-go.AOR-AOR3PL great-NOM.SG feast-NOM.SG in=prepare-AOR3PL  
 mepe-man da k’atalik’os-man  
 king-NARR.SG and catholicos-NARR.SG  
 ‘The king and catholicos went in and prepared a great feast’
- (11) Two interveners (Deut 24:2)  
 mi=tu=uk’ue=vid-es dedayk’ac-i igi  
 hither=if=already=go.AOR-AOR3PL woman-NOM.SG the.NOM.SG  
 ‘if the woman leaves [her house]’
- (12) Two interveners (Is 36:6)  
 romel-sa mi=tu=vin=e-q’rdn-as mas zeda  
 which-DAT.SG hither=if=who=PRV-lean.against-OPT3SG DAT.3SG on  
 ‘which someone might lean against’
- (13) Three interveners (Gal 4:15)  
 vitarmed še=tu=mca sadzlebel i-q’-o  
 because in=if=IRR overpowering PRV-be.AOR-AOR3SG  
 ‘because it would be overpowering’
- (14) Four interveners (Deut 19: 5)  
 še=tu=vin-me srul i-q’-os t’q’e-sa  
 in=if-who-any complete PRV-be.OPT-OPT3SG forest-DAT.SG  
 šeš-isa k’rv-a-d  
 firewood-GEN.SG bind-MAS-ADV.SG  
 ‘if anyone can improve binding firewood in the forest’

This tmesic behavior can license quite a few interveners: anything from one in (10) to four in (14). It is also clear that tmesis of this sort is extant from the very first texts: sentences like (7) are found in the very first *xanmet’i* texts of the fifth century. Preverbal tmesis continued to be used in the written (and presumably spoken) language at least until the 14<sup>th</sup> century, after which the modern prefixal pattern becomes more fixed:



**Table 3. Preverbal Tmesis in Classical and Middle Georgian.**

Based on this survey of materials available in the Georgian National Corpus<sup>3</sup>, tmesis reached a peak in the 10<sup>th</sup> century, and declined precipitously in the next several centuries. Even the one extreme outlier found in the 18<sup>th</sup> century represents this trend: it consists almost entirely of a single text, Bakar's Bible published in Moscow in 1743, which relied very extensively on the late 9<sup>th</sup> century Oshki Bible. So even apparent textual exceptions reinforce the rule: tmesis died out in spoken Georgian probably around the late 13<sup>th</sup> century (see also Cherchi 1994).

## §2.4 -(e)n plural agreement

The same cannot be said about *-(e)n*-plural absolutive<sup>4</sup> argument agreement. This feature of verb morphology (which has been discussed extensively elsewhere, notably Tuite 1998) in which plural objects of transitive verbs or plural subjects of intransitive verbs bear an extra morphological indication of number is likewise found from the earliest texts throughout the late medieval period and even marginally into the works of nineteenth and twentieth century authors, for whom it remains grammatical albeit in a rather archaic or literary register:

<sup>3</sup> To attempt to set fixed boundaries on this corpus search, I identified every instance in the GNC of a preverb (plus sometimes the ventive suffix *-mo*) with a following conjunction *tu* 'if', as conjunctions only ever surface after preverbs under conditions of tmesis. Because conjunctions do not appear in some periods of texts more or less frequently than other periods, they can serve as an independent variable.

<sup>4</sup> It is important to distinguish here at least two senses of 'absolutive'. One is that found in the Kartvelological literature which is used to denote forms of ostensibly case-suffix-less nouns (they are 'absolutely' unmarked). As Harris notes, this 'absolutive case' is syntactically a proper subset of the nominative case functions reflecting nonreferential arguments. The other sense of absolutive is the one used here: verbs that take *-(e)n* plural markers agree with the subject of intransitive clauses and the object of transitive clauses, one of the few straightforward examples of ergativity in Georgian.

- (15) ek'lesia-d      še-vid-a,                      da tana      mi-i-q'van-n-a  
church-ADV    PVB-go.AOR-AOR3SG    and same.time PVB-PRV-take-OBJ.PL-AOR3SG  
sam-ni            igi                      dze-ni            mis-ni  
three-NOM.PL   the.NOM            son-NOM.PL    3SGPOSS-NOM.PL  
'He entered the church and at the same time took his three sons.'  
(5<sup>th</sup> c, *Martyrdom of Saint Queen Shushanik*)
- (16) šemdgom-ad    mcired-isa      dro-ysa            mo-vid-a                      msaxur-i  
next-ADV      little-GEN      time-GEN      PVB-go.AOR-AOR3SG    servant-NOM  
mat-i,            ga-i-t'an-n-a                      danahštom-ni            xil-ni  
3PLPOSS-NOM   PVB-PRV-bring-OBJ.PL-AOR3SG    remaining-NOM.PL    fruit-NOM.PL  
'In the next few minutes, their servant came, [and] he brought the remaining fruits.'  
(Giorgi Avalishvili, *The Traveller*, 1820)
- (17) mo-a-k'vl-ev-in-a                                      Ovs-ta                      mepe            da  
PVB-PRV-kill-TH-CAUS-AOR3SG                      Ossetian-GEN.PL            king.NOM      and  
dzal-it            i-taq'van-n-a                                      Ovs-ni  
force-INST      PRV-praise-OBJ.PL-AOR3SG      Ossetian-NOM.PL  
'The king of the Ossetians had him slaughtered and he praised the Ossetians  
greatly.' (K. Gamsaxurdia, *The Right Hand of the Grandmaster*, 1939)

Its decline in the modern period (Table 4)<sup>5</sup> parallels the decline of nominal case marking with fusional case-number suffixes: even in Old Georgian, *-(e)n*-plural agreement occurred with arguments bearing nominative case *-ni* in the aorist and perfective series of verb tenses (Tuite 1998: 69); semantically plural arguments with the *-eb* plural suffix did not trigger this number agreement<sup>6</sup>.

<sup>5</sup> This represents every instance in the GNC of *-(e)n*-plural agreement with the high frequency verbs *xilva* 'look, see', *t'an-* 'bring/take (something inanimate)', and *micema* 'give'.

<sup>6</sup> Presumably this is because the *-eb* plural suffix originated as a collective derivational suffix (Harris 1985).



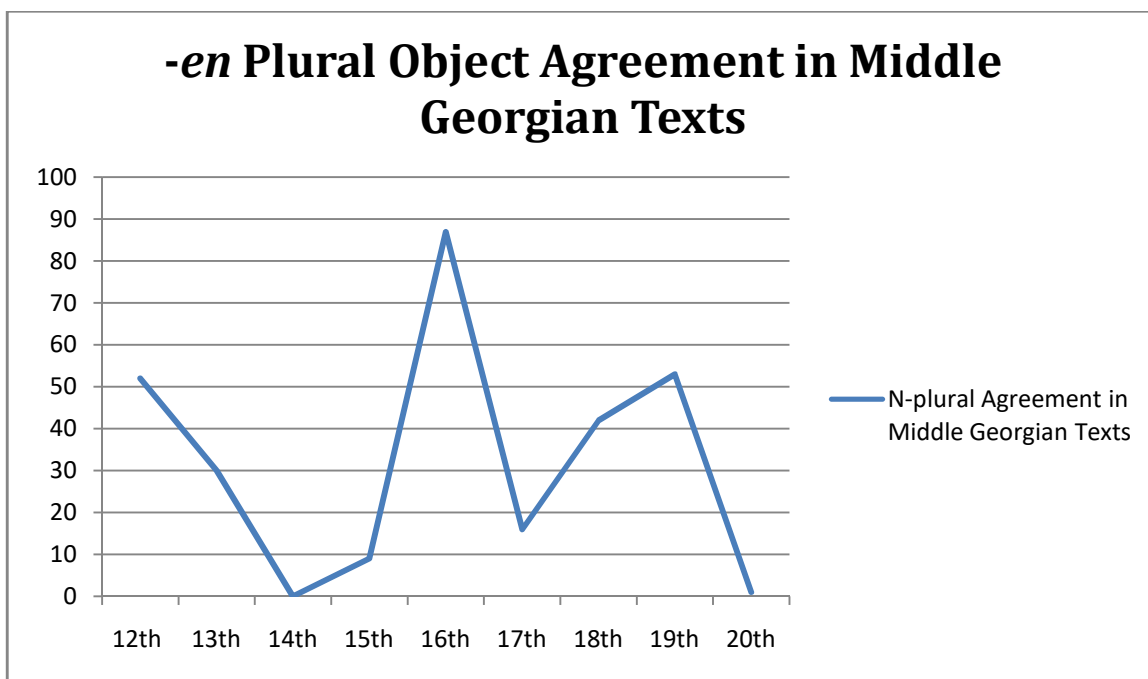


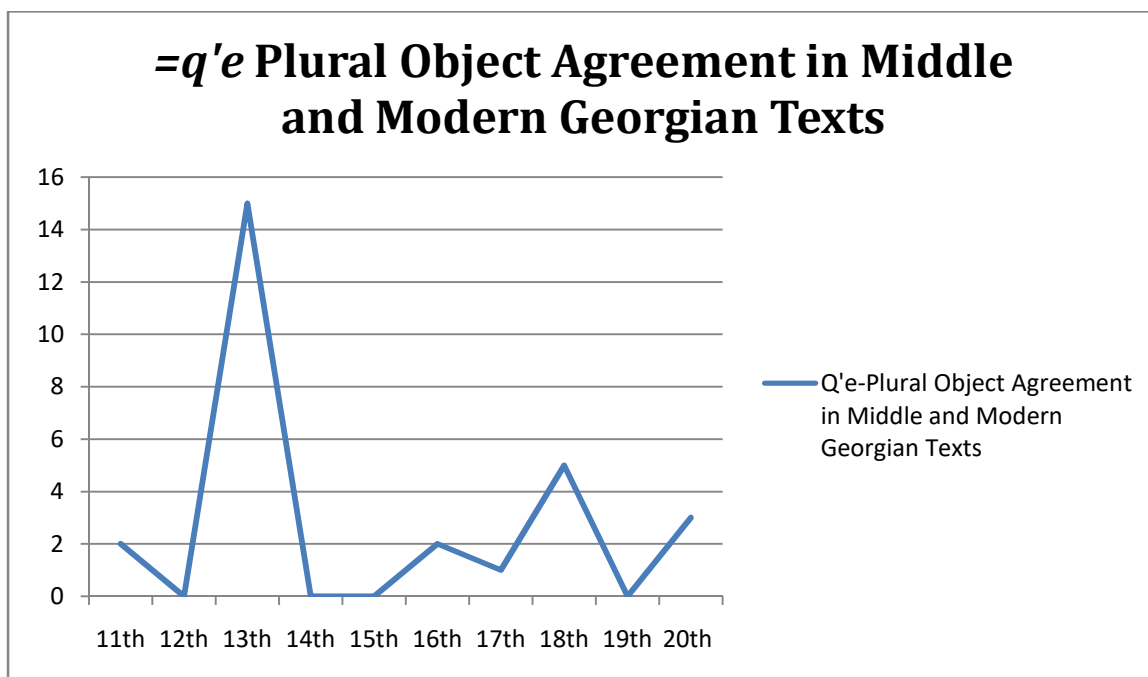
Table 4. -(e)n Plural Object Agreement in Middle Georgian texts.

## §2.5 ‘Ambivalent’ grammaticalization of =*q’e* plural and aspectual and modal clitics

The case of =*q’e*-plural object agreement is different yet again from both *-t* and *-en*-plural agreement, as noted in Tuite (1989), in that it targets different arguments (semantic recipients or experiencers and never morphological subjects, as in (18)), is always animate, is enclitic and separable from the verb matrix (19), and can even be used as a kind of multiple exponence alongside the other verb plural suffix *-t*, as in (20):

- (18) c’inaysc’ro<sup>h</sup>bil-ta k’reba-ta                      g-a-q<sup>h</sup>s-ov-s=*q’e*  
 early.on-GEN.PL meeting-GEN.PL                      2-PRV-remember-TH-3SG=OBJ.PL  
 gana=ǵa                      amat-i                      gansazǵv<sup>h</sup>reba-y  
 really=quite                      3plPoss-NOM.SG                      limit-NOM.SG  
 ‘Don’t you (PL) remember their limits on early meetings...[?]’  
 (*The sixth canon of the Church Council of Carthage*; ca 1010-1030)
- (19) mk’urnal-ni                      da                      dast’akar-ni                      c’amal-sa=*q’e*                      mo-g-i-t’an-d-es  
 doctor-NOM.PL and                      surgeon-NOM.PL medicine-DAT.SG=OBJ.PL PVB-2-PRV-bring-COND-3SG  
 ‘the doctors and surgeons brought you the medicine’ (*Knight in the Tiger Skin*, K526; 1190)
- (20) da                      perx-ta                      kala[m]a-ni                      oden,                      vitarca                      g-i-xil-av-t=*q’e*  
 and                      foot-GEN.PL                      sandal-NOM.PL only                      as                      2-PRV-see-TH-PL=OBJ.PL  
 ‘and only sandals of the feet, as you all have seen’ (*The Life of a Monk is Christ’s*; 1880)

Many of these behaviors make sense if we assume that =*q’e* began as a reduced form of the quantifier *q’vela* ‘all’. Unlike the *-en* pluralizer, which was inherited from the protolanguage, =*q’e* began to grammaticalize within historical time: it is not attested at all in first millennium texts,



**Table 5. =q'e Plural Object Agreement in Middle and Modern Georgian Texts.**

and it does not become relatively common until the 13<sup>th</sup> century (Table 5)<sup>7</sup>. Although =q'e survives into the modern period in a number of dialects (especially the dialects of Fereidan, Iran), it never quite becomes a formal part of the verb.

In this sense, =q'e resembles a number of other clitic markers that existed in Old and Middle Georgian but which never quite 'made it' to become a fixed part of the verb matrix. Four in particular stand out for the semantic readings they induce on verbs:

- (21) a. =mca induces irrealis, deontic or conditional modal readings in indicative verbs<sup>8</sup>  
 b. =dzi dubitative mood  
 c. =re aspectual 'attenuator', inducing imperfective aspectual readings on perfective verbs  
 d. =ǵa intensifier clitic often with evidential implication of confirmed or real information
- (22) g-a-q<sup>hs</sup>-ov-t=mca maradis c'mida-ta šina locva-ta šen-ta  
 2-PRV-remember-TH-PL=IRR eternal saint-GEN.PL in prayer-GEN.PL 2Poss-GEN.PL  
 'You all should remember in your prayers of the everlasting saints'  
 (*Life of Grigol Xandzteli*; 951)

<sup>7</sup> This table represents in fact every instance of =q'e number agreement in the GNC. It includes only instances of number agreement, and excludes cases in which a homophonous =q'e seems to serve discourse functions other than number agreement.

<sup>8</sup> This is distinct from its use as a discourse-functional clitic that simply means 'however'.

- (23) me ga-mo-v-cad-o igi, uk'uetu namdvil=ve  
 1SG PVB-VENT-1-test-OPT.1SG 3SG.NOM if genuine=EMPH  
 a-kun-d-es=dzi morčileba-y  
 PRV-have.INAN-COND-3SG=DUB obedience-NOM.SG  
 'I should test him, if indeed he has genuine obedience'  
 (*Studies and Narratives of the Fathers*; 11<sup>th</sup> century)
- (24) aḡar m-i-q'ivl-a ḡimil-it  
 no.longer 1SG-PRV-crow-AOR3SGsmile-INST  
 ar-ca=ḡa ga-m-i-cin-a=re  
 not-also=INT PVB-1SG-PRV-laugh-AOR3SG=ATT  
 'He no longer made me crow with a smile, nor quite made me laugh'  
 (*Knight in the Tiger Skin*, K568; 1190)
- (25) i-xil-e-t=ḡa ušiš-i ese sul-ita  
 PRV-see-AOR1/2-PL=INT safe.place-NOM.SG this.NOM soul-INST  
 'You all really saw this safe space with the spirit'  
 (*Life of Giorgi Mtac'mindeli*; 1068)

Thus in (22) and (23), the clitics =*mca* and =*dzi* force otherwise regular realis verbs *gaq<sup>h</sup>sovt* 'y'all remember' and *akundes* 'he has' into new modal interpretations, and likewise in (24) and (25), =*re* and =*ḡa* impose imperfective quasi-aspectual and quasi-evidential interpretations on verbs *gamicina* 'he made me laugh' and *ixilet* 'y'all saw' without those readings otherwise. What these clitic markers have in common is that they often convey modal, aspectual or evidential readings in a text, sometimes added to the indicative form, and sometimes in addition to other, older layers of modal inflectional morphology. By virtue of being clitics, they promiscuously attached to other parts of speech, and so in the Georgian National Corpus their appearance affixed to verb forms is in fact rather rare, with the rarity depending on the specific clitic. Although none of these clitics any longer preferentially attach to verb forms, most of them do still exist in the language with other meanings or as frozen elements attached to pronouns (eg-*re* 'thus, so'), conjunctions (*tu-mca* 'although') or other parts of speech.

### III. Morphological shifts in contemporary nonstandard Georgian dialects

Far less well understood, and almost unstudied by theoreticians, are the ways in which nonstandard dialects of modern Georgian have also shifted away from the pattern found in the literary language's verb morphology. In many cases, these dialects reflect phonological changes which have obscured or been reinterpreted from the more straightforward relationship of morphemes to surface forms found in the literary language. Thus in the eastern mountainous Pshav dialect, a rule of lenition has turned coda /h/ segments into /y/, which however has been subsequently followed in some forms with a reinsertion (or perhaps analogical preservation) of the same /h/ segment. Because /h/ is a morphological marker of third person indirect objects, this has the effect of creating

pleonastic multiple exponence of that marker, what Harris (2016: 62) calls ‘Type-3’ or ‘reinforcing multiple exponence’:

- (26) vepxv xo dznel-i=a, adamian-s ša-š-č’am-s,  
tiger CONJ hard-NOM=be.3SG man-DAT PVB-3SGIO-eat-3SG  
ga-**y-h**-pet-av-s  
PVB-**3SGO-3SGO**-startle-TH-3SG  
‘If a tiger is being difficult, it will eat a man up, it will startle him’
- (27) es ra ubedureba ari, ro k’ac-m  
this such misfortune.NOM be.3SG that man-NARR  
da-**y-h**-k’arg-os=o=d veğar  
PVB-**3SGO-3SGO**-lose-OPT3SG=QUOT=and can’t.any.longer  
mo-q<sup>h</sup>el-os=o  
PVB-make.time-OPT.3SG=QUOT  
‘This is such a misfortune, that a man would lose it and no longer be able to make time.’

In the neighboring Tush dialect, several rules conspire to blur the boundary between the preverb and the preradical vowel: vowel assimilation, lengthening of the first vowel, deletion of the second vowel in hiatus, and insertion in its place of a glottal stop. These rules have the effect of making otherwise surface-true morphological contrasts opaque.

- (28) c’iʔ-q’van ʔiʔm monadire-ma=c šin, mūʔ-ar,  
PVB.PRIV-bring.ANIM that.OBL hunter-NARR=too inside PVB.PRIV-come  
ʔiʔs c’q’rul-eb-i=c mūʔ-rčīn u-c’aml.  
that.NOM wound-PL-NOM=too PVB.PRIV-heal PRIV-medicine  
‘That hunter brought him inside, he came, he healed the wounds without medicine.’

Another dialect where phonological vowel coalescence affects the surface interpretation of verb morphology is the Ingilo dialect of Azerbaijan, where vowel conflation exists (29) alongside fortition of object agreement markers (30):

- (29) garak ow-d-o c’o-i-ğ-o  
need PVB.1-put.on-AOR1/2 PVB.1-PRV-take-AOR1/2  
‘I needed to put it on and take it’
- (30) mi-h-x-q’on-s a-c’ön-av-s=av amey saknela  
PVB-3SG-3SG-bring-3SG PVB-weigh-TH-3SG=QUOT this.GEN to.be.done  
‘He brings it, weighs it, gets it done.’

In such cases, it is not clear whether these represent synchronic phonological rules, or diachronic changes with the knock-on effect of merging or contrarily breaking up morphological slots on the verb.

Where the Tush and Ingilo dialects in different ways sometimes conflate otherwise distinct slots on the verb, the Khevsur dialect has begun to add extra layers of morphology through a clitic quotative particle  $-(i/a)v$ :

- (31) t'quil-s      k'i      nu      v-i-t'qv-i-o=da  
 lie-DAT      however      NEG      1-PRV-tell-AOR1/2=QUOT=and  
 ra=c      g-i-nd-a      ma-m-i-vid-as=av  
 what=REL      2-PRV-want-3SG      PVB-1SG-PRV-go.AOR-OPT3SG=QUOT  
 'I however didn't tell a lie, and what you supposedly wanted to go to me...'

While this clitic has analogues in the literary language as  $-o$ , the use of  $-a/iv$  in the mountain dialects and specifically Khevsur is far more frequent and seems likely to be evolving toward an evidential verbal category in its own right.

#### IV. Conclusions and Discussion

In the above discussion we have noted several different kinds of changes to the underlying structure of the Georgian verb. On the one hand, we have seen a fairly classical case of grammaticalization of preverbs from original adverbs, adpositions and nouns when the tmesic behavior of those preverbs was eventually lost and they became a fixed part of the verb matrix. This allows for the possibility of 'trapped morphology' (in the phrase of Harris and Faarlund (2006)), in which person prefixes and preradical vowels expressing argument valence become fixed between the preverb and the root. We have also seen systematic loss of some of that older trapped internal morphology, in the form of  $-en$ -plural agreement, corresponding to the loss of fusional case-number affixes  $-ni$ ,  $-ta$ , etc.

However perhaps most interesting are the morphological processes that fall in between the cracks:  $=q'e$ -plural object agreement and the modal, aspectual or evidential clitics such as  $=mca$ ,  $=dzi$ ,  $=re$  and  $=\check{g}a$  which, for a time, became grammatically promiscuous but did not in the end become fixed parts of the verb. We have also seen, in the presumable origin of  $v$ - and  $x/h$ - verb person prefixes as well as various phenomena in the modern nonstandard dialects, a kind of morphological fissioning of what was once a single affix into two or more segments. In at least some of these cases, this seems to be the result of a phonological process that has a knock-on effect in the morphology when speakers reinterpret the results of purely phonological processes as grammatical.

Rather than trying to propose a formal theoretical analysis of these various morphological phenomena, it is perhaps more interesting to consider what questions are most relevant for linguists going forward:

- (32) a. Why do some cliticizing processes succeed in becoming fixed aspects of morphology in particular periods (e.g. tmesis-loss), but not others (modal clitic loss)?
- b. Why does trapped morphology in some cases slowly blur out of existence (as in Ingilo dialect with fused preverb-person agreement forms) whereas in other times and places it disappears discretely (as with *-en*-plural agreement)?
- c. To what extent are these kinds of morphological changes triggered by changes in other domains of grammar (phonology, syntax, etc)?
- d. To what extent can they be identified in historical corpora?

It would seem these questions loom large in our understanding of grammaticalization and morphosyntax generally.

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