

The \varnothing - prefix in early Georgian

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(Note added in 2003: *This is the English original of a paper which appeared in German translation in Georgica 13/14: 34-61 [1991]. The problem of the distribution of the Early Georgian \varnothing - prefix continues to baffle me, and I by no means consider the hypotheses presented here to be the last word on the subject!* — KT)

1. Introduction. One of the most significant developments in Georgian philological studies to occur in this century is the discovery and analysis of manuscripts from the period preceding the Arab conquest of Tbilisi [Shanidze 1923]. These early texts, dating from the 5th-7th centuries, are of special interest for the view they afford of an ancient dialect of the Georgian language which was soon to disappear. This is the so-called KHANMETI DIALECT (*Ლanmet'i* “superfluous \varnothing 's”), the existence of which had been alluded to by the medieval scholar Giorgi Mtacmideli [Kawtaradse 1975: 576]. It derives its name from its system of person marking. The S_2 and O_3 marker is \varnothing -, and the prefix appears in this form in almost all contexts, including prevocalic position.¹ The discovery of an early dialect of Georgian with “superfluous” \varnothing 's was not entirely unexpected (Shanidze had in fact predicted it), in view of fragmentary evidence from within Georgian, and comparative data from Svan. The Svan S_2 and O_3 marker is indeed \varnothing - (prevocalically). There are, however, curious differences in the distribution of this prefix between Svan and Khanmeti Georgian (hereafter abbreviated **KhG**). In particular, the \varnothing - prefix occurs in certain contexts in which it does not appear to mark agreement with any surface argument. The distribution is given in Table 1, and the terms for grammatical relations which will be used in the following discussion are in Table 2.

TABLE 1. Distribution of \varnothing - prefix (Khanmeti Georgian and Svan)²

Distribution of S_2 \varnothing -:

Svan: All verb forms.

KhG: All verb forms except (positive) imperatives.

Distribution of O_3 \varnothing -:

KhG/Svan: Agreement with DAT Arg2 (all series) and DAT Arg1 (perfect series).

KhG only: Agreement with DAT Arg3 (present series) — with exceptions.

Function unclear:

KhG/Svan: Present in comparative degree of adjectives.

KhG only: [a] Present in *i*-prefixed Class P verbs.

[b] Present in some intransitive Class A verbs.

¹There is a second early Georgian dialect, attested in manuscripts from the 7th-9th centuries, which Shanidze [1923] has termed Haemeti (“superfluous h's”). The distribution of the *h*-prefix in these texts is in principle the same as that of the \varnothing - prefix in the Khanmeti dialect, but it is not employed as consistently. It is probably the case that by the middle of the 8th century the principles governing the earlier distribution of the *h*-prefix were no longer observed in the dialect spoken by the writers [Sarjveladze 1971: 39]. For this reason I will not make use of Haemeti data. Throughout this paper the terms “Khanmeti Georgian” (KhG) and “early Georgian” will refer to the earliest attested form of the language (5th-7th c.), “Old Georgian” to the entire period from the 5th to the 13th c., and “Modern Georgian” to the contemporary standard language.

²For both languages, morphophonemic rules delete the \varnothing - prefix in certain contexts. In this paper, when an assertion is made that a particular verb form employs or does not employ the \varnothing - prefix, the reference is to underlying morphological structure, before the application of morphophonemic rules.

TABLE 2. Person agreement and case assignment pattern (Georgian and Svan)

	CLASS A VERBS			CLASS P VERBS	
	Arg1	Arg2	Arg3	Arg1	Arg2
<i>present series</i>					
agreement	S	O	O	S	O
case	NOM	DAT	DAT	NOM	DAT
<i>aurist series</i>					
agreement	S	O	O	S	O
case	ERG	DAT	NOM	NOM	DAT
<i>perfect series</i>					
agreement	O	-----	S	S	O
case	DAT	-----	NOM	NOM	DAT

Arg1 =	agent, source, theme, patient
Arg2 =	addressee, recipient, experiencer, beneficiary
Arg3 =	patient, goal, theme, instrument
present series:	present, imperfect, conjunctive, iterative, present-series imperative
aurist series:	aurist, optative/future, permansive, (aurist-series) imperative
perfect series:	present perfect, pluperfect, perfect conjunctive
Class A verbs:	all transitives; intransitives denoting (atelic) activities
Class P verbs:	stative and change-of-state intransitives

TABLE 3. Person agreement affixes (Khanmeti Georgian and Svan)

Set S (“subject”) affixes

	KHANMETI GEORGIAN			SVAN	
	singular	plural		singular	plural
<i>1st person:</i>	v-	v- t	<i>exclusive:</i>	□w-	□w- -d
<i>inclusive:</i>				l-	-d
<i>2nd person:</i>	□-	□- t		□-	□- -d
<i>3rd person:</i>	-s/a/o/n	-n/en/es/ed		∅-/l-	∅-/l- -□

Set O (“object”) affixes

	KHANMETI GEORGIAN	SVAN	
		singular	plural
<i>exclusive:</i>	m-	m-	n-
<i>inclusive:</i>	gw-	gw-	
<i>2nd person:</i>	g-	j-	j- -□
<i>3rd person:</i>	□-	□-	□- -□

In this article I will review the early Georgian data concerning the distribution of the □- prefixes for the classes of verbs listed in Table 1. Various proposals have been made to account for their distribution: I will discuss some of them here, and also present some hypotheses of my own. Since

the focus of this paper will be upon object marking in early Georgian, the patterning of the S₂ marker □-, which seems to have always been a separate morpheme, will be relegated to the appendix.

2. Indirect-object and direct-object agreement. As used here, the term “(formal) indirect object” (abbreviated **IO**) denotes a grammatical category characterized by case marking and verb morphology. In early Georgian and Svan, IOs are assigned DAT case, and control prefixal agreement in all three persons. They are to be distinguished from “direct objects,” which will be discussed below, and certain NPs of time, duration and location, which are marked by NOM or DAT case but never control verb agreement [Imnaishvili 1957: 679-680; Shanidze 1976: 154-155]. Using the argument categories defined in Table 2, for both Svan and KhG the Arg₂ has the formal attributes of an IO. In addition, the inversion transformation [Harris 1981: §8] assigns formal IO status to the Arg₁ of the perfect-series forms of Class A verbs.

The formal direct object (**DO**) is defined as that class of core arguments which does not have the capability of controlling person agreement in all three persons. More precisely, the DO may control person agreement if it is 1st or 2nd person, but not if it is 3rd person. In Svan and most modern Georgian dialects, the Arg₃ (patient, theme) of the transitive verb has the formal status of a DO. In the two Svan sentences below [from Topuria 1967: 48], compare the lack of agreement with a 3rd person Arg₃ with the occurrence of O₃ agreement with an Arg₂.

- (i) eža ečas æ=gwš=e
s/he:NOM it:DAT pour[A]:S_{3sg}:PRS
'S/he <Arg1> is pouring it <Arg3>.'
- (ii) eža ečas ečas_a χ_a=æ=gwš=e
s/he:NOM it:DAT him/her:DAT pour[A]:S_{3sg}:O₃:PRS
'S/he <Arg1> is pouring it <Arg3> on him/her <Arg2>.'

In Old Georgian, by contrast, the Arg₃ of most transitive verbs did control person agreement in the 3rd person, but only when it was assigned DAT case, that is, when the verb was in a present-series form. In the case of aorist-series verbs, which mark their Arg₃s with the NOM, there was no person agreement with 3rd person Arg₃s. Formally-speaking, therefore, the DAT-case Arg₃ had IO status, while the NOM-case Arg₃ had DO status, as illustrated in the following:

- Present-series Class A verb*
- (i) da gamo=χ_b=i=tχov=d=es mas_b žwar-s cwm-ad.
and request[A]:S_{3pl}:O₃:IMP him:DAT cross-DAT put-ADV
'They were asking for him <Arg3, IO> (in order) to crucify him.' [Luke 23:23]³
- Aorist-series Class A verb*
- (ii) gamo=i=tχov=a gwam-i iesu-ys-i.
request[A]:S_{3sg}:AOR corpse-NOM Jesus-GEN-NOM
'He asked for the body <Arg3, DO> of Jesus.' [Matthew 27:58]

³The Khanmeti examples used in this paper are taken from the 5th-6th century palimpsest fragments of the four gospels (manuscripts A-89 and A-844), as edited by L. Kajaia [1984].

č'am=d=es da swm=id=es
 eat[A]:S_{3sg}:CNJ and drink[A]:S_{3sg}:CNJ
 'He will eat and drink.' [Matthew 24:49]

ara šwreb=i=s ar-ca stav=s.
 not work[P]:S_{3sg}:PRS not-also spin[A]:S_{3sg}:PRS
 'It toils not, neither does it spin.' [Luke 12:27]

At the lexical-semantic level these verbs require arguments in the patient deep-case role. However, in constructions such as these the patient (food, drink, thread) is nonspecific, and — as in the equivalent English sentences — does not appear in the form of an overt NP. In this respect the above verbs resemble the medioactive or middle verbs described by Holisky [1981]. The medioactives are a subclass of Class A verbs which denote activities extending over a period of time, and which do not focus upon a change of state (i.e. they are aspectually atelic). They seldom — many of them never — appear with overt Arg_{3s}. The following medioactive verbs are attested in KhG texts; with certain exceptions, they do not employ O₃ markers:

galobs 'chants'	brc'q'inavs 'glistens'
rok'avš 'dances'	mydelobs 'acts as a priest'
rbis 'runs'	iχarebs 'makes merry'
kris '[wind] blows'	imrušebš 'commits adultery'
t'iris 'weeps'	

In the two passages cited above, and in several others where Group 3 verbs occur, the predicate is aspectually atelic: reference is made to the activities of eating, drinking, spinning, without focusing upon a change of state (e.g. a piece of food being consumed or a quantity of flax being converted into thread). This is the case even though these verbs are most often used with telic (change-of-state focus) aspect. In this respect as well the KhG Group 3 verbs resemble medioactive verbs.

Let us look now at the verbs which are attested sometimes with, sometimes without the O₃ prefix in the present series, as demonstrated by these KhG examples:

(i) mezwere-ta da codvil-ta tana č'am=s.
 tax.collector-GENpl and sinner-GENpl with eat[A]:S_{3sg}:PRS
 'He is eating with tax-collectors and sinners.' [Mark 2:16]

(ii) romel-n-i še=χ=č'am=en saχl-eb-sa kwriv-ta-sa
 which-PL-NOM eat[A]:S_{3pl}:O₃:PRS house-PL-DAT widow-GENpl-DAT
 '... who devour widows' houses' [Mark 12:40; Luke 20:47]

For both of the verbs for which this alternation is observed in the KhG corpus, the O₃ marker is only present when the verb contains a directional prefix (PREVERB). This correlation has already been noted in texts from the later Old Georgian period by Shanidze [1920: 103; 1976: 91]. In conjunction with verbs of movement preverbs have the function of indicating the trajectory of the

action. Most other verb stems can be used with one or more lexically-specified preverbs, which contribute to the meaning of the word in nontransparent ways [Shanidze 1976: 71-73]. It also appears that preverbs had a distinctly perfectivizing force with many Old Georgian verb stems. In this respect they resemble the particles used with English verbs: the difference between *č'ama* and *š'e=č'ama* is similar to that between *eat* and *eat up*. Later in the Old Georgian period preverbs came to be more consistently employed for this latter function, leading to the development of a Slavic-style system for marking aspectual oppositions [Machavariani 1974; Schmidt 1984]. The correlation between O₃ markers and preverbs implies that perfectivity or degree of impact upon the object may be the key factor conditioning the occurrence of the prefix.⁵

The data concerning the two groups of *kadagebs* verbs indicates that DAT-case Arg₃'s are less likely to control O₃ agreement when they are incompletely affected by the agent or are nonspecific, or when the verb is aspectually atelic. All of these factors are found on the lists compiled by Tsunoda [1981] of semantic parameters which contribute to deviations from canonical transitive clause structure (see also Hopper & Thompson [1980]). By this latter term is meant a clause with nominative subject and accusative direct-object NPs (as indicated by the morphology) or — if the language in question has predominantly ergative patterning — a subject marked with ergative case and a direct object with absolutive case. The crosslinguistic evidence presented by Tsunoda indicates that if any clause type within a given language is characterized by canonical transitive-clause morphosyntax, then it will be the clause which meets the EFFECTIVENESS parameters shown here [Tsunoda 1981: 393]:

	<i>transitive clause structure more likely</i>	<i>transitive clause structure less likely</i>
(A)	action	state
(B)	impingement on O(bject)	non-impingement on O
(C)	O attained	O not attained
(D)	O totally affected	O partially affected
(E)	completed	uncompleted, or in progress
(F)	punctual	durative
(G)	telic	atelic
(H)	resultative	non-resultative
(I)	specific or single activity/situation	customary/general/habitual activity/situation
(J)	O definite/specific/referential	O indefinite/nonspecific/non-referential
(K)	actual/realized	potential/unrealized
(L)	realis	irrealis
(M)	affirmative	negative

If we confine ourselves to constructions with monotransitive present-series verbs for the time being,

⁵It is worth pointing out that although the number of *č'ams*-type verbs was very small in KhG (Sarjveladze 1971 only lists two), this class became much more numerous in later Old Georgian. Shanidze, in fact, states that for monotransitive present-series verbs in this period, the O₃ agreement marker “almost always appears in forms with preverbs but not in verbs without preverbs, with some exceptions” [1976: 91]. At the same time, the perfectivizing function of preverbs was becoming more systematic in the Georgian verbal system [Machavariani 1974; Shanidze 1976: 73]. This is further support for the hypothesis that perfective aspect was one factor conditioning the presence of the prefix.

then the following two construction types occur in KhG (for 3rd-person arguments):

		SUBJECT (ARG1)	DIRECT OBJECT (ARG3)	
a.	case:	NOM	DAT	
	agreement:	S	O ₃	<IO status>
b.	case:	NOM	DAT	
	agreement:	S	none	<OBL status>

Since the subjects of intransitive verbs in the present series are marked in the same way as those of transitive verbs, the pattern is a nominative-accusative one, with DAT case and Set O agreement being the markers of the ‘accusative’ in this system. The (a) construction is the canonical one. In construction (b), one of the attributes of the ‘accusative’ — the capability of controlling agreement in all three persons — has been eliminated. As far as the agreement system is concerned, a 3rd person Arg3 in this instance is an oblique argument (OBL), no different from DAT-case adverbial expressions. As we have seen, it is construction (b) which is associated with failure to meet certain parameters of the effectiveness condition. The correlation between lower effectiveness and deviation from the canonical transitive construction format observed in KhG is comparable to the distinction in English between *he grabbed it* [high effectiveness — canonical transitive] and *he grabbed at it*. [lower effectiveness — direct object demoted to oblique phrase]).

To sum up: analysis of the two types of KhG *kadagebs* verbs indicates that failure to meet certain of the parameters of Tsunoda’s effectiveness hierarchy is associated with the failure of a 3rd person DAT Arg3 to control O₃ agreement. In particular, the Arg3s of *kadagebs* verbs have been ‘demoted’ from IO to OBL status, and the construction takes on the appearance of an intransitive clause.

4. Comparative degree of adjectives. In KhG adjectives and adverbs formed the comparative degree by means of the circumfix $\chi u-$ $-(e)ys$, e.g. *advil* ‘easy,’ $\chi uadvileys$ ‘easier’ [Luke 16:17]. The Svan comparative degree employs the circumfix $\chi o-$ $-a$, e.g. *ma χ e* ‘new,’ $\chi om\chi a$ ‘newer’ [Palmaitis & Gudjedjiani 1986: 52; Topuria 1967: 43]. It has been hypothesized that earlier the comparative degree in these two languages was indicated by a denominal verb [Shanidze 1976: 55-56], in which Set O prefixes crossreferenced the object compared against. The original Georgian comparative construction would have looked something like this:⁶

Arg1 _a	Arg2 _b	$\ddagger\chi_b=u=advil=e=i=s_a$
[NOM, Set S]	[DAT, Set O]	easy:S _{3sg} :O ₃ :PRS
‘Arg1 is easier than Arg2’		

By the time of the earliest Georgian texts, the comparative-degree form patterned like ordinary adjectives and adverbs. There was no longer any indication of agreement with either of its arguments. The object of comparison was assigned DAT, GEN or GEN+DAT case. The latter marking is especially common when the object is a pronoun [Shanidze 1976: 157-158]; e.g.

⁶Presumably the χ was an O₃ agreement marker and $-u-$ an indicator of objective version. The $-i-$ suffix was probably the same as that found in many stative verbs, and $-s$ was the S_{3sg} marker.

romel-sa χ=u=q'ward=e=s mama-y twis-i gina tu
 who-DAT love[P_{ind}]:O₃:S_{3sg}:CNJ father-NOM own-NOM either if
 deda-y twis-i čem-sa χu=pro=ys
 mother-NOM own-NOM me:GEN-DAT more
 ‘Whoever would love father or mother more than me . . .’ [Matthew 10:37]

kwriv-man aman glaχak'-man χu=met'=eys q'ovel-ta-sa
 widow-ERG this:ERG poor-ERG more all-GENpl-DAT
 še=c'ir=a.
 offer[A]:S_{3sg}:AOR
 ‘This poor widow offered more than anyone.’ [Luke 21:3]

One might surmise that the use of the DAT in these contexts is a survival from the time when the comparative verb assigned DAT case to its Arg2. The assignment of DAT or GEN case to (deep-structure) Arg2s is also a property of certain types of nouns derived from verbs in Old Georgian (e.g. brzan=a micema-d igi mas ‘command[A]:S_{3sg}:AOR giving-AD it:NOM her:DAT’ = lit. ‘(he) commanded (the) giving her it’ [Matthew 14:9]; cp. the purely nominal case marking in Modern Georgian misi micema mis-tvis ‘it:GEN giving her:GEN-for’ = ‘the giving of it to her'). The alternation between noun-like and verb-like case-assignment properties indicates that KhG comparatives, like participles, were still at an intermediate phase in the process of deverbalization.

5. Prefixal Class P verbs. Perhaps the most vexing problem presented by the KhG texts is the consistent use of the □- prefix by a class of intransitive Class P verbs which never take Arg2s. These verbs are termed ‘*i*-passives’ by Shanidze. They are one of four groups of Class P verbs:

i-prefixed: Marked by the vowel **-i-** before the verb root. Always monovalent; their only argument is an Arg1 assigned NOM case.

e-prefixed: Marked by the vowel **-e-** before the verb root. Almost always bivalent, with an Arg1 assigned NOM case and an Arg2 assigned DAT case.

suffixal: Marked by the suffix **-n-** or **-d-**. May or may not take an Arg2. Many of these verbs are inchoative (indicate the onset of some activity or state), and derived from nouns or adjectives. In Old Georgian the prefixal verbs were by far the largest group of Class P verbs. Since that time the proportion of suffixal Class P verbs has been growing. Many verbs that formed their passives in *i*-/e- now have suffixal passives [Imnaishvili 1968].

root: Have no special marker. Unlike the above three groups, the root Class P verbs are not derived from a Class A verb. This is a small, nonproductive group.

In KhG, suffixal and root Class P verbs only employ Set O markers if they subcategorize for an Arg2 (IO). In the two following passages with essentially identical meaning, the O₃ agreement marker occurs when the locus of prostration is formally an IO, but not when it is marked as an OBL NP:

- (i) da=vard=a perq-ta tana iesu-ys-ta
 fall[P]:S_{3sg}:AOR foot-DATpl at Jesus-GEN-DATpl
 ‘He fell down at Jesus’ feet’ [Luke 8:41]
- (ii) simon p’et’re še=χ=u=vrđ=a muql-ta iesu-ys-ta
 Simon Peter:ABS fall[P]:S_{3sg}:O₃:AOR knee-DATpl Jesus-GEN-DATpl
 ‘Simon Peter fell down at Jesus’ knees’ [Luke 5:8]

The *e*-prefixed verbs always have a Set O prefix. Since they are almost invariably bivalent, these markers have been interpreted as indicating agreement with the IO. Those *e*-prefixed verbs which do not subcategorize for an Arg2 (IO), such as the one shown here, may have been bivalent at an earlier stage of the language [Shanidze 1976: 103-104; Sarjveladze 1971: 120-121]. They are in many cases the passive analogues of the Group 2 verbs described at the beginning of Section 3.

vitarca aγ=χ=e=srul=n=es dγe-n-i igi rva-n-i
 when finish:PASS:[P]:S_{3pl}:O₃:PLDO:AOR day-PL-NOM the eight-PL-NOM
 ‘When the eight days had elapsed . . .’ [Luke 2:21]

There is no such handy explanation to account for the consistent appearance of the □- prefix in *i*-prefixed Class P verbs in KhG. Here are some examples:

q’ovel-i cecχl-ita da=χ=i=maril=o=s
 everyone-NOM fire-INS salt:PASS:[P]:S_{3sg}:‘O₃:FUT
 ‘Everyone shall be salted with fire’ [Mark 9:49]

c’arc’q’medul χ=i=q’=o da χ=i=p’ov=a
 lost be:[P]:S_{3sg}:‘O₃:AOR and find:PASS:[P]:S_{3sg}:‘O₃:AOR
 ‘He was lost and has been found’ [Luke 15:24]

mo=χ=i=kc=es igini ierusalem-d-ve.
 return[P]:S_{3pl}:‘O₃:AOR they:NOM Jerusalem-AD-EMP
 ‘They turned back again toward Jerusalem.’ [Luke 2:45]

We can first of all eliminate the possibility that it is the *-i*- prefix itself which conditions the appearance of the □- prefix. Class A verbs marked for subjective version (which is usually an indication that the action is in some sense centered upon the agent) employ this same pre-radical vowel. These verbs do not, however, appear with the □- prefix in the aorist series, for the reasons described in Section 3. There is even an instance of a minimal pair in the KhG corpus, where a Class A verb and its passive both have the pre-radical vowel *-i*-. The □- prefix only appears in the passive verb:

- (i) cocχleb-it mo=χ=i=q’wan=a igi
 life-INS bring:PASS:[P]:S_{3sg}:‘O₃:AOR he:NOM
 ‘He was brought back alive’ [Luke 15:27]

- (ii) mo=i=q'wan=a igi q'ovel-ta-sa mas sadgur-sa
 bring[A]:S_{3sg}:AOR him:NOM everybody-GENpl-DAT the:DAT station-DAT
 '(He) brought him to the inn' [Luke 10:34]

The evidence indicates that the □- prefix is only obligatory before the pre-radical vowel *-i-* in a Class P verb. If this is indeed — or if this used to be, at any rate — an O₃ prefix, how did it come to be present in a class of verbs that never subcategorize an argument with which it can agree? Gamqrelidze [1979:46-47] offers an interesting hypothesis. Prefixal Class P verbs (both *i*-prefixed and *e*-prefixed) are semantically more like true passives than the other types of Class P verbs. Many prefixal Class P verbs give evidence of having transitive semantic structures. For example, they allow oblique agent phrases, while root and suffixal Class P verbs almost never do [Harris 1985:60-61]. Oblique agent phrases (marked by the postpositions *mier* 'by' or *gan* 'from') are not especially common in KhG texts, but when they do occur it is with a prefixal — and never with a root or suffixal — Class P verb, e.g.:

mi=χ=i=q'wan=a igi angeloz-ta-gan c'iaγ-ta
 take:PASS:[P]:S_{3sg}:**O₃**:AOR he:NOM angel-GENpl-from bosom-DATpl
 abraham-is-ta.
 Abraham-GEN-DATpl
 'He was taken by the angels to the bosom of Abraham.' [Luke 16:22]

In those cases where both prefixal and root or suffixal Class P stems can be derived from the same verb root the difference is easily discerned. Compare these two Modern Georgian sentences:

- (i) χაč'ap'ur-i cχveb=a (*ded-is mier)
 cheesebread-NOM bake[P_{root}]:S_{3sg}:PRS mother-GENby
 'The cheesebread is baking (*by mother).'
- (ii) χაč'ap'ur-i i=cχob=a ded-is mier
 cheesebread-NOM bake:PASS:[P_{i-prf}]:S_{3sg}:PRS mother-GENby
 'The cheesebread is being baked by mother.'

The contrast between (i) and (ii) is similar to the contrast between what are sometimes termed “unaccusative” (or “ergative”) and passive constructions in English [Keyser & Roeper 1984]. The semantic structures underlying the two constructions are quite different:

TRANSITIVE SEMANTIC STRUCTURE

- (a¹) *transitive construction*: agent □ subject patient/theme □ direct object
 (a²) *passive construction*: agent □ oblique NP patient/theme □ subject

INTRANSITIVE SEMANTIC STRUCTURE

- (b) “*unaccusative*” *construction*: patient/theme □ subject

Gamqrelidze [1979:47] claims that prefixal Class P verbs at one time represented the output of a passive transformation (cp. Harris 1981: §13).⁷ According to this hypothesis, in Ancient Georgian (the period preceding the earliest texts) the \square - prefix marked both surface and deep-structure 3rd person direct objects. In this period verb pairs such as the following would have occurred:

[transitive]	$\ddot{\text{m}}\text{an}_a$	igi_b	$\text{da}=\chi_b=\text{i}=\text{maril}=\text{o}=\text{s}_a$	
	s/he:ERG	it:NOM	salt[A]:S _{3sg} :O ₃ :FUT	
	'S/he will salt it [for her/himself – subjective version].'			
[passive]	$\ddot{\text{m}}\text{igi}_b$	$\text{da}=\chi_b=\text{i}=\text{maril}=\text{o}=\text{s}_b$		(mis mier)
	it:NOM	salt:PASS:[P]:S _{3sg} :‘O ₃ ’:FUT		him/her:GEN by
	'It will be salted (by him/her).'			

As it turns out, verbs like transitive $\ddot{\text{m}}\text{da}=\chi=\text{i}=\text{maril}=\text{o}=\text{s}$, with an \square - prefix crossreferencing a NOM-case Arg3, are not attested in Georgian. In the Khanmeti gospels we find the verb pair [passive] $\text{da}=\chi=\text{i}=\text{maril}=\text{o}=\text{s}$ “it will be salted” [Mark 9:49] and [transitive] $\text{da}=\text{i}=\text{maril}=\text{o}=\text{s}$ “he will salt it” [Mark 9:50]. Gamqrelidze surmises that “at the time when the 3rd person direct-object marker $\ddot{\text{m}}\square$ became \emptyset - for active constructions, the \square - prefix in the corresponding passive constructions was no longer perceived as a direct-object marker” [1979:47]. He hazards no guess as to how this \square - was perceived at this stage in the history of Georgian. Harris [1985:267] deems Gamqrelidze's argument “a compelling one”; nonetheless she lists the use of the \square - marker in *i*-prefixed Class P verbs in early Old Georgian as one of several “unexplained problems” in Kartvelian morphology.

I offer here an alternative hypothesis, without claiming that it has any fewer weaknesses than the argument just presented. My proposal, simply put, is that the \square -prefix found in intransitive *i*-prefixed Class P verbs was the reflex of what in earlier times marked an underlying agent.

In Ancient Georgian, prefixal Class P verbs were, as Gamqrelidze indicated, associated with transitive semantic structures. I propose, however, that these verbs were at one time morphologically bivalent, rather than monovalent. The NOM Arg1 (patient, theme) of a prefixal Class P verb controlled Set S agreement, and the agent argument, even though absent from surface structure, or present in a postpositional phrase, controlled Set O agreement.⁸ My hypothesis also differs from

⁷By the early Old Georgian period this was clearly no longer the case for at least some prefixed Class P verbs. In the KhG manuscripts $\chi=\text{i}=\text{q}'=\text{o}$ and $\chi=\text{i}=\text{q}'\text{w}=\text{n}=\text{es}$ are consistently used to render the meaning “s/he, it was” and “they were”; e.g.

χolo	toma	...	ara	$\chi=\text{i}=\text{q}'=\text{o}$	mat tana .
but	Thomas:NOM		not	be:[P]:S _{3sg} :‘O ₃ ’:AOR	them:DAT with
'But Thomas ... was not with them.'					[John 20:24]

Even though the root $\text{q}'\text{w}$ in the above verb is etymologically related to the CK root $\ddot{\text{m}}\text{q}'\text{w}$ “do, make” [Klimov 1964:209], it is unlikely to have been still perceived as a passive (“sb/sthg is made”) at the time the Khanmeti gospels were translated.

⁸The agreement pattern I am proposing has its typological parallels elsewhere, too. In the Indonesian language Achenese, the agent NP of a passive verb controls agreement, even those it has been demoted to oblique status [Lawler 1977:224-5]:

Boh-mamplam	ni _a -pajoh	le- dron _a	[Lawler 1977:225]
fruit-mango	2nd.person-eat	by-you	
'The mango is eaten by you.'			

Gamqrelidze's in maintaining the formal distinction between aorist-series Arg3s, which had DO status and did not control O₃ agreement, and IOs which controlled person agreement (in all three persons) at this stage of Ancient Georgian. According to my proposal, transitive-passive verb pairs in Ancient Georgian had the agreement pattern shown here:

[transitive]	‡man _a	igi	da=i=maril=o=s _a	
	s/he:ERG	it:NOM	salt[A]:S _{3sg} :FUT	
	'S/he will salt it [for her/himself – subjective version].'			
	(a ¹) <i>transitive construction</i> : agent □ subject <Arg1>			
	patient/theme □ direct object <Arg3>			
[passive]	‡igi _b	da=χ _a =i=maril=o=s _b		(mis _a mier/gan)
	it:NOM	salt:PASS:[P]:S _{3sg} :O ₃ :FUT		him/her:GEN by
	'It will be salted (by him/her).'			
	(a ²) <i>passive construction</i> : agent □ postpositional phrase <Arg2>			
	patient/theme □ subject <Arg1>			

The nonoccurrence of the O₃ agreement marker with (monovalent) suffixal and root Class P verbs is a reflection of their underlying argument structure, which is also monovalent. The only argument in deep structure — the theme or patient — surfaces as the Arg1:

[intransitive]	‡igi _a	gan=risc=n=a _a	
	he:NOM	angry:INCH:[P]:S _{3sg} :AOR	
	'He became angry' [Luke 15:28]		
	(b) " <i>unaccusative</i> " construction: patient/theme □ subject <Arg1>		

My proposal hinges on an analogy drawn between the constructions illustrated above and the constructions from which Kartvelian perfect-series verb forms are believed to have been derived. Several scholars [e.g. Shanidze 1953:445-6; Pxakadze 1984:29-31; Harris 1985:286-306] have proposed a common origin for stative Class P verbs and the perfect-series forms of Class A verbs. In most cases the two verb forms are identical [Shanidze 1953:454; Aronson 1984] (except for the usual presence of a preverb in the perfect-series forms):

	STATIVE CLASS P	CLASS A PERFECT SERIES
	present	present perfect
1sg:	m=i=c'er=i=e=s	(da=)m=i=c'er=i=e=s
	'it is written in my [e.g. book]'	'I have apparently written it'
2sg:	g=i=c'er=i=e=s	(da=)g=i=c'er=i=e=s
3sg:	χ=u=c'er=i=e=s	(da=)χ=u=c'er=i=e=s
	aorist	pluperfect
1sg:	m=e=c'=er=a	(da=)m=e=c'=er=a
	'it was written in my . . .'	'I had apparently written it'

optative/future	perfect conjunctive
1sg: m=e=c'er=o=s 'it will be written in my ...'	(da=)m=e=c'er=o=s 'I would have apparently written it'

If the series III screeves developed from Class P verb forms (with stative-resultative meaning), as Harris [1985:288-9] suggests, then it follows that at some time in the Common Kartvelian period these Class P verbs had transitive semantic structures, with the underlying agent assigned IO status:

	c'er 'write' [Agent, Patient, (Beneficiary)]
<i>Class A:</i>	(e.g. †χ _b =c'er=a _a 'sb _a wrote it to/for sb _b ' Agent □ Arg1 Patient □ Arg3 (Beneficiary □ Arg2))
<i>stative-resultative Class P:</i>	(e.g. †χ _a =e=c'er=a _b 'it _b had been written for/by sb _a ' Patient □ Arg1 (a) Agent □ OBL, Beneficiary □ Arg2 or: (b) Agent □ Arg2, (Beneficiary □ OBL))

The (a) type of Class P stative-resultative verb is the ancestor of modern passives of state, and the (b) type — in which the underlying agent controls Set O agreement — is the ancestor of the Class A perfect-series forms. If my proposal is correct, the following type (b) Class P stative verb forms were also in use in Ancient Georgian:

†χ _a =i=c'er=eb=i=s _b	'it _b is being written by sb _a '
†χ _a =i=c'er=a _b	'it _b was written by sb _a '
†χ _a =i=c'er=o=s _b	'it _b will be written by sb _a '

At this stage, these verbs would presumably have had a full set of Set O forms: †m_a=i=c'er=eb=i=s_b 'it_b is being written by me_a'; †g_a=i=c'er=eb=i=s_b 'it_b is being written by you_a' and so forth. Later in the Ancient Georgian period the *i*-prefixed Class P verbs ceased to be interpreted by speakers as morphologically bivalent (perhaps due to the rarity of agent phrases surfacing as overt NPs in passive constructions), and the □- prefix simply became part of the marking of this verb class. The fate of the Set O markers in *i*-prefixed Class P verbs, therefore, is similar to that undergone by the same markers in the comparative-degree forms.

There are at least two components of my hypothesis which may be eliciting uneasiness on the part of the reader. First of all, it would require a rethinking of the semantic basis of the opposition between the preradical vowels *-i-* and *-e-* for prefixal Class P verbs. In all of the attested Kartvelian languages the reflexes of *i-* and *e-* prefixed Class P verbs are morphologically monovalent and bivalent respectively. At an earlier period, however, the difference would have been related to the nature of the crossreferenced IO: agent or beneficiary/addressee (e.g. †m_a=i=c'er=eb=i=s_b 'it_b is being written by me_a' vs. †m_a=e=c'er=eb=i=s_b 'it_b is being written for me_a').

Secondly, in none of the attested Kartvelian languages do postpositional phrases such as *mis-gan*

‘from him/her’ or *mis mier* ‘by him/her’ control agreement.⁹ The privilege of controlling agreement is restricted to NPs assigned NOM, ERG and DAT case. If my proposal is correct then either demoted agent phrases were marked with DAT case in Ancient Georgian, or else postpositional phrases — some of them, anyway — could control agreement.

6. Objects and agreement in Ancient Georgian. The person-marking patterns of the earliest attested stage of the Georgian language, I believe, represent a mixture of well-established morphosyntactic rules preserved intact from the Common Kartvelian period, more-or-less fossilized remnants of once-living agreement rules, and also some innovations. The correlation between the O₃ prefix and preverbs (the *č’ams* — *šexč’ams* alternation discussed in Section 3) is most probably an instance of the latter. The association of preverbs and perfective aspect was quite weak in the KhG period, but grew much more systematic in the succeeding centuries. As this association strengthened, the number of *č’ams*-type verbs increased from a tiny handful in the earliest texts to several dozen in the later Old Georgian period. As examples of morphological fossils we have the □- prefixes occurring as part of the obligatory marking of comparative-degree adjectives and *i*-prefixed Class P verbs.

This section of the paper will be given over to speculation concerning the sentence patterns of Ancient Georgian (the stage of the language preceding the earliest texts) and the Common Kartvelian proto-language. My main point will be that the KhG data reflect an earlier distinction in the morphosyntax between core arguments which are inside and outside of the NUCLEUS of the clause. I will begin by explaining these terms.

(a) *Local arguments and the clausal nucleus.* The arguments of the Kartvelian verb can be divided, first of all, into two groups. The first group comprises the Arg1, Arg2 and Arg3. These arguments are characterized by a special relation to the verb, reflected in their case marking and agreement-controlling properties. They will be referred to as CORE ARGUMENTS.

The second group comprises non-core or PERIPHERAL arguments, most of which have an adverbial function, which never control verb agreement.

The concept of CLAUSAL NUCLEUS¹⁰ has been devised to represent the special semantic bond observed in many languages between verbs and what I will term LOCAL ARGUMENTS (**LA**). The local argument of a verb is usually a patient, theme or instrument, and usually surfaces in the clause as the direct object of a transitive verb or as the subject of an intransitive verb. The verb-LA semantic bond referred to makes itself manifest in a number of ways, for example:

⁹There are in fact several dozen instances in Old Georgian texts where a GEN-case NP appears to be controlling Set O agreement [Shanidze 1953:356; Danelia 1975], e.g.:

rad	gan=m=a=šoreb	čem-gan?
what:ADV	distance[A]:S _{2sg} :O _{1sg} :PRS	me:GEN-from
‘Why do you keep her from me?’		[Shushanik XIX,20]

Shanidze and Danelia argue that the constructions referred to are not native to Georgian, but rather represent attempts by translators to follow as closely as possible the syntax of the Greek originals, in which prepositional phrases are used. The attested translation is a sort of compromise construction, with a Greek constituent structure and a Kartvelian agreement pattern. The occurrence of such constructions in original Georgian works is to be attributed to the influence of the translated texts upon the style of the writers [Danelia 1975:87].

¹⁰The reader who is familiar with the works of Foley & Van Valin will note that the terms “core” and “nucleus,” employed in their formulation of the layered structure of the clause, are used with different senses here. I too am operating with a layered clause structure, though I carve the beast at different joints in order to capture certain regularities of Kartvelian morphosyntax.

special selectional restrictions — requirements that the argument in question be animate, plural, of a particular shape or material, etc. These restrictions are almost always more specific for the LA than for other arguments. For example, the English verb *smear* presupposes certain qualities of its patient argument, while it imposes almost no restrictions upon the agent [Talmy 1985: 125-138].

verb-stem modification — derivational change of verb stem according to features of an argument. Almost all instances of stem modification or suppletion reflect features of the LA [Uhlenbeck 1916: 191-5] (e.g. Georgian $mo=i=q'$ **van**=s ‘brings’ is used if the theme [that which is brought] is animate, and a verb with a different root — $mo=i=t'$ **an**=s — if the theme argument is inanimate).

idioms — in the formation of idioms, fixed phrases and lexicalized verb+noun complexes, the LA is more likely to become frozen into the expression than the indirect object or transitive subject [Tuite 1988a: §1.3.3].

noun incorporation — LAs are far more likely than other arguments to be incorporated into a single word with the verb stem [Mithun 1984].

Evidence for the special role of the LA can be found within the Kartvelian family, too. In a large number of the world’s languages number marking in the verb is associated with LAs in particular [Frajzyngier 1985; Mithun 1988]. This is one component of the semantic category which Dressler [1968] termed verbal plurality. This concept subsumes both plurality of action [iterativity, distributivity], and plurality of LA. In many languages a particular morpheme or stem modification (e.g. reduplication) indicates verbal plurality in both of the above senses. Without going into too much detail I will point out that the Svan verbal suffix *-a:l-* (and its morphophonemic variants) is in these respects a verbal plurality morpheme in Dressler’s sense [Sharadzenidze 1954], e.g. $li=\check{s}\chi b=i$ ‘to sew one thing’ — $li=\check{s}\chi biy=\bar{e}l=i$ ‘to sew many things’; $li=\check{z}\bar{e}lw=e$ ‘to sweep sthg’ — $li=\check{z}\bar{e}lw=\bar{e}l=i$ ‘to sweep sthg many times’ [Gudjedjiani & Palmaitis 1985]. It has also been noted that the Georgian preverb *da-* fulfills a function similar to that of Svan *-a:l-* (e.g. **da**=t’eχ=s ‘breaks many things,’ **da**=laq’=d=eb=a ‘many [e.g. eggs] become rotten,’ **da**=čχwle’t’=s ‘pricks sb/sthg many times’ [Shanidze 1953: 263; Schmidt 1957]). It is not unlikely, therefore, that the Common Kartvelian verb also had a verbal-plurality morpheme, which reflected, among other things, the number of the LA.

(b) *Ancient Georgian sentence patterns*. I propose that certain aspects of the pattern of person and number agreement markers in KhG be interpreted as resulting from a grammaticization of the verb-LA semantic bond during an earlier stage of the language’s history. According to my hypothesis, the nucleus of the basic Ancient Georgian sentence was the complex {Verb+LA}. The LA could take the form of either the Arg3 of a transitive verb, or the Arg1 of an intransitive verb. The other main arguments of the clause, the transitive subject and indirect object, stood outside of the nucleus. The central point of my hypothesis is that Set O (object) agreement in Ancient Georgian was only controlled by NPs outside of the sentence nucleus.¹¹

¹¹It seems that no such restriction operated in the case of Set S agreement, which could be controlled by the Arg1s of intransitive verbs (which, as LAs, would have been within the sentence nucleus). Or could there have once been a sort of “subjectivization” transformation which moved the intransitive subject out of the nucleus? This question merits more attention than can be devoted to it here.

First we will consider the basic sentence. This type of construction occurred with an aorist-series transitive verb and a 3rd-person Arg3. The Arg3 was assigned NOM case, and did not control agreement:

[Arg1_a<Subj> Arg2_b<IO> {S_a=O_b=Verb + Arg3<DO>}]

It must be emphasized that the above construction is only one of several ways of grammaticizing the verb-LA bond. The tightness of the formal linkage between the verb and LA varied in accordance with a number of factors, some of which we can sort out. Representing one extreme are instances of incorporation of the Arg3 into a transitive verb to form a new lexical item. This was not an uncommon occurrence in Old Georgian, e.g.:

ara k'ac=χ=k'l=a
not man:kill[A]:S_{2sg}:FUT
'You shall not commit murder (lit. kill people)' [Matthew 5:21]

romel-man nate_l=χ=c=e=s sul-ita c'mid-ita
who-ERG light:give[A]:S_{3sg}:O₃:FUT spirit-INS holy-INS
'who will baptize (lit. give light) with the Holy Spirit' [John 1:33]

On the other hand, the LA could be “moved” out of the nucleus, into a position allowing it to control Set O agreement. There were at least three transformations which did this, which I will now describe.

The first such LA-movement operation was triggered by the category of person. In all attested stages of all Kartvelian languages the 1st and 2nd person Arg3s of transitive verbs controlled Set O agreement, under certain circumstances. In the following KhG sentence, a 2nd plural Arg3 — although it is assigned the NOM case consistent with DO status — controls O₂ agreement:

ara-me atormet'-n-i tkwen_a gamo=g_a=i=rč_i=en=ø-a?
not-PTC twelve-PL-NOM you_{pl}:ABS select[A]:S_{1sg}:O₂:PLDO:AOR-QUES
'Did I not select you twelve?' [John 6:70]

There is some evidence, summarized by Harris [1985: 261-262], which indicates that in Old Georgian a 1st or 2nd person Arg3 controlled Set O marking if there was no Arg2, or if the Arg3 outranked the Arg2 according to the person hierarchy 1st > 2nd > 3rd.¹² Harris [*loc. cit.*] cites the following Old Georgian examples to illustrate the effect of this hierarchy:

[1st p. Arg3 > 2nd p. Arg 2] mo=m_a=t'ac=es me_a šen-gan
abduct[A]:S_{3pl}:O_{1sg}:AOR me:ABS you-from
'They abducted me <Arg3> from you <Arg2>.'

¹²Typologically speaking, this resembles the person-hierarchy-controlled agreement phenomena found in the Algonquian languages of North America (compare Potawatomi *k_a-wapum* 'you see me_a' with *k_a-wapm-un* 'I_a see you' [Hockett 1966]).

[1st p. Arg2 > 2nd p. Arg 3] vin mi=m_a=t'ac=a šen čem_a-gan
 who:ERG abduct[A]:S_{3p}:O_{1sg}:AOR you:ABS me-from
 ‘Who abducted you <Arg3> from me <Arg2>?’

The argument of lower rank does not control person agreement, regardless of its role or case marking.¹³ On the assumption that such a hierarchy determined the pattern of Set O agreement in Ancient Georgian as well, the following obligatory transformation would have been in effect:

Person-hierarchy-controlled transformation

[Arg1<Subj>	(Arg2<IO>)	{Verb + Arg3<DO>}
	□	
[Arg1 _a <Subj>	(Arg2<IO>)	Arg3 _b <DO> {S _a =O _b =Verb}
(when Arg3 outranks Arg2 on person hierarchy)		

It is clear from these facts that the degree of “closeness” of the Arg3 to the verb was correlated with certain properties of the noun phrase itself. The most tightly-bound, as reflected by the occurrence of noun incorporation, were nouns with nonspecific reference indicating a class of object characteristically involved in some activity. The least tightly-bound were 1st and 2nd person NPs, which always have highly specific reference (to the participants in the speech act). Nonincorporated 3rd person NPs occupied an intermediate position, physically separated from the verb but not sufficiently separate syntactically to control agreement.

The next transformation to be discussed produced passive verbs from underlying transitive constructions. In this operation as well the Arg3 is extracted from the nucleus, and therefore able to control agreement with the verb (as Arg1). The deep-structure subject, as I argued earlier, surfaces as an oblique object NP, but with the agreement properties of an IO. The output verb forms were the ancestors of the prefixal Class P verbs:

Ancient Georgian passive

[Arg1 _a <Subj>	{Arg3<DO> + S _a =Verb}	
	□	
[Agent-phrase _a <IO>	Arg1 _b <Subj>	{S _b =O _a =Verb}

Using the classification scheme for relation-changing transformations devised by Foley & Van Valin [1984: 160], this would be an instance of a ‘foregrounding passive of the fourth type,’ in that it enhances the syntactic prominence of the deep-structure direct object without demoting the agent from core status. In passives of this type, both agent and patient NPs continue to control agreement, and the patient replaces the agent as the grammatical subject.

The third transformation which affected the formal status of the Arg3 was that producing present-series verb forms from the more basic aorist-series forms. In Common Kartvelian this was a type of antipassive, triggered by durative aspect [Aronson 1979; Harris 1985]. This had the effect of pulling the Arg3 out of the nucleus and “promoting” it to IO status:

¹³The mechanism for resolving competition between the Arg2 and Arg3 for the Set O agreement slot is rather different in Modern Georgian. For details see Tuite [1988b].

Common Kartvelian antipassive

[Arg1 _a <Subj>	{Arg3<DO> + S _a =Verb}
	□
[Arg1 _a <Subj>	Arg3 _b <IO> {S _a =O _b =Verb}

Evidence for this ancient antipassive can be found in all of the daughter languages. However it is the case that in the attested Kartvelian languages the relationship between the input and output forms is paradigmatic rather than transformational. In particular, there is no evidence that the output forms are intransitive any longer. It is unclear, therefore, whether the relationship between the present- and aorist-series forms should be considered transformational in the Ancient Georgian period. An indirect argument can be made that these forms were already paradigmatically related on the basis of early Georgian number agreement data.

One special characteristic of Old Georgian DO arguments is their capacity for controlling agreement for number. NOM Arg3s, whether or not they were associated with person agreement, always controlled number agreement. The suffix *-(e)n-* indicated the presence of a plural DO. The KhG IO, as was noted, could control Set O agreement for all three persons, but at the same time there was no indication of the number of the IO in the verb.¹⁴ The syntactic properties of the two objects stand out clearly in the following KhG sentence. The IO (“us”) controls agreement for person (the O_{1excl} prefix *m-*) but not number, while the DO (“trespasses”) is crossreferenced by the number affix *-en-* only.

mo=m _a =i=t’ev=en _b =∅	čwen _a	<u>tananadeb-n-i</u> _b	čwen-n-i
forgive[A]:S _{2sg} :O _{1excl} : PLDO :IMPER	us:ABS	trespass-PL-NOM	our-PL-NOM
‘Forgive us our trespasses’		[Matthew 6:12]	

In addition to marking number agreement with the NOM Arg3s of Class A verbs, *-(e)n-* also appears in prefixal Class P verbs. In such instances it marks the presence of a plural Arg1. The other two groups of Class P verbs (suffixal and root verbs) are never attested with this suffix. It thus appears that *-(e)n-* indicates the number of the patient or theme argument of an underlyingly transitive construction. Since suffixal and root Class P verbs have monovalent deep structures, they do not employ this suffix. The plural-number suffix *-(e)n-* thus agrees with the deep-structure direct objects of aorist-series and perfect-series verbs.

TRANSITIVE SEMANTIC STRUCTURE (<i>-(e)n-</i> agreement possible)						
(a ¹) <i>transitive construction</i> :	agent	□	subject	patient/theme	□	direct object
(man) _b	ara	kmn=n _a =a _b		mun	<u>zal-n-i</u> _a	mra _{val} -n-i
he:ERG	not	make[A]:S _{3sg} : PLDO :AOR	there	work-PL-NOM	many-PL-NOM	
‘He did not do many deeds there.’ [Matthew 13:58]						

¹⁴The inclusive 1st person prefix (gw-) carries information about number (since it must refer to at least two persons), but this is epiphenomenal. The feature matrix underlying the KhG Set O system contains features for person only (± speaker, ± addressee), and not number.

(a²) *passive construction*: agent □ oblique NP patient/theme □ subject
 (igini)_a χ=i=kmn=n_a=es_a vitarca mk'wdar-n-i
 they:NOM make:PASS:[P]:S_{3pl}:‘O₃’:PLDO:AOR like dead-PL-NOM
 ‘They were made to be like dead people’ [Matthew 28:4]

INTRANSITIVE SEMANTIC STRUCTURE (no-(e)n- agreement)

(b) “*unaccusative*” *construction*: patient/theme □ subject
 c'ar=vid=es_a mc'q'ems-n-i_a igi
 go:[P]:S_{3pl}:AOR shepherd-PL-NOM the:NOM
 ‘The shepherds left’ [Luke 2:20]

It is, therefore, no coincidence that the *-(e)n-* suffix is restricted to precisely those Class P verbs which always employ the □- prefix in KhG. Both morphological phenomena reflect transitive semantic structures, and as we have seen, only the prefixal Class P verbs were underlyingly transitive in the early Georgian period.

The non-occurrence of *-(e)n-* agreement in present-series verbs indicates that a transformational relationship similar to that between Class A and prefixal Class P verbs no longer obtained in the case of present- and aorist-series forms of Class A verbs. The former were no longer perceived as secondary forms produced by the antipassivization of the primary (aorist-series) forms. They were already grouped in the lexicon as members of the same set of forms produced by the inflection of a verb stem for tense, aspect, mood, etc. The distribution of the *-(e)n-* suffix in Ancient Georgian was restricted, arbitrarily, to verb forms based upon the aorist-series stem. Since the present-series forms were no longer productively derived from the aorist-series stems by the addition of a suffix (series marker) and/or ablaut of the root vowel, but rather were listed alongside the aorist-series forms in the lexicon, the *-(e)n-* suffix was not extended to them.

7. Conclusion. I have attempted in this paper to review and systematize the data on person marking from the earliest attested period of the Georgian language. For those aspects of the distribution of the □- prefix which seem to have been unmotivated in the synchronic grammar of this period, it has been possible to construct hypotheses concerning the grammar of a more ancient stage of Georgian which account for the distribution. Furthermore I have made some tentative proposals concerning the nature of grammatical relations in Ancient Georgian. I will summarize the key points here:

(a). The relation between the lexically-specified arguments (Arg1, Arg2 and Arg3) and their surface realization (as subject, IO, DO or OBL) was a complex one. In addition to the shift in case and agreement properties conditioned by verb-form series (as shown in Table 2), which applied across the board to all Class A verbs, there were instances in which the surface expression of the Arg3 (direct object of a transitive verb) in the present series could shift between IO and OBL. This alternation was associated with some of the same semantic factors which have been shown to condition deviations from the canonical morphosyntactic patterns associated with transitive constructions in many different languages.

(b). The Ancient Georgian passive transformation, which produced prefixal Class P verbs from transitive Class A verbs, did not cause as thorough a redistribution of syntactic privileges as the passives found in most languages. The agent NP continued to control person agreement (Set O rather than S) and the patient NP, although promoted to grammatical subject status, controlled

suffixal number agreement in *-(e)n-*, a privilege only accorded to deep-structure direct objects. By the time of the earliest Georgian texts the relation between Class A verbs and their prefixal Class P counterparts was not always semantically transparent, and therefore lexical rather than transformational. The obligatory occurrence of a synchronically-unmotivated \square - prefix in monovalent prefixal Class P verbs has been explained as a relic of this earlier transformation.

(c). The lack of person agreement between 3rd person NOM Arg3 and the verb has been interpreted as a formal reflection in the morphosyntax of the semantic bond between the verb stem and its local argument (usually a patient or theme). In the transitive sentence-type I consider basic for Ancient Georgian, the Arg3 and the verb composed the nucleus of the clause. Set O agreement only occurred between core arguments outside of the nucleus and the verb within. By means of three distinct transformations, the Arg3 could be “moved” out of the nucleus into a position where it could control person agreement.

An analysis such as the one proposed here could be applied to the morphosyntactic systems of other languages. The tell-tale agreement pattern would be something like this: overt person agreement with transitive subjects and perhaps indirect objects, and a gap in the person agreement paradigm for some or all local arguments (direct objects, intransitive subjects). If any of the latter fail to control overt person agreement, it will be some or all 3rd person NPs. I hope to encourage further investigation of languages with patterns similar to this, and a reopening of the question of whether the nonoccurrence of an overt agreement marker is to be interpreted as a phonologically-null morpheme (\emptyset) or a true lack of agreement.

Abbreviations

Case: NOMinative, ABSoluteive, ERGative, DATive, GENitive, INStrumental, ADVerbial.

Verb forms:

PRESENT SERIES: PRS (present), IMP (imperfect), CNJ (conjunctive), ITER (iterative), PRS.IMPER (present-series imperative).

AORIST SERIES: AOR (aorist), FUT (optative/future), PERM (permansive), IMPER (aorist-series) imperative.

Verb class: [A], [P].

Other: PASSive, INCHoative, PLDO (plural direct object).

(*) ‘unacceptable,’ (‡) ‘reconstructed form,’ (∞) ‘not attested [and likely to be unacceptable]’

Appendices

Appendix 1. S₂ marking. It was mentioned at the beginning of this paper that in KhG the S₂ marker is \square - for all verb forms except positive imperatives. In most contemporary Georgian dialects and in Svan, the positive imperative is identical to the aorist with a 2nd person subject [Topuria 1967: 167-8]. This contrasts with the situation in KhG, and also in later forms of Old Georgian, for which the two forms are distinguished by the absence or presence of the \square - prefix [Shanidze 1920; 1953: 210-211]:¹⁵

¹⁵In Old Georgian there were, in fact, two imperatives: one belonging to the present series of verb forms, and one to the aorist series [Shanidze 1976: 70, 90]. The present-series imperative is formally equivalent to the 2nd-person

	KHANMETI GEORGIAN		MODERN GEORGIAN	SVAN
	<i>Aorist</i>	<i>Imperative</i>	<i>Aorist/Imperative</i>	<i>Aorist/Imperative</i>
S _{2sg} :	χ=q'av=∅	q'av=∅	q'av=∅	ǰ=a=χ=æ=sq'=∅
S _{2pl} :	χ=q'av=t	q'av=t	q'av=t	ǰ=a=χ=(a)=sq'=e=d
	'you made it'	'make it!'	'you made it / make it!'	

Here are two examples from the KhG gospel translations:

Aorist: tkwen χ=q'av=t igi kwab avazak'-ta.
 you_{pl} make[A]:S_{2pl}:AOR it:NOM den:ABS thief-GEN_{pl}
 'You made it a den of thieves.' [Luke 19:46]

Imperative: (∅=)q'av=t χe-y igi k'etil da naq'op-i-ca
 make[A]:S_{2pl}:IMPER tree-NOM the:NOM good:ABS and fruit-NOM-also
 misi k'etil
 it:GEN good:ABS [Matthew 12:33]
 'Make the tree and its fruit good.'

Concerning imperatives, linguists have noted that they are among the briefest verbal forms in almost every language described. In particular, imperatives often lack person markers (e.g. Latin *dic* 'speak!') [Palmer 1986: 29]. The formal opposition between KhG q'av! and χ=q'av can be thus be said to be similar to that between *make!* and (*thou*) *mak=est*. Another possibility is to draw a parallel between Georgian and languages such as Maricopa, which employ a distinct subject prefix for imperatives. Compare the forms *m-ashvark* 'you sang, you are singing,' and *k-ashvark* 'sing!' [Gordon 1986: 18-21]. The prefix *k-* is paradigmatically opposed to the 2nd person subject prefix *m-*, and to the 1st and 3rd person prefixes as well. One could similarly interpret the KhG imperatives as employing a special prefix ∅- which is paradigmatically opposed to the 1st, 2nd and 3rd person subject prefixes:

	MARICOPA	KHANMETI GEORGIAN
<i>1st person</i>	ʔ-	w-
<i>2nd person</i>	m-	∅-
<i>Addressee of imperative</i>	k-	∅-
<i>3rd person</i>	∅-	-s/a/n

For purposes of description the above representation is adequate, but it is undesirable from a structuralist point of view. If one wishes to use a set of features (± speaker, ± addressee, ± plural) to label the Kartvelian agreement affixes, then the inclusion of an 'addressee of imperative' prefix will create needless complication.

Appendix 2. Other occurrences of the ∅- prefix. In the preceding sections of this paper all occurrences of the ∅- prefix have been accounted for, except for a handful of cases. Sarjveladze

imperfect, except for the lack of an S₂ prefix, e.g.: *še=vidod=e=t ic'ro=sa mas bč'e=sa* 'enter at the narrow gate' [Matthew 7:13]; cp. imperfect *še=x=vidod=e=t*.

[1971: 116-117] inventories a half-dozen transitive verbs which are attested with the □- prefix in KhG texts. The prefix, he believes, is triggered by a NOM Arg3 in these instances. Four verbs have the preradical vowel *-i-* (subjective version marker), e.g.:

vrceḷ ar=s gza-y romel-man mi=χ=i=q'wan=i=s
 wide be[P]:S_{3sg}:PRS road-NOM which-ERG take[A]:S_{3sg}:‘O₃’:PERM
 c'ar=sa=c'q'med=el-ad
 to.be.destroyed-ADV
 ‘Wide is the road that leads to destruction.’ [Matthew 7:13]

p'irvel-ad ara χ=i=ban=a vidre sadiloba-mde
 first-AD not wash[A]:S_{3sg}:‘O₃’:AOR before dining-until
 ‘He did not wash himself before dining.’ [Luke 11:38]

Other examples are ay=χ=i=p'q'r=a ‘<he:ERG> lifted <it:NOM> up,’ and mi=χ=i=y=o ‘<he:ERG> received <it:NOM>,’ both from the KhG *mravaltavi* (collection of Patristic writings) [Molitor 1956: 70, 86].

There is also a small group of intransitive Class A medioactive verbs which appear with the □- prefix [Sarjveladze 1971: 121]. All of them have the preradical vowel *-i-*: χ=i=χar=eb=n ‘he rejoices’ [S_{3sg}:PRES.ITER]; χ=i=marχv=en ‘they are fasting’ [S_{3pl}:PRES]; χ=i=sadiln=es ‘they had dinner’ [S_{3pl}:AOR], e.g:

raysa-twis moc'ape-n-i iohane-ys-n-i da parisevel-n-i
 what:GEN-for disciple-PL-NOM John-GEN-PL-NOM and Pharisee-PL-NOM
 χ=i=marχv=en da moc'ape-n-i šen-n-i ara
 fast[A]:S_{3pl}:‘O₃’:PRES and disciple-PL-NOM your-PL-NOM not
 χ=i=marχv=en?
 fast[A]:S_{3pl}:‘O₃’:PRES
 ‘Why is it that John’s disciples and the Pharisees fast, but your disciples do not fast?’
 [Mark 2:18]

There are two observations to be made about these verbs. First, for most of them the presence of the □- prefix does not appear to be systematic. The form χ=i=sadiln=es occurs in one of the most ancient KhG palimpsests; in another early manuscript we find v=i=sadiln=e=t ‘we had dinner,’ without the prefix. Likewise the forms mi=i=q'wan=i=s, mi=i=y=o, da=i=ban=e [S_{2sg}:IMPER], i=χar=eb=d=a [S_{3sg}:IMP] are attested in the KhG corpus. The second point is that almost all of these exceptions have the preradical vowel *-i-*. After the original motivation of the Set O prefix with *i-*-prefixed Class P verbs had been lost (still in the Ancient Georgian period), the □- prefix had become an obligatory concomitant of these verbs. Some speakers may have perceived (at an unconscious level, of course) that almost all of the verbs employing the prefix combination □- *i-* were intransitive, and made a slight reanalysis of the conditions for its appearance. They then extended the □- prefix to other intransitive verbs with the preradical vowel *-i-*. (Note that all of the medioactive verbs in Sarjveladze’s list are intransitive, and that the Arg3 of mi=i=q'wan=i=s in

the passage quoted above has only generic reference, and does not surface as an overt NP. The presence of the prefix in clearly transitive verbs such as $mi=\chi=i=\gamma=o$ would appear to be a non-systematic overextension).

BIBLIOGRAPHY

- Aronson, Howard. 1979. Towards a typology of transitivity: the strange case of the Georgian subject. *CLS parasession on the elements*, pp. 297-306. Chicago Linguistics Society.
- Aronson, Howard. 1984. Homonymy in the Georgian verbal system. *Folia Slavica* 7: 21-37.
- Boeder, W. 1979. Ergative syntax and morphology in language change: the South Caucasian languages. In F. Plank (ed.) *Ergativity: towards a theory of grammatical relations*, pp.435-480. Orlando: Academic Press.
- Danelia, Korneli. 1975. უცხო ენათა გავლენის კვალი ძველი ქართული წერლობითი ძეგლების ენაში. [Traces of the influence of foreign languages on the language of Old Georgian documents.] *Macne* 4: 79-90.
- Dressler, W. 1968. Studien zur verbalen Pluralität. *Sitzungsberichte der philosophisch-historischen Classe der Österreichischen Akademie der Wissenschaften* 259, Abh 1.
- Foley, W. & Van Valin, R. 1984. Functional syntax and universal grammar. New York: Cambridge Univ Press.
- Frajzyngier, Z. 1985. Ergativity, number and agreement. *Berkeley Linguistics Society* 11: 96-106.
- Gamqrelidze, Tamaz. 1979. ზმნის პირიანობა და ვალენცობა. [The morphological and syntactic valence of the verb.] *Saenatmecniero krebuli*. (German transl.: *Georgica* 4: 65-70.)
- Gordon, Lynn. 1986. Maricopa morphology and syntax. *University of California Publications in Linguistics* 108.
- Gudjedjiani, Chato and Palmaitis, Letas. 1985. Svan-English dictionary. Delmar, NY: Caravan Books.
- Harris, Alice. 1981. *Georgian syntax: a study in relational grammar*. New York: Cambridge University Press.
- Harris, Alice. 1985. *Diachronic syntax: the Kartvelian case (Syntax and semantics 18)*. New York: Academic Press.
- Holisky, Dee Ann. 1981. *Aspect and Georgian medial verbs*. Delmar, NY: Caravan Press.
- Hopper, Paul and Thompson, Sandra. 1980. Transitivity in grammar and discourse. *Language* 56: 251-299.
- Imnaishvili, Ivane. 1957. სახელთა ბრუნება და ბრუნვათა ფუნქციები ძველ ქართულში. [Nominal declension and case function in Old Georgian.] *Dzveli Kartuli enis katedris shromebi* 4.
- Imnaishvili, Ivane. 1968. ვნებითი გვარის ზმნათა თავისებურებანი ძველ ქართულში. [Characteristics of passive verbs in Old Georgian.] *Dzveli Kartuli enis katedris shromebi* 11: 27-54.
- Kajaia, Lamara (ed.). 1984. ხანმეტი ტექსტები, 1: ხანმეტი ოთხთავი. [Khanmeti texts, 1: the Khanmeti gospels.] Tbilisi: Mecniereba.
- Kawtaradse, Iwane. 1975. Der Entwicklungsweg der georgischen Literatursprache. *Wissenschaftliche Zeitung der Fr. Schiller Universität Jena (Gesell. u. Sprachw. Reihe)* XXIV

5/6: 573-582.

- Keyser, S. J. & Roeper, T. 1984. On the middle and ergative constructions in English. *Linguistic Inquiry* **15**: 381-416.
- Klimov, G. A. 1964. *Ètimologicheskij slovar' kartvel'skix jazykov*. Moscow: Nauka.
- Lawler, John. 1977. A agrees with B in Achenese: a problem for relational grammar. In P. Cole & J. Sadock (eds.) *Grammatical relations (Syntax and semantics 8)*, pp. 219-248. New York: Academic Press.
- Machavariani, Givi. 1974. ასპექტის კატეგორია ქართველურ ენებში. [The category of aspect in the Kartvelian languages.] *Kartvelur enata strukturis sakitxebi* **IV**: 118-141.
- Mithun, Marianne. 1984. The evolution of noun incorporation. *Language* **60**. 847-894.
- Mithun, Marianne. 1988. Lexical categories and the evolution of number marking. In M. Hammond & M. Noonan (eds.) *Theoretical morphology: approaches in modern linguistics*, pp. 211-234. New York: Academic Press.
- Molitor, Joseph (ed.). 1956. Monumenta Iberica antiquiora: Textus chanmeti et haemeti ex inscriptionibus, Bibliis et patribus. *Corpus Scriptorum Christianorum Orientalium* **166** subsidia 10.
- Oniani, A. 1978. კარტველურ ენათა ისტორიული მორფოლოგიის საკითხები [Issues in Georgian historical morphology.] Tbilisi: Mecniereba.
- Palmer, F. R. 1986. Mood and modality. London: Cambridge University Press.
- Pxakadze, D. 1984. 1 თურმეობითის ფუნქციები ქართულში. [The functions of the present perfect in Georgian.] Tbilisi: Tbilisi University Press.
- Sarjveladze, Zurab. 1971. ხანმეტ და ჰაემეტ ტექსტებში დადასტურებულ ზმნის პირიან პორმათა საძიებლები. [A tabulation of the finite verb forms attested in the Khanmeti and Haemeti texts.] Tbilisi: Mecniereba.
- Schmidt, Karl Horst. 1957. Eine südkaukasische Aktionsart? *Münchener Studien zur Sprachwissenschaft* **10**. 9-24.
- Schmidt, Karl Horst. 1984. On aspect and tense in Old Georgian. *Folia Slavica* **7**: 290-302.
- Shanidze, Akaki. 1920. სუბიექტური პრეფიქსი მეორე პირისა და ობიექტური პრეფიქსი მესამე პირისა ქართულ ზმნებში. [The 2nd person subject prefix and the 3rd person object prefix in Georgian verbs.] Reprinted in Shanidze 1957: 49-263.
- Shanidze, Akaki. 1923. უძველესი ქართული ტექსტების აღმოჩენის გამო. [Concerning the discovery of the most ancient Georgian texts.] Reprinted in Shanidze 1957: 282-296.
- Shanidze, Akaki. 1953. ქართული გრამატიკის საფუძვლები, 1: მორფოლოგია. [Fundamentals of Georgian grammar, 1: Morphology.] Tbilisi: Tbilisi University Press.
- Shanidze, Akaki. 1957. ქართული ენის სტრუქტურისა და ისტორიის საკითხები, 1. [Questions of the structure and history of the Georgian language, 1.] Tbilisi: Tbilisi University Press.
- Shanidze, Akaki. 1976. ძველი ქართული ენის გრამატიკა. [Grammar of the Old Georgian language.] Tbilisi: Tbilisi University Press.
- Sharadzenidze, Tinatin. 1954. სახელთა მრავლობითი რიცხვის წარმოება სვანურში ბალსზემოური კილოს მიხედვით [Formation of the plural number of the noun in the Upper Bal dialect of Svan]. *Ibero-Caucasian Linguistics* **6**: 189-203.
- Talmy, Leonard. 1985. Lexicalization patterns: semantic structures in lexical form. In T. Shopen

(ed.) *Language typology and syntactic description, Vol. 3: Grammatical categories and the lexicon*. Cambridge Univ Press.

Topuria, Varlam. 1967. სვანური ენა, 1: ზმბა. [The Svan language, 1: Verb.] Tbilisi: Mecniereba.

Tsunoda, Tasaku. 1981. Split case-marking patterns in verb-types and tense/aspect/mood. *Linguistics* **19**: 389-438.

Tuite, Kevin. 1988a. Number agreement and morphosyntactic orientation in the Kartvelian languages. Dissertation, University of Chicago.

Tuite, Kevin. 1988b. Split objectivity in Georgian. *University of Chicago Working Papers in Linguistics* **4**. 257-265.

Uhlenbeck, C. C. 1916. Het passieve karakter van het verbum transitivum in talen van Noord-Amerika. *Verlagen en Mededeelingen der Koninklijke Akademie van Wetenschappen. (Afd. Letterkunde)*. **5** #2: 187-216.