Agentless transitive verbs in Georgian
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§1. The present paper continues work by the author on marginal verb types in Georgian and the other Kartvelian (South Caucasian) languages, in particular, those associated with apparent morphology-syntax mismatches (Tuite 1987, 2002, 2003), or atypical paradigms (Tuite 1994, 1996). The study of marginal verb classes, sites of variable (or uncertain) acceptability judgments, can be compared to ethnological interest in conflicts & variation in society: They afford a privileged window on change, and expose dynamic "fault lines" in language or culture.

The topic of this paper is the Georgian agentless transitive verb (ATV), a verb type that has received little attention from linguists. The ATV is characterized by the following features:
(i) Transitive morphology (most often that characteristic of causative verbs, with version vowel /a-/, and present-series marker /eb-/);
(ii) Only one argument, formally marked as an object, is subcategorized;
(iii) In general, ATVs have less elaborate conjugational paradigms than other transitives.

In other words, ATVs have the morphology of ordinary transitive verbs, but are not accompanied by overt grammatical subjects. Their one surface argument is assigned dative case — as are ordinary direct objects in the present series —, and controls object agreement markers in the verb. Here are three examples of ATVs, two of them from Georgian-language Internet chat groups, and one from a short story by a popular contemporary writer. The single argument of each of these verbs is marked by the 1sg object marker m-. Each ATV also ends with a S3sg suffix (present & subjunctive -s, past-indicative -a), which is not cross-indexed to a surface NP.

(1) ertxel   kimi-is   lekcia-ze   **da=m-a-mtknar-a**
    once   chemistry-GEN lecture-at   PV=O1sg-SupV-yawn-AOR.S3sg
    "Once I yawned at a chemistry lecture" (chat group *Tbilisi forum*)

(2) dzalian   a=civ-d-a,   gač'irvebul-ma maisur-i-c   k'i   čamo=v-i-č'im-e,
    very   got.cold-S3sg distressed-ERG T-shirt-NOM-also Prt   PV-S1-SubV-stretch-AOR
    m-a-k'ank'al-eb-d-a   mainc
    O1sg-SupV-shiver-IMP-S3sg   nonetheless
    "It got very cold. Suffering (from the cold) I stretched my T-shirt downward, but I was still shivering" (Guram Dočanišvili *Erti ramis siq'varuli*)

(3) v-k'vd-eb-i   liv t'ailer-ze **m-a-bod-eb-s**   mas-ze!!
    S1-die-SM-PRS L. T.-on   O1sg-SupV-craze-SM-S3sg   her-on
    "I'm dying over Liv Tyler, I am crazy about her" (chat group *Netgamer*)

Compare the syntactic frame of the ATV *a-xvel-eb-s* "X coughs" to that of an ordinary causative verb, such as *a-mɣer-eb-s* "X makes Y sing":

(4) bič'-s   a-xvel-eb-s
    boy-DAT O3-SupV-cough-SM-S3sg
    "The boy is coughing"

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(5) megobar-i   bič'-s   a-mɣer-eb-s
    friend-NOM boy-DAT   O3-SupV-sing-SM-S3sg
    "A friend makes the boy sing"

The verbs *a-xvel-eb-s* and *a-mɣer-eb-s* have identical morphology, but whereas the latter subcategorizes for both a DAT-case NP denoting the singer and a NOM-case argument denoting the person or situation that causes the singer to sing, *a-xvel-eb-s* is only accompanied by a single NP, designating the one who coughs. At first glance, sentence (4) looks like it ought to mean "X makes the boy cough", but no "X" ever appears with the habitual markers of a causative agent (NOM case in the present series of paradigms, ERG case in the aorist and optative). The author of example (3) claims to be driven crazy by the actress Liv Tyler, but the NP referring to her is marked by a postposition (*-ze* "on, at"), and does not occupy the role of grammatical subject. For all intents and purposes, *a-xvel-eb-s, a-bod-eb-s* and other ATVs are monovalent.

I have so far identified around three dozen ATVs in Modern Georgian, which are shown in Table I. In semantic terms, Georgian ATVs appear to form a coherent group: All examples that I have found denote observable — but usually involuntary — responses to internal physiological conditions, typically of the sort that a mother of small children or school nurse would encounter on a recurrent basis. One subset clusters around the physiological symptoms of fever or chills: shivering, trembling, delirium and the like. Another group, semantically less tightly centered, refer to the experience of sharp pains, stomach distress, or muscular discomfort. A third subset — to which I will devote particular attention further on in this paper — comprises a half-dozen verbs denoting different types of audible reaction to internal stimuli: coughing, sneezing, belching, yawning, hiccuping and vomiting.

§2. Impersonal transitives. Similar types of verbs have been identified in other languages. In dependent-marking languages of nominative-accusative alignment, such as Latin, Icelandic or German, ATVs — usually referred to in the literature as "impersonal transitives" — assign accusative case, as do ordinary transitive verbs, but are accompanied by dummy subjects (typically 3sg neuter pronouns) or no surface subject at all. In Amharic, which is double-marking, the single surface argument of ATVs is assigned ACC case, and governs object agreement in the verb. The identification of ATVs in dependent-marking languages of consistently ergative alignment cannot in principle be based on case assignment alone, since the single argument of an ATV would receive the same absolutive marking as the subject of an intransitive verb. Johanna Nichols (p. c.) has nonetheless detected a small number of ATVs in the Northeast Caucasian language Ingush. These expressions either employ a transitive auxiliary verb (*loac* "catch, capture", *C.u* "make" [C = class-agreement marker]), or are transitive verbs which are facultatively agentless. The inventories of ATVs for several languages are given in Table II.

Leaving aside "impersonalizing" transformations of the type to be discussed in the following section, the number of ATVs in languages for which I have information ranges from a handful (3 to 5) to the 50 or so ascribed to Icelandic. More importantly, the semantic characteristics of these verbs, in IE and non-IE languages alike, are strongly similar. As summarized in Table III, ATVs denote sensations, symptoms and changes of state which normally occur spontaneously, or without the experiencer's volition:

(i)   psychophysiological sensations (be cold, hungry, tired)
(ii)   symptoms of illness or other internal states (shiver, sneeze, have cramps)
(iii)   emotional reactions, almost always negative (feel fear, disgust, shame)
(iv)   nonvolitionary cognitive phenomena (dream, wonder, remember)

(v)   changes of weather, state, or life-cycle phase (freeze, rust, age, die)
(vi)   undergoing movement or action (only described for Icelandic, as far as I know: drift, be carried, be fastened)

Whereas the inventory of ATVs for some languages spreads over most or all of the semantic fields enumerated above (e.g. Icelandic, Shina, Ingush), those of other languages cluster in one or two fields. The five Latin impersonals which assign accusative case describe negative reactions of an emotional and/or moral nature. The half-dozen lexical ATVs of Russian, like the much larger group in the Georgian lexicon, denote physical symptoms.

I note in passing that the classification of some of the verbs described above as ATVs has been contested by certain linguists. Moravcsik (1978: 241-2; see also Creissels 2004, Wunderlich 2005) characterizes the Latin, German and Amharic verbs in Table II as instances of the "extension of accusative markers to intransitive subjects", and as such, comparable to the "split-ergative" or "split-S" alignments described for numerous languages (Dixon 1994: 73). This is also the favored interpretation of the class of superficially monovalent verbs in head-marking languages such as Wichita (Rood 1971), Lakhota (Mithun 1991: 514-8) and Caddo (Mithun 1991: 525-8), which crossreference their single argument with object-agreement affixes. In Caddo, for example, the prefix ku- crossreferences the 1sg patient of transitive verbs such as (6), and also the single surface argument of certain verbs denoting states and involuntary events, such as (7) (examples from Mithun 1991: 525, 527):

(6) **ku**:wida:kuhnah "He grabbed **me**"
(7) **ku**kahʔíwʔnah "**I** burped"

Since 3sg subject/agent agreement in these languages is zero, such verbs could equally well be regarded as ATVs. I do not know if there are independent, language-internal grounds in Caddo and the other languages mentioned which would compel analysis of (7) and similar verbs as intransitive rather than impersonal transitive.

§3. Facultative ATVs. The Georgian ATVs in Table I are divided into three groups on the basis of morphological and syntactic properties. The verbs of the first group are formally causative, as marked by the transitivizing version vowel a- and the series marker -eb-. Many of these have expressive roots, as indicated by full or partial reduplication and phonetic symbolism, as described by Holisky (1981). Shanidze (1953: 195-6) qualified the ATVs of the first and second group as "polysemic", since they allow both mono- and bi-valent syntactic frames.

(8) šiš-ma   isev   a=m-a-k'ank'al-a   [BIVALENT FRAME]
     fear-ERG again   PV=O1sg-SupV-shiver-AOR.S3sg
     "Fear made me tremble again " (T'erent'i Graneli *γame otaxši*)

(9) siciv-isa-gan   a-m-a-k'ank'al-a   [MONOVALENT FRAME]
     cold-GEN-from   PV=O1sg-SupV-shiver-AOR.S3sg
     "I trembled from the cold"

Most of the bivalent homologues of ATVs are associated with indirect syntax, that is, the formal direct object — which tends to refer to human experiencers — takes on certain of the syntactic attributes of a grammatical subject at the expense of the agent, which almost invariably has inanimate or abstract reference (Tuite 1987). In accordance with the split-ergative patterning characteristic of Georgian and some of the other Kartvelian languages, the case assignment

properties of transitive verbs (and some intransitives) shift from an accusative alignment in the present series of conjugational paradigms to an ergative alignment in the aorist and optative. Bivalent indirect intransitives conform to this pattern:

(10a) kal-s   usiamovno mogoneba-Ø   a-žržol-eb-s
       woman-DAT   unpleasant   recollection-NOM SupV-shudder-SM-S3sg
       "An unpleasant memory makes the woman shudder"

(10b) kal-i   usiamovno mogoneba-m   še=a-žržol-a
       woman-NOM unpleasant   recollection-ERG PV=SupV-shudder-AOR.S3sg
       "An unpleasant memory made the woman shudder"

When the same verbs are employed with monovalent syntactic frames, however, their case-assignment properties change somewhat. The single argument is assigned dative case in both the present and aorist series:[2]

(11a) xazarula-s siciv-isa-gan   a-žržol-eb-s
       X.-DAT   cold-GEN-from SupV-shudder-SM-S3sg
       "The *xazarula* (name of an apple tree) shudders from the cold"

(11b) xazarula-s siciv-isa-gan   še=a-žržol-a
       X.-DAT   cold-GEN-from PV=SupV-shudder-AOR.S3sg
       "The *xazarula* shuddered from the cold" (Nodar Dumbadze *Xazarula*)

The shift from direct-object (DO) to indirect-object (IO) marking brings the ATVs into conformity with the vast majority of Georgian verbs which display indirect syntax. Most such verbs belong to the passive ("IInd conjugation") or mediopassive ("IVth conjugation") classes, which do not undergo case shift. The formal subject is assigned NOM case, and the formal IO — which, in the case of indirect verbs, receives the syntactic attributes of subjecthood — is assigned DAT case. The case-assigning properties of the two types of indirect transitives are juxtaposed to those of indirect passive and mediopassive verbs in Table IV. (A typical construction with bivalent indirect passive would be *gogo-s dedis naxva e-nat'r-eb-a* [girl-DAT mother-GEN seeing:NOM ObjV-miss-SM-S3sg] "the girl-DAT misses seeing her mother"; a typical monovalent indirect passive would be *gogo-s e-mɣer-eb-a* [girl-DAT ObjV-sing-SM-S3sg] "the girl-DAT feels like singing")

Table IV. Case-assignment by Georgian indirect verbs
(syntactic subject marked in **boldface**)

	indirect transitive (bivalent)		*agentless transitive*		*bivalent (medio)-passive*		*monovalent indirect (medio)-passive*	
	agent	patient	agent	patient	theme	experiencer	theme	experiencer
Series I	NOM	**DAT**	——	**DAT**	NOM	**DAT**	——	**DAT**
Series II	ERG	**NOM**	——	**DAT**	NOM	**DAT**	——	**DAT**
Series III			(——	**DAT)**	NOM	**DAT**	——	**DAT**

[2] Transitive verbs in the present perfect and pluperfect (Series III) undergo "inversion" of the case and agreement marking assigned to their agents and patients. With regard to bivalent indirect transitives, Georgian speakers found Series III forms to be unacceptable or awkward, preferring to substitute perfects formed from the corresponding passives, accompanied by a postpositional phrase containing the agent. Series III forms ATVs are acceptable to at least some speakers (albeit rejected by Melikishvili 2001: 240), but without genuine inversion.

The assignment of DAT rather than NOM (i.e., absolutive) case to the arguments of ATVs in the aorist and perfect series would appear, at first glance, to be a symptom of the so-called "dative sickness" afflicting Icelandic and some other Germanic languages (Eythórsson 2000; Barðdal & Eythórsson 2003). A tendency has been noted in the latter languages for impersonal transitives which once marked their primary argument with accusative case (e.g. German *mich hungert, mich dürstet*) to assign dative instead (**mir hungert, mir dürstet**). In the case of Georgian, though, a rather different "sickness" appears to underlie the symptoms in question. Compared to the case and agreement coding of transitive agents, intransitive subjects, and indirect objects, that of direct objects is considerably less robust. 3rd-person direct objects generally do not govern person or number agreement in most varieties of Modern Georgian. When both are present in the clause, IOs are favored over DOs in competition for the preverbal object-agreement slot in the verb (Tuite 1998: 17-23). The shift in case-assigning properties undergone by *še=a-žržol-a* and other indirect transitive verbs when used monovalently implies that the weakness of DO coding extends to case marking as well. It would appear that contemporary Georgian speakers only recognize DOs in clauses that have an agent NP in surface structure. When the agent is replaced by a dummy argument that does not appear in surface structure, the single remaining NP "drifts" from DO to IO status.

The Georgian strain of "dative sickness" seems not to have yet spread to agentless transitives in wish and curse formulas, which are generated by the impersonalized optative construction described by Suxishvili (1979; 1986: 90-3) and Amiridze (2005). In such formulas — particularly common in the highland dialects of northern Georgia — the optative particle *net'avi* or its variants is combined with a transitive verb in the aorist tense. The agent of the verb was formerly expressed as an indefinite pronoun (*vin*, traces of which subsist in the particle *net'avi < net'ar + vin;* Shanidze 1953: 636), but its presence is no longer apparent to speakers, and in fact the particle can be dispensed with entirely, as in (13). As a result, facultatively agentless transitives, like those in groups I and II in Table I, can be created in principle from almost any stem:

(12) net'ain **ma=m-k'l-a**   mta-šia,   **da=m-marx-a**   buneba-šia …
      OPT   PV=O1sg-kill-AOR.S3sg mountain-in PV=O1sg-bury-AOR.S3sg nature-in
      "May I die in the mountains, may I be buried in nature"
      (lit. "May X kill me … bury me …", Xornauli 1949: 216; translation Tuite 1994 #67)

(13) dačokili   mexvec'eboda — erti dɣe šen-tan   **m-a-mq'op-a**
      kneeling   he.begged.me   one   day you-with   O1sg-SupV-be-AOR.S3sg
      "On his knees he begged me, 'May I spend one day with you!'" [Giorgi Leonidze *Pupala*]

As would be expected on pragmatic grounds, the beneficiary of wish formulas is generally in the 1st, or less often, the 2nd person. Impersonal optative constructions with a single 3rd-person NP are very rare in spontaneous speech or literature. In the few examples I know of, the single NP received DO coding (i.e. NOM case):

(14) net'amc k'i   okros tavtav-ad **gada=a-kci-a**   q'vela-o!
      OPT   indeed golden ear-ADV   PV=SupV-turn-AOR.S3sg   everyone:NOM-QUOT
      "May everyone turn into golden ears (of grain)" (Šio Mɣvimeli *Okros tavtavi*)

§4. Lexically agentless causatives. The eight verbs composing the third group of ATVs in Table I are lexically agentless, that is, they are always monovalent. Although membership in group III is determined by morphosyntactic criteria, the verbs cluster around a semantic prototype as well: audible actions of the mouth or nose, sometimes accompanied by the expulsion of a gaseous or

liquid substance, and usually involuntarily provoked by internal states of the body, although most of the denoted actions can be controlled by the subject. All eight lexically agentless transitives (LATVs) are morphologically causative. Except for *slok'inebs* "s/he hiccups", the medioactives from which the LATVs would have been derived are either unattested (*mtknarebs) or obsolete (*iqwels* "coughs", which occurs in medieval medical texts (Panask'ert'eli-Cicišvili 1978)). As was noted above with regard to facultative ATVs, LATVs assign DAT case to their single NP in all three series, i.e., it is not (or no longer) coded as a DO:

(15) mas a-xvel-eb-s / da=a-xvel-a / da=u-xvel-eb-i-a   (Lela Samushia, p. c.)
    s/he:DAT coughs (present), coughed (aorist), has-coughed (perfect)

Unlike the other types of ATVs, and indeed, unlike any other verb type described for Georgian, LATVs can flip from indirect to direct syntax (Melikishvili 2001: 117, 240). The verb meaning "hiccup", for instance, has the following two paradigms in the present tense:

(16)   INDIRECT CONJUGATION   DIRECT CONJUGATION
    me   **m**-a-slok'in-eb-s   me   **v**-a-slok'in-eb   "I hiccup"
    I/me   **O1sg**-SupV-hiccup-SM-S3sg   I/me **S1**-SupV-hiccup-SM
    šen   g-a-slok'in-eb-s   šen   a-slok'in-eb   "you (sg.) hiccup"
    mas   a-slok'in-eb-s   is   a-slok'in-eb-s   "he/she hiccups"

What is so unusual about the above two paradigms is not their form, but rather their near-equivalence in meaning. The single argument in each instance denotes the one who hiccups. Formally comparable paradigms can be formed from ordinary causative verbs, but the role of the argument shifts according to the agreement marker it governs:

(17) me   **m**-a-mɣer-eb-s   (is)   me   **v**-a- mɣer-eb   (mas)
    I/me **O1sg**-SupV-sing-SM-S3sg (s/he:NOM)   I/me **S1**-SupV-sing-SM   (s/he:DAT)
    "S/he makes **me** sing"   "**I** make him/her sing"

All eight LATVs can undergo syntactic flip-flop as in (16). The syntactic shift has certain semantic implications. According to Nino Amiridze (p. c.), "whereas direct-syntax forms can be used for an unintentional (*uneburi*) action as well as for sneezing or coughing on purpose, the indirect-syntax forms are only for unintentional [actions]". Note the contrast between the indirect and direct uses of *axvelebs* "coughs" in the two examples in (18), both from the play *Šebindebidan gatenebamde* by Bačo K'virt'ia. On the other hand, the direct use of the verb in (19), from an anti-smoking tract posted on the web page of the Georgian Orthodox patriarchate, does not appear to be correlated with intentional coughing.

(18a) c'amosvlis   dɣes   gaciebuli vq'opilvar ; sašinlad **m**-a-xvel-eb-da. [INDIRECT]
    leaving-GEN day-DAT   chilled   I.was-PERF terribly **O1sg**-SupV-cough-IMP-S3sg
    "The day I was to leave I had a cold; I was coughing terribly"

(18b) didi k'acivit   muč'ši   **v**-a-xvel-eb.   [DIRECT]
    big   man-like   palm-in   **S1**-SupV-cough-SM
    "Like an adult I cough into my hand"

(19) dɣes gacilebit   uk'et vgrdznob tavs, aɣarc   **v**-a-xvel-eb   da
    today considerably   better I.feel   myself no-longer **S1**-SupV-cough-SM and
    aɣarc   naxveli   m-a-xrčob-s
    no-longer   coughed it.chokes.me   (http://www.patriarchate.ge/su/312/7text.htm)
    "Today I feel much better, I am no longer coughing and no longer gagging on sputum"

Here as well, superficially similar phenomena have been described in other languages. One might juxtapose the syntactic flip-flop of Georgian LATVs to the shift from indirect to direct syntax for so-called Psych-verbs in Middle English (for example, the oft-discussed transition from *þæm cyninge licodon peran* [the:DAT king:DAT liked-3pl pears:NOM] to its modern equivalent *The king liked pears* (Jespersen 1927:11.21)). In reality the two cases are very dissimilar. The shift from indirect to direct syntax in English and some other Germanic languages was associated with the erosion and eventual loss of case suffixes and the increasingly rigid preference for SVO word order. Nothing of the sort is happening in Georgian. Its double-marking morphosyntax has been remarkably stable since the earliest attestation of the language 15 centuries ago, and not even the slightest indication of a generalized syntactic drift away from indirect constructions can be detected in any Georgian dialect. Dative-subject verbs number in the hundreds, and new ones are easily (and regularly) added to the lexicon. They are also among the very first verbs acquired by children (Imedadze & Tuite 1992: 63-4). Since syntactic flip-flop in Georgian is limited to the eight LATVs, the search for a possible motivation should begin with the special features of this small subclass of indirect transitives.[3]

§5. ATVs and zero subjects. Real and apparent subjectlessness? The contrast between facultatively agentless intransitives like *mak'ank'alebs* and lexically agentless intransitives like *maxvelebs* recalls that proposed for Russian impersonal transitives by L. Babby (1994, 1998). Babby draws a distinction between "adversity impersonals" such as (20b) and the Russian verbs listed in Table II, for which "the obligatory absence of a subject is specified in the verb's argument structure" (1994: 26). The impersonal transitive in (20b) is derived from an ordinary transitive as in (20a), whereas (21) is the only permitted syntactic frame for the handful of what Babby calls "initial impersonal" transitives.

(20a) Menja   oslep-il-a   molnij-a
       me:ACC blind-PAST-FEM lightning-NOM

(20b) Menja   oslep-il-o   molni-ej
       me:ACC blind-PAST-NEUT lightning-INST
       "The lightning blinded me"

(21)   Menja   tošn-il-o   ot   zapax-a
       me:ACC sicken-PAST-NEUT from smell-GEN
       "The smell made me nauseous"

As further evidence of the different argument structures of the two types of impersonal transitives, Babby (1998: 9) points out that Russian facultative ATVs can passivize, whereas initial impersonal transitives (i.e. LATVs) cannot

(22a) Ego tošnilo ot boli (the pain made him nauseous) /   *On tošnilsja ot boli
(22b) Ego korčilo ot boli (the pain gave him convulsions) / On korčilsja ot boli

As represented in the following diagrams (adapted from Babby 1998: 11), the argument structures of verbs like *korčit'* "convulse" allow for an optional subject (or "external argument",

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[3] According to information supplied by Lela Samushia (University of Frankfurt), the closely-related language Mingrelian does not have syntactic flip-flop as such. Mingrelian LATVs, some of them based on roots cognate with those of Georgian LATVs, are indeed in contrast with direct-syntax constructions, but these latter are medioactive rather than causative in form. See the Mingrelian paradigms, with Georgian formal or functional equivalents, in Table V.

in the configurational terms preferred by linguists operating with the Minimalist framework), indicated as (NP$_1$) in parentheses. As for *tošnit'*-type initial impersonals, no NP$_1$ is present in the argument structure.

tošnit'-type initial	——	——	θ$_2$ (= accusative)	S-selection
impersonal verbs		V	NP$_2$	C-selection (syntactic arguments)

| *korčit'*-type derived	——	——	θ$_2$ (= accusative)	S-selection
impersonal verbs	(NP$_1$)	V	NP$_2$	C-selection (syntactic arguments)

The existence of impersonal transitives has consequences for configurational accounts of verb-specified argument structure, as acknowledged by J. Bowers in a recent paper (2002). Recall that generativists accommodated the difference between "unaccusative" and "unergative" verbs (inactive and active intransitives, respectively), which goes back to the Relational Grammar of the 1970's, by attributing them with distinct deep structures: Unaccusatives have internal arguments (initial DOs) but no external arguments (initial subjects), whereas the reverse obtains for unergative verbs. Transitives of course have both. If Babby's account of Russian initial impersonals is correct, however, it would follow that they, like unaccusatives, have deep structures with a DO but no subject, but with the difference that the initial DO of impersonal transitives does not advance to subject position. In order to account for the distinct behaviors of unaccusative and impersonal transitive verbs in languages such as Russian (in Wichita and Lakhota they may in fact be indistinguishable!), Bowers adds a new level to the configurational representation of the argument structure of transitives, called "TrP". By means of this binary feature in conjunction with presence or absence of an external argument, Bowers distinguishes the four verb types shown below:

		TrP (transitivity)	
		+	—
external	+	TRANSITIVE	UNERGATIVE
argument	—	IMPERSONAL TRANSITIVE	UNACCUSATIVE
(agent)			

Let us return to Georgian lexically agentless transitives. These give every indication of being genuinely monovalent, or — like the initial impersonals of Russian — of having no external argument in deep structure. If, for the sake of argument, we represent this state of affairs in configurational terms, how could syntactic flip-flop be understood?

Type D: Impersonal transitive
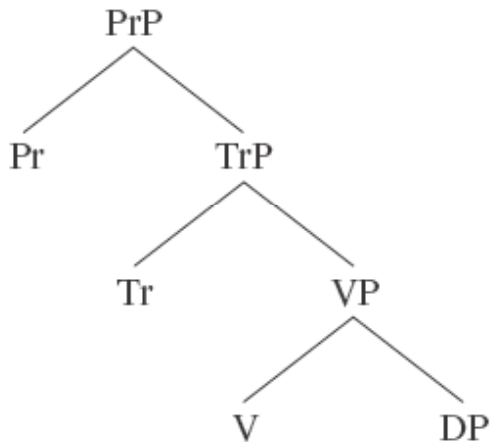
The alternation between direct and indirect syntax might imply the capacity for the internal argument (marked DP in the diagram at left, from Bowers 2002:186) to move out of the VP and occupy the position of an external argument (i.e. Spec, Pr), which would otherwise be unoccupied for this class of verbs. In the case of facultative ATVs, which do not allow flip-flop, movement of the internal argument would presumably be blocked by a zero expletive (like English *it* or German *es*, but without phonetic form). Less readily accommodated, however, is the

first syntactic shift noted in this paper, that between DO and IO marking for the experiencer NPs of indirect transitives, illustrated in (10) and (11) above. The formal attributes of DO-hood (which, in most varieties of Georgian, are distinct from those of IO-hood only in the aorist and perfect conjugational series) only appear when an explicit agent is present in the verb's argument structure. Otherwise, when the external argument slot in initial structure is either vacant (as in the case of LATVs) or held by a zero expletive (facultative ATVs), the internal argument shifts from DO to IO status, and receives DAT case in all conjugations.

As far as Georgian is concerned, the following questions emerge for future study:

1. The drift from DO to IO marking in the absence of an explicit agent underlines the marked nature of the DO relation compared to the other core grammatical relations. This clearly represents a change relative to the situation in Old Georgian (and some conservative highland dialects), for which NOM-case arguments — including DOs — enjoyed special marking privileges, especially number agreement in the verb (Tuite 1992). Further work needs to be done on the marginalization of the DO in Georgian (and perhaps in other Kartvelian languages), from a diachronic as well as synchronic perspective.

2. If, as shown in (14), bivalent transitive verbs in impersonal optative constructions assign DO status to their NP denoting the beneficiary of the wish, this implies that the external-argument slot in deep structure is held by a type of expletive which somehow blocks the DO to IO drift. Although phonetically invisible (or nearly so), the underlying agent NP is somehow more "solid" than the zero expletive in verbs such as (11b). Cf. the discussion in Amiridze 2005.

3. The above phenomenon has implications for a deeper understanding of the grammatical relation of indirect object, which generativists tend to lump together with all other categories of "internal argument", except for the DO. Whereas the latter is assigned accusative Case on configurational grounds, the IO and various types of oblique NPs have "semantic" case, which reflects their thematic ("theta") roles. In Georgian, at least, the IO plays a particularly prominent role in both clause-internal and -external syntax. Many DAT-case NPs function as syntactic subjects outright, and many others share at least some features with subjects: their tendency to refer to humans, to appear toward the front of the clause, and to govern agreement in the verb. Especially in contrast to the particularly close relation between the DO (more precisely, the absolutive argument) and the verb, IOs come across as tantamount to secondary subjects. When no initial external argument is assigned by the verb — as can be assumed for the large number of passive and mediopassive verbs that have formal IOs — the IO takes on all or most privileges of subjecthood, while at the same time signalling, through its DAT marking, various shades of contrast to canonical agenthood (experiencer or beneficiary role, decreased volitionality, indirect evidentiality, etc.) Perhaps it is time that syntacticians take another, and closer, look at this most "external" of internal arguments.

Table I. **Georgian agentless transitives and causatives.**
[cp Jorbenadze 1985: 164-165; Melikishvili 2001: 239-40].

I. FACULTATIVELY AGENTLESS CAUSATIVES [cp. Shanidze 1953: 195-6 on "polysemic" causatives, with ATV readings]
Ø=m-a-caxcax-eb-s "I tremble"
Ø=m-a-taxtax-eb-s "I am overcome by quivering, trembling"
Ø=m-a-dzagdzag-eb-s "I tremble"
Ø=m-a-dzigdzig-eb-s "I tremble"
ga=/da=m-a-zrial-eb-s (t'anši) "I am overcome by shaking, trembling (in my body)"
ga=/še=m-a-žrial-eb-s (t'anši) "I am overcome by shuddering, my whole body trembles"
m-a-trtol-eb-s "I am overcome by shaking, trembling"
a=/ga=/še=m-a-žržol-eb-s (t'anši) "I am overcome by shuddering, my whole body trembles"
a=/ga=/še=m-a-k'ank'al-eb-s "I begin to shake, am overcome by shaking"
Ø=/a=m-a-baban-eb-s "I shiver"
Ø=/ga=/še=m-a-ci(v)-eb-s "I have/get hot & cold spells"
še=m-a-mcivn-eb-s "I shiver (esp. from fever)"
m-a-cxel-eb-s "I have a fever (from malaria)"
m-a-cxro-eb-s (< cxro "malaria")
Ø=m-a-bod-eb-s "I am delirious (from fever)"

ga=/da=m-a-zmor-eb-s "I feel the need to stretch out"
amo=/da=m-a-zid-eb-s "I am nauseous"
m-a-paɣarat-eb-s "I have diarrhea"

II. NON-CAUSATIVE AGENTLESS TRANSITIVES
da=m-cecxl-av-s "I have a hot flash"
ga=m-q'in-av-s "I feel ice-cold"
m-zrzn-i-s "I am overcome by shuddering, trembling"

m-čxvlet'-(av)-s "I feel a stabbing, sticking pain"
m-c'ic'k'n-i-s "I feel a stabbing, knifing pain"
da=/še=m-xut-av-s (muxlebši) "my knees fell stiff (e.g. from rheumatism)"

III. LEXICALLY AGENTLESS CAUSATIVES
da=m-a-xvel-eb-s "I cough"
da=m-a-mtknar-eb-s "I yawn"
amo=/da=m-a-boq'in-eb-s "I belch"
c'amo=m-a-ʒloq'in-eb-s "I belch"
Ø=/amo=/da=m-a-slok'in-eb-s "I have the hiccups"
da=m-a-cemin-eb-s (cxvirs) "I sneeze"
m-a-[m]cxik'v-eb-s "I sneeze"
Ø=m-a-rc'q'-ev-s "I vomit"

Table II. Agentless transitive verbs in other languages.

LATIN
me paenitet (rei)	I regret, repent of (X)
me piget (rei)	I am disgusted, displeased (by X)
me miseret (tui, rei)	I pity (you) ; I am distressed (by X)
me pudet (rei)	I am ashamed (of X)
me taedet (rei)	I am wearied (of X)

RUSSIAN (Creissels 2004)
menja znobit	I feel chilly, feverish
menja lixoradit	I have a fever [cp. *lixoradka* « fever »]
menja lomit	I am bent over [« X breaks me »]
menja mutit	I feel sick [« X stirs me up »]
menja rvët	I vomit [« X rends me »]
menja tošnit	I feel sick

GERMAN
Mich friert/fröstelt/gruselt (es). Es ekelt mich
Mich hungert/dürstet, mich (mir) deucht/dünkt
Mich schläfert. Mich gelüstet [es] nach einem Stück Torte. Mich verlangt nach dir.

ICELANDIC (Eythórsson 2000): verbs with accusative subjects
(COGNITIVE) *dreyma* 'dream', *óra fyrir* 'imagine', *gruna* 'suspect', *iðra* 'repent, regret', *minna* '(seem to) remember', *misminna* 'remember incorrectly', *ráma í* 'vaguely remember', *greina á um* 'disagree about', *ugga* 'fear', *undra* 'wonder, surprise', *furða* 'be surprised at', *varða um* 'concern', *muna um* 'make a difference to', *henda* 'happen',
(WANT) *bresta* 'lack', *fýsa* 'want', *langa* 'want', *lysta* 'want', *skorta* 'lack', *vanhaga um* 'lack, need', *vanta* 'lack, need', *þrjóta* 'run short of, lack', *þverra* 'decrease', *lengja eftir* 'long for'
(PHYSIOLOGICAL DISCOMFORT) *hungra* 'hunger', *svengja* 'feel hungry', *kala* 'suffer frostbite', *kitla* 'tickle', *klígja* 'feel nauseated, sick', *velgja* 'feel nauseated', *sundla* 'feel dizzy', *svima* 'feel dizzy', *hrylla við* 'shudder at', *svíða* 'smart, sting', *syfja* 'grow sleepy', *verkja* 'hurt, ache', *þyrsta* 'feel thirsty', *saka* 'be hurt'
([passive] MOVEMENT) *bera* 'be carried', *brjóta* 'break', *drífa að* 'come flocking', *hefja* 'be raised', *reka* 'drift', *festa* 'be fastened', *fylla* 'get swamped', *leggja* 'be laid', *lengja* 'get longer; long for',
(SPONTANEOUS CHANGE) *ysta* 'curdle', *leysa* 'thaw', *lægja* 'subside', *daga uppi* 'be caught by daylight'

AMHARIC (Amberber 2000, 2002): impersonal verbs of sensation, emotion and perception
aster-(ɨn)	*bərrəd-at*	*rabb-ə-ññ*
Aster-(ACC)	be.cold.PERF.3MASC-3FEMObj	hunger.PERF.3MASC-1SGObj
'Aster is cold.'		'I am hungry.' (Lit.: 'It hungers me.')

(Bender & Fulass 1978) worry, be tired, wonder, astonish, be sick, feel gloomy, bleed (nose), be bored, be comfortable, be thirsty, yawn, have a cramp, stumble, be disturbed

NGAN'GITYEMERRI (Australia; Reid 2000): monoreferential transitive complex verbs
"feel sad", "feel shamed", "be cold", "be happy", "need to get one's breath back", "have a toothache", "feel ill at ease", "feel uncomfortable talking together"

SHINA (Indic; Hook & Zia) 34 impersonal causative expressions: feel hungry, thirsty, bored, ashamed, afraid, hot, cold, weak, cloyed, dizzy, exhausted; become old, fat, blind, paralyzed, startled, restless, tormented, rusty, gassy, fed up [with X]; stumble, fall, swell up, curdle, shine, die

Ingush agentless transitives (Johanna Nichols, p.c.)
Cited as present stem. # in valence entries means that the first element of a compound verb functions as the nominative (S/O) argument of the valence (i.e. agreement is internal). Since both S and O receive absolute case, transitivity is determined lexically, according to valence of auxiliary verb (*loac* "catch, capture", *D.u* "make")

INGUSH FORMAL TRANSITIVES WITHOUT ERGATIVE AGENT:

Verb	Valence	Gloss, comments
maalx loac	#maalx	'solar eclipse occurs' Agentless; aux. is transitive.
butt loac	#butt	'lunar eclipse occurs' " " " "
		[lit. "X catches sun/moon"] *loac* "catch, capture"
muq=d.u	Nom	'rust, get rusty, rust through, be rust-eaten, corrode'
		Transitive aux.
ghor=ju	(Dat) #ghor	'harden, freeze'
sha=b.u	Lat #sha	'freeze, turn to ice'
		[lit. "X makes ice (*sha*)"] *D.u* "make"
qeika=d.u	Nom	'cough'; 'be sick, have a cough' (*qeik* 'cry, shout')
		Meaning is stative, close to 'be sick, have a cough'.
sotta=d.u	Nom	'stretch (on waking)' (*sott* 'bend, curve')
loarha=d.u	Nom Inf	'get up the nerve (to), make up one's mind (to); decide, dare'
		(*loarh* 'count, respect, consider, decide')
sa=got(ta)=d.u	Gen #sa	'be worried, be upset' (*sa* 'soul', *gotta* 'narrow, cramped')
qoa=d.u	Nom	'manage, find time, manage to find time, manage to finish'
dosh d.uuc	Gen #dosh	'go on trial, be on trial (for non-capital crime)'
		[lit. "X narrates word/matter"] Aux. is transitive verb.

LABILE (AMBITRANSITIVE) VALENCE WHERE THE AGENTLESS FORM IS LEXICALIZED:

d.u	(Erg) Nom	'give birth' (with Erg.)
		'be born' (no Erg.; deponent)
ghuorad.u	Nom	'chill, get chilled, freeze' (of person)'
	Erg-Nom	'freeze, freeze solid' (of water)
d.ieq	(Erg)-Nom	'make up, compensate; avenge' Erg-Nom
		'clear up, become clear' (of weather) Nom only; deponent

Table III. Semantic range of ATVs in various languages.

	GEO	LAT	RUS	ICE	GER	AMH	SHI	NGA	ING
I. PSYCHOPHYSICAL SENSATIONS									
hunger, thirst				X	X	X	X		
heat, cold	X			X	X	X	X	X	X
dizziness, delirium	X			X					
pain	X			X		X		X	
sleepiness, exhaustion							X		
II. OBSERVABLE SYMPTOMS									
shivering, fever, chills	X		X						
audible (cough, belch, &c)	X					X			X
nausea, diarrhea, cramps	X		X	X		X			
paralysis, stiffness	X		X				X		X
swelling, fatness							X		
stumble, fall						X	X		
III. EMOTIONS (NEGATIVE)									
fear, worry, sorrow				X		X	X	X	X
shock, surprise				X		X	X		
moral reaction		X		X				X	
need, lack, longing				X		X			
boredom							X		
positive emotion (happiness)						X		X	
IV. COGNITIVE									
memory				X					
dream				X	X				
think, imagine					X				
V. SPONTANEOUS CHANGE									
freeze, thaw				X					X
rust, rot, curdle				X			X		X
life cycle: be born, die, age							X		X
weather, celestial event							X		X
VI. PASSIVE MOVEMENT				X					

languages : Georgian, Latin, Russian, Icelandic, German, Amharic, Shina, Ngan'gityemerri, Ingush

Table V. Mingrelian lexically agentless transitives (L. Samušia, p. c.)

MEDIOACTIVE BASE FORM	INDIRECT CAUSATIVE (LATV)
šik'in-un-s (cp. Geo. slok'in-eb-s) "hiccups"	o-šik'in-ap-u-an-s (cp. Geo. a-slok'in-eb-s)
xval-un-s (cp. Middle Geo. i-qwel-s) "coughs"	o-xval-ap-u-an-s (cp. Geo. a-xvel-eb-s)

direct syntax (± control)	indirect syntax (— control)
1sg. ma p-šik'in-un-k (≅ v-a-slok'in-eb)	ma m-o-šik'in-ap-u-an-s (= m-a-slok'in-eb-s)
2sg. si šik'in-un-k (≅ a-slok'in-eb)	si g-o-šik'in-ap-u-an-s (= g-a-slok'in-eb-s)
3sg. tina šik'in-un-s (≅ is a-slok'in-eb-s)	tina-s o-šik'in-ap-u-an-s (= mas a-slok'in-eb-s)

References

Amberber, Mengistu. 2002. *Verb classes and transitivity in Amharic.* Munich: Lincom Europa.

Amberber, Mengistu. 2000. Valency-changing and valency-encoding devices in Amharic. *Changing Valency: Case studies in transitivity,* ed. R. M. W. Dixon & A. Aikhenvald, pp. 312-332. Cambridge U Press.

Amiridze, Nino. 2005. Mismatches between the Form and the Meaning. Reanalyzing Wish and Blessing Formulae in Georgian. ms., Utrecht Institute of Linguistics

Babby, Leonard H. 1994. A theta-theoretic analysis of adversity impersonal sentences in Russian. *Formal approaches to Slavic linguistics: the MIT meeting,* S. Avrutin, S. Franks, and L. Progovac (eds.). Ann Arbor: Michigan Slavic Publications, 25-67.

Babby, Leonard H. 1998. *Voice and Diathesis in Slavic.* Presented at Conference on Comparative Slavic Morphosyntax, Bloomington (www.indiana.edu/~slavconf/linguistics/babby.pdf)

Barðdal, Jóhanna & Eythórsson, Thórhallur. 2003. The change that never happened: the story of oblique subjects. *Journal of Linguistics*, 39: 439-472.

Bender M. Lionel, and Fulass, Hailu. 1978. *Amharic verb morphology: a generative approach.* East Lansing: African Studies Center, Michigan State University.

Bowers, John. 2002. Transitivity. Linguistic Inquiry, Volume 33, # 2, Spring 2002 : 183-224.

Creissels, Denis. 2004. « Ergativité / accusativité et l'hétérogénéité des constructions intransitives » (INALCO 2004) ; *Cours de syntaxe générale* 2004, chapitre 10, L'ergativité.

Dixon, R. M. W. 1994. *Ergativity.* Cambridge: Cambridge University Press.

Eythórsson, Thórhallur. 2000. Dative vs. Nominative: Changes in Quirky Subjects in Icelandic *Leeds Working Papers in Linguistics* 8, Nelson, D. & P. Foulkes (eds), pp. 27-44.

Holisky, D. A., 1981. *Aspect and Georgian medial verbs.* Delmar, NY: Caravan Press

Hook, Peter Edwin. 1990. A Note on Expressions of Involuntary Experience in the Shina of Skardu. Bulletin of the School of Oriental and African Studies 53:77-82.

Hook, Peter Edwin and Zia, M. A. Searching for the Goddess: A study of sensory and other impersonal causative expressions in the Shina of Gilgit.

Imedadze, Natela & K. Tuite. 1992. The acquisition of Georgian. *The crosslinguistic study of language acquisition* vol. 3, D. Slobin, ed. , pp 39-109. Hillside, NJ: Lawrence Erlbaum.

Jespersen, O. 1927. *A Modern English Grammar on Historical Principles*

Jorbenadze, Besarion. 1985. *kartuli enis pak'ult'at'iuri gramat'ik'is sak'itxebi* (Issues in the facultative grammar of Georgian). Tbilisi: Tbilisis saxelmc'ipo universit'et'is gamomcemloba.

Melikišvili, Damana. 2001. *Kartuli zmnis uɣlebis sist'ema.* (The conjugational system of the Georgian verb). Tbilisi: Logos Press.

Mithun, Marianne. 1991. Active/agentive case marking and its motivations. Language 67 #3: 510-546.

Moravcsik, Edith. 1978. On the distribution of ergative and accusative patterns. Lingua 45: 233-279.

Panask'ert'eli-Cicišvili, Zaza. 1978. *samk'urnalo c'igni — k'arabadini.* (Mixeil Shengelia, ed.) Tbilisi: Sabč'ota Sakartvelo.

Reid, Nicholas. 2000. Complex verb collocations in Ngan'gityemerri. *Changing Valency: Case studies in transitivity,* ed. R. M. W. Dixon & A. Aikhenvald, pp. 333-359. Cambridge U Press.

Rood, David. 1971. Agent and object in Wichita. Lingua 28: 100-107.

Shanidze, Ak'ak'i. 1953. *kartuli gramat'ik'is sapudzvlebi, 1: morpologia.* (Fundamentals of

Georgian grammar, 1: Morphology). Tbilisi: Tbilisis universit'et'is gamomcemloba.

Suxišvili, Murman. 1979. uaxloesi obiekt'isa da subiekt'is gaučinareba gardamavali zmnis šemcvel šesit'q'vebaši. <u>Iberiul-k'avk'asiuri enatmecniereba</u> XXI: 57-67

Suxišvili, Murman. 1986. gardamavali zmnebi kartulši. sist'emisa da ist'oriis zogi sak'itxi. Tbilisi: Mecniereba

Tuite, K. 1987. Indirect transitives in Georgian. *Proceedings of the 13th annual meeting of the Berkeley Linguistics Society* (*BLS* 13); 296-309.

Tuite, K. 1992. The category of number in Common Kartvelian. *The Non-Slavic Languages of the USSR: Linguistic Studies,* 2nd Series, H. Aronson, ed. Chicago Linguistic Society, p 245-283

Tuite, K. 1994. Aorist and pseudo-aorist for Svan atelic verbs. *NSL 7: Linguistic Studies In The Non-Slavic Languages of the Commonwealth of Independent States and the Baltic Republics,* H. Aronson (editor), Chicago Linguistics Society; 319-340.

Tuite, K. 1996. Paradigm recruitment in Georgian. *NSL 8: Linguistic Studies In The Non-Slavic Languages of the Commonwealth of Independent States and the Baltic Republics,* H. Aronson (editor). Chicago Linguistics Society; 375-387.

Tuite, K. 1998. *Kartvelian Morphosyntax. Number agreement and morphosyntactic orientation in the South Caucasian languages*. München: LINCOM Europa

Tuite, K. 2002. Deponent verbs in Georgian; *Philologie, Typologie und Sprachstruktur: Festschrift für Winfried Boeder zum 65. Geburtstag,* Wolfram Bublitz, Manfred von Roncador, Heinz Vater (editors), 375-389. Frankfurt am Main: Peter Lang Verlag.

Tuite, K. 2003. Liminal morphosyntax: Georgian deponents and their kin. *Chicago Linguistics Society,* vol 39.

Wunderlich, Dieter. 2005. Towards a structural typology of verb classes. (file at http://web.phil-fak.uni-duesseldorf.de/~wdl/structyp-verb.pdf)

Xornauli, Ivane, ed. 1949. *Pshav-khevsuruli p'oezia* "Pshav-Khevsur poetry." Tbilisi: Sakhelgami.