Valency Increasing Derivations in Georgian: Theoretical Approaches

Two regular valency increasing verbal derivations in the Kartvelian languages are 1) the bene-factive, traditionally called version (i.e. the benefactive derivation which adds a non-core indirect object), or locative, and 2) causative.

Theoretical approaches interpret facts of different languages within frameworks, or research projects, that try to characterize what a grammar of a human language can or cannot be. To achieve that goal, theoretical frameworks employ more or less formal models.

1. Akaki Shanidze
(Šaniże 1973 kartuli gramaţişis sapuzylebi. I ‘Foundations of Georgian Grammar’):

inflectional categories vs. derivational categories
(urilebis kategoriEBi) (çarmokmnis ŋaTEgorieBi)

The latter include version (keeva), transitivity (gardamavloba), contact (koŋakçi), and locative derivation (situacia).

The traditional notion of person ( pérdi) is more than a mere morphological category — it denotes any participant grammatically encoded in the verb via derivation and/or agreement. Implicitly, Šanižė’s theory of derivation involves three grammatical levels:

- syntax: verb and its nominal arguments morphologically indexed in the verb via ‘persons’ (subject, direct object, indirect object)
- verbal morphology (persons, markers of derivation)
- semantic relationships between pairs of arguments

Any valency increasing derivation (adding a non-core participant), according to Šanižė, is moti-
vated by a semantic relationship.

The verbs in Georgian have up to three (rarely four) persons that correspond to the nominals – subject and objects. The marked values of version (viz. object version) and contact (viz. indirect contact) involve new, additional persons like Causative Agent (xelmgviavleni). With version, Šanižė does not use terms like recipient (mìmyebi) or possessor (mplobeli), speaking instead of the semantic relationships: benefactivity (danisnuleba) and possession (kutvnileba) respectively.

Version has three values:

- neutral (saarviso), e.g. çer-s ‘He/She writes (it)’,
- subject-oriented, or reflexive (sataviso), e.g. i-çer-s ‘He/She writes (it) for himself/herself’
- object-oriented, (sasxviso), with transitive verbs only, e.g. u-çer-s ‘He/She writes (it) for him/her’

With a benefactive:

(1) a. v-kerja v-kerja-s
    1SG.SB-sew dress-DAT
    ‘I’m sewing a dress.’ (neutral)
b. v-u-kerja v-ka bavšv-s
1SG.SB-ov3-sew dress-DAT child-DAT
‘I’m sewing a dress for the child.’ (object-oriented)

c. v-i-kerja v-ka
1SG.SB-sv-sew dress-DAT
‘I’m sewing a dress for myself.’ (subject-oriented)

With a possessor:

(2) a. koča ga-tqd-a
jar PR-break-3SG.SB.AOR
‘The jar broke.’

b. bavšv-s koča ga-u-tqd-a
child-DAT jar PR-ov3-break-3SG.SB.AOR
‘The child’s jar broke.’

Šaniže distinguished version from what he called situation (situaţia), a locative derivation which other authors regard as a value of the version/applicative (local, or superessive version, Vogt 1971: 124; Hewitt 1995: 184, a.o.):

(3) a. mama c̣eř-s misamart-s
father.NOM write-3SG.PRS address-DAT
‘Father is writing the address.’

b. mama a-c̣eř-s misamart-s konvert-s
father.NOM sv-write-3SG.PRS address-DAT envelope-DAT
‘Father is writing the address on the envelope.’

“The term contact means the form of the transitive verb which denotes whether the subject person affects the direct object directly or through (mediated by) another person” (357–358). The category has two values:

- direct (uşualo), e.g. c̣eř-s ‘He/She writes (it)’, and
- indirect (uşalobiti), e.g. a-c̣eř-ineb-s ‘He/She makes/lets.allows him/her (to) write (it)’

Three participants: the cause (xelmzyvane), the causee (šemsrulebeli), and the object (samizno).

(3) a. bavšv-i c̣eř-s c̣eřil-s
child-NOM write-3SG.PRS letter-DAT
‘The child writes a letter.’

b. mama a-c̣eř-ineb-s bavšv-s c̣eřil-s
father.nom TR-write-Caus-3SG.PRS child-DAT letter-DAT
‘Father makes/lets.allows the child to write a letter.’

Šaniţe distinguished contact from transitivity (gardamavloba), although he emphasized their similarity and the fact that they are formally indistinguished in many languages:
Šaniże’s analysis of derivations was fine-grained, but he did not distinguish clearly between the syntactic derivation, i.e. addition of a participant (“person”), and semantic relationships like “possession” or “position”. His notional system is unable to distinguish between inherent and derived properties, i.e. “transitivity” may mean (i) the inherent or (ii) derived property of a verb and (iii) a derivation. In spite of that he considers pairs or triples, as in (4), of constructions, he employs no formal system of derivation which could produce one construction from another, or them both from an abstract underlying representation.

2. St.-Petersburg’s school approach to derivation

(Gecadze, Nedjalkov, Xolodovič 1969)

A typologically oriented theoretical approach which distinguishes between semantics (structure of situations that involves predicates and roles) and syntax. The syntactic structure is represented in terms of grammatical relations (subject, direct object, indirect objects).

**Causative** is defined as a verb which refers to a causative situation, that is to a causal relation between two events, one of which is believed by the speaker to be caused by another (i.e. a father causes a child to write a letter, as in (3b)). The causative agent of the causing event is expressed as the subject in the syntactic **causative construction**, whereas the subject of the non-causative counterpart may be syntactically demoted, i.e. expressed by a nominal that is structurally less prominent than the subject.

The approach achieved clarity and precision in the grammatical classification of constructions, i.e. it was able to distinguish the genuine causatives from the homophonous comitative (5) or applicative (6–7) derivations (op. cit. 136):

(5) cekv-av-a ‘dances’ → a-cekv-eb-s ‘dances with him/her’
(6) brcqin-av-s ‘glitters’ → a-brcqin-eb-s ‘illuminates, shines over it/him/her’
(7) ṭq̣u-i-s ‘lies’ → a-ṭq̣u-eb-s ‘deceives him/her’

Moreover, the precise definition of the causative as a pair consisting of a semantic and a syntactic object made it possible for Gecadze, Nedjalkov & Xolodovič to outline the main meanings of the causative construction in the strict sense. Like causatives in many other languages, Georgian causatives show regular polysemy:

**Distant** causation, mainly from transitive and medial verbs:

(8) čer-s ‘he/she writes (it)’ → a-čer-ineb-s ‘he/she makes (factitive)/allows (permissive)/helps (assistive) him/her to write(it)’
(9) muša-ob-s ‘he/she works’ → a-mušav-eb-s ‘he/she makes (factitive)/allows (permissive)/helps (assistive) him/her to work’

**Contact** causation, mainly from intransitives, the factitive meaning only:

(10) i-cin-i-s ‘he/she laughs’ → a-cin-eb-s ‘he/she makes him/her laugh’
(11) xar-ob-s ‘he/she enjoys’ → a-xar-eb-s ‘he/she makes him/her rejoice’

St.-Petersburg school’s model of derivations has however a restricted theoretical potential:

- it cannot be extended somewhere beyond the correspondence of semantic and syntactic arguments, i.e. regular or irregular phenomena of derivation and voice;
- neither it presents the verbal derivation as a part of general theoretical model of human languages’ syntax and morphology.
3. Relational Grammar

Verbal derivation, among other facts of Georgian grammar, was approached in (Harris 1981) within the framework of **Relational Grammar** (RG; Perlmutter & Postal 1977 a.o.). RG assumes that the grammar of human languages is best represented by rules operating on grammatical relations. The grammatical relations (subject, object, indirect object…) are the best notional basis for stating universal generalizations across languages. The structure of a clause is a set of grammatical relations obtaining between the elements of a clause. For example, the passive voice can be best captured by a universal rule of Passivization that promotes direct objects to subjecthood, rather than e.g., in terms of constituent structure, a transformation which moves an NP that is a sister of a verb to a structurally higher position. The three major grammatical relations, **subject, direct object** and **indirect object**, are called terms.

(Harris 1981): a part of the grammar of Georgian is the rule of **Causative Clause Union** under which the complement clause and the matrix clause fuse to form a single clause. Two levels of representation are introduced, **initial** and **final**.

- The initial subject of the embedded intransitive verb becomes the direct object of the matrix verb;
- the initial subject of the embedded transitive becomes the indirect object of the matrix verb;
- the initial direct object becomes the direct object of the matrix verb, and
- the indirect object of the embedded transitive verb becomes the emeritus dependent of the united clause.

(12) a. mama-m mi-s-ce-a vard-eb-i deda-s
    Father-ERG PRV-3SG.IO-give-3SG.AOR rose-PL-NOM mother-DAT
    ‘Father gave roses to Mother.’

b. mama-m mi-m- a-cem-in-a vard-eb-i ded-istvis
    Father-ERG PRV-1SG.O-CAUS-give-CAUS-3SG.AOR rose-PL-NOM mother-for
    ‘Father had me give roses to Mother.’ (69)

(13) **Initial level:** Subject (P1) Subject (P2) Direct Object (P2) Indirect Object (P2)
    **Final (derived) level:** Subject Indirect Object Direct Object Retired
    mama-m me vard-eb-i ded-istvis
    Father-ERG I rose-PL-NOM mother-for

In (Harris 1981), conclusive evidence was brought that the three terms at both levels display consistent syntactic characteristics across different constructions. E.g., initial terms have the same selection characteristics, no matter what final terms they make. In (14–15), çola ‘lie’ requires the initial subject to be animate:

(14) a. gela çev-s ţaxt-ze
    Gela.NOM lie-3SG.PRS couch-on
    ‘Gela is lying on the couch.’

b. *çign-i çev-s ţaxt-ze
    book-NOM lie-3SG.PRS couch-on
    ‘The book is lying on the couch.’

(15) a. mama gela-s a-cv-en-s ţaxt-ze
    Father Gela-DAT CAUS-lie-CAUS-3SG.PRS couch-on
    ‘Father makes Gela lie on the couch.’
b. *mama čign-s a-çv-en-s ţaxt-ze
   Father book-DAT CAUS-lie-CAUS-3SG.PRS couch-on
   ‘Father lays the book on the couch.’

The reflexive pronoun tavisi tavi ‘self’ cannot have a distant antecedent, but only one belonging
   to the same clause, which confirms the Clause Union analysis of the causative (77):

(16) ekim-ma vano a-laϕarak-a tavistav-ze
doctor-ERG Vano.NOM CAUS-speak-3SG.PRS self-about
   ‘The doctor got Vano to talk about himself.’

The derived term dependents are marked with whatever case is appropriate to the derived term
   relation it holds. The Causative Clause Union hypothesis stated in terms of grammatical relations
   easily captures the cross-language regularities of causative constructions.

**Version** (kceva) is a syntactic rule that creates a non-core indirect object. **Benefactive Adv-
   ance** rule promotes a benefactive non-term nominal to indirect-objecthood.

(17) gela-m še-g-i-kerja axal-i šarval-i šen
   Gela-ERG PRV-2SG.O-V-sew-3SG.PRS new-NOM trousers-NOM you(sg.)
   ‘Gela made new trousers for you.’

(18) **Initial level:** Subject Direct Object Non-Term Benefactive
    **Final (derived) level:** Subject Direct Object Indirect Object
    gela-m šarval-i šen

Universal generalizations involved to account for the verbal derivation in Georgian and else-
   where:

(19) **Stratal Uniqueness Law:** at each stage of derivation no more than one nominal may bear a
given term relation (the “chess” principle that assumes that more than one element cannot oc-
cupy the same structural position, adopted also in the Generative Grammar, St.-Petersburg
   school and other theories).

(20) **Chômeur Law:** if a nominal assumes the term relation borne by another nominal, that an-
other nominal becomes a chômeur, that is, a nominal which lacks the privileged grammatical
   characteristics like triggering verbal agreement, the ability to antecede reflexive pronouns etc.
Failure of the framework: for many languages, the adequacy of initial vs. final level distinction
   cannot be substantiated. Even in Georgian, e.g. ellipsis phenomena cannot be fully captured in
   the terms of the RG model.

4. The vP structure

Constituent structure employed in Generative Grammar assumes consistent binary branching:
any structurally complex element consists of exactly two immediate constituents (daughters)
which can in their turn have complex structure.

In the traditional approach to the structure of VP (verb phrase), many regularities between transi-
tive and intransitive counterparts cannot be captured.

(21) a. We rolled the ball down the hill
    b. The ball rolled down the hill

(22) a. He broke the vase into pieces
    b. The vase broke into pieces

(23) a. The ball/the rock/the theory/sincerity rolled down the hill
    b. John rolled the ball/the rock/the theory/sincerity down the hill
The ball rolled down the hill.

We rolled the ball down the hill.

We gently rolled the ball down the hill.

We rolled the ball gently down the hill.
(28)  a. He had *deliberately* rolled the ball *gently* down the hill  
      b. *He had *gently* rolled the ball *deliberately* down the hill

(29) Georgian

čven (??nel-nela) uren-i kvevit *(nel-nela)* ća-v-a-gor-e-t  
we *gently* cart-NOM downward *gently* PRV-1SG.SB-CAUS-roll-AOR-1PL  
‘We gently rolled the cart downward.’ (both meanings)

5. Pylkkänen 2008: Introducing Arguments

- What grammatical elements are responsible for allowing non-core arguments to appear in argument structures?
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high vs. low applicatives

(30) High applicative (Chaga, Bantu)

VoiceP

I

Voice

wife

Appl(ben)

V

eat

PP

food

(31) Low applicative (English)

VoiceP

I

Voice

bake

him

Appl(ben)

cake
With Georgian applicatives, like with “core” trivalent verbs, the direct object may be higher: Semantic binding requires syntactic binding (coindexing + c-command):

(32)  
elene-m  arc  ert  stumar-si  ar  
Elene-ERG  not  one  guest-DAT  not  
mi-s-c-a//da-u-brun-a  tavis-i  gasayeb-i  
PRV-3SG.O-give-3SG.AOR//PRV-BEN-return-3SG.AOR  self-NOM  key-NOM  
‘Elene did’n give (back) his/her key to any guest.’

(33)  
elene-m  arc  ert-i  txzuleba  ar  da-u-brun-a//mi-s-c-a  
Elene-ERG  not  one-NOM  work  not  PRV-3SG.O.BEN  return-AOR.3SG//give-AOR  
tavis  avtor-s  
SELF.PSS  author-DAT  
‘Elene did not give (back) any work to its author.’

Variables cannot be bound from within an adjunct:

(34)  
gela  ar  saubrob-s  arc  ert  avtor-tani  tavis*ij  cignon-ze  
gela  not  speak-3SG.PRS  not  one-to  author-to  his  book-about  
‘Gela; does not speak with any author about his book.’

(Pylkkänen 2008): with low applicatives, the direct object cannot be provided with a depictive nominal:

(35)  
John washed the shirt clean.
(36)  
John washed him the shirt.
(37)  
*John washed him the shirt clean.

(Bondarenko 2015) applies this test to detect high applicatives in Georgian:

(38)  
man  me  namcxvar-i  damcvar-i  gamo-m-i-cxo  
he.ERG  I  cake-NOM  burnt-NOM  PRV-1SG.IO-BEN-bake  
‘(S)he baked me a cake that burnt.’ (lit.: “(S)he baked me a cake burnt”).

However, there seem to be no depictives in Georgian, so they are not indicative in uncovering the hierarchy. Instead, there is a free right dislocation of any modifier:

(39)  
a.  iman  me  pul-i  ukanasknel-ma  mo-m-c-a  
he/she.ERG  I  money-NOM  last-ERG  PRV-1SG.O-give-AOR.3SG  
‘(S)he was the last one to give me money.’

b.  iman  me  pul-i  ukanasknel-s  mo-m-c-a  
he/she.ERG  I(DAT)  money-NOM  last-DAT  PRV-1SG.O-give-AOR.3SG  
‘I was the last person (s)he gave money to.’

c.  iman  me  pul-i  ukanasknel-i  mo-m-c-a  
he/she.ERG  I  money-NOM  last-NOM  PRV-1SG.O-give-AOR.3SG  
‘Money was the last thing (s)he gave me.’
Transitive + Benefactive:

(40)  a. iman me çeril-i ukanasknel-ma gamo-m-i-gzavn-a  
    he/she.ERG I letter-NOM last-ERG PRV-1SG.O-BEN-send-AOR.3SG  
    ‘(S)he was the last one to give me money.’

b. iman me çeril-i ukanasknel-s gamo-m-i-gzavn-a  
    he/she.ERG I(DAT) letter-NOM last-DAT PRV-1SG.O-BEN-send-AOR.3SG  
    ‘I was the last person (s)he gave money to.’

c. iman me çeril-i ukanasknel-i gamo-m-i-gzavn-a  
    he/she.ERG I letter-NOM last-NOM PRV-1SG.O-BEN-send-AOR.3SG  
    ‘Money was the last thing (s)he gave me.’

Bondarenko (2015: 40) concludes that the dative object + direct object form a constituent because the string may undergo ellipsis (41a). However, other strings like the direct object + verb (41b), and the indirect object + verb (42c) may also undergo ellipsis as well:

(41)  a. šota-m da-s satamašo mi-s-c-a,  
      Shota-ERG sister-DAT toy. NOM PRV-3SG.IO-give-AOR.3SG  
      givi-m ki moğpar-a  
      Givi-ERG and steal-AOR.3SG  
      ‘Shota gave the toy to his sister, and Givi stole it.’

b. šota-m da-s satamašo mi-s-c-a,  
      Shota-ERG sister-DAT toy. NOM PRV-3SG.IO-give-AOR.3SG  
      givi-m ki çign-i  
      Givi-ERG and book-NOM  
      ‘Shota gave the toy to his sister, and Givi gave her the book.’

c. šota-m da-s satamašo mi-s-c-a,  
      Shota-ERG sister-DAT toy. NOM PRV-3SG.IO-give-AOR.3SG  
      givi-m ki ʒma-s  
      Givi-ERG and brother-DAT  
      ‘Shota gave the toy to his sister, and Givi gave it to his brother.’

To sum up:

- the hierarchy proposed in (Harris 1981):
  subject > direct object, indirect object > non-terms
  holds its value with newer tests (not employed by Harris) as well;
- no conclusive evidence has been found to date to discriminate between the two privileged objects in terms of binary branching structure and functional categories (or otherwise).

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