Polypersonal verbal categories in Georgian sign language

1. Introduction

Georgian sign language is the language of deaf and hard of hearing people - a linguistic minority of Georgia. The acronym for Georgian sign language is GESL.1 This language was considered as a part of Soviet sign language, which was common for all Soviet people and was based on the Russian system. Thus, in the Soviet period the sign languages in this region were highly influenced by Russian. Georgia was typical in that and there were no books or research about GESL. Today, the Russian influence is easy to find in the lexical units of GESL. In practice, this means that many deaf people can communicate in this “Soviet sign language” and they would like to keep this possibility. However, the process of nationalization has begun everywhere in post-Soviet regions and sign languages are reintegrating. Each country has undertaken scientific researches on its own national sign language. Besides Georgia, such processes are taking place in many other former Soviet republics, such as Ukraine, Byelorussia, Estonia, Lithuania, Latvia, Moldova, etc.

In the presented paper I will attempt to give a short description and analysis of polypersonalism (verb agreement) and the polypersonal verbal categories of version and causation in GESL. These two categories are closely connected with verbal polypersonalism and the opposition forms of these categories recall the changes of verbal valency. The same morphological categories have influence on verbal polypersonalism in spoken Georgian as well.

“Still more comprehensive documentations and typological studies of different sign languages are necessary for a better understanding of the similarities and differences between sign languages in particular and signed and spoken languages in general. In the long term sign language typology is expected to make an important contribution to a better understanding of the nature of human language”(Perniss et al 2007:4). Unfortunately data about GESL is missing in all topological investigations of sign languages and in the new handbooks (such as Pfau et al 2012). The reason is that Georgian sign language is not well investigated yet and following Kevin Tuite (2009) and Amiran Batatunashvili (2008) I am just now doing the first steps.

This article has two goals: the first is to focus attention to the original GESL, which is not investigated well, and therefore its data has not yet been taken into consideration for typological conclusions concerning sign languages; and the second aim is to show the results of my field work and research about the polypersonal system of this language.

2. Polypersonalism in Georgian sign language

The morphology of GESL shows its individual system in contrast with the lexical level, which has more influence from Russian sign language. It does not repeat the same parameters of the common Soviet sign language. On one hand it displays the partly copied system from spoken Georgian and on the other hand it keeps the general schemes of kinetic semantics for sign languages. One of the intriguing problems of this language is polypersonalism. This term (and a few other terms such as polysynthetic, incorporation, valency or verbal agreement) shows the meaning of a verbal ability to accept morphologically referenced or non-referenced arguments. Polypersonalism means “(pronominal cross-reference to more that one actant in the verb complex), or just a large number of affixes in a language, but with the cumulative result of such trails in a type of language that allows the expression within the complex word forms of numerous elements that in more analytic languages correspond to independent lexical items, verbs thus often corresponding to whole sentences in the latter” (Fortescue 1992:242). The main difference between the polypersonal verbs of different spoken languages is connected with
referencing issues. For example, spoken Georgian does not always display all verbal markers, while Basque verbs show a typologically different situation, displaying the markers of all the verbal persons – subject, direct and indirect objects in one verbal form (Makharoblidze 2007). Spoken Georgian can show a maximum of two references for the verbal persons in one form, meanwhile the verb can be bi-transitive, tri-personal with subject, direct and indirect objects and rarely it even can be four-personal with two indirect objects (Shanidze 1980, Chikobava 1950; Vogt 1971; Schmidt 1965; Aronson 1982; Boeder 2003; Fänrich 1965; Harris 1978, 1981; Hewitt 1995, 2005, Jorbenadze 1983; Kavtaradze 1954, Kvachadze 1993, 2001; Uturgaidze. 2002; Tuite 2008, Oniani 2003; Makharoblidze 2009, 2010). One reason for not marking all verbal actants is the monopersonal marking system in prefix position. The subject-object combination, when both have a prefixed marking, is displayed with only one marker, and mainly it is a marker of an object (Shanidze 1980; Jorbenadze 1983; Deeters 1930; Harris 1978, 1981). Another reason is that in modern spoken Georgian the direct object is not marked for the third person, and non-marked forms are considered absolutely equal members of the opposition along with the marked first and second direct objects. Meanwhile, for any finite verb all the semantically existed arguments are taken for verbal morphological actants despite the fact that some of them may not be referenced in the concrete verbal form. The verbal morphosemantics is a basic outcome for the all verbal morphology in spoken Georgian (Shanidze 1980, Chikobava 1950; Harris 1978, 1981; Hewitt 1995, Damenia 1982, Melikishvili 2000, Cherchi 1997).

In sign language literature polypersonalism never had been discussed but the same topic known as “verb agreement” has been researched in many sign languages. “Verb agreement is a topic that has received much attention in the sign language literature” (Mathur & Rathmann 2010:173). “Verb agreement forms mark arguments in a sentence, such as the subject and /or the object. When the form overtly marks only one argument, it is called as single agreement, and when the form overtly marks both the subject and the object, it is called double agreement” (Mathur & Rathmann 2010:175). Padden (1983), Friedman (1976) Fischer and Gough (1978), Meier (1982), Liddell (2003), Fischer & Ágel (2010) noted that the verbs in sign languages (namely in American sign language) display agreements. “In sign languages certain verbs are generally said to agree with both their subjects and their objects. The process is considered agreement because the verb is modified in its form defending on certain aspects of the form of the subject/object nominals” (Sandler & Lillo-Martin 2006:24). According to Wynne Janis (1995) in ASL the agreement facts are predictable like spoken languages. The verb agreement would be expected to behave in basically the same way as verb agreement in other languages… to be predictable form properties of nominals (Jannis 1995:201).

Very often the verbs in sign languages are translated as infinitives. In their book “American Sign Language” Ch. Baker-Shenk and D. Cokely wrote about the verb to give “unlike English, this verb rarely means simply ‘to give’. Instead, each form of the verb generally indicates a subject and object. Unfortunately, the glossaries for such directional verbs in most sign language texts have given the false impression that these verbs are like the infinitive forms of English verbs (e.g. ‘to give’). These verbs should be considered together with their indications (Baker-Shenk & Cokely 1991:248). For Georgian native-speakers such indication is very natural because of the polypersonal system of spoken Georgian, and such verbal forms are always translated properly despite the facts that the morphological sign markers are naturally the separated signs in GESL, and the arguments are not always marked in the verbal forms of spoken Georgian.

According to Mark Aronoff, Irit Meir and Wendy Sandler, “sign languages exhibit two radically different types in their grammars. On the one hand they have complex morphological structures… and on the other hand, some sign languages… also have simple affixal morphology. In both of these languages, the affixed elements are related to free content words from which
they appear to have evolved” (Aronoff et al 2005:302). “Sign languages have the capacity to represent certain spatio-temporal concepts in a more direct manner than spoken languages do” (Aronoff et al 2005:303). The use of space in sign language expression is widely guided by iconic principles, which is common for such languages and thus there has been little expectation of variation between sign languages in the spatial domain in the use of spatial devices. Although the results of investigations “suggest that different sign languages may use a variety of different mechanisms and strategies in the expression of spatial relationships” (Perniss 2007:249). The agreement and spatial classes of the verbs are distinguished. The typology of agreement reveals that “the agreement markers in ASL function syntactically more like case-markers do in other languages” (Janis 1995:220). Gaurav Mathur and Christian Rathmann noticed “that the relevant part of the hand always faces the area associated with the object referent and /or moves from the area associated with the subject referent to the area associated with the object referent” (Mathur & Rathmann 2010:177). The subject associated area is at the chin. It is noted that “the body is likewise involved in the formation of concepts” (Tuite 2009:102). In verb agreement the body can act as a subject (Meir at al., 2006).

It is important that mimicking may have a grammar role in verb agreement, and eye gaze and head tilt may act as nominal components in sign language syntax (Aarons et al 1992, Bahan 1996, Neidle et al 2000, Thompson et al 2006). In GESL the arguments can be represented through these means. In the other words, on the morphosyntactic hierarchical level of the language the mimic nominals (namely mimic pronouns) can display the subject and objects. This choice is always optional, although it seems to be universal for the all sign languages.

Meier (1990) distinguishes the first person argument and non-first person arguments. The communication process is egocentric and the signer is a center of communication and the location of the all world is around him/her. The specific role of the first person in sign languages is commonly known (Sandler & Lillo-Martin 2006:26). The Georgian spoken language does not distinguish the gender or class categories in grammar, but the III person personal /demonstrative pronouns display the spatial relationship and the starting point is the first person.

Table 1. III person Personal /demonstrative pronouns

<table>
<thead>
<tr>
<th>Pronouns</th>
<th>Singular / Plural</th>
<th>Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>es</td>
<td>Sing.</td>
<td>This, near the first person</td>
</tr>
<tr>
<td>eg</td>
<td>Sing.</td>
<td>This, near the second person (that near you)</td>
</tr>
<tr>
<td>is (igi)</td>
<td>Sing.</td>
<td>That, far from the first/second persons</td>
</tr>
<tr>
<td>eseni</td>
<td>Pl.</td>
<td>These, near the first person.</td>
</tr>
<tr>
<td>egeni</td>
<td>Pl.</td>
<td>These, near the second person. (these near you)</td>
</tr>
<tr>
<td>isini</td>
<td>Pl.</td>
<td>Those, far from the first/second persons</td>
</tr>
</tbody>
</table>

GESL fully copies the spatial system for personal/demonstrative pronouns from the spoken language, replacing them in proper correlations with the first person (the signer) while using these pronouns as arguments.
The polypersonal verb in GESL shows agreement with a few arguments, and it is not a single agreement type, although the single agreement can appear as a morphological opposition for multi agreement forms. In sign languages the argument agreement schemes look as follow:

1. a. V ➞ S or b. V ➞ Oind.

2. V ➞ S

3. V ➞ S

4. V ➞ S

5. V ➞ S

O ind. (With postposition)

1. When only one argument is presented in sign language syntax and it can be the subject or the indirect object, while in spoken languages this only argument usually is the subject.

(1) (me) davinnale. [Spoken Georgian]
PREV³- SBJ1SG-VER/S-hide-RM
I HIDE [GESL]
I hid (my self).

(2) davemale me dedas. [Spoken Georgian]
PREV- SBJ1SG-VER/O-hide-RM I mother-DAT.
I HIDE MOTHER-DAT [GESL]
I hid from the mother.
In this last example GESL can show only the object (the mother) in the sentence.

2. This is a model for transitive verbs, when the subject and the direct object are displayed.

(3) davmale me k’alami. [Spoken Georgian]
PREV- SBJ1SG-hide-RM I pen-NOM.
I HIDE PEN. [GESL]
I hid the pen.

3. This is a model for intransitive verbs, when the subject and the indirect object are displayed the same as the example 2:

(4) davemale me dedas. [Spoken Georgian]
I HIDE MOTHER-DAT [GESL]
I hid from the mother.
In sign language this example may have one or two arguments. According to Gaurav Mather and Christin Rathmann, bitransitive verb agreements are not well investigated in sign languages (Mather & Rathmann 2010:194).
4. This is a model for ditransitive verbs, when the subject, direct and the indirect objects are displayed.

(5) davumale me dedas k'alami. [Spoken Georgian]
PREV- SBJ1SG-VER/O-hide-RM I mother-DAT pen-NOM.
I HIDE PEN MOTER-DAT [GESL]
I hid the pen from the mother.

5. This is a form of the fourth model but with two indirect objects. One of them is often with postpositions. This also can be a causative form or a four-person verb.

(6) davumalvine me dedas k'alami mamistvis. [Spoken Georgian]
PREV- SBJ1SG-VER/O-hide-RM I mother-DAT pen-NOM father-GEN-P/FOR.
I HIDE PEN MOTER-DAT FATHER-FOR [GESL]
I hid the pen from the mother for the father.

(7) davamalvine me dedas k'alami mamistvis [Spoken Georgian].
PREV- SBJ1SG-VER/N-hide-CAUS-RM I mother-DAT pen-NOM father-GEN-P/FOR.
I HIDE-CAUS. PEN MOTER-DAT FATHER-FOR [GESL]
I made the mother hide the pen for the father.

(8) mismie šen me dedas c’q’ali. [Spoken Georgian]
OBJ1-VER/O-drink-RM you I(me) mother-DAT water-NOM.
YOU GIVE WATER MY MOTER [GESL]
(You) give a drink of water to the mother for me.

In the example 8 both of the indirect objects are in dative and they are indicated in the verbal morphology as verbal persons, but such forms are very rare.

The referential difference appears between the singular and plural arguments (Padden 1983), (Mathur & Rathmann 2010:180). Singular forms seem to be more productive for ASL. Argument combination in GESL is parallel to the spoken language system: the subject and objects can be singular or plural and the both forms are productive. The argument combination scheme in GESL can completely repeat the system of spoken Georgian:

Table 2. Transitive verb (vxaťav I paint it)

<table>
<thead>
<tr>
<th>S/O</th>
<th>I s.</th>
<th>II s.</th>
<th>III s.</th>
<th>I pl.</th>
<th>II pl.</th>
<th>III pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I s.</td>
<td></td>
<td>gxtiv</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II s.</td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III s.</td>
<td></td>
<td>xat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I pl.</td>
<td></td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II pl.</td>
<td></td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III pl.</td>
<td></td>
<td>vxat’av</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 3. Bitransitive verb (vuxat’av I paint it for him/her/it)

<table>
<thead>
<tr>
<th>S/O</th>
<th>I s.</th>
<th>II s.</th>
<th>III s.</th>
<th>I pl.</th>
<th>II pl.</th>
<th>III pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I s.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II s.</td>
<td></td>
<td></td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III s.</td>
<td></td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I pl.</td>
<td></td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II pl.</td>
<td>vxat’av</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III pl.</td>
<td>vxat’av</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

5
The sign languages are the communication systems of the codes exposed by visual channels with three 3-D elements: a face, hands and a body. Relying on such a unique spatio-temporal kinetics any sign language morphology can show the verbal arguments. Deductively, it seems to be universal that the all sign languages are polypersonal, or in other words, all sign languages have verbal agreements. Inductively, this case was investigated by the aforementioned authors in different sign languages. The existing polypersonal verbal categories in sign languages will finally prove and strengthen their systemic polypersonalism. “All natural sign languages have an iconic base. Indeed it would be quite odd for a language in a manual-visual modality to avoid exploiting its ability to represent visual images and spatial relations iconically. Yet, despite the fact that they are often based on iconic images, the words of sign languages may be morphologically complex... there are many processes for marking complex words in these languages” (Sandler & Lillo-Martin 2006:21). Such type of complex morphology in GESL is displayed by the polypersonal categories of version and causation.

3. Version in GESL

In spoken Georgian, verbs can convey possessive meaning with the category of version, which shows inter-verbal person relations (Shanidze 1980, Chikobava 1950, Machavariani 1987, Boeder 1968, Damenia 2003, Nebieridze 1976, Ertelishvili 1965, Rogava 1942, Lomtatidze 1947, Anderson & Gurevich 2012, etc). This verbal category shows to whom the verbal action is destined or oriented. In spoken Georgian besides the subject and object markers verbs have an additional possibility to convey the possessive-destinative relations between the subject and the object or between the objects. According to traditional Georgian studies there are the three types of version:

1. **Neutral** – with the prefix markers $a$-, $Ø$-. The direct object does not belong and/or is not destined or oriented to anybody.
   (9) $v$-$Ø$-xat’-av me surats. [Spoken Georgian]
   SBJ1SG-VER/N-paint-TH I picture-DAT
   ‘I’m painting the picture.’

2. **Subjective** – with the prefix marker $i$-. The direct object belongs to the subject.
   (10) $v$-$i$-xat’-av me surats. [Spoken Georgian]
   SBJ1SG-VER/S-paint-TH I picture-DAT
   ‘I’m painting the picture for myself.’

The verbal act is performed by the subject and for the subject. This is a category of introverted semantics (Machavariani 1987:124).

3. **Objective** – with the prefix markers $i$ – for the indirect object of the I-II persons and $u$ – for the indirect object of the III person. The direct object belongs to or it is destined or oriented towards the indirect object. The objective version conveys the meaning that the verbal act is performed for the interests of the indirect object. This is a category of extraverted semantics (Machavariani 1987:124).
   (11) $g$-$i$-xat’-av me šen surats. [Spoken Georgian]
   OBJ2SG-VER/O-paint-TH I you picture-DAT

<table>
<thead>
<tr>
<th>II s.</th>
<th>mixat’av</th>
<th>------</th>
<th>uxat’av</th>
<th>gvixat’av</th>
<th>------</th>
<th>uxat’av</th>
</tr>
</thead>
<tbody>
<tr>
<td>III s.</td>
<td>mixat’avs</td>
<td>gixat’avs</td>
<td>uxat’avs</td>
<td>gvixat’avs</td>
<td>gixat’av</td>
<td>uxat’avs</td>
</tr>
<tr>
<td>I pl.</td>
<td>------</td>
<td>gixat’av</td>
<td>vuxat’av</td>
<td>------</td>
<td>gixat’av</td>
<td>vuxat’av</td>
</tr>
<tr>
<td>II pl.</td>
<td>mixat’av</td>
<td>------</td>
<td>uxat’av</td>
<td>gvixat’av</td>
<td>------</td>
<td>uxat’av</td>
</tr>
<tr>
<td>III pl.</td>
<td>mixat’aven</td>
<td>gixat’aven</td>
<td>uxat’aven</td>
<td>gvixat’aven</td>
<td>gixat’aven</td>
<td>uxat’aven</td>
</tr>
</tbody>
</table>
‘I’m painting the picture for you.’

(12)  v-u-xat’ av me mas surats.  
  SBJ1SG-VER/O-paint-TH I him/her-DAT picture-DAT’
  ‘I’m painting the picture for him/her/it.’

Some linguists (Shanidze 1926, Deeters 1930, Vogt 1971, Tuite 2008, Harris 1981, Hewitt 1995, Boeder 1968, 2003) attach the superessive to this category as a “version locale” (Vogt 1971). Winfried Boeder writes: “The superessive version (a-) denotes the location at or movement on or from a surface” (Boeder 2003:35). In 1930 A. Shanidze changed his opinion about superessive, removing it from the opposition forms and leaving only three members of the opposition for the category of version in Georgian verbs.


(13) Øc’er-s  
  Write-SBJ3SG  
  ‘He/she writes it’ – Neutral;

(14) a-c’er-s  
  VER/N/S-write-SBJ3SG  
  ‘He/she writes it on/upon it’ – Superessive;

(15) xat’-av-s  
  paint-TH-SBJ3SG  
  ‘He/she paints it’ – Neutral;

(16) a-xat’-av-s  
  VER/N/S-paint-TH-SBJ3SG  
  ‘He/she paints it on/upon it’ – Superessive.

Version is a category of poly-personal verbs. There is a one way statistic deductive linguistic regulation – Only poly-personal verbs can expose the verbal possessive category of version (Makharoblidze 2007:87, 2010:137). For morphological realization of this verbal category we need a few (more than one) morphological arguments being indicated in the verbal form. Thus verbal poly-personalism is an obligation for the morphological category of version (Chikobava 1952:277-278, Oniani 2003:126).

GESL partly copies the category of version from the spoken language, and polypersonalism is an obligation for this category. The differences between the version of spoken and sign Georgian are as follows:

- Version in GESL does not have the supperessive as an opposition form. There is no special sign-marker for it. The different verbs show the content of supperessives differently, depending on the concrete kinetic convenience for each of them. The spatial system of GESL does not give any concrete marking to the category of situation (in other words supperessive) displaying this meaning as the content with -ze postposition (having the meaning of the English preposition ‘on’).
- In GESL the objective version has disrespectful (malefactive) forms as the inside sub-opposition along with the forms of respectful (benefactive) version, while in spoken Georgian the objective version has only one form for such different semantics.
- The markers of version in spoken Georgian are prefixed vowels, but in GESL the signs for version usually follow the main verbal lexical sign. Only reflexive content may have the exclusion: the sign for subjective version can appear before the verbal lexical root.
- GESL has a unified system of the category of version. This language does not distinguish passive mood, unlike spoken Georgian, and the category of version has no different
variations for transitive and intransitive verbs. This verbal category does not have irregular forms in GESL.

The model of version in GESL looks as the following:

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VERSION


a. Respectful forms       b. Disrespectful forms
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In GESL the category of version is well formed by the proper markers – signs. These markers of version are the separated signs following the verbal lexical root. Costello writes about the American Sign Language, “In many cases meanings communicated by an affix in English are simply conveyed by separate independent signs in ASL” (Costello 1994:XX). The sign languages can only display the morphemes as separated signs, and sometimes the border between morphological and separate syntactical units is not quite clear. How can we understand the separate signs conveying the meanings of verbal arguments and/or verbal categories? How can we consider the verbs polypersonal if these separate lexical units are the separate signs? On the one hand, as these signs are separate units they can be taken for the separated lexical units, but on the other hand, in combination with the other verbal markers these signs give concrete understanding for the proper verbal forms. In GESL, it looks very clear in parallel with the verbal morphology of spoken Georgian.

Polypersonalism in GESL is strengthened by the polypersonal verbal categories of version and causation. These polypersonal verbal categories have concrete markers, and the existence of these markers in the row of signs of the complex verbal forms frees the verb-argument word order.

The GESL morphology uses the sign of relation for cases of arguments. Mainly, it marks the dative case for the indirect object. When the indirect object is exposed by pronouns this sign is not used. When the indirect object is presented by gesture nicknames or common nouns or by finger-spelling alphabets for proper nouns, the marker of relation usually follows the sign of the indirect object. The sign of relation looks as follows:

![Figure 1: The marker of relation](image)
This is a single hand two-phase sign with the pointing index finger. The other fingers are bent into a fist and the palm is facing down. This sign conveys the meaning of the dative case for the arguments.

GESL has a special sign for indirect object. This is a single hand sign with an extended thumb and little finger while the other fingers are bent into a fist. The palm is facing the body of the signer and the sign movement vector is directed up and forward.

**Figure 2: The marker of indirect object**

This sign can be used instead of the arguments displayed by pronouns, when they convey the meaning of the indirect object. The sign moves towards the location of the indirect object. GESL never uses these two markers (in figures 1 and 5) together. Rather the language makes a stylistic choice between these signs.

The aforementioned marker of the indirect object can replace the same type two-handed sign for benefactive forms, and the verb will convey the meaning of objective version with respectful content. This two-handed symmetric sign is a marker of version in GESL. Independently, it means “respect”. The objective version with this marker shows respect to the indirect object and the verbal act is performed for the interest of the indirect object.

**Figure 3: The marker of respectful forms of objective version**

The objective version in GESL can have the forms of respect or disrespect. The disrespectful forms convey the following meaning: the verbal act is performed for the indirect object but against its interests.
The marker of disrespect is a single hand two-phase dynamic sign with the extended index finger and little finger, the other fingers are bent into a fist, and the palm is facing down. Its location is at the chest and it moves forward. Compare the following forms:

**Figure 4:** The marker of disrespectful forms of objective version

**Figure 5:** *vuk’eteb* ‘I do it for him/her/it’

**Figure 6:** *vuk’eteb* ‘I do it for him/her/It’

In these verbal forms *vuk’eteb* ‘I do it for him/her/it’, the first two photos show the lexical part of the verb, and the third and fourth photos illustrate the markers of objective version. Figure 5 displays the respectful forms of objective version with the last two photos. Figure 6 shows the disrespectful forms of the objective version, and the marker of disrespect is presented in the third and fourth photos. The last verbal form means that I do (or I am doing) something unpleasant / not good for him/her/it. In these verbal forms, the subject is not shown. In such cases, when the
subject is the first person singular, the sign of subject is often missing, and the body acts as a subject (Meir at al., 2006). The third person direct object is also often missing in GESL. In most cases the III direct object is an inanimate thing-class category nominal and it is not marked even in spoken Georgian.

According to A. Kendon (1994) there are three types of gestures defined in sign languages:

A. Iconic gesture characterizing the object, action or phenomenon being described,
B. Metaphoric gesture that represents a common metaphor,
C. Deictic gesture, such as pointing.

In Georgian sign language the markers of objective version indicate a combination of metaphoric and deictic signs, as besides their primary semantic content these signs (as deictic signs) are also pointing to the indirect object – its location in the signing-communication space. The marker of subjective version is a metaphoric sign.

![Figure 7: The marker of subjective version](image1)

The marker of subjective version is a two-handed asymmetric sign. The right dominant hand with the up-facing palm moves down on the open up-facing palm of the passive left hand. The first position for the right hand is the trunk (chest) with a flattened C-handshape. In the second position, when the right hand touches the open palm of the left hand the handshape is changed for the right hand: the fingers are bent and the thumb touches the index and middle fingers. This is a marker of reflexivity as well. Its primary meaning is “property”. This marker sometimes appears before the verbal lexical sign.

![Figure 8: vik’eteb ‘I do it for myself’](image2)
The second and third photos display the marker of subjective version, which is presented before the verbal root.

Figure 9: *vik’eteb* ‘I do it for myself’

The marker of version is displayed after the verbal lexical sign on the 4th and 5th photos. The position of the marker of subjective version does not have any semantic significance.

Thus, the polypersonal verbal category of version has a clear morphological system. Compare the following opposition forms:

Figure 10: *me vašeneb mas* ‘I build it’ / ‘I am building it’

Figure 10 shows a form of neutral version. The second and third drawings expose the verb “to build”. There is no marker of version here.

Figure 11: *me višeneb mas* ‘I build it for myself’ / ‘I am building it for myself’

Figure 11 shows a form of subjective version, where the fourth and the fifth drawings present the marker of subjective version. This marker follows the verbal root.
Figure 12: *me vušeneb mas mas* ‘I build it for him/her/it’. ‘I am building it for him/her/it’.

Figure 12 shows a form of objective version. The fourth and the fifth drawings show the marker of objective version with respectful meaning.

Figure 13: *me vušeneb mas mas* ‘I build it for him/her/it’/ ‘I am building it for him/her/it’.

Figure 13 shows s form of objective version. The second drawing shows the indirect object of the 3rd person singular form. The third and fourth drawings present the lexical root of the verb “to build”. The last fifth and sixth drawings are displaying the marker of objective version with disrespectful content.

“Image-like representations cannot be said to derive form lexico-syntactic representations” (Kendon 1994:49). The signers are operating in terms of sensory-motor schemata. For this reason, sign languages do not always copy the grammar systems from the spoken languages (Kendon 1994:49). As it was shown above, the category of version in GESL has a different model from the same category of spoken Georgian.

4. Causation in Georgian sign language

Causation is well investigated in spoken languages by a number of linguists (Shibatani 2002, Comrie 1981, Croft 2003, Dixon & Aikhenvald 2000, Talmy 2000, Goldberg 1995, Tesnière 1969 Song 1996, 2000 and others). Writing on the typology of causation in spoken languages, Bernard Comrie categorizes causatives into the following three types: lexical, morphological and analytic causatives (Comrie 1981:158-177). Spoken Georgian shows the verbal category of causation. It is a morphological causation: the causing and the caused events are encoded in a single verbal complex via causative morphology with the suffixed marking. In the words of Masayoshi Shibatani (2002), in such forms an agent causes or forces another participant to perform an action, or to be in a certain condition. Causation in Georgian is a valency-increasing operation, which adds one argument (indirect object) to transitive forms receiving ditransitive verbs:

(17) *ak’eteb k’aci sakmes.*
N/VER-do-TH-S3Sg. man-NOM. Job-DAT
‘The man does the job’

(18) *ak’etebinebs mezobels k’aci sakmes.*
When the original verb is intransitive, then the causative construction will be transitive:

(19) \textit{tev}zı \textit{č’ams}.
fish-NOM eat-S3Sg.
‘The fish eats.’

(20) \textit{kaci tev}zs \textit{ač’}mεvs.
man-NOM fish-DAT N/VER-eat-CAUS-S3Sg.
‘The man feeds the fish.’

The investigations of causation in spoken Georgian revealed the morphological references and semantic contents of the category (Chikobava 1950; Shanidze 1953; 1980 Vogt 1971; Deeters 1930; Aronson 1982; Hewitt 1995. 2005; Kavtaradze 1954; Fänrich 1965; Harris 1978, 1981, 1982; Jorbenadze 1983; Kvachadze 2001; Makharoblidze 2009, 2010; Oniani 2003; Tuite 2008; Uturgaidze 2002; Schmidt 1965; Melikishvili 2000; Machavariani 1987; Damen 1982, 2003; Boeder 2003; Cherchi 1997 and others). Verbs “can take on a causative meaning by the addition of a circumfix a-, … in-eb… These causatives can have a variety of translations into English, including: to cause/have someone do something, to let/permit someone do something, to make/help someone to do something, etc. In these constructions the causer (permitter, forcer, etc.) is the grammatical subject and the person caused (permitted, forced, etc.) to perform the given action is the indirect object” (Aronson 1982:305-306).

Causation in GESL is copied from spoken Georgian (Makharoblidze 2012:388-391). But there is a main difference in marking: in spoken Georgian this category may have different marking variations: \textit{a-ev}, \textit{a-evin} and these circumfixes can also be expanded by the thematic markers: \textit{a-ev}eb, \textit{a-evineb}. In GESL there is only one marker for the all cases.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{marker_of_causation.png}
\caption{The marker of causation}
\end{figure}

The sign presented above is a two-handed, asymmetric, dynamic, two-phase sign. The passive left hand is under the dominant right hand and fingers are bent into a fist. The right hand is placed on the left hand, the fingers are bent into a fist, and on the second phase the index finger of the dominant right hand is extended quickly pointing the direction of the indirect object – the executor.

Morphological causation in GESL conveys the following meaning: the subject performs the verbal act through the indirect object. The indirect object is an executor, and the subject is an initiator (Makharoblidze 2012:388). This is a morphological causation as this category has its verbal references. The marker of causation is a two-handed two-phase asymmetric sign, which usually follows the sign of the main verbal lexical root. This marker is directional and as a
spatial marker it is pointing or directed towards the indirect object. This sign is a primary imperative marker conveying the content of causation – the subject forcing the indirect object to do something. As an independent sign, the marker of causation originally means “to give an order or a task”.

**Figure 15:** *me vašenebineb mas mas* - ‘I make him/her build it’/ ‘I am making him/her build it’

In Figure 15 the indirect object is not displayed. The last two graphics illustrate the marker of causation, which follows the verbal root. Without this marker the verbal form will be “*me vašeneb mas* ’I build it’ /’I am building it’.

Like spoken Georgian, the morphological opposition of the category of causation has two members:
1. Non-causative or direct and
2. Causative verbal forms.

Non-causatives are the direct forms without marking while causatives as the indirect or intermediary forms are always marked. Compare the following forms:

**Figure 16:** *me vak’eteb mas* – ‘I do it’ /’I am doing it’

In the verbal form presented, the first photo displays the subject of the first singular form. The second and third photos show the lexical part of the verb. This is a non-causative, direct form. The third person direct object is not presented.
Figure 17: *me vak’etebineb mas mas* - ‘I make him/her to do it’/ ‘I am making him/her to do it’

In the presented verbal form, the first photo displays the subject of the first singular form. The second and third photos show the lexical root of the verb “to do”. This is a causative intermediary form, but the indirect object is not presented here, as the marker of causation is directed towards the third person – *mas* ‘him/her’ pointing to the indirect object. The polypersonal verbs in GESL can have the causation conjugation displaying the following argument combinations:

<table>
<thead>
<tr>
<th>S/O</th>
<th>I s.</th>
<th>II s.</th>
<th>III s.</th>
<th>I pl.</th>
<th>II pl.</th>
<th>III pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I s.</td>
<td>------</td>
<td>gaxat’vineb</td>
<td>vaxat’vineb</td>
<td>------</td>
<td>gaxat’vineb</td>
<td>vaxat’vineb</td>
</tr>
<tr>
<td>II s.</td>
<td>maxat’vineb</td>
<td>------</td>
<td>axat’vineb</td>
<td>gvatxat’vineb</td>
<td>------</td>
<td>axat’vineb</td>
</tr>
<tr>
<td>III s.</td>
<td>maxat’vineb</td>
<td>gaxat’vineb</td>
<td>axat’vineb</td>
<td>gvatxat’vineb</td>
<td>gaxat’vineb</td>
<td>axat’vineb</td>
</tr>
<tr>
<td>I pl.</td>
<td>------</td>
<td>gaxat’vineb</td>
<td>vaxat’vineb</td>
<td>------</td>
<td>gaxat’vineb</td>
<td>vaxat’vineb</td>
</tr>
<tr>
<td>II pl.</td>
<td>maxat’vineb</td>
<td>------</td>
<td>axat’vineb</td>
<td>gvatxat’vineb</td>
<td>------</td>
<td>axat’vineb</td>
</tr>
<tr>
<td>III pl.</td>
<td>maxat’vineb</td>
<td>gaxat’vineb</td>
<td>axat’vineb</td>
<td>gvatxat’vineb</td>
<td>gaxat’vineb</td>
<td>axat’vinebe</td>
</tr>
</tbody>
</table>

The word order is free and the arguments may have different places in the verbal forms. The deictic sign of causation frees the word order pointing to the indirect object.

5. Conclusions

- GESL shows verb agreement. It is a language with polypersonal verbal morphology. As it has been shown, GESL has polypersonal verbal categories such as version and causation, and the existence of these morphological verbal categories strengthens the polypersonalism in this language.
- For morphological realization of the verbal categories of version and causation, a few morphological arguments should be indicated in the verbal form. Verbal polypersonalism is obligatory for the categories of version and causation. “The one-way statistic universal regulation looks as follows: only polypersonal verbs can expose the verbal possessive category of version” (author). The same type of universal regulation can be illustrated...
concerning morphological causation, as polypersonalism is obligatory for the verbal category of causation as well.

- GESL partly copies the same category from the spoken language, adding the respectful and disrespectful forms to the model of version in spoken Georgian - without superessives. The category of version in GESL has a unified system without irregular forms of the category in difference spoken Georgian, as GESL does not distinguish passive mood and version has no different variations for transitive and intransitive verbs.

The category of version in GESL has the following model:

```
VERSION
   a. Respectful forms  b. Disrespectful forms
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- Spoken Georgian and GESL show a difference in marking the forms of the category of version. The markers of version are pre-radical vowels in spoken Georgian, while in GESL there is suffixed marking for the same category. The signs of version are post-radical signs.
- GESL has a morphological causation with the suffixed marking. This category is fully copied from spoken Georgian including the suffixed position for the markers of this category in both languages.
- The spatial system of GESL has the directional markers of causation and version (except the subjective version), and the vectors of the markers for causation and version are oriented to the indirect object.
- In GESL the directional markers of objective version and causation free the word order in sentences, and strict argument order is not a mandatory.

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Notes
1. The acronym GESL appears for the first time.
2. These forms are the same for personal and demonstrative pronouns. The personal pronouns are connected with verbs, while the same forms with nouns are considered as demonstrative pronouns.
3. PREV is used for glossing preverb, VER/N is an abbreviation for version. VER/S is subjective version. VER/O is objective version. TH is an abbreviation for thematic marker. RM is for the markers of conjugation rows. P/FOR is used for the postposition “for”. These abbreviations are missing in “CLIPP Christiani Lehmanni inedita, publicanda, publicata. Interlinear morphemic glossary” and Leipzig Glossing Rules <http://www.eva.mpg.de/lingua/resources/glossing-rules.php>, and we had to add a few glossary items.
4. “kceva” or “version” - the first name (Kceva) was given by Acad. Akaki Shanidze (1980:323)
5. In order to give a better translation we prefer to call these forms “respectful” and “disrespectful” rather to use the well known terms “benefactives” and “malefactives”
6. Acad. Akaki Shanidze calls uses the term “contact” for the verbal category of causation (1980:357-373)
Polypersonal verbal categories in Georgian sign language

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Abstract

This paper is one of the first publications about Georgian sign language (GESL). It intends to focus attention to this language. The data of GESL has never been taken into consideration in typological research of sign languages. GESL was closely connected with common Soviet sign language and was partly based on the Russian system. However, the process of nationalization has begun in post-Soviet regions and the sign languages are reintegrating.

This paper attempts to explain the verb agreement and the polypersonal verbal categories of version and causation in GESL. These two categories are closely connected with verbal polypersonalism. The spatial system of GESL has the directional markers of causation and objective version. The vectors of the markers for these two categories are oriented towards the indirect object. The existence of such sign markers in GESL frees the word order in sentences.

Keywords:
Sign language, Georgian, polypersonalism, version, causation, verb, argument agreement

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