

Modality in Spoken Georgian and Georgian Sign language

ABSTRACT

Modality is one of the most fascinating and complex areas of language studies. The literature on Georgian linguistics lacks research concerning modality. This paper illustrates the types of modal construction with examples in spoken Georgian and Georgian Sign language (GESL), including the negative forms. GESL can also show modality semantics with a combination of manual and facial signs. Modals in GESL can occur in the pre-verbal, clause-final, or clause-initial positions, as in many other sign languages. GESL modal constructions show the specific tense-related negation strategy. Imperfective forms of modal constructions are displayed using repeated signs.¹

Keywords: modality, negation, Georgian, Georgian Sign Language, GESL

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1. INTRODUCTION

Modality is one of the most fascinating and complex fields in language studies. In linguistics, the term MODALITY was used for different types of reality. In general, there are three traditionally accepted meanings for this term depending on whether one is referring to logical, discursive, or grammatical facts. The traditional definition of modality refers to the speaker's attitude or opinion (among others Palmer 1986). Thus, this is a category of discourse showing the relationship between the speaker and the discourse (Herrero-Blanco & Salazar-García 2010), and meanwhile as a grammatical category modality has the different morphosyntactic forms in different languages. Modality also concerns the logical structure of the text or sentence, and it can be regarded as a kind of logical category as well. Even if we consider only the grammatical content of this term, modality is an extremely complex category that resists a general common definition that captures all of the involved factors (Herrero-Blanco & Salazar-García 2010).

Recently the term MODALITY acquired a new meaning related to the channel employed to form messages. In case of sign languages this term is often used as a mean of exposition for linguistic categories, such as 'modality-specific' pathway of grammaticalization (Pfau & Steinbach 2006).

Modality can be classified into DEONTIC and EPISTEMIC modality (Palmer 1979; Hoyer 1997). Epistemic modality concerns matters of the knowledge or beliefs on which speakers express their judgments about states of affairs, events, or actions (Hoyer 1997:42). Deontic modality concerns the possibility or necessity of acts in terms of which the speaker gives permission or asserts an obligation for the performance of actions at some point in the future (Hoyer 1997:43). In Georgian, among other languages, the difference between the epistemic and deontic modality is sometimes not very clear; the same modal verb or particle (*unda* – 'must/should', for example) can have epistemic and deontic contents. Unfortunately, the Georgian linguistic literature lacks research on modality, with only a few papers are published on this topic (Sharashenidze 1999, 2000, Boeder 2010, Vamling 1989). This paper describes the main types of modal constructions in spoken Georgian and in Georgian Sign language (GESL).

GESL is a language of about 2500 Deaf and hard of hearing people (DHH) in Georgia. This language has a strong influence of Russian Sign Language (RSL), as there was only one Soviet Sign Language (of course based on RSL) for all DHH in the Soviet country. The lexical level is strongly influenced by RSL till now, but grammar level of GESL shows its unique system. In post-Soviet period the reintegrated countries begin investigations of their own sign languages and Georgia is typical in this.

This paper describes modality in general frames in spoken Georgian and in GESL as well. The comparison between sign and spoken languages of the same geographical area is very common for SL studies. Such comparisons can show the differences between comparable languages for similar types of grammatical systems or categories. Such comparisons are also important in order to reveal the level of influence of one language on another.

2. MODALITY IN SPOKEN GEORGIAN

2.1. TYPES OF MODAL CONSTRUCTIONS

Roughly speaking, epistemic and deontic modality have a few semantic subgroups showing the different nuances of modal content. In terms of exposition any type of modality formally may be displayed by the following types of constructions:

1. Purely verbal construction with a modal verb (auxiliaries) and the main verb:
 - (1) *minda c'a-vid-e*
I-want PREV-1SBJs-go-RM
I want to go.
2. Construction with non-verbal elements consisting of a non-verbal modal element (particle) and a verb:
 - (2) *unda c'a-vid-e.*
must/should PREV-1SBJs-go-RM
I should go.
3. Combined construction consisting of a modal verb and a particle, along with the main finite verb:
 - (3) *v-i-c-i, (rom) unda c'a-vid-e*
1SBJs-VER²-know-RM (that) must/should PREV-1SBJs-go-RM
I know (that) I should go.

These typological modality types describe the morphological face of modal constructions with the main distinction between verbal and non-verbal means.

In modern spoken Georgian, modality content often occurs with the following verbal forms:

minda 'I want' / *ginda* 'You want'. Interestingly, the reduced form for the second person singular – *gind* (<=*ginda*) is often used as a conjunction with the semantics of free choice / free will. The form of the third person singular *unda* 'muat / should' is becoming a particle that is the most frequent unit in Georgian modal constructions.

The following verbs (and verbal phrases) are frequent participants of modal constructions in spoken Georgian:

šezleba/šesazloa 'it is possible',

vpikrob 'I think' / *sapikrelia* 'one could/may think',

ve č'vob 'I doubt' / *sae č'voa* 'It is doubtful',

vvaraudob 'I suppose' / *savaraudoa* 'It could be' / 'supposed',

² In the verb *vici* the meaningless marker of subjective version *i-* appears, but this verb does not have the category of version, as the opposite forms are missing.

vgrznob ‘I feel’/*igrznoba* ‘One can feel’,

c’xadia ‘it is clear’

natelia ‘it is clear’

vici ‘I know’

mitxres ‘I was told’.

To convey the second version of modality with nonverbal element, spoken Georgian often uses the following particles:

lamis ‘almost’, ‘about’

albat ‘probably’

titkmis ‘almost’, ‘about’

k’inayam ‘almost’, ‘about’

ikneb ‘maybe’, ‘probably’

egeb/egebis ‘let it be’/‘if’

net’av/net’avi ‘(I) wish’

unda – must / should

These particles (except for the last one – *unda*) display the semantics of approximation, willingness, or expectation.

As we can see in the examples of spoken Georgian in Tables 1 and 2, certain constructions can show modality: by the combinations of modal verbs (and/or particles) conveying epistemic and/or deontic content, and the proper forms of finite verbs. The combined forms in Table 3 often have mixed semantics (epistemic and deontic).

[Insert Tables 1-3 about here]

2.2. THE AVERTIVE AND THE APPROXIMATIVE IN SPOKEN GEORGIAN

The avertive and approximative create the specific modal constructions showing the relationship between the speaker and the discourse. This issue never has been discussed with respect to spoken Georgian. The main combination of the modal (non-verbal) element with APPROXIMATIVE semantics and the finite verb looks as follows:

A. The particle of approximation + AORIST = past tense with non-realized action;

(4) *lamis mo-vid-a.*

almost PREV-come/go-3SBJs

He/she almost came.

Though the person did not come, and we have the negative result.

B. The particle of approximation + optative = present tense with almost/nearly performed action: (5)

(5) *lamis mo-vid-e-s*

almost PREV-come/go-RM-3SBJs

He/she is about to come.

Here we are not sure how the process ends.

These forms are the AVERTIVES, the ‘counter-to-fact TAM categories’ according to Kuteva, Aarts, Popova, and Abbi (2015). Semantically, the avertive is ‘a bounded verb situation – viewed as a whole – which was on the verge of taking place in the past, but did not. It denotes past events that almost took place, but did not’ (Kuteva et al. 2015). The avertive has several properties:

- (i) Counterfactuality
- (ii) Full foregrounded degree of verb situation realization
- (iii) Zero result of verb situation realization
- (iv) Imminence (*the state or fact of being about to happen.*)
- (v) PASTNESS
- (vi) PERFECTIVITY (Kuteva et al. 2015).

Example B shows that neither pastness nor perfectivity are obligatory. Crucially, the second and the third properties of the verb situation realization and verb situation realization are also doubtful for such cases. Thus, this form cannot be avertive.

Actually, example B is the PROXIMATIVE, which possesses imminences as a grammatical feature. Kuteva et al. claim that, ‘the semantics of the avertive subsumes the semantics of the proximative’. These are semantically close categories. Approximation and imminence are common features of the avertive and the proximative, but it seems rather difficult to include these in a common semantic umbrella since one already has a negative result while the other is an action that is not yet accomplished that may have any kind of result. Additionally, if perfectivity is a core feature of the avertive, then the proximative differs from it noticeably. Finally, we can either take such forms for the avertive and reduce the number of properties and widen its

grammatical content, or we can assign these constructions a different term (the proximative). It also can be the *optative proximative* or the *imminent optative* (at least for the Georgian case).

Interestingly, in spoken Georgian, all meaning depends on the verbal paradigms. The construction with aorist agrees with the all properties of the avertive, but the optative construction absolutely excludes the last two properties and changes the total picture of the other properties as well. Therefore, the IMPERFECTIVE forms of the proximative should be separated from the avertive because the result of such forms is not yet known. Usually, such constructions may convey the following semantics:

- The result is not expected or is not desirable, and
- The result seems to be very important / unexpected for some reasons.

I fully agree with these authors – the avertive is a semantically elaborate grammatical category. Thus, we can consider the avertive and the approximative as a grammar category that appears on the morpho-syntactic level with its morphological markers in the rows of verbal conjugation. First, I should say that it is a modal category along with the other counter-to-fact TAM categories. Avertive cannot be considered as a simply aspectual category, because its verbal form may be perfective or imperfective.

2.3. THE PERFECTIVE AND IMPERFECTIVE MODALITY IN SPOKEN GEORGIAN

The difference between the perfective and imperfective forms of the following modal constructions is principally in terms of the result; compare

A. (6) *net'av xat'-av-d-e-s*

wish paint-TH-EX-RM-3SBJs

I wish him/her to be in the process of painting, and

B. (7) *net'av da-xat'-av-d-e-s*

wish PREV-paint-TH-EX-RM-3SBJs

I wish him/her to paint.

Modal construction (A - 6) indicates the wish for him/her to be able to paint, or to be in the process of painting, while construction (B - 7) indicates the wish to have a result, something painted by him/her. Imperfective modality (which is a combination of modality and imperfect aspect) is a process-oriented action different from the result-oriented perfective forms. This difference is common for many languages.

Interestingly, in some languages, different forms of mood are used to wish misfortune upon others, and another mood is used for wishes in general. Georgian does not show such differences between opposite forms of mood in verbal paradigms. The same paradigmatic forms can convey any kind of semantics (with positive and negative outcomes).

From the first view, it is difficult to argue that in Georgian, imperfectivity has a stronger connection to modality than perfectivity due to the existence of parallel verbal forms with and without preverbs in the paradigms. Verbs may have perfect and/or imperfect forms depending on the preverbs. Interestingly, Georgian preverbs show four functions: spatial, temporal, lexical, and objective. In spoken Georgian, preverbs have the crucial role in the category of aspect. The temporal and spatio-temporal functions of preverbs in spoken Georgian are very active and productive functions for Kartvelian (and namely, Georgian) verbs. The temporal functions of preverbs (aspectual and tense changing) affect the modal constructions as well.

Georgian verbs may have perfect or imperfect/durative forms for almost all rows of conjugation – including even the aorist, perfect, and pluperfect (compare the forms: *vc'ere* 'I was writing'/'I wrote', and *dav'cere*, 'I wrote'/'I have written'; *mic'eria* 'It seems, that I have been writing'/'I was writing', and *damic'eria*, 'It seems, that I have/had written'; *mec'era* '(If) I have been writing' and *damec'era*, '(If) I have/had written'). All rows in the II and III series (aorist, indicative, optative, perfect, pluperfect, and perfect subjunctive) have parallel forms with or without preverbs. In the first series, the new future indicative, conditional, and future subjunctive paradigms were produced from the present indicative, imperfect, and present subjunctive by adding preverbs.

Above, I was discussing modality in the narrow sense. However, it is very important to pay proper attention to the grammatical values of modality in Georgian. In many languages, the verbal morphology expresses the modal categories. If modality is a grammar category, then it should have some kind of morphological referencing. The verbal markers of modality are the markers of mood (subjunctive, conditional or indicative). Following this approach, we can consider that in Georgian verbs, the markers of some rows in the paradigms with subjunctive (and conditional) mood are morphological markers of modality.

Although imperfective modality in Georgian has no proven advantage over perfective constructions, but there are some circumstances that may bring more light to this issue. Interestingly, these forms of the verb *minda/unda* are imperfective, although these forms do not accept preverbs. The III person of the real (non-grammatical) subject³ of the verb *ndoma* 'to want' is always in dative form:

(8) *k'ac-s* *u-nd-a*

man-DAT VER-want-3SBJ

The man wants.

(9) *k'ac-eb-s* *u-nd-a-t*

³ A Non-grammatical subject means a morphological verbal argument without subject markers. According to traditional Kartvelian studies, whatever is required or wanted is the subject (and has the subject markers), and whoever wants is an indirect object (with the object markers). The latter is the real (non-grammatical) subject.

man-PL-DAT VER-want-3SBJs-PL

The men want.

(10) *k'ac-s* *u-nd-od-a*

man-DAT VER-want-EX-3SBJs

The man wanted.

(11) *k'ac-eb-s* *e-ndom-eb-a-t*

man-PL-DAT VER-want-TH-3SBJs-PL

The men will want. Etc.

This is an intransitive medio-passive verb. The paradigms of the second series are missing.

One of main participants in Georgian epistemic modality is the verb *tsodna* 'to know'/'knowledge'. It is the only verb in Georgian that has the III person subject in ergative and the direct object in the nominative in the present tense:

(12) *kal-ma* *i-c-i-s*

woman-ERG VER-know-RM-3SBJs

The woman knows.

Originally, these forms are from the second series, and the forms in the second series are missing in paradigms of conjugations. According to traditional Georgian studies, this verb does not have a category of aspect because it has no opposite forms and does not accept the preverbs. On the one hand, it is a special or peculiar verb in terms of perfectivity; on the other hand, it conveys the semantics of the imperfective.

Interestingly, the verbs *vici* and *mina/unda* are the most frequent participants⁴ in imperfective modality constructions. In this light, we can discuss the role of imperfective modality in Georgian.

For deep understanding of modality in Georgian and in other Kartvelian languages, all kind of modal constructions (including irrealis meanings) should be revised in detail for the all Kartvelian languages considering all possible meanings for the subjunctive mood:

⁴ Statistics from the Georgian National Corpus, available at <http://gnc.gov.ge/gnc/concordance>.: *minda* – 60469; *ginda* – 17740; *unda* – 740258; and *vici* 64437; *ici* – 12089; *icis* – 49007.

- Potentiality
- Uncertainty
- Prediction
- Obligation
- Desire, and so on.

3. MODALITY IN GEORGIAN SIGN LANGUAGE

3.1. MODALITY ACROSS SIGN LANGUAGES

Sign Languages (SLs) are the natural native or primary languages of Deaf people worldwide. SLs communicate via nonverbal channels, using manual and non-manual means to convey mean. The information is encoded mainly by manual and mimic units. The 13th Edition of Ethnologue listed 114 signed languages worldwide in 1996 (Grimes, 1996), though the Georgian Sign Language (GESL) is not among them. In the Soviet Union sign languages were highly influenced by the Russian language. Georgia was typical in that, during the Soviet period there were no books about Georgian sign language. The process of nationalization has begun everywhere in the post-Soviet region and sign languages are reintegrating creating their own dactyl alphabets and providing the scientific researches of their own national sign languages. Besides Georgia such processes take place in many other former Soviet republics, such as Ukraine, Byelorussia, Estonia, Lithuania, Latvia, Moldova, etc. For the current moment GESL is an understudied language.

This paper is the very first look at GESL grammatical modality. Modality is a very complex grammatical category, and it is the object of an intense debate in present-day linguistic theory. However, research into modality in the SLs of deaf communities is a field that has not yet been thoroughly explored. Previous studies on modality in SLs (Brito 1990; Wilcox & Wilcox 1995; Shaffer 2004) highlighted the iconic or metaphorical origin of modal constructions including repetition, energetic movement, etc. Although certain cross-linguistic tendencies may exist, iconicity and metaphor finally act upon grammatical codification in a language-specific way.

Interestingly, in American Sign Language (ASL), modals are auxiliary verbs used to provide additional information (attitude) about the verb used in a sentence. They modulate the meaning/mood/feeling of the verb. According to Bernstein, “modals can occur in one of three locations in a sentence:

1. Directly before the verb sign,
2. At the end of the sentence before the copy-subject pronoun,
3. Directly before the verb AND before the copy-subject pronoun.”

(<http://seattlecentral.edu/faculty/bbernstein/ASL102/102Resources/102%20handouts/102%20Modals.htm>).

In Brazilian SL (Brito 1990), verbal movements are simple and energetic in the case of deontic modality, while those of epistemic modality are repetitive and not energetic. Wilcox and Wilcox (1995) highlight a relatively analogous situation for ASL. Shaffer (2004:177) states that deontic modality is more basic than epistemic modality, exploring the iconic relationship between the

expression of speaker subjectivity and information ordering in ASL. According to this author, the position of the modal in an utterance corresponds to the modal's scope and to its role in the discourse. Modals with scope over only the verb appear near the verb while modals with clausal scope appear at the end of the clause (<http://psycnet.apa.org/record/2004-16184-004>; <https://www.degruyter.com/view/j/cogl.2004.15.issue-2/cogl.2004.007/cogl.2004.007.xml>).

As it was discussed above, modality is frequently defined as the conceptual domain of necessity and possibility, which are expressed by modals (lexemes or auxiliaries) or grammatical mood (inflectional coding on the verb), and this is the same for sign languages. According to Wilcox (2016), grammaticalization (including modality-related issues) in SLs operates much the same as in spoken languages.

Number of SL researches argued that iconicity and metaphor play a relevant role in the grammatical configuration of modality. Another important question is the role of the non-manual components of modal signs that typically involve a cluster of facial mimics including eye contact with the addressee, eyebrow raising, and head and body positions. These non-manual components play an important role in modal constructions across the sign languages, just like the intonation, which is very relevant for certain modal constructions in many spoken languages.

Wilcox (2004) shows that in Italian Sign Languages and ASL, movement alternations accompanied by mimic⁵ expresses different meanings of modal verbs. Modals performed with faster, larger, and intensive kinetics express stronger obligation, evidentiality, and possibility, while modals performed with slower, smaller, and less intensive movements express weaker obligation, evidentiality, and possibility. The manner of movement corresponding to weak or strong forms (colors, adjective/adverbial manner, and degree) is also attested in many spoken languages (Pfau & Steinbach 2006:72). „As opposed to sign languages, spoken languages use different articulatory and perceptual systems as gesturing. Therefore, they do not have the option of integrating manual and non-manual gestures... However, spoken languages can integrate acoustic gestures, since the acoustic-auditory domain is the articulatory and perceptual domain characteristic of spoken languages.“ (Pfau & Steinbach 2006:84).

Interestingly, in many sign languages (including GESL) imperfective modal constructions are displayed by repeated signs.

3.2. MODALITY IN GESL

For the presented research I used the method of elicitation. My language sources were 4 female persons and one male with very good knowledge of GESL, as they are the third generations born in Deaf families. The age of my language sources varies from 20 up to 55. Besides the elicitation, I also checked the modal constructions in the free narrative texts - videos. I used about five hour videos of GESL signing.

⁵ Mimic as non-manual marker

The examples of GESL show that this language can display all three abovementioned types of modal constructions. The first type of modal constructions in GESL appear in Figures 1-12; the second type of modal constructions with *unda* non-verbal element in GESL⁶ appear in Figures 13-18. GESL also has its own structure for non-verbal modal elements. Spoken Georgian has nothing like the signs WRONG/MISTAKE, FOR-SURE and SUBJUNCTIVE-MARKER, which usually follow the main verb, as we can see in the figures below. These signs can be considered as modal auxiliaries, or particles. These are the desemantized forms -- meaningless signs, which appear only in modal constructions. Of course, this issue needs future scrutiny. The last, third type of modal constructions in GESL are illustrated in Figures 19-24.

[Insert Figures 1-24 about here]

The figures above show that in GESL, the negative forms of the modal verbs SHOULD/MUST, KNOW, and WANT do not use the particle NO/NOT, but these forms have the different lexical signs for negation (for more details see Makharoblidze & Pfau 2018). In the past tense, there is double negation, while the marker of past tense is omitted in the modal constructions in GESL.

GESL fully can display the modal constructions, which occur in spoken Georgian, and additionally it shows the different negation strategy in such constructions. GESL also uses specific mimics as non-manual markers of modality. This needs future detailed research.

As the examples above show, GESL can completely express the complex variety of modal semantics with a combination of manual and facial signs. The analysis of GESL video material shows that modals in GESL (as in ASL) can occur in the pre-verbal, clause-final, or clause-initial positions, like the many other sign languages.

In GESL repeated signs show the imperfective modal constructions.

4. CONCLUSIONS

In this paper I tried to describe the possible modal constructions in spoken Georgian. There are the three types of modal constructions:

1. Purely verbal construction with a modal verb (auxiliaries) and the main verb, (*minda c'avide* – I want to go).
2. Construction with non-verbal elements consisting of a nonverbal modal element (particle) and a verb, (*unda c'avide* – I should go).
3. Combined construction consisting of a modal verb and a particle along with the main finite verb (*vici, unda c'avide* – I know, I should go).

⁶ *unda* non-verbal element in GESL adds the obligation semantics to the verbs, and it is calqued from spoken Georgian.

The avertive in spoken Georgian is displayed with the second type aorist construction. The particle of approximation + aorist = past tense with non-realized action: *lamis movida* – He/she almost came, though he/she has not come and we have a negative result. The approximative is the second type optative construction. The particle of approximation + optative = present tense with almost/nearly performed action: *lamis movides* – he/she is about to come and we are not sure how the process ends.

This paper is the first to reveal modality in GESL. GESL can also show modality semantics with a combination of manual and facial signs. Modals in GESL can occur in the pre-verbal, clause-final, or clause-initial positions like in many other sign languages.

GESL modal constructions do not repeat the modality system of spoken Georgian, but GESL has its specific linguistic schemes for modality. GESL is able to display the all types of modal constructions that appear in spoken Georgian. I showed that in GESL, the negative forms of the modal verbs SHOULD/MUST, KNOW, and WANT do not use the particle NO, but that these are different signs. I argue that in GESL, the past tense has double negation, while the marker of past tense is omitted in the modal constructions. This is a very specific negation strategy, which was revealed in modal constructions of GESL, and as far as I know it has no analogues in other languages.

GESL also uses specific mimics as non-manual markers of modality. In this discussion, I neglect the mimic, as I am not concerned with its scope. Modality in spoken Georgian and in GESL needs future detailed research.

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TABLES

Table 1. The first type of modal constructions.

Modality/Georgian form	Modal verb	Finite verb	Semantics
Epistemic <i>vici</i> <i>ak'etebds//ak'etebda</i> 'I know he/she does/is doing//was doing (it)'	Present	Present/Imperfect	Knowledge/feeling of the process, but not sure about the results
Epistemic <i>vici gaak'etebda</i> 'I know he/she would do (it)'	Present	Future subjunctive	Convincing semantics (Being sure about the results)
Epistemic <i>vicodi ak'etebda</i> 'I knew he/she was doing (it)'	Past	Imperfect	Knowledge/feeling of the process, but not sure about the results
Epistemic <i>vicodi</i> <i>gaak'etebda</i> 'I knew he/she would do (it)'	Past	future subjunctive	Knowledge/feeling being sure about the results
Deontic <i>minda (ga)vak'eto</i> 'I want to do (it)'	Present	Optative	Wish to have the result (with preverbs)
Deontic <i>minda vak'etebde</i> 'I want doing (it)'	Present	Present subjunctive	Wish to have the process
Deontic <i>mindoda</i> <i>(ga)mek'etebina</i> 'I wanted to do (it)'	Past	Pluperfect	Wish to have the result (with preverbs)

Table 2. The second type of modal constructions with the *unda* non-verbal element.

Modality/Georgian form	Particle	Finite verb	Semantics
Deontic <i>unda (ga)vak'eto</i> 'I should do (it)'	<i>unda</i>	Optative	Necessity/Obligation to do something in the future (accomplished action with preverbs)
Deontic <i>unda vak'etebde</i> 'I should be doing (it)'	<i>unda</i>	Present subjunctive	Necessity/Obligation of having the process
Deontic <i>unda (ga)mek'etebina</i> 'I was to do (it)'	<i>unda</i>	Pluperfect	Necessity/Obligation for the process or result (with preverbs)

Table 3. The third type of modal constructions.

Double modality, Georgian form	Modal verb+Particle	Finite verb	Semantics
Epistemic <i>vici (rom) unda (ga)vak'eto</i> 'I know (that) I should do (it)'	<i>vici unda</i>	Optative	Knowledge/feeling the necessity or obligation to do something in the future (accomplished action with preverbs)
Epistemic <i>vici (rom) unda vak'etebde</i> 'I know (that) I should be doing (it)'	<i>vici unda</i>	Present subjunctive	Knowledge/feeling the necessity or obligation of having the process
Epistemic <i>vicodi (rom) unda (ga)mek'etebina</i> 'I knew (that) I was to do (it)'	<i>vicodi unda</i>	Pluperfect	Knowledge/feeling the necessity or obligation of having the process or result (with preverbs)

FIGURES



Figure 1. Epistemic KNOW DO DURATION THIS. 'I know he/she does/is doing (it)'.

The third photo illustrates the morphemic sign of DURATION. This meaningless durative marker always follows the main verb (Makharoblidze 2012). The first pronoun is often omitted in SL texts since the body acts as a subject.



Figure 2. Epistemic KNOW DO FUTURE FOR-SURE. 'I know he/she would do (it)'.

The third photo conveys the morpheme FUTURE, the last morphemic sign FOR SURE/DEFINITELY is accompanied by the mimic and articulation 'OV' (meaningless).



Figure 3. Negative epistemic DO-NOT-KNOW IF DO FUTURE FOR-SURE THIS. ‘I do not know (if) he/she would do (it)’.

The second photo conveys the sign IF adding the subjunctive semantics.



Figure 4. Epistemic KNOW ALREADY DO DURATION THIS. 'I knew he/she was doing (it)'.

The second photo is the morphemic sign for past perfect grammaticalized from the two-handed symmetric sign ALREADY.



Figure 5. Negative epistemic DO-NOT-KNOW NOT IF DO THIS. ‘I did not know (if) he/she was doing (it)’.

The negative form DO-NOT-KNOW is displayed on the first photo, and the second photo shows the particle NO. Thus, here we have double negation, though this is impossible for the present tense. Interestingly, the marker of past perfect tense (ALREADY)⁷ is missing here.

⁷ In GESL perfect tense is with perfective aspect. They always co-occur, and both – “perfect” (tense) and “perfective” (aspect) have the same marker ALREADY – the one handed form with sign erosion.



Figure 6. Negative epistemic DO-NOT-KNOW NOT IF DO FUTURE FOR-SURE THIS. 'I did not know (if) he/she would do (it)'.

The marker of future in the third photo for this construction conveys the meaning of the 'future in the past' or the subjunctive mood.



Figure 7. Deontic WANT DO FUTURE. 'I will want to do (it)'.

The first photo shows the sign WANT. The first pronoun is often omitted in SL texts since the body acts as a subject.



Figure 8. Negative deontic DO-NOT-WANT DO THIS. 'I do not want to do (it)'.

The first two photos show the dynamic sign DO NOT WANT with ipsilateral movement.

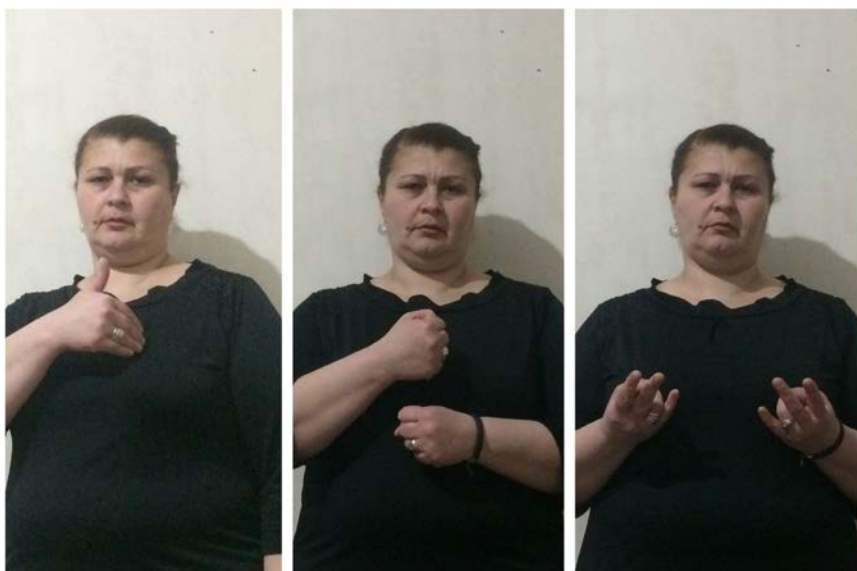


Figure 9. Deontic WANT DO DURATION. 'I want doing (it)'.



Figure 10. Negative deontic DO-NOT-WANT DO DURATION. 'I do not want doing (it)'

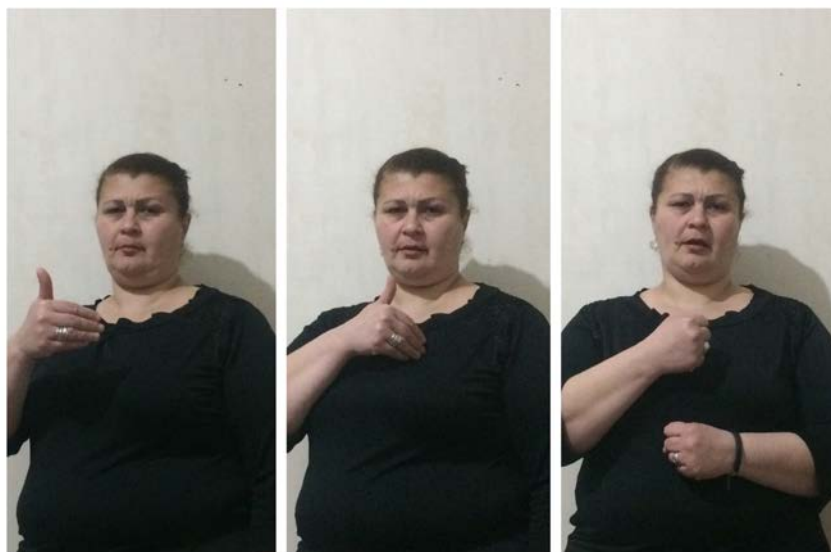


Figure 11. Deontic WANTED DO. 'I wanted to do (it)'.

The first two photos show the dynamic sign WANTED with repeated movement.



Figure 12. Negative deontic DO-NOT-WANT NOT DO THIS. 'I did not want to do (it)'.

As we see, here is the double negation again in the past tense.



Figure 13. Deontic SHOULD DO FUTURE. 'I should do (it)'.

The first photo displays the sign 'SHOULD' (*unda*).



Figure 14. Negative deontic SHOULD-NOT DO. 'I should not do (it)'.

The first three photos show SHOULD-NOT.

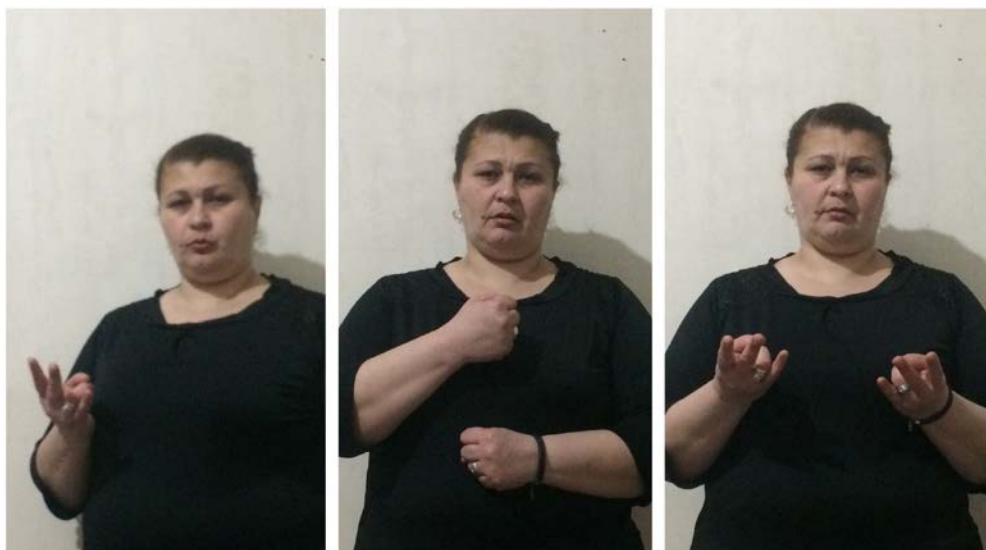


Figure 15. Deontic SHOULD DO DUTATION. 'I should be doing (it)' .



Figure 16. Negative deontic SHOULD-NOT DO DUTATION. 'I should not doing (it)'.

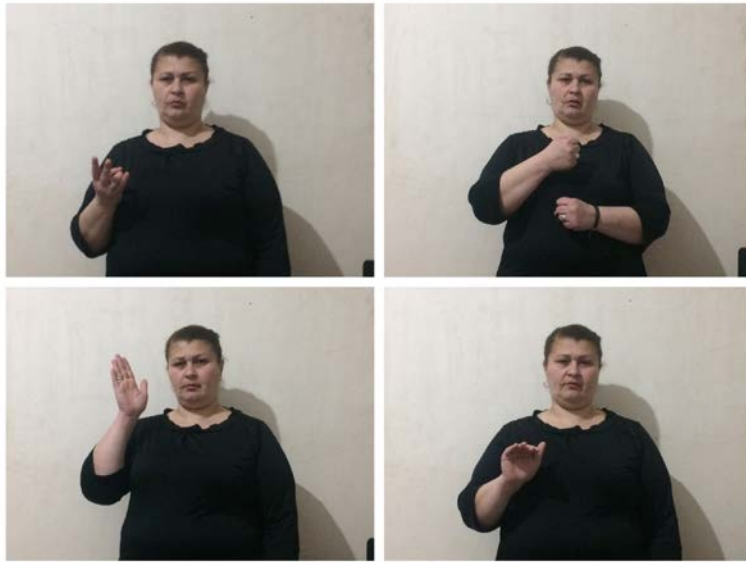


Figure 17. Deontic SHOULD DO FUTURE FOR-SURE. 'I was to do (it)'.



Figure 18. Negative deontic SHOULD-NOT DO WRONG/MISTAKE. 'I was not to do (it)'.

The last two photos convey the sign MISTAKEN/WRONG. There is no double negation with modal SHOULD in fidderece from the constructions with modal the verbs KNOW and WANT. The double negation here has a deep semantic content, and it is displayed with combination SHOULD-NOT preceding the main verb and particle WRONG/MISTAKE following the verb.



Figure 19. Epistemic-deontic KNOW SHOULD DO FUTURE. 'I know, (that) I should do (it)'.



Figure 20. Negative epistemic-deontic DO-NOT-KNOW THAT SHOULD DO FUTURE. 'I do not know (that/if) I should do (it)'.

The second photo shows conjunction THAT.



Figure 21. Epistemic-deontic KNOW THAT SHOULD DO DURATION. 'I know (that) I should be doing (it)'.



Figure 22. Negative epistemic-deontic DO-NOT-KNOW THAT SHOULD DO DURATION. 'I do not know (if) I should be doing (it)'.



Figure 23. Epistemic-deontic KNOW ALREADY THAT SHOULD DO FUTURE FOR-SURE
'I knew (that) I would have to do (it)'.

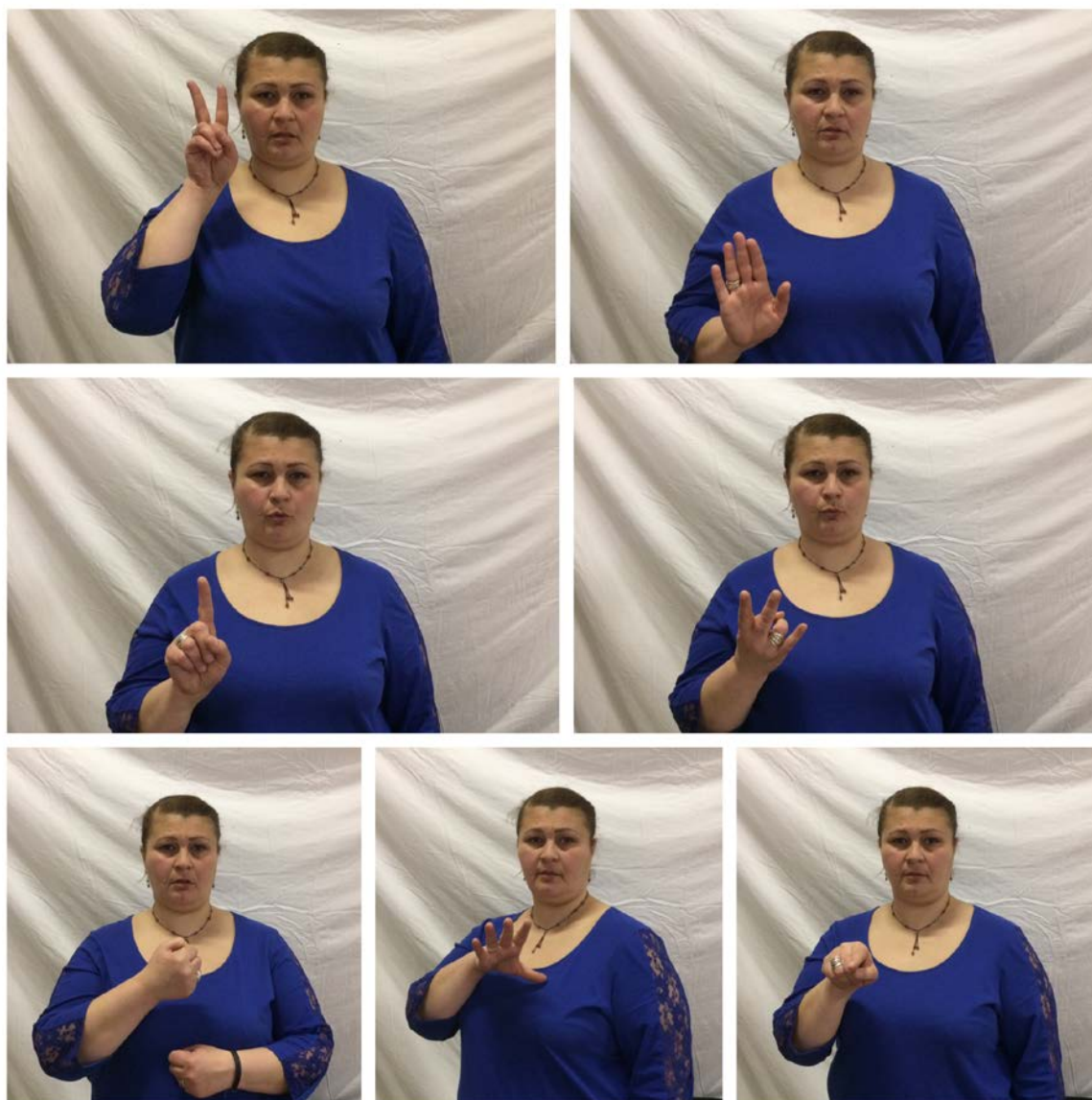


Figure 24. Negative epistemic-deontic DO-NOT-KNOW NOT THAT SHOULD DO SUBJUNCTIVE-MARKER. 'I did not know (that) I was to do (it)'.

The signs in the last two photos can be considered as a modality marker (in combination) because without any lexical meaning, they are marking the subjunctive mood. The initial meaning of the first one is WAS, but in this construction it is desemantized. The last meaningless sign seems to be initially a deictic sign. In the most cases, this whole content of the phrase means that the fact did not happen, and thus, there is a negative result (although it can have opposite content as well – 'I did not know, that I was to do it, but I did it anyway'). WAS is often used for verbal negation in GESL, for example: 'I do not write' in GESL will be WRITE WAS NOT, 'She does not paint' will be SHE PAINT WAS NOT, etc.

The list of abbreviations

1SBJs – the first subject singular

3SBJs – the third subject singular

EX - extension, or so called imperfective marker *d, od*

GESL – Georgian Sign Language

PREV - preverb

RM - marker of row in verbal conjugation paradigm

TH - thematic marker

VER – marker of version