

Grammatical Category of Version in Georgian and “Conjugation Prefixes” in Sumerian: A Contrastive Analysis

Zurab Baratashvili

*Ph.D student, Ivane Javakhishvili Tbilisi State University;
Researcher, Georgian National Academy of Sciences*

Abstract: In the article semantics, syntactic functions, and morphological marking of the markers of the grammatical category of version in Georgian and of the so-called “conjugation prefixes” in Sumerian are described, analyzed, and contrasted with each other according to different syntactic frameworks. The results are valuable for functional typology.

Keywords: *The Georgian language, the Sumerian language, the passive voice, the middle voice, applicative, locative, reflexive, syntactic functions*

1. Preliminaries

The aim of the paper is to compare and contrast the grammatical category of version in the Georgian language with the grammatical meanings expressed by the so-called “conjugation prefixes” in the Sumerian language established on morphology, syntax and semantics.

The theoretical analysis and description is based on basic assumptions of both functionalistic – Dependency Grammar [38], Role and Reference Grammar [27; 35], Functional Typology and Basic Linguistic Theory [5; 8; 14], and non-transformational Generativistic [6; 3] approaches, but the findings and the generalisation of the results are mainly aimed for Functional Typology.

For some of the abovementioned frameworks, it is necessary to find out traditional syntactic functions (subject, direct and indirect objects and so on) by not only morphological coding (person, number, and gender/class markers in the verb, case markers in the nominal phrase and so on), but also by syntactic behavioural properties. However, in consequence of the goal of the article, it is possible to avoid establishing syntactic functions and according to Sumerological tradition, the

correspondence between the semantic roles and syntactic functions can be admitted as established in prototypical cases. A bivalent transitive verb (e.g., 'to kill') expresses agent and patient syntactically by means of a subject and direct object, correspondingly; a trivalent transitive verb (e.g., 'to give') expresses agent, theme, and recipient, by means of a subject, direct object, and indirect object, correspondingly; a monovalent intransitive verb (e.g., 'to go') expresses the sole semantic role connected to it by means of a subject.

Besides such connection of semantic roles and syntactic functions, still both contemporary Sumerological and Kartvelological grammatical literature are represented and referred to where they are necessary.

2. Methodology and glossing

The Sumerian examples are taken from the electronic base (ETCSL) created by the Oriental Institute of the University of Oxford where about 400 Sumerian literary works are located [2]. Conversely, the Georgian examples are not taken from the base of fiction but taken solely by the introspection.

For the sake of easy reading, the samples of the Sumerian language are represented according to the Leipzig interlinear glossing¹, but instead of three lines, four lines are given: the first line shows traditional Sumerological transliteration, the second line – morphemic/analytic transcription in accordance with the contemporary development of Sumerology (as the Sumerian language is understood nowadays), the third line expresses glossing labels (grammatical meanings are written according to Leipzig interlinear glossing, and lexical meanings are represented by the English translation), and the last line reflects the English translation.

The Sumerian writing system could not express the phonetic or phonological system of the language, could not reflect the spoken language even roughly: it was a mnemonic system, whose goal had never been to reflect the pronunciation. Thus, Sumerologists have to reconstruct the Sumerian language by means of the defective mnemonic system, which, in fact, cannot express morphophonemic alternations of affixes and root, conditions of allomorphs, and so on. The omission of phonological and grammatical elements was easily understandable only for them who were the bearers of the language at a native level or in addition to this, those elements were not reflected in the text whose non-expression (set expressions and formulae) did not create difficulties to perceive the content of a text [4, p. 23, 25; 7, p. 100; 26, pp. 20-21, 23; 15, p. 1; 16, p. 15].

The Sumerian spelling often disregards a consonant in the coda position. For example, {n-} (expressing the morpheme of an agent (and subject) of the third person) was not often

¹ <http://grammar.ucsd.edu/courses/lign120/leipziggloss.pdf>

written in texts; or else: the non-existence of the dative allomorph /=r/ in a text, which, according to context, should really be existed functionally. The reflection of such a type of consonants regularly appears in the texts of the Old Babylonian period (1900-1600 BC) [16, pp. 12-13, 19].

(1)	anna	lugal-ĝu ₁₀	e ₂ -gal-la-na ²	mu-na-du ₃
	[anna	lugal=ĝu=ra	e.gal=ani=Ø	mu-n-a-Ø-du-Ø
	anna	king=1sg.poss=dat	palace=3.sg.h.poss=abs	vent-3sg.h-r- 1sg.a-erect-3sg.p

'For Nanna, my master, I have built his temple' (A praise poem of Ur-Namma (Ur-Namma C): 108)

On the one hand, in (1) example, the /=r/ allomorph of the dative case is not expressed graphically, which should be reconstructed by all means (in the morphological transcription, the dominant allomorph /=ra/ is presented), and, on the other hand, the prefix of the third human person (the subject – according to syntactic functions, agent – according to semantic roles), whose existence in the text is obligatory to express the Sumerian ergativity (of course, both reconstructions, represent the theoretical construction and shows that at the contemporary level of the development of Sumerology, the Sumerian language is understandable in this way).

3. The voice and the applicative

3.1 The voice

As a result of the prototypical passive alternation, the intransitive clause derives from the transitive one: the subject is demoted to the optional oblique object. The verb can have a formal marker of the passivisation process [9, p. 206; 12, p. 71; 23; 14, p. 539; 23, pp. 117-118; 19, p. 374]. The Passive Voice can be discussed as the remapping of the semantic roles and their syntactic functions in accordance with the correspondent basic active [18, p. 11; 23, p. 4]. The number of core arguments is reduced by one and the status of transitivity is changed (reduced): the transitive clause becomes intransitive [23, p. 19, 174; 6, p. 10; 3, p. 21]. The point of view that the result of passivisation represents the intransitive clause can be taken as one of the basic assumptions in spite of some exceptions³ discussed in the work by R. M. W. Dixon [9, p. 215].

The opposition of active - passive is discussed as the prototypical grammatical voice [22, p. 182]. For example, in the Latin Language (example (2)), the active clause expresses the

² The /-a/ morph can express either one of the allomorph of the locative or genitive case; or it can be the result of assimilation caused by the previous vowel reflected graphically. Since e.gal "palace" has the function of the direct object (the semantic role of patient) then it should be formed with the marker of the absolutive case by all means.

³ It can be deduced that this represents the confusion of an earlier and later points of view in the Basic Linguistic Theory; the Dixonian approach is discussed in the paper by M. Haspelmath [14, pp. 544-545, 549].

subject (agent) by the nominative case and the direct/primary object (patient) – by the accusative case. After the passivisation, the patient becomes the subject and is expressed by the nominative case, and the agent – by the ablative case.

(2) Latin

- a. Mile-s host-em occidi-t
warrior-NOM.SG.M enemy-ACC.SG.M kill-3.SG.PRS
‘The warrior is killing the enemy’.
- b. A milit-e hosti-s occidi-tur
ABL warrior-ABL.SG.M enemy-
NOM.SG.M kill-PASS.3.SG.PRS
‘the enemy is being killed by the warrior’. [22, pp. 192-193].

3.2 The middle voice

In the middle voice construction, the semantic role which functions syntactically as the subject is characterised by both agentive and patientive properties; in other words, the agent is affected by either mentally or physically [18, p. 3,45; 19, p. 265]. Semantic groups of the verb are singled out which can be assigned by the morphological marker expressing the middle voice (in the event of existing such a marker in a given language): 1. grooming and body care actions: “bathing”, “washing”, “shaving”, “getting dressed” – the body action type; the agent must act on himself (it is similar to the prototypical reflexive); 2. translational motion: “going”, “coming”, “going upstream”, “climbing up”, “walking”, “flying”, “running”, “leaping”, “running away” and so on – it expresses the locomotion of a body in the space; 3. Non-translational motion: “bending”, “turning around”, “bowing”, “shaking”, “stretching”, “shivering”, “fisting” and so on – the action of the body or part of the body without changing of the location of the body, only changing of a form or shape; 4. change in body posture situation type: “laying”, “sitting down”, “getting up”, “kneeling”, “squatting” – it is similar to the verbs of groom and body care actions (similar to the prototypical reflexives); 5. mental events: a. emotion middle: “being angry”, “frightening”, “being bored”, “being happy”, and so on; b. cognition middle: “thinking”, “memorising”, “forgetting”, “considering”, and so on; c. perception: “looking at”, “perceiving”, “seeing”, “listening to”, “smelling”, and so on – the situation where the stimulus and experiencer are involved. There are two types of interrelations between them: the experiencer pays attention to the stimulus, and the stimulus initiates a mental event in the experiencer; 6. spontaneous events: “growing”, “rotting”, “drying out”, “falling apart”, “evaporating”, and so on; besides these types, the followings are united into the middle

voice verbs: 7. direct reflexive; 8. indirect reflexive,⁴ and so on [17, pp. 16-19, 42, 54-57, 67-70, 74, 128, 130; 19, p. 266].

Coreference is the main property of the direct reflexive [17, p. 43; 8, p. 146; 19, p. 268]: the agent and patient must refer to one and the same participant. The construction can be expressed syntactically by a reflexive pronoun and cannot affect the demotion of syntactic valency.⁵

- (3) Direct reflexive
 - Basic verbal situation
 - a. John Paint-ed Bill
 - Reflexive construction
 - b. John Paint-ed Him-self [9, p. 138]

In (3a) sentence, the agent and patient refer to different referents (John and Bill), conversely, sentence (4b) expresses the same situation with the direct object argument (semantically – patient) being coreferent to the agent participated in the same situation. The subject is the antecedent (resp. controller) of the direct object [9, p. 138].

The indirect reflexive, different from the direct reflexive, implies not the coreference between the agent and patient, but the referential identification of the agent and recipient/benefactive in a semantically trivalent situation (agent, patient/theme, recipient/benefactive) [17, p. 74; 9, p. 178; 19,⁶ p. 270].

- (4) Indirect reflexive
 - a. Basic verbal situation
 - John Built a house for Him
 - b. Reflexive construction
 - John Built a House for him-self [17, p. 75]

(4a) expresses semantically basic trivalent intransitive construction, in which agent, patient, and benefactive are presented and which refer to different referents. Conversely, (4b) reflects the coreference of the agent (syntactically – subject) and

⁴ Instead of indirect reflexive, L. Kulikov uses “auto-benefactive” (self-benefactive/self-beneficent) and a Kartvelological term “subjective/subject version” [19, p. 266, 270-271, 273].

⁵ In the case of changing valency and reflecting the semantic referential identification syntactically, one can come across a different type of the grammatical category of voice [36, pp. 164-170].

⁶ L. Kulikov thinks that the Georgian subjective version is the result of the sequential application of the two derivational operations: first of all, the benefactive is added to the basic bivalent construction, and then, by means of the indirect reflexive, the agent and benefactive are the result of coreferentiality.

benefactive (syntactically – indirect/oblique object),⁷ and the patient refers to the referent different from them.⁸

3.3 The applicative

The applicative alternation involves the promotion of an oblique object to the function of the indirect/primary object [12, p. 84; 20, p. 386]. This is applicativisation *sensu stricto*, but *sensu latiore* can be any kind of promotion from the oblique object function [1, p. 3; 3, p. 341]. Applicativisation applies to both transitive and intransitive clauses. For intransitive verbs, the new or applied argument acquires object function, and if the basic clause is transitive, the direct object of a non-applicative clause can be demoted to the indirect or oblique object [1, pp. 13-14]. The applicative can have several different meanings; for example, the applied argument expresses different semantic roles: benefactive, malefactive, goal, instrument, comitative and locative [12, p. 86, 89; 8, p. 31].

In Indonesian, the benefactive applicative can be applied to a transitive bivalent clause. the primary object ‘segelas’ (patient/theme) of the basic clause (5a) is demoted to the secondary object in (5b) trivalent clause, and the benefactive ‘tamu’ occupies the function of the primary object (immediately follows the verb) [25, 80].

(5) Indonesian

- | | | | | | |
|---|--|---------------|---------|---------|-------|
| a | Pelayan | mengambil | segelas | air | |
| | Waiter | fetch | glass | water | |
| | ‘The waiter fetched a glass of water’. | | | | |
| b | Pelayan | mengambil-kan | tamu | segelas | Air |
| | Waiter | fetch-ben | guest | glass | Water |
| | ‘The waiter fetched the guest a glass of water’. [25, p. 80] | | | | |

Applicativisation always changes (increases) valency and may change transitivity (it depends on the type of the applicative).

4. The version in Georgian

According to the traditional definition, the grammatical category of version expresses particular types (possessing, acting in one’s interest) of relation between subject and objects. According to this, three types of the version are singled out (expressed by the verbal vocalic prefixes): neutral, objective, and subjective; but some scholars add the locative meaning [43; 42,

⁷ for him/himself can be either the indirect or the oblique object; it depends on different analyses. Opposed to English, in Georgian, adpositional form is unambiguously the oblique object.

⁸ R.M.W. Dixon does not accept the middle voice as a typologically valid universal category because S. Kemmer does not define both “voice” and “middle” and she establishes her analysis on semantics and not on the language specific grammatical criteria [9, pp. 192-193; vid. also 36, pp. 173-174]; opposite opinion vid. [19, p. 275].

p. 323; 41, p. 540]. The version is considered as a category of the transitive verb, but the above-mentioned meanings can be singled out in the intransitive verb with the exclusion of the subjective version [41, p. 543-546]. The main function of the verbal prefixes is considered the promotion and demotion of valency [39, pp. 74-79]. All of the four grammatical meanings should be considered as the meanings of the same grammatical category, since, from the point of view of morphology, they exclude each other in the same word-form; consequently, the version is inflectional and not derivational category morphologically [40, p. 91]; but syntactically, it is one of the means of valency-changing, that is why V. Plungian connects it to the applicative and considers it as one of the types of the applicative [37, p. 291].

Therefore, on the one hand, since the markers of the version are connected to valency changing, and, on the other hand, to the semantic roles of the benefactive, recipient, and locative, that is why the issue can be raised about their typological resemblance to the Sumerian so-called “conjugation prefixes”.

5. Conjugation prefixes in Sumerian

Those morphemes which are united in the slot of -5 (traditionally), or -7 and -8 (much more recent approach) are traditionally called conjugation prefixes, whose allomorphic structure and functional loadedness are considered by extremely different opinions [33, pp. 67-68; 26, pp. 161-189; 30; 32; 34, pp. 105-145; 15, pp. 43-44, 50, 107-108, 162-163, 203, 236, 296, 428, 433-434; 28; 13, pp. 91-96; 31, pp. 156-162].

The term “conjugation prefixes” indicate that in the case of the non-existence (or graphically not expressed) of the other prefixes in the verb, the verb is the finite form [34, p. 105].

Among various approaches, mainly three different points of view (but not contradictory) are singled out about the functions of these prefixes. The conjugation prefixes can express general orientation/direction, voice (*sensu latiore*), and topicalisation (resp. actualisation, focus) [24, p. 86].

Traditionally, there are seven morphemes of the conjugation prefixes [34, p. 106], which, taking into account dominant allomorphs, are written as follows: {mu-}, {i-}, {ba-}, {bi-}, {ima-}, {imi-}, and {al-}. After this, different types of suppositions exist about the number and allomorphic structure of the prefixes. According to one version, {ima-} and {imi-} contain not one but more than one morphemic sequences and they are deducible, respectively, from the morphemic sequences {i-} + {mu-} + {ba-} (or {i-} + {ba-}, or else: {i-} + {b}) ⇔ {i-} + {mu-} + {bi} ({i-} + {bi})⁹, i.e., /b/ > /m/ assimilatory transition is supposed. The geminated /m/ consonant is considered to express this process, which, according to this analysis, belong to different morphemes

⁹ Nearly all theoretically possible analyses of the given prefixes testify that there is no unequivocal answer for a linguistic description and its explanation especially when a text gives a plenty of possibilities of an interpretation.

[11, pp. 182-184; 26, p. 161; 34, p. 126, 139]. Besides, it is possible to divide {ba-} and {bi-} morphemes and consider them as {b-} expressing non-human third person morpheme and {a-} expressing dative (resp. recipient or benefactive or locative) and {i-} locative (locative-terminative) meanings; according to another approach, both vowels express the distance both from the listener or addressee [10, pp. 180-184; 34, p. 106]. According to such a point of view, the morphemes of the conjugation prefixes come under three different rank orders/slots and, correspondingly, they differ from each other functionally too. For example, M. Thomsen takes out {i-} prefix in a separate slot and considers {a-} prefix as its variant, but she unites the other conjugation prefixes ({mu-}, {m-}, {ba-}, {bi-}) in one slot [26, p. 161].

A. Jagersma considers the above-mentioned prefixes separately from each other; he groups the morphemes according to their meanings and divides them into four groups: vocalic prefixes ({a-} and {i-}),¹⁰ ventive morpheme {mu-}, {ba-} expressing the middle and the indirect voices, and {bi-} expressing location and the oblique object [16, p. 286]. As is seen, A. Jagersma and other sumerologists consider {ba-} prefix as expressing the voice, on the one hand, and, on the other hand, designating non-human indirect object [16, p. 288].

6. The comparison of the Sumerian “conjugation prefixes” to the Georgian grammatical category of version

M. Yoshikawa indicated the typological similarity of the “conjugation prefixes” to the Georgian grammatical category of version, but he limits himself only to the theoretically possible correspondences and establishes the following correlation between Georgian and Sumerian [29, pp. 204-205].

Table 1 - The Correlation of the Georgian and Sumerian prefixes

Grammatical meanings	Sumerian		Georgian	
Locative	Ientive	{bi-}	Locative	/a-/
	Ventive	{imi-}		
Reflexive	Ientive	{ba-}	Subjective	/i-/
	Ventive	{ima-}		
Agentive	Topicalised	{mu-}	Objective	/u-/
	Non-topicalised	{i-}		
Neutral		{al-}	Neutral	/Ø-/or /a-/

M. Yoshikawa does not bring Georgian examples, does not say anything how the argument structure changes in accordance with changing the markers of version. Furthermore, he does not say anything about Sumerian argument changes. He speaks only about the content of each prefix; but in the viewpoint of typology, very syntactic changes are interesting which is connected to the changes of morphological markers.

¹⁰ According to A. Jagersma, {ʔa-} and {ʔi-}.

The Georgian subjective version is syntactically expressed by bivalent transitive construction, morphologically by /i-/ prefixal morph, semantically by the coreference of the agent and recipient (or benefactive); it can involve autobenefactive, recipientive and reflexive meanings:

(6) Verbs with /i-/ prefix in Georgian

- a Autobenefactive

k'ats ^h -ma	saxl-i	a-i-fen-a
man-erg	house-nom	prev-subj-build-3a.sg

A man build a house for himself.
- b Body action; bivalent

k'ats ^h -ma	t'ansats ^h mel-i	tj ^h a-i-ts ^h v-a
man-erg	cloths-nom	prev-subj-put.on-3a.sg

A man put on the cloths.
- c Body action; monovalent

k'ats ^h -ma	i-ban-av-a
man-erg	subj-bathe-them-3s.sg

A man bathed.
- d Situation expressing emotion

k'ats ^h -ma	i-t'ir-a
man-erg	subj-weep-3s.sg

A man wept.
- e Spontaneous event; monovalent

p ^h its ^h ar-ma	ts'q'al-ze	i-tivtiv-a
board-erg	water-loc	subj-float-3s.sg

A board floated on the water.

(6a) expresses a bivalent transitive verb to which the agent – “k'ats^hma” and patient “saxli” are connected. Beside the agent, “k'ats^hma” is compatible with the benefactive semantic role, because the patient is intended for him and the result which is achieved by the action expressed by the verb is connected to the agent. (6b) and (6c) expresses body action, reflexivity, but the difference between them is that the first one is bivalent: with agent (coreferent with benefactive or recipient) – “k'ats^hma” and with theme (and not with patient) – “t'ansats^hmeli”, and the second one is monovalent: with the agent (which is the patient at the same time).¹¹ The situation expressing the emotion in (6d) is also monovalent whose sole argument can be understood as experiencer, and the main semantic role presented in (6e) is the theme (neither the agent and nor the patient), because it neither acts himself nor is affected (like patient) by the agent.

Besides, /i-/¹² morph expresses passive monovalent construction which is connected to patient, theme, and agent (so-called deponent verbs) semantically; it expresses, from the

¹¹ In Georgian, “ibanava” (“bathed himself”) must be understood as ambitransitive since the second argument can be considered as optional: “k'ats^hma t^havi ibanava” “the man bathed himself”; in this case, the structure will belong to the transitive clause.

¹² Whether the markers of the passive and subjective version are the allomorphs of the same morpheme or they belong to different homophone morphemes, depends on the type and interpretation of the analysis; but for the aim of this paper it is enough that morphological markers of the passive and active content or construction are homophones on the expression plane [cf.42, pp. 354-355].

viewpoint of applicative, neutral content, but it can also have the autobenefactive content.

(7) Passive, monovalent

- a Passive voice; monovalent; patient
 ts'eril-i da-i-ts'er-a
 letter-nom prev-pass-write-3s.sg
 A letter was written.
- b Passive voice; monovalent; theme
 ts'eril-i ga-i-gzavn-a
 letter-nom prev-pass-send-3s.sg
 A letter was sent.
- c Possibility passive; monovalent
 mts'vad-i i-tj'm-ev-a
 kebab-nom pass-eat-them-3s.sg
 The Kebab is eaten.
- d Deponent
 k'atsh-i i-k'bin-eb-a
 man-nom pass-bite-them-3s.sg
 A man bites.

The (7a) example shows the prototypical passive, which is the result of the conversion of active: the direct object (traditionally) is promoted to the subject. Such a conversive operation is presented in (7b) and (7c) clauses but in the former, the semantic role of the theme is showed instead of the patient, and in the latter, the nuance of possibility is added. In (7d), the sole argument – the subject is an agent semantically, in spite of the fact that the verb is in the passive. (7a) and (7b) clauses represent the verbs in the aorist, and (7c) and (7d) show the present form, because they do not have aorist forms.

In spite of the fact that the forms with /i-/ prefix, on the one hand, belong to the passive, and, on the other hand, belong to the subjective version, our main goal is not to establish in how many grammatical categories the above-mentioned content properties are distributed and how many inflectional or derivational meanings are expressed by /i-/ prefix, but only to show homophones markers may express different meanings from one another. For this reason, let us compare them to the meanings expressed by /ba-/ prefix in Sumerian and establish common properties.

In Sumerian, /ba-/ prefix may express meanings different with one another in both intransitive and transitive verbs:

(8) Middle voice

- a Body action; monovalent, intransitive
- | | | | |
|--------------|-----|------------------|--------------------|
| Sipad | ud | ul-e | ba-nu ₂ |
| sipad=Ø | ud | ul=e | ba-nu-Ø |
| shepherd=abs | day | distant.time=dir | mid-lie.down-3sg.s |

'In ancient times the shepherd lay down' (Dumuzid's dream: 15)

- b Motion; monovalent intransitive

unug ^{ki} -ta	^d inana	ba-da-an-kar ¹³
unug=ta	inana=Ø	ba-da-ni-kar-Ø
Unug=abl	Inana=abs	mid-com-loc-flee-3sg.s
ki-erim ₂ -e	ba-ab-ġen	
ki.erim=e	ba-bi-ġen-Ø	
	mid-loc-go-3sg.s	

enemy.territory=dir
 ‘Inana abandoned Unug and went off to enemy territory’ (The lament for Sumer and Urim: 150)

- c Emotion; bivalent, transitive
- | | | | | |
|----------------------|-------------------------------|------|----------------------------------|-----------------|
| šag ₄ -ba | en-me-er-
kar ₂ | dumu | ^d utu-ke ₄ | ni ₂ |
| šag=bi=a | enmerkar | dumu | utu=ak=e | ni=Ø |
- heart=3.pl.poss=loc Enmerkar child Utu=gen=erg fear=abs
 ba-ni-in-te zi ba-ni-in-ir
 ba-ni-n-te-Ø zi=Ø ba-ni-n-ir-Ø
 mid-loc-3sg.p.a-approach-3sg.p life=abs mid-loc-3sg.h.a-root-3sg.p
- | | |
|---------------------------|-------------------|
| za-pa-aġ ₂ -bi | ba-ni-in-BAD |
| zapaġ=bi=abs | ba-ni-n-BAD |
| noise=dem=abs | mid-loc-3sg.h.a-? |
- ‘In their midst Enmerkar son of Utu was afraid, was troubled, was disturbed by this upset’ (Lugalbanda and the Anzud bird: 268-269)

- d Autobenefactive; bivalent, transitive
- | | | | |
|---------|----|--------------|-------|
| ġuruš-e | ud | tur-ra-na-ka | dam |
| ġuruš=e | ud | tur=ani=ak=a | dam=Ø |
- young.man=erg day be.small=3.sg.h=gen=loc spouse=abs
 ba-tuku-tuku-u₂-a
 ba-n-tuku~tuku-e-a
 mid-3sg.h.p-have~int-3sg.a.ipfv-nmlz
 ‘the young man who got married while he was young’ (Proverbs: collection 19: 16)

- e Spontaneous events; monovalent, intransitive
- | | | | | |
|-----------|------------|-----------------------|-----------|--------------------|
| hur-saġ | galam | kad ₅ -dam | a-e | ba-dirig |
| hur.saġ=Ø | galam | kad=Ø=am | a=e | ba-dirig-Ø |
| mountain | be.skilful | bind.together=abs=b | water=dir | mid-float-
sg.s |
| =Ø | | e.3sg | | |

‘it is an artfully built mountain which floats on the water’
 (Enki’s journey to Nibru: 74)

The middle verbs can be both monovalent and bivalent, both transitive and intransitive. The above-presented bivalent verbs ((8c) and (8d)) do not differ by their structure from the active verbs. The number of arguments connected to the active and middle verbs can coincide with each other: the subject (semantically – agent) is expressed by the ergative case, and the

¹³ In the given verb, there is comitative {da-} prefix and, supposedly, locative {ni-} prefix when the noun phrase unug^{ki}-ta “from Uruk” is in the ablative case. One can see neither from the context, nor from the translation what the function of the given verbal prefixes is.

direct object (semantically – patient) is expressed by the absolutive case. In (8c) sentence, the phrase en-me-er-kar₂ dumu⁴utu-ke₄ “Utu’s son Enmerkar” is marked by the ergative case, and ni₂ “fear” and zi “life” are marked by the absolutive case; both nouns marked by the absolutive are the nominal parts of the compound verb; that is why, in the translation, monovalent intransitive passive verbs are given, but in Sumerian, bivalent transitive verbs are presented. The sentence with the same structure is presented in (8d), which is monovalent in translation – got married but it is interpreted differently in Sumerian: “marriage” is connected to “gain a wife”. An argument is connected to the monovalent verbs (examples: (8a), (8b), (8e)) by the absolutive case, and the verb is formed by /ba-/ prefix.

Taking into account the given examples, one can talk about the typological resemblances between Georgian /i-/ prefix and Sumerian /ba-/ prefix: 1. both of them are added to both transitive and intransitive verbs; 2. they express autobenefactive/subjective meaning; 3. they express reflexivity/body action; 4. they are added to the verbs expressing emotional meanings and spontaneous events; 5. Both of them can be considered as a prefix expressing passivity.

Besides the resemblances, there are differences: in Georgian, preverbs which have the deictic function are added to the motion verbs, whereas in Sumerian /ba-/ prefix expresses the same function. There is no example with deponent function or possibility/potential meanings.

Typological resemblances can be observable between locative {bi-} and Georgian locative applicative /a-/, as well. These prefixes find correspondences with each other by content: both of them express the place where the action occurs but they differ syntactically: In Georgian, the argument is in dative, but in Sumerian is in one of the local cases (locative, directive) and syntactically, it must be loaded by the function of oblique object and not of the indirect object:

(9) Locative marker in Sumerian

)

a. Locative case; transitive

munus-e	ġiš	šu-na	li-bi ₂ -in-du
munus=e	ġiš=Ø	šu=ani=a	li-bi-n-du-Ø
woman=erg	tree=ab	hand=3sg.h.poss=loc	neg-mid.loc-
	s		3sg.h.a-plant-3sg.p
ġiri ₃ -ni-ta		bi ₂ -in-du	
ġiri=ani=ta ¹⁴		bi-n-du-Ø	
foot=3sg.h.poss=abl		mid.loc-3sg.h.a-plant-3sg.p	
‘The woman planted the tree with her feet, but not with her hands’			
(Gilgameš, Enkidu and the nether world: 36)			

¹⁴ Both šu-na “with hand” and ġiri₃-ni-ta “with foot” must be in the locative case but as it can be seen, both nouns are marked by different cases. At this stage, the explanation of such a distribution of the cases cannot be found in other works, a-s well.

- b. Locative case; transitive
- | | | | |
|---------------------|---|----------|---|
| lugal [...] | mu-sar-ra-ba | šu | bi ₂ -ib ₂ -ra-a |
| lugal=e | musara=bi=a | šu=Ø | bi-b-ra-e |
| king=erg | royal.inscription=3sg.n.poss=lo
c | hand=abs | mid.loc-
3sg.n.p-
beat-
3sg.a.ipfv |
| mu-ni | bi ₂ -ib ₂ -sar-a | | |
| mu=ani=Ø | bi-b-sar-e ¹⁵ | | |
| name=3sg.h.poss=abs | mid.loc-3sg.n.p-write-3sg.a.ipfv | | |
- ‘If a king [...]erases its inscription and writes his own name on it’ (A dedication of a statue (Išme-Dagan S): 29-30)
- c. Directive case; transitive
- | | | |
|--------------------------------------|------------------------|-----------------------------|
| giš ¹⁵ kiši ₁₆ | kur-ra-ke ₄ | bi ₂ -in-du-e-en |
| kiši | kur=ak=e | bi-n-ġen-en ¹⁶ |
| acacia | mountain=gen=dir | loc-3sg.h.a-go-1sg.p |
- ‘He made me walk through the thorn bushes of the mountains’
(The exaltation of Inana (Inana B): 106)
- d. Not connected to locative
- | | | | |
|---|------------------|---------------|--------------------|
| ^d en-ki-ke ₄ | tur ₃ | amaš | šu |
| enkik=e | tur=ra | amaš=ra | šu=Ø ¹⁷ |
| Enki=erg | animal.stall=dat | sheepfold=dat | hand=abs |
| bi ₂ -in-daġal ¹⁸ | sipad | unud | |
| bi-n-daġal-Ø | sipad=Ø | unud=Ø | |
| mid.loc-3sg.h.a-be.wide- | shepherd=abs | herdsman=abs | |
| 3sg.p | | | |
| bi ₂ -in-tuku | | | |
| bi-n-tuku | | | |
| mid.loc-3sg.h.a-acquire-3sg.p | | | |
- ‘Enki made spacious sheepfolds and cattle-pens, and provided
shepherds and herdsmen’ (The debate between Bird and Fish: 9)

As is seen from the examples, the Sumerian {bi-} prefix is mainly connected to the noun phrases standing in local cases (locative, directive) in the sentence, but unlike Georgian, in (9a)-

¹⁵ In both verbs bi₂-ib₂-ra-a “beat” and bi₂-ib₂-sar-a “write”, /a-/ could have been understood as the marker of nominalisation/subordination; in both cases, /-e/ → /-a/ assimilatory process is considered.

¹⁶ It was possible to think that the anterior grapheme of the /-en/ morph expresses {-ed} morpheme but it would be difficult to explain its existence in the perfective.

¹⁷ Since šu must be in absolutive, that is why the nouns tur₃ “animal. stall” and amaš “sheepfold” were written with the marker of the dative, since the structure of the given sentence is understood as canonical trivalent – the arguments with the ergative, absolutive, and dative cases.

¹⁸ The complete form of the given verb should be šu daġal tag “to spread wide” (“to touch a wide/broad hand” (?), but here, only the first two constituents are presented.

(9c) examples, it does not trigger the noun phrase change from the local cases to the dative. All the above-presented sentences are transitive (the subject is in the ergative case, while the direct object is in the absolutive case) as an intransitive sentence with {bi-} cannot be found. Generally, it is difficult to solve the problem connected to {bi-} prefix: there exist lots of other sentences in which a noun is in a local case but {bi-} prefix is not added to the verb. That is why it is difficult to say whether the prefix is connected to the locality or not in the way that it does not trigger to change the case marker attached to the noun phrase. According to this point of view, unlike Georgian, the local noun phrases given in (9) example cannot be considered as arguments: one of the basic assumptions is that formally, the noun must be in one of the core cases (ergative, absolutive, dative) since they are the prototypical cases for arguments; on the other hand, theoretically it is possible, a non-argument (an oblique object, adjunct) can agree with a verb, as for example, in the Rundi language (the Bantu language family), the subject, direct object, indirect object, and adverbial modifier agree with a verb [36, p. 278]. But in Georgian, locative applicative changes the case marker: instead of locative, the noun is expressed by the dative case.

(10) Locative applicative in Georgian

- a. megobar-ma tʃ'eril-s misamart^h-i da-a-tʃ'er-a
friend-erg letter-dat address-nom prev-loc-letter-
3a.sg
A friend wrote an address on the letter.
- c. k'atʃ^h-s t^hav-ze nagav-i da-a-q'ar-es
man-dat head-loc garbage-nom prev-loc-
throw-3a.pl
A man had garbage thrown on his head.
- d. k'atʃ^h-s t^hav-ze buz-i da-a-dʒɔd-a
man-dat head-loc fly-nom prev-loc-sit-3a.sg
A man had a fly sat on his head.

In spite of the fact that in the sentences (40b) and (40c), there is a word-form 't^havze' "on the head" marked by the locative postposition, we should think that as the other markers of the applicative, the locative version can introduce a new argument, because the verbs 'daq'ares' "they throw them on it" and 'dadʒɔda' "he/she sat down" are connected to one less argument than 'daaq'ares' "they throw them on him/her" da 'daajda' "he/she/it sat down on him/her/it"; that is why, according to valency Georgian /a-/ prefix differs from Sumerian {bi-}.

{i-} prefix can be compared to that /a-/¹⁹ morph which expresses the neutral version in Georgian. As is seen from the

¹⁹ For Georgian, we use morphemic indications – slashes, unlike Sumerian, for which we use curly brackets for the morpheme indication. On the one hand, it is discrepancy of the levels, but, on the other hand, we insure ourselves and avoid the morphemic analysis of the category of version. Nevertheless, we

above-mentioned viewpoint of Sumerologists, {i-} prefix is expressed when there is no relationship between ventive and ientive, when the middle voice is not expressed. The prefix can be used both in transitive and intransitive verbs. In (11), there are both intransitive (i₃-gub-be₂-en “stand”) and transitive (ib₂-lah₄-lah₄-e “carry”) verbs. Both of them are marked by the neutral prefix {i-}:

(11) Intransitive and transitive verbs with {i-} prefix

Mu	inim	lugal-ĝa ₂ -ke ₄	i ₃ -gub-be ₂ -en
Mu	inim	lugal=ĝu=ak=e	i-gub-e-en
name	word	king=1sg.poss=gen=dir	neut-stand- ipfv-1sg.s
ĝi ^s tukul		ib ₂ -lah ₄ -lah ₄ -e	
tukul=Ø		i-b-lah ₂ -lah ₂ -e	
weapon=abs		neut-3sg.n.p-carry~int-3sg.h.a.ipfv	

Besides this, {al-}²⁰ prefix has the neutral meaning which is mainly encountered with the stative verbs, but its use with transitive dynamic verbs are not restricted.

‘I stand at the disposal of the fame and word of my lord, and so I (?) will bring weapons to bear’ (Letter from Šarrum-bāni to Šu-Suen about keeping the Martu at bay: 41)

(12) Verb with {al-} prefix

uga ^{mušen} -aš	u ₃ -mu-ni-in-kur ₉	gu ₃	al-de ₂ -de ₂ -e
uga=eš	u-mu-ni-n-kur-Ø	gu=Ø	al-de~de-e
raven=adv	ant-vent-loc-3sg.h.a- enter-3sg.p	voice=abs	neut- pour~int- 3sg.a.ipfv

‘he had turned into a raven and was croaking’ (Enlil and Nam-zid-tara: 13-14)

In sentence (12), the verb u₃-mu-ni-in-kur₉ (whose main meaning is indicated as “enter” and according to context, it is translated as “turn into”) needs explanation: in the translation, monovalent “turn into” is given, but, in fact, the verb expresses a bivalent transitive situation: /n-/ prefix attested before the root morpheme /-kur-/ cannot be understood as /n-/ allomorph of {ni-} locative prefix displayed in intransitive verbs because in the given verb, /ni-/ allomorph is already there and it is impossible for the prefix with the same rank and with the same meaning to be displayed at the same time in the same word-form according to language rules. That is why, if the context is taken into account (the previous sentence), it appears that the god Enlil is an agent which affects the patient, that is why the agent of the verb kur₉,

believe that the typological similarity of content between the Sumerian and Georgian affixes should not encumber the valid analysis.

²⁰ See Ph.D dissertation by A. Jagersma regarding {al-} prefix for an approach differing from M. Yoshikawa’s work [16, pp. 520-521, 533].

“turn into” should be accounted as “Enlil” and, consequently, the existence of /n-/ prefixal morph will not be unexpected and exceptional.

Since in (12), there is al-de₂-de₂-e “pour”, we believe that it should be translated as “start croaking” (with the inchoative nuance) and not “was croaking” (with durative aspect); since {al-} prefix can have such inchoative meaning – the meaning expressing the starting stage of the action, it could be possible to sign it in the interlinear glossing and to make it different from {i-} prefix.

Also M. Yoshikawa explains the use of the suffix with stative verbs by its neutral function [29, p. 205] but it is not necessary for a stative verb to be combined with the neutral prefix (the examples are found both in Georgian and Sumerian).

Georgian /a-/ prefix expresses neutral relationship towards the benefactive, when the verb expresses neither the subjective nor objective version. The given prefix is not used with intransitive verbs. In intransitive verbs, neutrality can be expressed by /Ø-/ in one type of verbs, and in other verbs by /i-/ prefix:

- (13)
- | | | | |
|----|------------------------------|-----------------------|-----------------------|
| a. | k'atʂ ^h -i | saxl-s | a-ʃen-eb-s |
| | man-nom | house-dat | neut-build-them-3a.sg |
| | 'A man is building a house'. | | |
| b. | k'atʂ ^h -i | ʃs'eril-s | Ø-ʃs'er-s |
| | man-nom | letter-dat | neut-write-3a.sg |
| | 'A man is writing a letter'. | | |
| c. | k'atʃ ^h -i | Ø-dg-a-s | |
| | man-nom | neut-stand-?-3a.sg | |
| | 'A man is standing'. | | |
| d. | ʃs'eril-i | i-ʃs'er-eb-a | |
| | l letter-nom | pass-write-them-3a.sg | |
| | 'A letter is being written'. | | |

The similarity between Georgian and Sumerian prefixes is their relationship towards the opposition subjective - objective (in Georgian), on the one hand, and, on the other hand, ventive - ientive, passive - middle (in Sumerian). {i-} prefix is used in both transitive and intransitive constructions, unlike the Georgian prefix, which is added to only the transitive verbs; the Georgian prefix can be united in the same morphemic rank with the other markers of the grammatical category of version (subjective – /i-/, objective – /u-/), but the Sumerian vocalic prefix, according to some analyses, is assigned with different rank (M. Thomsen, A. Jagersma), and that is why it cannot be included in the opposition with the other so-called conjugation “prefixes”.

M. Yoshikawa's opinion about the connection of {mu-} and {i-} prefixes to the Georgian objective version [29, pp. 204-205] should not be correct. The marker /u-/ of the Georgian objective version is found in both transitive (14a) and intransitive

verbs (14b). Besides this, it obligatorily requires the indirect object (semantically – recipient or benefactive) and the transitive verb will be trivalent (14a), and the intransitive (14b) – bivalent. Sumerian {mu-} and {i-} can be connected to both transitives (bivalent and trivalent) and intransitive monovalent verbs (especially {i-} prefix):

(14) Objective (benefactive) applicative in Georgian

- a. k'af^h-ma megobar-s saxl-i a-u-fen-a
man-erg friend-dat house-nom prev-obj-build-
3a.sg

‘A man built a house for his friend’.

- b. k'af^h-i megobar-s mi-u-ṭ₃d-a
man-nom friend-dat prev-obj-sit-3a.sg

‘A man sat beside his friend’.

(15) Forms with {mu-}prefix

- a. Trivalent
lugal-ra kur nu-še-ga-ni
lugal=ra kur=Ø nu- šeg.a=ani
king=dat mountain.land=abs neg-gree=3sg.h.poss
mu-na-gul-gul-le
mu-n-a-b-gul~gul-e
vent-3sg.h-r-3col.n.p-destroy~int-3sg.a.ipfv

‘For the king, he annihilates all enemy lands that are not compliant to him’ (A šir-gida to Martu (Martu A): 21)

- b. Bivalent
lugal-e iri mu-gul-la-ta
lugal=e iri=Ø mu-n-gul-Ø-a=ta
king=erg town=abs vent-3sg.h.a-destroy-
3sg.p-nmlz=abl

bad₃ mu-sig₁₀-ga-ta
bad=Ø mu-n-sig-Ø-a-ta
wall=abs vent-3sg.h.a-place-3sg.p-nmlz-abl

‘After the king had destroyed the cities and ruined the city walls’
(A praise poem of Šulgi (Šulgi D): 344)

In the verbs of both (15a) and (15b) sentences, there is {mu-} prefix (which is glossed as ventive), since the (15b) is a bivalent verb (with ergative lugal-e “king” and absolutive iri “town” arguments and with personal markers which agree with the given arguments), and (15a) expresses a trivalent verb derived with the same verbal root with the dative argument and with the personal markers of all of three arguments expressed in the verb. Consequently, {mu-} prefix can be found in both bivalent and trivalent transitive verbs. That is why we cannot consider it as the marker of the benefactive applicative and as typologically similar affix to the marker of the Georgian objective version.

7. Conclusion

In Sumerian, valency changing can be morphologically marked. Among them, the widespread possibility is the middle voice, which is expressed by {ba-} and {ima-} prefixes. By content, it can express reflexivity/body action, autobenefactive (resp. subjective version); it is added to the verbs expressing emotion, movement, and spontaneous events. In some cases, it expresses the passive voice, which opposes the active expressed by {mu-} prefix. Also {mu-} prefix can be considered as a marker of the causative (which is said to be expressed by only syntactically with introducing a new argument – causer), since the transitive bivalent verb derived from the intransitive verb by means of a causer is expressed by {mu-} prefix, whose intransitive correlative is marked by {ba-} or {ima-}. In any case, the passive and causative changes are also reflected in the argument structure: the subject which is marked by the ergative in the transitive construction, is not expressed in the passive at all; the direct object which is marked by the absolutive case, acquires the subject function in the intransitive verb and again it is expressed by the absolutive case; and a new argument in the causative construction – the causer is marked by the ergative case.

{bi-} and {imi-} indeed express the locative by content, but their addition to the verb does not bring about changing the case in the noun phrases, which can be expressed by the locative, directive and so on cases. Those case markers can be accepted as argument markers by which the agent, patient, themes, recipient, and benefactive is expressed in prototypical cases (ergative, absolutive, dative). Thus, the above-mentioned prefixes can be connected to the oblique object or the adverbial modifier of place.

If we typologically connect {ba-} prefix to the Georgian /i-/ verbal prefix, then, on the one hand, we should agree with M. Yoshikawa's approach that the prefix renders valency decreasing (the noun in the dative is not expressed) in transitive verbs, i.e., in the case of reflexivity or autobenefactivity, the agent and recipient/benefactive is referentially identified with each other and syntactically, only two arguments are expressed (like it happens in Georgian). When the {ba-} prefix expresses the passive, then in Sumerian, the agent is demoted (or disappears at all) like Georgian.

Typologically, {i-} prefix can be connected partially to the Georgian /a-/ prefix expressing the neutral version, since in Sumerian, the prefix appears both in transitive and intransitive verbs, but in Georgian – only in transitive.

By content, {bi-} prefix can be connected to /a-/ locative verbal marker, but the main difference between them is that in Georgian, the addition of the prefix to the verb renders the change of the argument markers: the locative postposition changes into the dative marker, but in Sumerian, the similar change does not occur.

Thus we discussed the Sumerian so-called “conjugation prefixes”, which are connected to valency - changing and they can be considered as a particular type of the applicative, but also in Sumerological literature, the prefixes (especially {ba-} and also {ima-}, if we consider them as one morpheme and not the sequence of morphemes) are discussed as the markers of the middle voice. The comparison of these prefixes to the markers of the Georgian grammatical category of version gives a new opportunity to discuss typologically some Sumerian and Georgian grammatical categories and also the question can arise whether the cross-linguistic categories – the applicative and the middle voice can be cumulatively expressed by the markers of one grammatical category in a particular language.

At first glance, in spite of the existence of the arranged subsystem (with the middle and applicative meanings), in some cases, the particular examples remain outside the subsystem (either valency - changing does not occur, or the morphological marker does not change during valency- changing, or by content, the argument and some other particular prefix do not correspond to each other). Such exceptions are often difficult to explain (or at the current stage of the development of Sumerology, it is entirely impossible to perceive particular linguistic structures by the contemporary linguistic approaches, or else because of a mere mistake by the scribe, the research can be developed in an entirely different way), since it is impossible to check any hypothesis with consultants because of the mere reason that Sumerian belongs to so-called “dead languages”.

Bibliography

1. Dixon, R. M. W., and Aikhenvald, A. Y., “Introduction. Changing Valency”: *Case studies in transitivity*. Edited by R. M. W. Dixon and A. Y. Aikhenvald. Research Centre for Linguistic Typology, Le Trobe University, Melbourne. Cambridge: Cambridge University Press, 2000
2. Black, J.A., Cunningham, G., Ebeling, J., Flückiger-Hawker, E., Robson, E., Taylor, J., and Zólyomi, G., *The Electronic Text Corpus of Sumerian Literature* (<http://etcsl.orinst.ox.ac.uk/>), Oxford 1998–2006
3. Bresnan, J., Asudeh, A., Toivonen, I., & Wechsler, S., *Lexical-Functional Grammar*. Second Edition. Blackwell Textbooks in Linguistics. Wiley Blackwell, 2016
4. Civil, M., “The Sumerian Writing System: Some Problems”: *Orientalia, Nova Series, Vol. 42*, 1973
5. Comrie, B., *Language Universals and Linguistic Typology: Syntax and Morphology*. Second Edition. Oxford UK and Cambridge USA: Blackwell Publishers, 1989
6. Dalrymple, M., “Lexical Functional Grammar”: *Syntax and Semantix. Volume 34*. San Diego/London: Academic Press, 2001
7. Diakonoff, I., Ancient Writing and Ancient Written Languages: Pitfalls and Peculiarities in the Study of Sumerian, *Sumerological Studies in Honor of Thorkild Jacobsen on his Seventieth Birthday*, June 7, 1976, AS. vol. 20

8. Dixon, R. M. W., *Basic Linguistic Theory, Volume 2: grammatical Topics*. Oxford: Oxford University Press, 2010
9. Dixon, R. M. W., *Basic Linguistic Theory, Volume 3: Further Grammatical Topics*. Oxford: Oxford University Press, 2012
10. Falkenstein, A., "Grammatik der Sprache Gudeas von Lagaš", I, *Schrift und Formenlehre, Analecta Orientalia*, Commentationes Scientificalae de Rebus Orientis Antiqui, 28, Pontificum Institutum Biblicum, Roma 1949
11. Falkenstein, A., "Grammatik der Sprache Gudeas von Lagaš", II, *Syntax, Analecta Orientalia*, Commentationes Scientificalae de Rebus Orientis Antiqui, 29, Pontificum Institutum Biblicum, Roma 1950
12. Farrell, P., "Grammatical Relations". *Oxford Surveys in Syntax and Morphology*. Oxford: Oxford University Press, 2005
13. Foxvog, D. A., *Introduction to Sumerian Grammar*, University of California at Berkeley, revised edition, 2016
14. Haspelmath, M., "On S, A, P, T and R as comparative concepts for alignment typology": *Linguistic Typology* 15, 2011
15. Hayes, J. L., *A Manual of Sumerian Grammar and Texts*, Second Revised and Expanded Edition, Aids and Research Tools in Ancient Near Eastern Studies, 5, Undena Publications, Malibu 2000
16. Jagersma, A. H., *A Descriptive Grammar of Sumerian*, Ph.D. Dissertation, Leiden 2010
17. Kemmer, S., "The Middle Voice": *Typological Studies in Language, volume 23*, John Benjamins Publishing Company, Amsterdam/Philadelphia, 1993
18. Klaiman, M. H., "Grammatical Voice": *Cambridge Studies in Linguistics* 59. Cambridge: Cambridge University Press, 1991
19. Kulikov, L., "Middle and Reflexive": *The Bloomsbury Companion to Syntax*, Edited by Silvia Luraghi and Claudia Parodi, Bloomsbury Academic, London/New Delhi/New York/Sydney, 2013
20. Kulikov, L., "Voice Typology": *The Oxford Handbook of Linguistic Typology*. Oxford: Oxford University Press, 2011
21. Malchukov, A., Haspelmath, M., & Comrie, B., "Ditransitive Construction: A typological Overview": *Studies in Ditransitive Constructions: A Comparative Handbook*. Andrej Malchukov, Martin Haspelmath, Bernard Comrie (Eds.). Berlin/New York: Mouton De Gruyter, 2010
22. Mel'čuk, I., "Aspects of the Theory of Morphology": *Trends in Linguistics: Studies and Monographs* 146. Berlin/New York: Mouton de Gruyter, 2006
23. Palmer, F. R., "Grammatical roles and Relations": *Cambridge Textbooks in Linguistics*. Cambridge: Cambridge University Press, 1994
24. Smith, E. J. M., *Query-based Annotation and the Sumerian Verbal Prefixes*: A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy, University of Toronto, 2010
25. Sneddon, J. N., *Indonesian: a Comprehensive Grammar*. London/New York: Routledge, 1996
26. Thomsen, M.-L., "The Sumerian Language: An Introduction to its History and Grammatical Structure", 3rd edition, *Mesopotamia: Copenhagen Studies in Assyriology, Volume 10*, Akademisk Forlag, Copenhagen 1984 [reprint 2001]
27. Van Valin, R. D., Jr., *An Introduction to Syntax*. Cambridge: Cambridge University Press, 2001

28. Woods, C., *The Grammar of Perspective: The Sumerian Conjugation Prefixes as a System of Voice*, Brill, Leiden – Boston 2008
29. Yoshikawa, M., “The Sumerian Verbal Prefix al-“: *Acta Sumerologica, Supplementary Series, vol. 1*, The Middle Eastern Center in Japan, Hiroshima 1993M
30. Yoshikawa, M., “Sumerian ventive and Inetive“: *Acta Sumerologica, Supplementary Series, vol. 1*, The Middle Eastern Center in Japan, Hiroshima 1993K
31. Zólyomi, G., *An Introduction to the Grammar of Sumerian*, with the collaboration of Szilvia Jáka-Sövegjártó and Melinda Hagymássy, Eötvös Loránd University, Eötvös University Press, Budapest 2017
32. Zólyomi, G., *Voice and Topicalization in Sumerian*, Bölcsészdoktori disszertáció, Budapest 1993
33. Дьяконов, И. М., *Языки Древней Передней Азии*, Главная редакция восточной литературы, изд. «Наука», Москва 1967
34. Канева, И. Т., *Шумерский язык*, Российская Академия Наук, Институт Востоковедения, Санкт-Петербургский Филиал, Центр «Петербургское Востоковедение», Санкт-Петербург 1996
35. Кибрик, А. А., Плунгян, В. А., *Функционализм. Современная американская лингвистика: фундаментальные направления*. Под редакцией А. А. Кибрика, И. М. Кобозевой, И. А. Секериной. Издание второе (стереотипное). Москва. Изд. «Книжный дом «ЛИБРОКОМ»», URSS, 2009 [2016]
36. Мельчук, И. А., *Курс общей морфологии*, том II, часть вторая: Морфологические значения, «Языки Русской Культуры», Wiener Slawistischer Almanach, Sonderband 38/2, Москва – Вена 1998
37. В. А. Плунгян, *Введение в грамматическую семантику: грамматические значения и грамматические системы языков мира*, Москва 2011
38. Теньер, Л., *Основы структурного синтаксиса*. Серия “Языковеды мира”, Изд. «Прогресс», Москва 1988
39. Asatiani, R., “The Functions of the Verbal vowel prefixes in the South Caucasian (Kartvelian) Languages: Version and Causative“: *Problems of the Historical-Comparative Investigation of Languages*, Publishing House “Nekeri”, Tb. 2016 (in Georgian) / ასათიანი, რ., „ზმნური ხმოვანპრეფიქსების ფუნქციები ქართველურში: ვერსია და კაუზაცია“: *ენათა ისტორიულ-შედარებითი კვლევის პრობლემები*, გამომც. „ნეკერი“, თბ. 2016
40. Baratashvili, Z., “Grammatical Meanings of the Category of Version in Georgian“: *Typological Investigations, VII*, Ilia State University, G. Tsereteli Institute of Oriental Studies, Publishing House “Georgian Academic Book”, 2015 (in Georgian) / ბარათაშვილი, ზ., „ქვეყნის კატეგორიის გრამატიკული მნიშვნელობები ქართულში“: *ტიპოლოგიური ძიებანი*, №7, ილიას სახელმწიფო უნივერსიტეტი, გ. წერეთლის აღმოსავლეთმცოდნეობის ინსტიტუტი, გამომც. „ქართული აკადემიური წიგნი“, თბ. 2015
41. Gogolashvili, G., Arabuli, A., Sukhishvili, M., Manjgaladze, M., Chumburidze, N., Jorbenadze, N., *Morphology of the Contemporary Georgian: Standard Language*, Publishing House “Meridiani”, Tbilisi 2011 (in Georgian) / გოგოლაშვილი, გ., არაბული, ა., სუხიშვილი, მ., მანჯგალაძე, მ., ჭუმბურიძე, ნ.,

ჯორბენაძე, ნ., თანამედროვე ქართული ენის მორფოლოგია: სალიტერატურო ენა, გამომც. „მერიდიანი“, თბ. 2011

42. Shanidze, A., *Fundamentals of the Grammar of the Georgian Language*, Collected Works in 12 volumes, Volume III, TSU Publishing House, Tb. 1980 (in Georgian) / შანიძე, ა., *ქართული ენის გრამატიკის საფუძვლები*, თხზულებანი თორმეტ ტომად, ტომი III, თსუ გამომცემლობა, თბ. 1980
43. Shanidze, A., *Version of the Georgian Verb*, Collected Works in 12 volumes, Volume II, *Questions of the Structure and History of the Georgian Language*, Publishing House “Metsniereba”, Tb. 1981 (in Georgian) / შანიძე, ა., *ქართული ზმნის საკცევი*, თხზულებანი თორმეტ ტომად, ტომი II, *ქართული ენის სტრუქტურისა და ისტორიის საკითხები*, გამომცემლობა „მეცნიერება“, თბ. 1981.

