

VERBAL COMPLEMENTIZERS IN KALMYK: V, C OR BOTH?*

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1 Introduction

Complement clauses with a finite embedded predicate in Kalmyk can be divided into two categories. Either they are directly embedded by the verb *gi-* ‘say’, as in (1a), or they are introduced by a complementizer that is morphologically a nonfinite form of *gi-*, as in (1b).¹

- (1) a. Badma [Ajsa-gə usə av-čə ir-txä] gi-və.
Badma Ajsa-ACC water take-CVB.IPFV come-JUSS say-PST
‘Badma said that Ajsa should bring some water.’²
- b. Badma [Ajsa-gə usə av-čə ir-txä] gi-žə kelə-v.
Badma Ajsa-ACC water take-CVB.IPFV come-JUSS say-CVB.IPFV say-PST
‘Badma said that Ajsa should bring some water.’

As shown by the translation, these two instances of *gi-* are clearly distinguished depending on whether *gi-* has or not an independent semantic content. This suggests an analysis of *gi-* in which it is either a lexical verb or a complementizer with some traces of verbal morphology. In this paper I show that this analysis is problematic for two reasons. Firstly, even in its contentful uses *gi-* shares many functional properties pointing to its complementizer status. Secondly, in its contentless uses

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¹ The verb *gi-* also has other uses in Kalmyk grammar, as discussed in Baranova 2010. It is used as an adpositional marker introducing onomatopoeic words and ideophones and proper names. It is also used in complex predicate constructions with aspectual meaning. Finally, the nonfinite forms can also introduce rationale clauses. For reasons of space, I abstract away from these uses in this paper.

² The glosses used in this paper are mostly based on Say et al. 2009 but sometimes I follow Blaesing 2003 for expository purposes. Some uncommon glosses are: NOM.EXT – extension (used as a nominative marker with certain nouns), JUSS – jussive, PTCP.HAB – habitual participle, REM – remote past tense. The spelling system is also adopted from Say et al. 2009.

as a complementizer, derives of *gi-* present evidence of being true nonfinite verbal forms. To solve this puzzle, I propose a unified analysis of both contentful and contentless forms of *gi-*. According to this analysis *gi-* is uniformly a complementizer head introduced by a null verb. This analysis makes an interesting prediction, namely, that *gi-* is expected to have argument structure in its uses as a complementizer. I present tentative evidence from indexical shifting suggesting that this prediction is borne out.

2 Properties of *gi-* as a contentful verb

2.1 Interpretation

As a speech act verb, *gi-* can introduce both quotations and true embedded clauses (commonly referred to as direct and reported speech, respectively). This is shown by the interpretation of the indexical pronoun *nandə* in the complement clause in (2). The direct speech interpretation is illustrated in (2i), where *nandə* refers to the speaker of the reported context, that is, the matrix subject. The reported speech interpretation is illustrated in (2ii), where it refers to the speaker of the context of utterance.

- (2) eckə-n^j [Badma nan-də möngə ög-txä] gi-və.
 father-POSS.3 Badma 1SG-DAT money give-JUSS say-PST
 i. ‘His father_i said Badma should give him_i the money.’
 ii. ‘His father said Badma should give me the money.’

It turns out that indexicals in the complement of *gi-* can also be interpreted relative to the reported context even when the clause is truly embedded. This is known as *indexical shifting* (see Shklovsky and Sudo 2013, Schlenker 2003, among others). Consider, for example, (3a) in which a *wh*-word inside the complement can take matrix scope, which would be impossible if the clause were a quotation. Yet *nandə* can refer to the matrix subject. The same interpretation is also possible in (3b), where the subject of the complement clause is marked with accusative case, which is only possible in embedded clauses.

- (3) a. eckə-n^j [Badma nan-də ju ög-txä] gi-və?
 father-POSS.3 Badma 1SG-DAT what give-JUSS say-PST
 ‘What did his father_i say Badma should give him_i?’
 b. eckə-n^j [Badma-gə nan-də möngə ög-txä] gi-və.
 father-POSS.3 Badma-ACC 1SG-DAT money give-JUSS say-PST
 ‘His_i father said Badma should give him_i the money.’

The phenomenon of indexical shifting will be important for the discussion in section 4.2.3.

2.2 Functional properties

As a contentful verb, *gi-* displays a number of properties that are usually associated with functional heads, in particular, complementizers. Firstly, *gi-* is a unique verb that can take complement clauses

directly. Other verbs such as *kel-* ‘say’ disallow bare complement clauses, as is shown in (4), and require the complementizer to be inserted, as in (1b).³

- (4) *Badma [Ajsa-gə usə av-čə ir-txä] kelə-v.
 Badma Ajsa-ACC water take-CVB.IPFV come-JUSS say-PST
 ‘Badma said that Ajsa should bring some water.’

Secondly, *gi-* has to immediately follow the complement. Thus, for example, the matrix subject may not intervene between *gi-* and the embedded clause, as shown in (5a); cf. (1a). In contrast, this is possible and even usual for complement clauses of verbs other than *gi-*, as shown in (5b); cf. (1b).

- (5) a. *[Ajsa-gə usə av-čə ir-txä] Badma gi-və.
 Ajsa-ACC water take-CVB.IPFV come-JUSS Badma say-PST
 Intended: ‘Badma said that Ajsa should bring some water.’
 b. [Ajsa-gə usə av-čə ir-txä] gi-žə Badma kelə-v.
 Ajsa-ACC water take-CVB.IPFV come-JUSS Badma say-CVB.IPFV say-PST
 ‘Badma said that Ajsa should bring some water.’

Thirdly, *gi-* disallows nominal complements. This is illustrated in (6a) for the wh-word *ju* ‘what’ (in the unmarked accusative form). Compare this with the example (6b), in which the verb *kel-* ‘say’ is used.⁴ The same holds for participial forms used as nominalizations, as shown in (7a); cf. (7b).

- (6) a. *Bajrta čam-də ju gi-və?
 Bajrta 2SG-DAT what say-PST
 Intended: ‘What did Bajrta say to you?’
 b. Bajrta čam-də ju kelə-v?
 Bajrta 2SG-DAT what say-PST
 ‘What did Bajrta say you to you?’

³ To be more precise, *kel-* does take a bare sentence as a complement but only in a specific construction for introducing direct speech, where the quotation has to follow the verb, as in (ia); cf. (ib). The construction is probably a Russian influence.

- (i) a. eckə-n¹ kövü-d-t-än kelə-v [cug tadn-də sän bol-txa].
 father-POSS.3 son-PL-DAT-POSS.REFL say-PST all 2PL-DAT good become-JUSS
 ‘Father said to his sons, ‘Let you all be fine.’
 b. *eckə-n¹ kövü-d-t-än [cug tadn-də sän bol-txa] kelə-v.
 father-POSS.3 son-PL-DAT-POSS.REFL all 2PL-DAT good become-JUSS say-PST
 Intended: ‘Father said to his sons, ‘Let you all be fine.’

⁴ Interestingly, the example is fine with the nominative form *jun* ‘what’, as shown in (i).

- (i) ta ju-n gi-žä-nä-t?
 2PL.NOM what-NOM.EXT say-DUR-PRS-2PL
 ‘What are you saying?’
 (web-corpora.net/KalmykCorpus/search/index.php)

- (7) a. *Bajrta [bi xotə säänär ke-dg-igə] gi-və.
 Bajrta 1SG.NOM food well do-PTCP.HAB-ACC say-PST
 Intended: ‘Bajrta said that I cook food well.’
- b. Bajrta [bi xotə säänär ke-dg-igə] kelə-v.
 Bajrta 1SG.NOM food well do-PTCP.HAB-ACC] say-PST
 ‘Bajrta said that I cook food well.’

These three properties could be readily accounted for if *gi-* is a functional head, in particular a C head. Firstly, it is typical of functional words to be closed-class items. This explains the uniqueness of *gi-*. An alternative account, according to which complements of *gi-* are headed by a null C such that *gi-* is the only verb that can select this C, appears to be less economical. Secondly, the adjacency between *gi-* and the complement clause would follow from the fact that if *gi-* is an instance of C, it would form part of the embedded clause, whereas material from the matrix clause can never appear inside the embedded clause. Finally, the absence of nominal complements would be expected since C normally takes TP as its complement.

2.3 Lexical properties

Despite the fact that *gi-* in its uses as a contentful verb behaves in some respects as a complementizer, it has a number of properties that point to its status as a lexical verb (apart from the verbal interpretation). Firstly, *gi-* has argument structure. This is obviously seen by the presence of the subject argument in examples like (2a). In addition, *gi-* can take a goal argument realized as a dative DP, as shown in (8). Note that the indexical *nandə* can be interpreted both relative to the reported context and relative to the context of utterance, the latter fact showing that there is true embedding.

- (8) Badma Baatr-də [nan-də möŋgə ög-Ø] gi-və.
 Badam Baatr-DAT 1SG-DAT money give-IMP say-PST
 ‘Badma_i asked Baatr to give him_i/me the money’

The second obvious property pointing to the lexical nature of *gi-* is the presence of verbal morphology.⁵ So far, we have seen examples with *gi-* in the past tense morphology.⁶ *Gi-* can also appear in the present tense and take an aspectual suffix, as shown in (9a). Note that the accusative marking of the subject in (9a) indicates embedding. Example (9b) shows that *gi-* can be used in the

⁵ For unclear reasons, speakers note that certain constructions with *gi-* are limited in their interpretive options. For example, embedding of *gi-* under the negative predicate (which requires the participial form), is degraded when the complement shows signs of true embedding, as in (ia); cf. (ib), which is analyzable as a quotation.

- (i) a. *Ajsa Badma-də [nan-də durta-v] gi-sən uga.
 Ajsa Badma-DAT 1SG.NOM with.love-1SG say-PTCP.PST NEG.COP
 Intended: ‘Ajsa didn’t say to Badma that she loves me.’
- b. Badma Ajsa-də [bi cham-də durta-v] gi-sən uga.
 Badma Ajsa-DAT 1SG.NOM 2SG-DAT with.love-1SG say-PTCP.PST NEG.COP
 ‘Badma didn’t say to Ajsa, ‘I love you.’’

⁶ This is not a definitive argument for the lexical nature of an element since, for example, English modals also have forms specified as [past], yet they are usually analyzed as functional elements, which is demonstrated by the lack of other verbal properties such as inflection, lack of *do* support, etc.

imperative. Example (9c) shows that *gi-* can be used with the purpose converb morphology. Note that the indexical *nandə* in (9b)–(9c) refers to the speaker of the context of utterance indicating true embedding.⁷

- (9) a. bi [čamagə zurg zur-txa] gi-žä-nä-v.
1SG.NOM 2SG.ACC picture draw-JUSS say-DUR-PRS-1SG
'I am ordering you to draw a picture.'
- b. [nan-də durta-v] gi-Ø.
1SG-DAT with.love-1SG say-IMP
'Say that you love me.'
- c. Ajsa Badma-də [nan-də durta-v] gi-xär sed-nä.
Ajsa Badma-DAT 1SG-DAT with.love-1SG say-CVB.PURP want-PRS
'Ajsa_i wants to say to Badma that she_i loves me.'

By way of summary, we can say that *gi-* when used as a contentful verb shares properties of a complementizer and a lexical verb. As a complementizer, it is unique among other lexical items in taking (true embedded) clausal complements, it requires adjacency to the complement clause, and it resists nominal complements. As a lexical verb, it has the interpretation of a speech act verb, has argument structure, and is compatible with a number of verbal morphological categories.

3 Properties of *gi-* as a complementizer

As pointed out in section 2.2, verbs other than *gi-* can only take clausal complements introduced by nonfinite forms of *gi-*. It appears that these forms play a purely functional role of complementizers. Yet they present morphosyntactic evidence of being verbal forms, thus also revealing their double nature just like contentful uses of *gi-*. The primary evidence comes from the fact that the choice of the particular nonfinite form depends on the category of the lexical head that selects the complement, in particular whether it is a verb or a noun. I will discuss these two kinds of heads in turn.

3.1 Complementizers introducing complements of verbs

Verbal predicates take complement clauses introduced by converbial forms of *gi-*, namely the forms *gižə*, which is an imperfective converb, and *giḃäd*, which is a perfective converb.⁸ In (10a) we see a sentential argument of the verb *kel-* 'say' introduced by the complementizer. The first person pronoun *nandə* inside the complement can have both shifted and nonshifted interpretation just like in the case of *gi-* used as a contentful verb (note the accusative marking of the embedded subject

⁷ Interestingly, the *pro* subject triggering the first person agreement on the predicate in (9b)–(9c) is interpreted relative to the reported context, which, given that the clause is embedded, shows that it is an instance of indexical shifting.

⁸ I will only be discussing examples with *gižə* in this paper. *Giḃäd*, illustrated in (i), has a similar but a somewhat narrower distribution.

- (i) Bajrta [kövü-ḃän cerg-tə mord-xə] giḃäd ää-žä-nä.
Bajrta son-POSS.REFL army-DAT leave-PTCP.FUT say-CVB.PFV fear-DUR-PRS
'Bajrta fears that her son will go to the army.'

indicating true embedding). In (10b) we see another speech act verb, *zak-* ‘order’, whose sentential argument is introduced by the complementizer *gižə*.

- (10) a. *eckə-n^j* [Badma-gə nan-də möngə ög-txä] *gi-žə* *kelə-v*.
 father-POSS.3 Badma-ACC 1SG-DAT money give-JUSS say-CVB.IPFV tell-PST
 ‘His father_i said that Badma should give him_i/me’
- b. *Baatr cergč-nər-tə* [bələ tal jöv-tən] *gi-žə* *zakə-v*.
 Baatr soldier-PL-DAT river towards go-IMP.PL say-CVB.IPFV order-PST
 ‘Baatr ordered soldiers to go towards the river.’

As a complementizer *gi-* can also introduce sentential arguments of verbs that do not express speech acts. This includes *san-* ‘think’ in (11a), *bajərl* ‘be glad’ in (11b), and *nääl-* ‘hope’ in (11c). Note that in the latter case the first person possessive marker *-m* can refer either to the speaker of the context of utterance or to the speaker of the reported context.⁹

- (11) a. [Ajsa orat-xə] *gi-žə* *bi* *san-žə-na-v*.
 Ajsa be.late-PTCP.FUT say-CVB.IPFV 1SG.NOM think-DUR-PRS-1SG
 ‘I think Ajsa will be late.’
- b. *ekə-n^j* [kövü-ɸän xär-žə irə-v] *gi-žə*
 mother-POSS.3 son-POSS.REFL return-CVB.IPFV come-PST say-CVB.IPFV
bajərl-žə-na.
 be.glad-DUR-PRS
 ‘His mother is glad that her son has come back.’
- c. [kövü-m institut-tə sur-xə] *gi-žə* *Bajrta nääl-žə-nä*.
 son-POSS.1SG institute-DAT study-PTCP.FUT say-CVB.IPFV Bajrta hope-DUR-PRS
 ‘Bajrta_i hopes that her_i/my son will study at the university.’

The compatibility of *gi-* with non-speech-act verbs shows it can totally lack the ‘say’ component in its meaning and thus has to be analyzed as having a more abstract meaning.

3.2 Complementizers introducing complements of nouns

Sentential complements of nouns have to be introduced by complementizers having participial morphology, most commonly *gisən*, which is the past participle of *gi-*.¹⁰ In (12a) we see the noun *zakvər* ‘order’ (nominalization of *zak-* ‘order’) whose sentential argument is introduced by *gisən*, the converbial form *gižə* being unacceptable; cf. (10b). In (12b) and (12c) nouns *zəngə*

⁹ Assuming that the quotation interpretation is independently blocked in the case of non-speech-act verbs, this suggests that the indexical in (11c) can be shifted.

¹⁰ Other forms include *gižəxə*, illustrated in (ia) and *gižəsən*, illustrated in (ib).

- (i) a. [tüümər šatə-v] *gi-žə-xə* *zəngə irə-v*.
 fire burn-PST say-DUR-PTCP.FUT news come-PST
 ‘The news came that a fire broke out.’
- b. *Bajrta-də* [kövü-n^j institut-tə sur-xə] *gi-žə-sən* *itkəl bi-lä*.
 Bajrta-DAT son-POSS.1SG institute-DAT study-PTCP.FUT say-DUR-PTCP.PST belief be-REM
 ‘Bajrta_i had the belief that her_i son will study at the university.’

‘news’ and *itkəl* ‘belief’ are illustrated. Note that the first person possessive marker *-m* in (12c) can be interpreted both relative to the context of utterance and to the reported context, showing that indexicals can also shift in complements of nouns (under the assumption that the quotation interpretation is independently precluded with non-speech-act predicates).

- (12) a. *cerğč-nər [ɬolə tal jov-tən] {gi-sən / *gi-žə} zakvər avə-v.*
 soldier-PL river towards go-IMP.PL say-PTCP.PST / say-CVB.IPFV order receive-PST
 ‘Soldiers received the order to go towards the river.’
- b. *[tüümər šatə-v] {gi-sən / *gi-žə} zängə irə-v.*
 fire burn-PST say-PTCP.PST / *say-CVB.IPFV news come-PST
 ‘The news came that a fire broke out.’
- c. *Bajrta-də [kövü-m institut-tə sur-xə] {gi-sən /*
Bajrta-DAT son-POSS.1SG institute-DAT study-PTCP.FUT say-PTCP.PST /
**gi-žə} itkəl bi-lä.*
**say-CVB.IPFV belief be-REM*
 ‘Bajrta_i had the belief that her_i/my son will study at the university.’

The fact that sentential complements of nouns can only be introduced by complementizers that have the form of participles but not the form of converbs can be readily accounted for if those complementizers are in fact participles or converbs since converbs are modifiers of clauses (and not nouns) and participles are modifiers of nouns (and not clauses). That is, the complementizers derived from *gi-* should in fact be analyzed as forms of *gi-*.

4 Analysis

If we summarize the properties of *gi-* as a contentful verb and as a complementizer, we will arrive at (13).

- (13) a. As a contentful verb, *gi-* behaves like a complementizer and a lexical verb at the same time.
- b. As a complementizer, *gi-* behaves like a nonfinite verb form.

Both statements (13a) and (13b) appear puzzling in view of the fact that *gi-* in both cases combines properties of a verb and a complementizer. I will first propose an analysis of *gi-* as a contentful verb to solve this puzzle and a particular semantic problem that arises under this analysis. Then I extend this analysis to uses of *gi-* as a complementizer and also show that it makes an interesting prediction regarding the argument structure of *gi-*, which appears to be borne out. In the end we will arrive at a unified analysis of *gi-*.

4.1 Analysis of *gi-* as a contentful verb

I propose that *gi-* as a contentful verb is a C head selected by null V.¹¹ This is illustrated in the simplified tree in (15) corresponding to example (1a), repeated here as (14).¹² The fact that *gi-* is

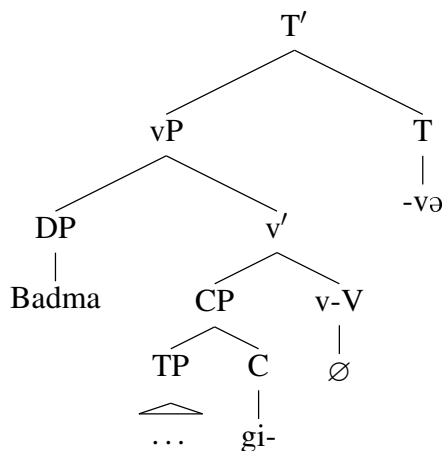
¹¹ Despite this analysis I will still continue referring to the null V associated with *gi-* as *gi-* for the sake of simplicity.

¹² In (15) and the rest of the trees, I mostly abstract away from the matrix C-T region and potential movements associated with it. I also use v-V as a shortcut for the vP-layer associated with the null V.

a realization of C explains the complementizer properties discussed in section 2.2. The presence of a V head explains the trivial fact that *gi-* is accompanied by arguments and verbal morphology. Under this analysis the verbal morphology is in fact not associated with *gi-* proper but rather with V, but since V is null and thus does not count as a legitimate host, this morphology ends up pronounced on C.¹³

- (14) Badma [Ajsa-gə usə av-čə ir-txä] gi-və.
 Badma Ajsa-ACC water take-CVB.IPFV come-JUSS say-PST
 ‘Badma said that Ajsa should bring some water.’

(15)



The present analysis raises an obvious problem. It apparently requires to postulate a verb with the meaning ‘say’ and a zero phonological matrix. However, to anticipate the unified analysis that I will propose, this option is untenable (recall that as a complementizer *gi-* can introduce complements of non-speech-act predicates). What I propose instead is that the null V corresponds to a more abstract relation, namely that of possession (of propositional content), which I will refer to as HOLD.¹⁴ Now that the null V is interpreted as HOLD, the fact that the actual sentences involving *gi-* (as a contentful verb) comes out referring to speech acts should be treated as a result of pragmatic factors. The basic idea is that the speech act semantics in sentences with *gi-* is implied rather than asserted, the actually expressed semantic content being underspecified.

¹³ I am thankful for the suggestion along these lines to Bradley Larson. The original technical implementation of the analysis was in terms of nanosyntax (see Starke 2009); however, given a simpler expository value of the present implementation, I will leave the discussion of a nanosyntactic analysis to another occasion.

¹⁴ How exactly null V gets its interpretation is a separate question. One obvious possibility is that V_{HOLD} is a specific lexical item in Kalmyk. A more general solution to pursue is that null V gets its meaning via a default interpretation mechanism similar to the one proposed by Pustejovsky (1995) for examples like *John began a novel*. Pustejovsky proposed that the content of the understood verb (‘read’/‘write’) in such examples is recovered based on the specific encyclopedic information associated with its complement (‘novel’) such as purpose of the object and action through which the object came into being, jointly called the QUALIA structure. Developing Pustejovsky’s ideas, we can propose that propositional complements in general also have QUALIA structure and that this structure precisely includes the predicate HOLD.

4.2 Analysis of *gi-* as a complementizer

This analysis of *gi-* can be extended to its uses as a complementizer. The complement clause introduced by *gi-* in those cases will be an argument of the null V interpreted as HOLD, the whole phrase headed by the null V being predicative and forming a kind of secondary predication. Given that *gižə/gisən*-clauses are usually obligatory, I will be treating the extended projection of the null V (here I assume that the converbial/participial morphology corresponds to separate functional heads) as sitting in the complement position of the matrix predicate (the structures are given below).¹⁵

There is one interesting prediction that arises under the unified analysis. Recall that as a contentful verb *gi-* is associated with argument structure, in particular, the (obligatory) subject argument. Consequently, we expect that the null V associated with *gi-* will also have a (nonovert) subject, the nature of the subject being different in the case of complementizers introducing complements of verbs and nouns.

4.2.1 Analysis of *gižə*

Let's start with the complementizer *gižə*, which introduces complements of verbs. The imperfective converb suffix *-žə*, which *gižə* is derived by, requires the understood subject of the verb to be coindexed with the matrix subject, as shown in (16).

- (16) *giič-nər_i [PRO_{i/*j} divan deer suu-žə] cä uu-la.*
 guest-PL sofa on sit-CVB.IPFV tea drink-REM
 'The guests were drinking tea sitting on the sofa.'

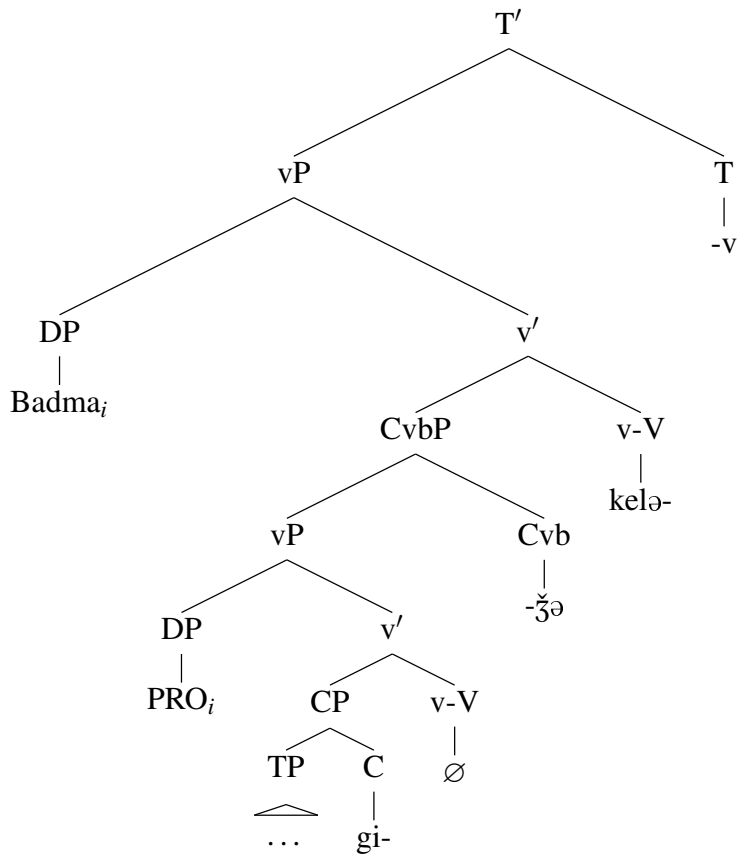
(adapted from Mischenko 2009)

Consequently, the obvious candidate for the subject of the null V associated with *gižə* is a controlled subject-oriented PRO. This is illustrated by example (1b), repeated here as (17). The corresponding tree is given in (18).

- (17) *Badma_i [PRO_i [Ajsa-gə usə av-čə ir-txä] gi-žə] kelə-v.*
 Badma Ajsa-ACC water take-CVB.IPFV come-JUSS say-CVB.IPFV say-PST
 'Badma said that Ajsa should bring some water.'

¹⁵ The analysis I propose for *gižə/gisən*-clauses is thus reminiscent to the one proposed by Wechsler (1997) for directional PPs such as *Mary put the book into a box*, where the relevant PP is treated as a predicative (relational) expression in the complement position.

(18)



In section 4.2.3 I will discuss some evidence pertaining to the presence of PRO in *giʒə*-clauses.

4.2.2 Analysis of *gisən*

Let's turn to the subject of *gi-* in the case of the complementizer *gisən*, which introduces complements of nouns. The past participle suffix *-sən*, which *gisən* is derived by, introduces both relative clauses (with a gap in a variety of positions) and (gapless) complement clauses illustrated in (19).

- (19) [tüümər ʃat-sən] zəŋgə bi soŋs-la-v.
 fire burn-PTCP.PST news I hear-PST-1SG
 'I heard the news that a fire broke out.'

Assuming *gi-* has a subject, under the relative clause analysis the *gisən*-clause will have a subject gap corresponding to the subject of *gi-* and coindexed with the head noun, as shown in (20) for example (12b).¹⁶

¹⁶ Cf. a simpler example with a subject gap and the *-sən* participle in (i)

- (i) [____i ter ükr-tə ceceg ög-sən] küü-n_i
 that cow-DAT flower give-PTCP.PST man-NOM.EXT
 'the man that gave a flower to that cow'

(adapted from Krapivina 2009)

- (20) [____i [tüümər šatə-v] gi-sən] zäjgə_i irə-v.
 fire burn-PST say-PTCP.PST news come-PST
 ‘The news came that a fire broke out.’

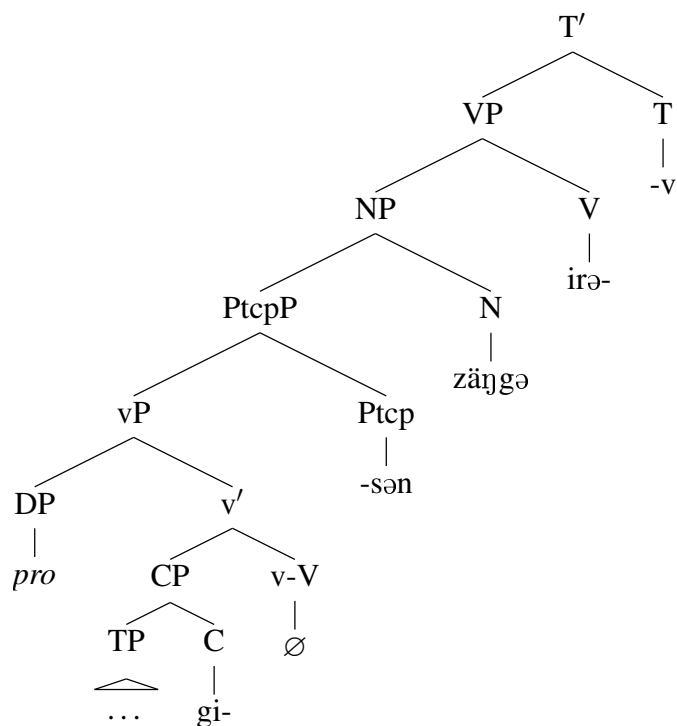
This analysis, however, has to be discarded at least for *gisən*-clauses associated with *zäjgə* as *zäjgə* cannot be the subject of the verb *gi-*, as shown in (21).

- (21) *zäjgə [tüümər šatə-v] gi-və.
 news fire burn-PST say-PST
 ‘The news said that a fire broke out.’

Consequently, I will analyze the *-sən* participle in *gisən*-clauses as introducing a complement clause with a *pro* subject. This is illustrated in (22) for example (12b). The corresponding tree is given in (23).

- (22) [*pro* [tüümər šatə-v] gi-sən] zäjgə irə-v.
 fire burn-PST say-PTCP.PST news come-PST
 ‘The news came that a fire broke out.’

(23)



In the next section I present some evidence for the presence of *pro* in *gisən*-clauses.

4.2.3 Evidence from indexical shifting

Now we turn to some tentative evidence for the presence of the subject of the null V in uses of *gi-* as a complementizer. The evidence comes from indexical shifting.¹⁷ In (24a)-(24b) we see two

¹⁷ The full description of the Kalmyk indexical shifting data is beyond the scope of this paper and is left for future research.

examples with indexical shifting repeated from (10a) and (11c). In (24a) the first person pronoun *nandə* inside the *gižə*-clause complement of the verb *kel-* ‘say’ can have both a shifted and a nonshifted interpretation, referring either to the speaker of the context of utterance or to the speaker of the reported context. In (24b) the first person possessive marker *-m* inside the *gižə*-clause complement of the verb *nääl-* ‘hope’ can also have both a shifted and a nonshifted interpretation, referring either to the speaker of the context of utterance or to the holder of propositional attitude of the reported context.

- (24) a. *eckə-nʲ* [Badma-gə nan-də möngə ög-txä] *gi-žə* *kelə-v*.
 father-POSS.3 Badma-ACC 1SG-DAT money give-JUSS say-CVB.IPFV tell-PST
 ‘His father_i said that Badma should give him_i/me the money.’
 b. [*kövü-m* institut-tə sur-xə] *gi-žə* *Bajrta nääl-žä-nä*.
 son-POSS.1SG institute-DAT study-PTCP.FUT say-CVB.IPFV Bajrta hope-DUR-PRS
 ‘Bajrta_i hopes that her_i/my son will study at the university.’

When we consider, however, the verb *soŋs-* ‘hear’, illustrated in (25), we see that it only allows the first person possessive marker *-m* inside the complement clause to refer to the speaker of the context of utterance and neither to the speaker of the reported context, *Badma*, realized as the source phrase, nor to the hearer/holder of the propositional attitude of the reported context, *Ajsa*, realized as the matrix subject.

- (25) [*ekə-m* kövü *ɁarɁə-v*] *gi-žə* *Ajsa Badm-asə soŋs-la*.
 mother-POSS.1SG son bear-PST say-CVB.IPFV Ajsa Badma-ABL hear-PST
 ‘Ajsa_i heard from Badma_j that my/*her_i/*his_j mother gave birth to a child.’

In order to account for this pattern, I assume that shifting of a first person indexical is constrained by a general principle given in (26a) and a specific restriction pertaining to Kalmyk given in (26b).

- (26) a. When a first person indexical inside a complement clause shifts, it gets coindexed with the subject of the higher verb.
 b. In Kalmyk, when a first person indexical inside a complement clause shifts, it gets coindexed with the speaker of the reported context if there is one in that context.

Let’s first look at (24a)–(24b). Suppose that the null V associated with *gižə* has a PRO subject, as I suggested in section 4.2.1. In accordance with (26a), in the situation of shifting, the indexical *nandə* in (24a) will be coindexed with PRO. PRO, in turn, will be coindexed with the matrix subject, which is the speaker of the reported context, in line with (26b). This is shown in (27a). In a similar vein, in (24b) the possessor *pro* agreeing with the first person marker *-m* will be coindexed with the matrix subject, which is the holder of propositional attitude (again in line with (26b) since the sentence does not refer to a speech act). This is shown in (27b). As one can see, the shifting of the indexicals in (24a)–(24b) conforms to (26).

- (27) a. *eckənʲ_i* [PRO_i [Badmagə *nandə_i* möngə ögtxä] *gižə*] *keləv*. (= (24a))
 b. [PRO_i [*pro_i* kövüm] instituttə *surxə*] *gižə*] *Bajrta_i* *näälžänä*. (= (24b))

In contrast, in (25) the principle in (26a) requires the first person possessor *pro* to get coindexed with PRO. PRO, in turn, will get coindexed with the matrix subject, *Ajsa*. This, however, will

violate (26b) since *Ajsa* is not the speaker of the reported context, yet there is a speaker in the reported context, namely, *Badma*. The coindexation of the possessor *pro* with *Badma*, however, is also impossible since the PRO associated with *gižə* has to be controlled by the subject. As a result, the indexical in (25) cannot be shifted and will refer to the speaker of the utterance. This is shown in (28).¹⁸

- (28) [PRO_{i/*j} [[*pro*_{Speaker/*i/*j} ekəm] kövü ɣarɣəv] gižə] Ajsa_i Badmasə_j soŋsla. (= (25))

Now let's see what happens when the *gižə*-clause in (25) is replaced with a complex noun phrase comprised of the noun *zəŋgə* accompanied by a *gisən*-clause. This time the first person possessive marker *can* shift to the speaker of the reported context, *Badma*, realized as a source phrase. (Here again I am assuming that the complement of *zəŋgə* independently precludes the quotation interpretation.) Note also that it cannot shift to the addressee, *Ajsa*. This is shown in (29).

- (29) [ekə-m kövü ɣarɣə-v] gi-sən zəŋgə Ajsa Badm-asə soŋs-la.
mother-POSS.1SG son bear-PST say-PTCP.PST news Ajsa Badma-ABL hear-PST
'Ajsa_i heard from Badma_j the news that his_j/*her_i mother gave birth to a child.'

This interpretation, however, apparently violates the principle in (26a) since *Badma* is not the subject. The problem can be solved if the null V associated with *gisən* has a separate subject, namely *pro*, as I suggested in section 4.2.2. By the principle in (26a), the first person possessor *pro* will be coindexed with the *pro* subject. The *pro* subject, as a referential pronoun, can pick up its referent from the linguistic context and thus can be coindexed with the speaker of the reported context, *Badma*. Further note that the coindexation of the possessor *pro* with the addressee, *Ajsa*, will violate the principle in (26b), exactly matching the interpretation of (29). This is shown in (30).

- (30) [*pro*_{j/*i} [[*pro*_{j/*i} ekəm] kövü ɣarɣəv] gisən] zəŋgə Ajsa_i Badmasə_j soŋsla. (= (29))

To summarize, we see that the postulation of the separate subject of the null V associated with *gi-* can account for some restrictions on the distribution of indexical shifting in Kalmyk.¹⁹

5 Conclusion

In this paper I looked at Kalmyk finite complement clauses, which could be introduced by what appears to be the verb *gi-* interpreted as 'say' and a number of nonfinite forms of *gi-* functioning as complementizers. I showed that in its both uses *gi-* shares properties of a complementizer and a verb at the same time. I proposed a unified analysis for these two uses of *gi-*, arguing that *gi-* is a C head selected by null V. I also proposed a possible interpretation of the null V associated with *gi-* and presented an argument from indexical shifting to the effect that *gi-* might have argument structure even in its uses as a complementizer.

¹⁸ Note that the principles in (26) account for the pattern observed in *gižə*-clauses in (24)–(25) independently of whether *gižə* is analyzed as associated with a V head and PRO subject.

¹⁹ David Pesetsky (p. c.) notes that in examples like (29a) it might be the (null) possessor of *zəŋgə* rather than the subject of *gisən* that accounts for the satisfaction of the principle in (26). I leave the discussion of this possibility for future research.

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