

The verb *ʧi:ɣə* in Barguzin Buryat

A case of overt surface anaphora

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This paper examines the verb *ʧi:ɣə* ‘do so’ in Barguzin Buryat. This verb serves as a proform, which, as the research shows, can substitute various structures. I provide a description of the functional distribution of the verb *ʧi:ɣə* and propose that this anaphoric construction is in fact a type of ellipsis, or a case of overt surface anaphora.

1. Introduction

Verbal proform is a type of anaphora in which a certain word or phrase stands in for a verb. This type of anaphoric processes has not yet been extensively studied in languages of the world, since the previous studies based mostly on Germanic languages (in particular Norwegian (Lødrup 1994), Swedish (Källgren & Prince 1989), German (Lopez & Winkler 2000), Danish (van Craenenbroeck 2004, Houser et al. 2006), and English (Kehler & Ward 1999, 2004, Aelbrecht 2009, Baltin 2012, Bentzen et al. 2013, Bruening 2018).

This paper deals with the verb *ʧi:ɣə* ‘do so’, one of the anaphoric verbs in Barguzin Buryat (< Central Mongolic < Mongolic). The data used in this study were collected during a field trip to Baraghan village in the year 2017. The main source of information was elicitation.

According to Sandjeev (1941), the verb *ʧi:ɣə* is one of the so-called ‘pro-nominal verbs’ used in Buryat. Colloquially, they are mostly used in converbal forms that serve as conjunctions between clauses, as demonstrated in (1).

- (1) *ʧi:-xə-də* man-ha: ajaga-tai: xara uha aba-za u:-han xun bajaža-xa
do.so-POT-DAT we-ABL cup-COM black water take-CONV drink-PFCT man get.rich-POT
bolo-no.
become-PRS
(Context: ...when we give the black water to a man, we give away our luck and wealth along with it.) ‘**Then (=having done so)** the man, who has drunk a cup of black water we gave him, will get rich.’

This paper, however, focuses on the anaphoric usage of this verb, which presupposes replacing some lexical verb, the meaning of which can be retrieved from the context. An example of such usage is presented in (2).

- (2) basaga-d oi: ofo-bo. bʲidə baha tʲi:-gəjə!
 girl-PL forest go-PST2 we also do.so-HRT
 ‘The girls went to the forest. Let’s also do so!’

This study provides a thorough description of the construction’s syntax and argues that the verb *tʲi:xə* represents a case of overt surface anaphora, i.e. an anaphoric construction that involves ellipsis and is at the same time phonologically overt.

The paper is structured as follows. Section 2 describes the functional distribution of the verb in question. Section 3 offers a brief overview of the methods used to identify the anaphoric status of similar constructions, proposed in the literature, and the following discussion of the anaphoric status of the verb *tʲi:xə*. Section 4 summarizes the results and offers some concluding observations.

2. Functional distribution of *tʲi:xə*

Let us start with revealing what structures can be replaced by the verb in question. The verb *tʲi:xə* can replace both intransitive (3) and transitive VPs (4).

- (3) badma unta-na dugar baha tʲi:-nə.
 Badma sleep-PRS Dugar also do.so-PRS
 ‘Badma sleeps and Dugar also does.’
- (4) sajana jabloka ədʲi-nə badma baha tʲi:-nə.
 Sajana apple.ACC eat-PRS Badma also do.so-PRS
 ‘Sajana is eating an apple, and Dugar is also doing so.’

As demonstrated by the examples above, the remnant left along with the verb is usually a subject, although some speakers permit DPs of other syntactic roles as remnants and find examples like (5) and (6) acceptable.

- (5) % dugar tort əd-əjə pʲiroʒno baha tʲi:-gəjə.
 Dugar cake.ACC eat-PST1 brownie.ACC also do.so-PST1
 ‘Dugar ate a cake and he also ate a brownie.’
- (6) % tʲæ:rʲən dugar sajana-da bəfəg əlʲgə:-bə xʲulərʲinʲ darʲima-da tʲi:-bə.
 first Dugar Sajana-DAT letter.ACC send-PST2 then Darima-DAT do.so-PST2
 ‘First Dugar sent a letter to Sajana, then he also sent a letter to Darima.’

Adverbs can also be remnants. In that case, the VP with all the arguments of the verb is replaced with *tʲi:xə*, as in (7).

- (7) əglə:gʲər badma ʃəd-ə: səbərʲlə-nə udəʃə baha tʲi:-nə.
 morning Badma tooth-REFL clean-PRS evening also do.so-PRS
 ‘Badma cleans his teeth in the morning and in the evening.’

Sentences like (8), in which more than one remnant is left along with the verb *ʈi:xə* are usually considered to be grammatically incorrect by the speakers.

- (8) * badma darʃim-i:ʃə tan-ja:, dorzʃi dugar-i:ʃə baha ʈi:-gəʃ.
 Badma Darima-ACC recognize-PST1 Dorzhi Dugar-ACC also do.so-PST1
 ‘Badma recognized Darima, and Dorzhi recognized Dugar.’

Structures larger than a usual VP can act as the antecedent of the verb *ʈi:xə* as well. For instance, (9) demonstrates that in cases when the passive verb is the antecedent, the verb *ʈi:xə* can replace both the lexical verb phrase and the passive verb phrase. This is evident from the presence of the passive suffix *-gda* in the former case and its absence in the latter.

- (9) a. gər-tə oʃo:r uga:-gd-a: sonxo baha ʈi:-gəʃ.
 house-DAT floor.NOM clean-PASS-PST1 window.NOM also do.so-PST1
 ‘The floor in the house was cleaned, and the windows also were.’ (a=b)
 b. gər-tə oʃo:r uga:-gd-a: sonxo baha ʈi:-gd-əʃ.
 house-DAT floor.NOM clean-PASS-PST1 window.NOM also do.so-PASS-PST1

Overall, the verb *ʈi:xə* can replace any verbal forms, as long as it is in the appropriate morphological form. For instance, in (10) a nominalization serves as an antecedent for the verbal proform, while in (11) the antecedent of the verbal proform is a participle.¹

- (10) bi badm-i:n tərgə əmdələ-h-i:ə-nʃ məd-ə:-b
 I Badma-GEN cart.ACC break-PFCT-ACC-3 know-PST1-1
 dugar sajan-i:n baha ʈi:gə-h-i:ə-nʃ məd-əʃ.
 Dugar Sajana-GEN also do.so-PFCT-ACC-3 know-PST1
 ‘I know that Badma broke the cart, and Dugar knows the same about Sajana.’

- (11) ʌsəgəldər koncerta-da ʈi:-hən basagan gər-tə hu:-na.
 yesterday concert-DAT do.so-PFCT girl house-DAT sit-PRS
 (Context: The boy who sang at the concert yesterday, is having a walk.) ‘A girl who also did so yesterday, is at home.’

Moreover, the verb *ʈi:xə* can serve as a proform for a whole clause, as shown in (12). (12a) demonstrates that the verb *ʈi:xə* can substitute the embedded clause without its complementizer. In that case the verbal proform copies the morphological form of the embedded verb. At the same time, the Buryat verbal proform can also replace the entire clause including the complementizer *gəʃə*, as shown in the example (12b). Here the verb *ʈi:xə* gets the converb suffix *-ʃə*. Probably, that is possible due to the fact that the complementizer *gəʃə* used to be a converb form of the verb ‘say’ (*gə-ʃə* ‘say-CONV’), that was later grammaticalized.²

- (12) a. badma sajan-i:ə bul-ja: gəʃə han-a:,
 Badma Sajana-ACC win-PST1 COMP think-PST1

¹In (10) the root of the verbal proform is *ʈi:gə-* instead of *ʈi:-*. This is a valid variant of the root, attested in other contexts as well. So far I haven’t found valuable distinctions between two allomorphs.

²One might assume that in (12b) the verbal proform substitutes not an embedded clause with a complementizer but a converb. However, the subjects of the main and embedded clauses are different in that sentence; in these cases converbs cannot be sentential actants.

- ojuna sajan-i:ə baha tʃi:-gə gəʒə han-a:
 Ojuna Sajana-ACC also do.so-PST1 COMP think-PST1
 ‘Badma thought that Sajana had won, and Ojuna also thought Sajana had done so.’
 (a=b)
- b. badma sajan-i:ə bul-ja: gəʒə han-a:,
 Badma Sajana-ACC win-PST1 COMP think-PST1
 ojuna sajan-i:ə baha tʃi:-ʒə han-a:
 Ojuna Sajana-ACC also do.so-CONV think-PST1

Finally, *tʃi:xə* can be used as an affirmative word, as shown in (13).

- (13) *tʃi:-xə*.
 do.so-POT
 ‘(- Will the guest come?) Yes.’

3. The anaphoric status of *tʃi:xə*

Having considered the distribution of the verb *tʃi:xə* I now turn to its anaphoric status.

The present analysis will rely on the terminology suggested by Hankamer & Sag (1976). Hankamer and Sag argue that there are two distinct types of anaphoric processes: surface anaphora and deep anaphora. The former notion describes null phrasal elements, that are deleted or replaced by a proform later in the derivation, while the latter attributes to those anaphors that appear as proforms in the initial numeration. The differences between these two anaphoric processes can be shown with the help of the two constructions, discussed in Hankamer & Sag (1976): VP-ellipsis, which is assumed to be an case of surface anaphora, and *do it* anaphora, assumed to be an instance of deep anaphora. Both are illustrated in (14).

- (14) Baltin 2012: (1)
- a. John will visit Sally, and Fred will ~~visit Sally~~ too.
 - b. John will visit Sally, and Fred will do it too.

Structures like this differ from each other in certain ways. First, anaphors like VP-ellipsis require syntactic control (15a), while anaphors like *do it* permit pragmatic antecedents (15b).

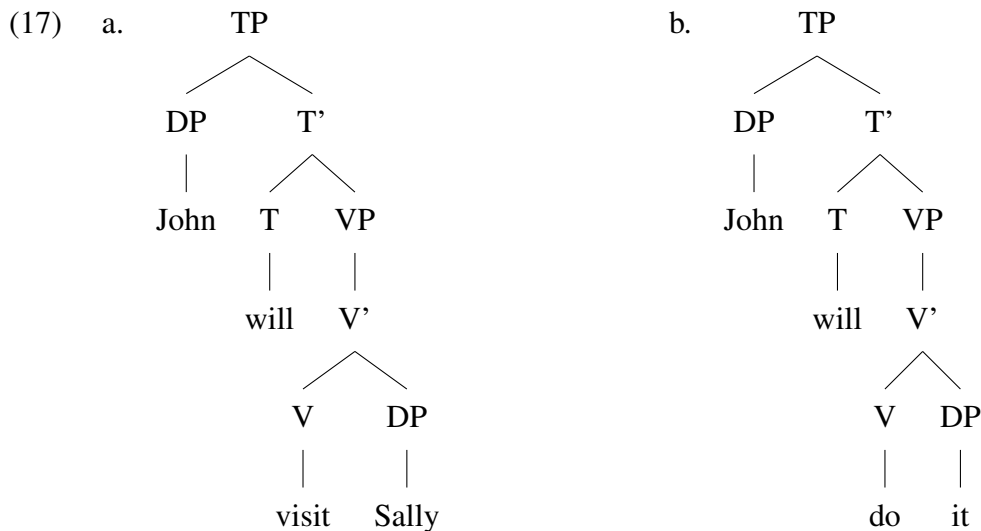
- (15) Hankamer & Sag 1976: (3)-(4)
- a. [Hankamer attempts to stuff a 9-inch ball through a 6-inch loop]
 Sag: #It’s not clear that you’ll be able to.
 - b. [Hankamer attempts to stuff a 9-inch ball through a 6-inch loop]
 Sag: It’s not clear that you’ll be able to do it.

Secondly, structures like these interact differently with the processes that require internal structure for unpronounced material. For instance, *wh*-elements can be extracted out of the null VP (16a), and cannot be extracted out of the *do it* anaphor (16b).

- (16) Baltin 2012: (2)-(3)
- a. Although I dont know who John will visit, I do know who Fred will ~~visit~~.

- b. *Although I don't know who John will visit, I do know who Fred will do it.

These differences are expected if we assume that the null VP originally contains the lexical material that corresponds to its antecedent, while the *do it* anaphor appears in the initial numeration in the same form as it is in in the final numeration. Hence, the underlying structures of the VP-ellipsis and the *do it* anaphora will be (17a) and (17b), respectively (borrowed from Baltin 2012: (4)-(5)).



The one point made in Hankamer & Sag (1976) that is important for this paper is the following: the status of an anaphoric construction is independent of whether it has an overt phonological realization or not. Therefore there are four logically possible types of anaphora, all of which have been observed in the literature: overt and nonovert deep anaphora and overt and nonovert surface anaphora.

VP-ellipsis, that was showed above in (14a), is assumed to be a typical case of nonovert surface anaphora, while the *do it* anaphor (14b) is considered to be an instance of overt deep anaphora (Kehler & Ward 2004). Null complement anaphora (18) is argued to be a case of nonovert deep anaphora (Depiante 2000).

- (18) I asked Bill to leave, but he refused \emptyset .

One example of the overt surface anaphora was reported in Danish in Houser et al. (2006). The researches claim that the *det* pronominal substitutes VPs in a sentence and has the properties of the surface anaphoric process.

- (19) Houser et al. 2006: (1)
 Han siger han kan hkle, men selvflgelig kan han ikke det.
 he says he can crochet but of.course can he not DET
 'He says he can crochet, but of course he can't.'

The objective of this section is to demonstrate that the Hankamer and Sag's assertion about possible types of the anaphoric devices can be backed up not only with the examples from Germanic languages, but from other languages as well. Namely, I will argue that the verb *ʈi:xə*

represents a case of overt surface anaphora, which previously has been claimed to be a rare type of anaphoric devices (Houser et al. 2006).

To begin with, *ʃi:ɣə* can be controlled pragmatically, as shown in (20).

- (20) *mʲinʲi ɣʒə baha ʃi:-dəg.*
 I.GEN mother too do.so-HAB
 (Speaker watches somebody making tea in a certain way and says:) ‘My mother also does so.’

According to Hankamer & Sag (1976), this strongly indicates that the verb in question is a case of deep anaphora. However, as Merchant (2013) claims, pragmatically controlled anaphoric processes might still involve ellipsis, i.e. represent a case of surface anaphora. Therefore we cannot rely on this sampling method alone.

Other characteristics of Buryat verbal proform, however, suggest that it is a case of surface anaphora.

Firstly, as has been shown in the previous section, the verb *ʃi:ɣə* can substitute structures of different size, for instance, a VP and an entire embedded clause. Although, to my knowledge, such a characteristic of an overt anaphoric means has not been previously identified as a diagnostic for its anaphoric status (let alone been attested in other languages), I suggest that it might indicate that the verb in question is a surface anaphor. This is motivated by the following theoretical considerations. If we were to assume that *ʃi:ɣə* is a case of deep anaphora, then we would have to postulate, that there are at least two homonymous proforms — one proform for a VP and one proform for a CP. Although that is a possible way to look at the current phenomena, it is not the most satisfying one. On the contrary, under the surface anaphora analysis the diversity of the possible forms of the Buryat verbal proform is actually expected, since it is supposed to act like an ellipsis site.

Next, the verb *ʃi:ɣə* can replace stative verbs, as shown in (3). As noted in Bentzen et al. (2013), this fact distinguishes at least the Norwegian surface anaphor *gjøre det* from English deep anaphors *do it* and *do so*. Even though there are no close congeners for the Buryat verbal proform, I still think that it is important to note that *ʃi:ɣə* correlates with other surface anaphors in this matter.

- (21) *bʲi badm-i:n tərgə əbd-ə:-ʃ-i:ə məbdə-nə-b*
 I Badma-GEN cart.ACC break-PST1-PART-ACC know-PRS-1
dugar baha ʃi:-nə.
 Dugar also do.so-PRS
 ‘Badma sleeps and Dugar also does.’

Finally, it is possible to extract constituents out of *ʃi:ɣə*. This fact indicates that the verb in question has an internal structure of a kind, which allows to make an extraction out of it. The following examples suggest that both A-extraction and A'-extraction are possible.

To begin with, this verb can substitute passive forms of the verb. The fact that the subject of the passive VP can be the remnant left along with the verb *ʃi:ɣə*, as in (22), means that the A-extraction of the internal argument of the initial verb is possible.

- (22) *gəɾ-tə ojo:r uga:-gd-a: sonxo baha ʃi:-gəɪ.*
 house-DAT floor.NOM clean-PASS-PST1 window.NOM also do.so-PST1
 ‘The floor in the house was cleaned, and the window also was.’

The same fact holds for the cases in which the nominalization is substituted by the proform, as demonstrated in (10) in the previous section, repeated here as (23). According to Bondarenko (2017) the subject of the nominalization receives the genitive case when the phi-features are transmitted from head of the highest functional projection of the nominalization (F_0) onto a lower nominalizing head (n_0), and the subject is forced to undergo movement to the Spec, nP . If this analysis is true, then the sentence in (23) clearly indicates that this type of movement out of the *tʰi:xə* internal structure is possible as well.

- (23) bi badm-i:n tərgə əmdəl-h-i:ə-nʲ məd-əi-b
 I Badma-GEN cart.ACC break-PFCT-ACC-3 know-PST1-1
 dugar sajan-i:n baha tʰi:gə-h-i:ə-nʲ məd-ə.
 Dugar Sajana-GEN also do.so-PFCT-ACC-3 know-PST1
 ‘I know that Badma broke the cart, and Dugar knows the same about Sajana.’

The next set of examples proves that A'-extraction out of the structure of *tʰi:xə* might be possible as well. First, some speakers allow A'-extraction of direct and indirect object out of the ellipsis site, as it was demonstrated in the previous section (examples (5) and (6) are repeated here as (24) and (25), respectively).

- (24) % dugar tort əd-əjə pʲi:roʒno baha tʰi:gəi.
 Dugar cake.ACC eat-PST1 brownie.ACC also do.so-PST1
 ‘Dugar ate a cake and he also ate a brownie.’
- (25) % tʰi:rʰən dugar sajana-da bəfəg əlʲgəi-bə xʉlʰəʲinʲ darʲima-da tʰi:-bə.
 first Dugar Sajana-DAT letter.ACC send-PST2 then Darima-DAT do.so-PST2
 ‘First Dugar sent a letter to Sajana, then he also sent a letter to Darima.’

Secondly, wh-words can be extracted out of the proform site as well, as shown in (26). I must note that the nature of this movement is not clear as generally there is no wh-movement in Buryat. However, wh-words can be scrambled (27), so it may be assumed that scrambling out of *tʰi:xə* is permissible.³

- (26) a. xən-ʲə-b buxi: konfətə əd-əjə xarin xən tʰi:-gəi-b bi mədənə-gʉi-b
 who-FC-Q all candy eat-PST1 but who do.so-PST1-Q I know-NEG-1
 ‘Somebody ate all the candies, but I don’t know who did it.’
- b. əʒi: unf-a: xarʲin bʲi mədə-nə-gʉi-b ju: tʰi:g-əi-b
 mother read-PST1 but I know-PRS-NEG-1 what.ACC do.so-PST1-Q
 ‘Mother was reading, but I don’t know what she was reading.’
- (27) (ju:) badma (ju:) əstər (ju:) ugra:d so:-go: (ju:) ol-o:-b
 what badma what yesterday what yard in-REFL what find-PST1-Q
 ‘What did Badma found yesterday in the yard?’

³I must admit, that some speakers do not consider the examples with A'-extraction to be fully acceptable. This fact correlates with the observations, that many overt surface anaphors do not allow A'-extraction, while allowing A-extractions (see Houser et al. 2006, Bentzen et al. 2013 and Bruening 2018). Two questions arise then: (i) why are A'-extractions more restricted than the A-extractions (see Bruening 2018 for a possible explanation); (ii) why do some Buryat speakers consistently allow A'-extractions out of the overt surface anaphor. I leave both questions open for now.

I should note that not all the reliable diagnostics suggested in the literature were used due to the lack of information about the Buryat language. I address the reader to Merchant (2013) for an overview of other tests for ellipsis. However, I believe that the tests that could be conducted present sufficient evidence in favour of stating that *ʃi:xə* is indeed an example of surface anaphora.

4. Conclusion

The present paper discusses the verb *ʃi:xə* ‘do so’ in Buryat. I briefly described its distribution and properties and argued that this verb represents a case of an overt surface anaphoric construction. That claim is supported by the fact that *ʃi:xə* can substitute structures of different size (VPs and CPs) and the possibility of extraction out of the proformed cite. The only obstacle to analyzing *ʃi:xə* as a surface anaphora is the availability of the pragmatic control. However, I believe that the last fact actually reinforces doubts on the reliability of this method, previously expressed in Merchant (2013).

Buryat data provides us with a typological confirmation of the existence of the overt surface anaphora category, which was otherwise in question, as already noted in Houser et al. (2006). Moreover, the Buryat verbal proform differs drastically from the verbal anaphors in Germanic languages in its distribution, therefore presenting a typologically interesting type of anaphoric device.

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Abbreviations

1, 3	1st and 3rd person	NEG	negation
ABL	ablative case	NOM	nominative case
ACC	accusative case	PART	participle
COM	comitative case	PFCT	perfect
COMP	complementaizer	PL	plural
CONV	converb	POT	potentialis
DAT	dative case	PST1	1st past
FC	focus particle	PST2	2nd past
GEN	genitive case	Q	question particle
HAB	habitual	REFL	reflexive
HRT	hortative	RS	retrospective shift

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