

## Raising in Altaic languages: syntactic criteria

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### 1. Introduction

Raising has been defined as a construction where the subject of the dependent clause is assigned morphological case from the matrix verb and occupies the syntactic position in the matrix clause:

- (1) I believe him to be a linguist vs.
- (2) I believe that he is a linguist.
- (3) He is believed to be a linguist.

The analysis of the raised NP as occupying the position in the matrix clause is supported by a large number of syntactic tests that include reflexivization, reciprocals, passivization of the matrix verb, scope of quantifiers (Lasnik, Saito 1991), constituency tests, idioms' test, passivization of the dependent verb and others (see Postal 1974; Davies, Dubinsky 2004).

In other languages, the constructions with similar properties are attested: an argument of the dependent clause shows the structural properties of an argument of the matrix clause.

Nieuan > Polynesian (Seiter 1983: 321)

- (4) a. To maeke e ekekafo [ke lagomatai e tama ē].  
FUT possible ABS doctor SUBJ help ABS child this
- b. To maeke e tama ē [ke lagomatai he ekekafo].  
FUT possible ABS doctor this SUBJ help ERG doctor

The doctor could have helped this child.

Chamorro > Austronesian (Gibson 1980; cited after Davies, Dubinsky 2004: 57)

- (5) a. Si Lucy ha ekspekta na si Miguel pära u konni'  
the L 3SG expect COMP the M IRREALIS 3SG take  
i famagu'un pära eskuela.  
the children to school  
Lucy expects that Miguel will take the children to school.
- b. Si Lucy ha ekspekta si Miguel pära u konni' i famagu'un...  
the L 3SG expect the M IRREALIS 3SG take the children...  
Lucy expects Miguel to take the children to school.
- c. In-ekspekta si Miguel as Lucy pära u konni' i famagu'un...  
PASS-expect the M OBL L IRREALIS 3SG take the children  
Miguel is expected by Lucy to take the children to school.

Japanese > Altaic (Kuno 1976, Ohta 1997, Yoon 2007)

- (6) Yamada wa sono hon o [tumara-nai] to omot-ta.  
Yamada TOP this book ACC interesting-NEG COMPL think-PST  
Yamada thought that this book is not interesting. (Kuno 1976: 33-34)

In Altaic languages there are complement constructions that seem, at first sight, to show the properties of raising to the object position (as in English), cf. (1) and (2)

Tuvinian (Turkic)

- (7) [ada-je-m-nə končužu-p tur-gan-ən] men dəŋna-də-m  
father-mother-my-ACC quarrel-CONV stay-NMZ.PST-ACC.P.3 I hear-PST-1SG  
I heard my parents quarrelling.

Kalmyk (Mongolic)

- (8) bi čini kövü-gə qazad-in orən-də  
I you.GEN son-ACC foreign.country-GEN country-DAT  
sur-cha-x-i-ny med-sən uga-v.  
study-PROG-PC.FUT-ACC-P.3 know-PC.PST NEG.COP-1SG  
I did not know that your son studied abroad.

In Altaic languages the raising can occur both from nominalizations and from finite sentential complements. The subject of the embedded clause can be overtly expressed in these constructions: apart from the accusative, the nominative case subject is possible (in nominalizations, also genitive is acceptable in some cases):

Tuvinian

- (9) [ada-je-m      končužu-p      tur-gan-ən]      men      dəŋna-də-m  
 father-mother-1SG      quarrel-CONV      stay-NMZ.PST-ACC.P.3      I      hear-PST-1SG  
 I heard my parents quarrelling.

Kalmyk

- (10) bi      [čini      kövün      qazad-in      orən-də  
 I      you.GEN      son(NOM)      foreign.country-GEN      country-DAT  
 sur-ča-x-i-ny]      med-sən      uga-v.  
 study-PROG-PC.FUT-ACC-P.3      know-PC.PST      NEG.COP-1SG  
 I did not know that your son studied abroad.

However, these constructions demonstrate a number of properties that can not be explained on the basis of the analysis involving raising to the object position.

Languages: Tuvinian (Turkic, Altaic) and Kalmyk (Mongolic). The data have been collected during fieldwork with native speakers.

## 2. Syntactic properties of the raising construction

Cf. Postal 1974, Lasnik, Saito 1991, Davies, Dubinsky 2004, Serdobolskaya 2009.

2.1. The accusative NP in the discussed constructions shows the properties of an element of the matrix clause.

- the accusative NP can be replaced by the reflexive pronoun with the antecedent in the main clause;

- (11) [bijän      nōör-t-än      jov-dg-an      giqäd]      bi      soŋs-la-v  
 REFL.ACC      sleep-DAT-P.REFL      walk-PC.HAB-P.REFL      COMPL      I      hear-REM-1SG  
 I've heard that I walk in the sleep.

- the accusative NP can be replaced by the reciprocal with the antecedent in the main clause;

- (12) tedən      [neg      neg-än      qārg-tä      giqäd]      tool-na  
 they      one      one-P.REFL<sup>1</sup>      foolish-ASSOC      COMPL      think-PRS  
 They believe each other to be foolish.

- the accusative NP can occupy the linear position in the matrix clause:

- (13) [bi      med-sən      uga-v      [čamagə]      ir-s-i-n']  
 I      know-PC.PST      NEG.COP-1SG      you.ACC      come-PC.PST-ACC-P.3  
 I did't know that you had come.

the accusative NP and the dependent predicates exchange their linear positions:

...irsin'      čamagə      (\*či)  
 come-PC.PST-ACC-P.3      you.ACC      you(NOM)

the accusative NP allows interlacing with the matrix clause elements:

[ir-s-i-n']      bi      [čamagə (\*či)]      med-sən      uga-v  
 come-PC.PST      I      you.ACC      you      know-PC.PST      NEG.COP-1SG

\*\*\* raising vs. control:

<sup>1</sup> The form of the pronoun *neg neg-* with the reflexive possessive is used in direct object position.

(14) I believe the cat to be out of the bag

(15) a. xuux-in üsn bos-xə.  
skin-GEN hair raise-PC.FUT

His hair stood on end.

b. [xuux-in üs-igə bos-x-i-ny] med-nä-v.  
skin-GEN hair-ACC raise-PC.FUT-ACC-P.3 know-PRS-1

I know that it will be a hair-raiser (lit. that the hair will stand on end).

□ no copy raising is allowed:

(16) \*badma-gə [ter ir-s-i-ny] bi med-sən uga-v  
you.ACC DEM come-PC.PST-ACC-P.3 I know-PC.PST NEG.COP-1SG

I didn't know that Badma had come.

2.2. However, the accusative NP does not occupy the position of the direct object of the matrix clause.

□ passivization of the matrix verb:

(17) \*bi ter ämtəz-də [sad-in dotər or-s-i-ny] üz-gd-lä-v  
I DEM human-DAT garden-GEN inside enter-PC.PST-ACC-P.3 see-PASS-REM-1

(I was seen sneaking into the garden by these people.)

Cf.:

(18) bi ter ämtəz-də üz-gd-lä-v  
I DEM human-DAT see-PASS-REM-1

I was seen by these people.

The verb “to see” can passivize, and while passivized it can have a situation as a subject:

(19) [kün sad-in dotər or-sə-ny] üz-gd-lä  
person garden-GEN inside enter-PC.PST-P.3 see-PASS-REM

The fact that someone sneaked into the garden was seen.

□ two accusative NPs in the matrix clause and in the dependent clause:

(20) [čamagə ir-s-i-ny / ir-s-igə] bi med-sən uga-v (\*či)  
you.ACC come-PC.PST-ACC-P.3 / come-PC.PST-ACC I know-PC.PST NEG.COP-1 you.NOM

I didn't know that you had come.

(21) [čamagə cə (\*cə-əgə) uu-čk-s-i-ny] med-sən uga-v  
you.ACC tea tea-ACC drink-PRF.TR-PC.PST-ACC-P.3 know-PC.PST NEG.COP-1

I didn't know that you had drunk all the tea.

That suggests that the accusative in the discussed construction is not assigned in the matrix clause, but in the dependent clause. Another argument for this claim:

□ the subject can be marked with the accusative even if the matrix verb is intransitive, and in adverbial clauses:

(22) cecg-üd narn-əd dur-ta  
flower-PL sun-DAT love-COMIT

Flowers love the sun, lit. Flowers are with love to the sun. (Ilishkin 1964: 276)

(23) bi dur-ta-v [čamagə duul-xla]  
I love-COMIT-1 you.ACC sing-CV.SUCC

I love it when you sing.

(24) [čamagə ir-xə ömən] bi elstə-də kür-čk-sən bi-lä-v  
you.ACC come-PC.FUT before I Elista-DAT reach-COMPL-PC.PST БЫТЬ-REM-1

When you arrived, I already was in Elista.

Hence, the accusative NP does not occupy the position of the matrix verbs direct object, but apparently, it occupies some position within the matrix clause. To clarify this point, I consider constituency tests:

[matrix clause (ACC NP) dependent clause)

### 2.3. CONSTITUENCY TESTS

The accusative NP forms a constituent with the rest of dependent clause.

- the accusative NP be postposed to the adverb within the dependent clause:

(25) [**čamagə** öckəldür ir-s-i-čən] bi med-sən uga-v  
you.ACC yesterday come-PC.PST-ACC-P.2SG I know-PC.PST NEG.COP-1SG

(26) öckəldür **čam-agə** irsičən bi med-sən ugav  
a=b. I didn't know that you had come yesterday.

- pronoun replacement

(27) [**baatr-igə** ger av-sən giqäd] soŋs-l-čə?  
Baty-ACC house take-PC.PST COMPL hear-REM-2SG  
– ee, bi ter-ügə soŋs-la-v  
yes I DEM-ACC hear-REM-1SG

Did you know that Batyr has married? – Yes, I know that.

- topicalization: the dependent clause with the accusative NP can be topicalized;
- the group “dependent clause with the accusative NP” can form an independent utterance (as answer to a question):

(28) – ju badma tuskar soŋs-u-ch? – [**badma-gə**  
what Badma about hear-Q-2SG Badma-ACC  
mashi xul-dhə av-sən giqäd]  
car buy-CV.IPFV take-PC.PST COMPL

What did you hear about Badma? – That he had bought a car.

- the group “dependent clause with the accusative NP” can be in the focus of the contrast;
- the group “dependent clause with the accusative NP” can be a contrastive topic:

(29) [**xuldač-igə** jöv-sən giqäd] soŋs-la-v, lavkə xaa-lq-a-qi-ny  
seller-ACC leave-PC.PST COMPL hear-REM-1SG shop close-CAUS-CONT-ACC-P.3  
med-sən uga-v  
know-PC.PST NEG.COP-1SG

I heard that the seller had left, but I didn't know that the shop had been closed.

- the dependent clause with the accusative subject can be omitted by ellipsis;

(30) eckə med-nä [**badma-gə** kichäl-də  
father know-PRS Badma-ACC lesson-DAT  
od-dg-o-qi-ny], ekə med-x-shä  
go-PC.HAB-NEG.COP-ACC-P.3 mother know-PC.FUT-NEG

The father knows that Batyr skips lessons, but the mother doesn't.

- Right Node Raising: two conjoined matrix clauses by one dependent clause with the accusative NP:

(31) ekə med-nä, eckə bolxla med-x-shä  
mother know-PRS father however know-PC.FUT-NEG  
[**badma-gə** tämkə tatə-dha-x-i-ny]  
Badma-ACC tobacco pull-PROG-ACC-P.3

Mother knows and father doesn't know that Badma smokes.

- particles' scope:

(32) [**badm-igə** ir-s-igə basə] med-sən uga-v  
Badma-ACC come-PC.PST-ACC also know-PC.PST NEG.COP-1SG

a. I didn't know that Badma, too, had come [in addition to other people].

b. I didn't know that Badma had come, too [in addition to other events: your daughter had married etc.].

The accusative NP does not form a constituent with the matrix clause.

- pronoun replacement the dependent clause without the accusative NP can not be replaced by anaphoric pronoun:

(33) [baatr-igə ger avsən giqäd] soŋs-l-chə?  
 Batyr-ACC house take-PC.PST COMPL hear-PCL.EMPH-2SG  
 Did you hear that Batyr had married?

\* bi baatr-igə terügə soŋs-la-v  
 I Batyr-ACC DEM-ACC hear-REM-1SG  
 (I heard this about him.)

This meaning can be conveyed with a different construction:

(34) bi baatr-in tuskar ter-ügə soŋs-la-v  
 I Batyr-GEN about DEM-ACC hear-REM-1SG  
 Yes, I've heard it about him.

- acceptability of the group as an independent utterance the dependent clause without the accusative NP can not appear as an independent utterance:

(35) badma-n tuskar ju med-ən-č? – ger av-s-i-n' soŋs-la-v.  
 Badma-GEN about what know-PRS-2SG house take-PC.PST-ACC-P.3 hear-REM-1  
 \*badma-gə /Badma-ACC/  
 What do you know about Badma? lit. That had married.

Hence, the group “accusative NP with the dependent clause” does form a constituent, while “the accusative NP with the matrix clause” does not.

#### 2.4. Preliminary conclusions on Kalmyk raising

- the accusative NP in raising construction is assigned in the dependent clause
- the accusative NP does not occupy the position of the matrix clause direct object
- the accusative NP forms a constituent with dependent clause, and does not form a constituent with the matrix clause

However, the accusative NP at the same time

- can occupy the linear position in the matrix clause
- shows the structural properties of an element of the matrix clause (replacement with reflexive and reciprocal pronoun).

Similar discrepancy is observed in Tuvinian:

#### 2.5. Tuvinian raising

Passivization: it is impossible to passivize the matrix verb and make the ‘raised’ NP the matrix clause subject:

(36) \*[Ada-je-m] končužu-p tur-gan-ən koža-lar-ga dyŋna-l-gan.  
 father-mother-P.1SG quarrel-CONV stand-NZR.PST-ACC.P.3 neighbour-PL-DAT hear-PASS-NZR.PST  
 (My parents have been heard quarrelling by the neighbours.)

Cf.:

(37) Koža-lar-ga ada-je-m sug-lar dyŋna-l-gan-nar.  
 neighbour-PL-DAT father-mother-P.1SG both-PL hear-PASS-NZR-PL

My parents have been heard by the neighbours.

Ada-je-m končužu-p tur-gan-ə koža-lar-ga dyŋna-l-gan.  
 father-mother-P.1SG quarrel-CONV stand-NZR.PST-P.3 neighbour-PL-DAT hear-PASS-NZR.PST

The quarrel of my parents has been heard by the neighbours.

reflexive, reciprocals: not applicable

Linear position: the accusative NP occupies the position within the matrix clause:

No material (e.g., adverbials from the embedded clause) can intervene between the raised NP and the matrix clause:

- (38) a. [Ajas [kudum-čuže ɣn-geš] ool-du ete-p kaap-kan-ən] men kər-dɣ-m.  
 Ajas street-LAT go-CONV boy-ACC beat-CONV AUX-PART.PST-ACC I see-PST-1SG  
 b. [kudum-čuže ɣn-geš] Ajas...  
 street-LAT go-CONV Ajas...

I saw Ajas beating the boy, after he (Ajas) has gone out.

- (39) [Ajas-tə [kudum-čuže ɣn-geš] ool-du ete-p kaap-kan-ən] men kər-dɣ-m.  
 Ajas-ACC street-LAT go-CONV boy-ACC beat-CONV AUX-PART.PST-ACC I see-PST-1SG  
 ?? [kudum-čuže ɣn-geš] Ajas-tə...  
 street-LAT go-CONV Ajas-ACC...

I saw Ajas beating the boy, after he (Ajas) has gone out.

The raised NP can either precede or follow the embedded VP (9), while the nominative and genitive subject occupy a fixed position within the embedded clause (10).

- (40) ? [košeljok čidiri-p tur-gan-ən akə-ŋ-nə] esker-di-m.  
 wallet let.fall-CONV AUX-PART.PST-ACC.P.3 brother-P.2SG-ACC notice-PST-1SG

I noticed that your brother had lost his wallet.

- \* [košeljok čidiri-p tur-gan-ən akə-ŋ-nəŋ / akə-ŋ] esker-di-m.  
 wallet let.fall-CONV AUX-PART.PST-ACC.P.3 brother-P.2SG-GEN brother-P.2SG notice-PST-1SG

I noticed that your brother had lost his wallet.

Scope: the raised NP does not reconstruct to the gap in the embedded clause for the purpose of scope:

- (41) a. [kəm-nə košeljok čidiri-p tur-gan-ən] esker-di-ŋ?  
 who-ACC wallet let.fall-CONV AUX-PART.PST-ACC.P.3 notice-PST-2SG

Who (of them) did you notice to lose his wallet?

Cf. narrow scope reading in (b):

- b. [kəm-nəŋ košeljok čidiri-p tur-gan-ən ] esker-di-ŋ?  
 who-GEN wallet let.fall-CONV AUX-PART.PST-ACC.P.3 notice-PST-2SG

Did you notice anyone to have lost his wallet?

Pied-Piping of the embedded verb, in case the accusative NP is in the focus of wh-question:

- (42) a. kəm-nə kər-dɣ-ŋ [ool-du ete-p kaap-kan-ən]?  
 who-ACC see-PST-2SG boy-ACC beat-CONV AUX-PART.PST-ACC

Who, as you have seen, was beating the boy? (lit. Who did you see beating)

Cf.:

- b. \*kəm kər-dɣ-ŋ [ool-du ete-p kaap-kan-ən]?  
 who see-PST-2SG boy-ACC beat-CONV AUX-PART.PST-ACC

However, the accusative NP with the dependent clause does form a constituent, as in Kalmyk:

The accusative NP with the embedded clause can be replaced by a pronoun:

- (43) [ada-je-m sug-lar-nə končužu-p tur-gan-ən]  
 father-mother-P.1SG both-PL-ACC quarrel-CONV AUX-NZR.PST-ACC.P.3  
 dəŋna-də-m. — men baza onu dəŋna-dy-m.  
 hear-PST-1SG I also it.ACC hear-PST-1SG

I've heard my parents quarelling. — Yes, I've heard **it**, too.

\* Men baza ada-je-m sug-lar-nə onu dəŋna-də-m.  
 I too mother-father both-PL-ACC it.ACC hear-PST-1SG

The embedded clause with the ‘raised’ NP can form an independent utterance (e.g., an answer to a question):

(44) čŋny dəŋna-də-ŋ? — [ada-je-m sug-lar-nə končužu-p tur-gan-ən].  
 what hear-PST-2SG father-mother-P.1SG both-PL-ACC quarrel-CONV AUX-NZR.PST-ACC.P.3

What have you heard? — lit. My parents quarrelling.

However, contrary to Kalmyk:

- no ban on two accusative NP in the dependent clause

## 2.6. Pre-theoretic generalizations and analysis

Hence, both in Kalmyk and Tuvinian the accusative NP in question occupies a position on the edge of the dependent clause, where it can yield to syntactic processed available in the matrix clause.

However, it forms a constituent with the rest of the dependent clause. The question arises, what this position is.

I claim that this position is the one on the left periphery of the dependent clause.

### ? Why left periphery?

This claim is motivated by the fact that the accusative marking is chosen if the subject of the dependent clause is the topic of the sentence:

(45) [badma-gə terzə xamxl-s-i-ny] bi soŋsla-v  
 Badma-ACC window break-PC.PST-ACC-P.3 I hear-REM-1SG

{Badma’s mother comes to school, and the teacher starts complaining that he is naughty. The woman answers:} Yes, by the way, I heard that Badma had broken a window. {My husband will frame the new glass}

(46) [ter terz-igə baatər xamxl-s-i-ny] bi med-dhä-nä-v  
 DEM window-ACC Batyr(NOM) break-PC.PST-ACC-P.3 I know-PROG-PRS-1SG

{The same situation, and the teacher says that Badma had broken a window. The woman answers: You are scolding Badma for having broken the window.} But it is Batyr who has broken the window. {Badma was at home when it happened.}

Tests:

- no indefinite accusative subjects are allowed:

(47) [madən-də šin bagšə / \*bagš-igə ir-dhə giqäd] bi soŋs-la-v  
 we-DAT new teacher teacher-ACC come-EVD COMPL I hear-REM-1  
 I heard that a new teacher came [to our school].

- accusative is ungrammatical if the dependent clause subject is in the contrastive focus:

(48) a. [badəm bishə baatər ir-s-i-ny] med-nä-v  
 Badma NEG.PTCL Batyr come-PC.PST-ACC-P.3 know-PRS-1

б. \*badm-igə bishə baatr-igə ir-s-i-ny] med-nä-v  
 Badma-ACC NEG.PTCL Batyr-ACC come-PC.PST-ACC-P.3 know-PRS-1

I know that it is not Badma, but Batyr, who has come.

- nominative is strongly preferred if the dependent clause subject is in the focus of a wh-question:

(49) [ken / ?? ken-igə ir-lä giqäd] chi soŋs-l-ch?  
 who(NOM) who-ACC come-REM COMPL you hear-PCL.EMPH-2  
 {Echo-question:} Who did you hear had come?

Only one dependent clause subject can be marked with the accusative, if there are two conjoined dependent clauses:

- (50) [baatər ir-s-i-ny] bi soŋs-la-v, [badm-igə \_\_\_] soŋs-ən uga-v  
 Batyr come-PC.PST-ACC-P.3 I hear-REM-1SG Badma-ACC hear-PC.PST NEG.COP-1SG  
 That Batyr had come, I have heard, but I have not heard that Badma had come.

? Why the accusative is chosen for encoding the topicality of the dependent clause subject?

Differential Object Marking

- animacy
- (referential properties)
- information structure of the utterance

Kalmyk: DOM

- (51) bi en xöö-gə / xö [al-xə-v]  
 I.NOM this sheep sheep-ACC slaughter-PC.FUT-1SG  
 I will slaughter this sheep. (Konoshenko 2009: 59)

Tuvinian – DOM described in Muravyova 1992 and other works:

- (52) urug ajak-tə / ajak buzup-kan  
 girl cup-ACC cup break-PST  
 The girl has broken a/the cup.

### 3. Conclusions

The raising in Mongolic and Turkic languages is also possible with intransitive matrix verbs. The accusative can be assigned to the raised NP with matrix verbs that can not have a direct object and even in adverbial clauses. The accusative subjects can not become the main clause subject by passivization of the matrix verb. These facts lead to the conclusion that the accusative in this case is not assigned by the matrix verb. Still, it can be shown that the raised NP occupies some position within the matrix clause, since it may be expressed by reflexive / reciprocal pronouns that have an antecedent in the matrix clause (for other arguments of the dependent verb it is impossible). Constituency tests give a rather controversial result: there are tests show that the raised NP belongs to the matrix clause; however, it forms a constituent with the dependent clause, and not with the matrix one.

Both in Tuvinian and Kalmyk, the choice between the raising construction and the construction without raising (with nominative subject) is regulated by the animacy of the dependent clause subject and by the information structure of the sentence. If the raised NP constitutes the topic or the focus of the sentence, it is raised. Else the construction without raising is chosen.

On the basis on these arguments, I claim that the constructions in Tuvinian and Kalmyk can not be termed as raising to object. I argue that another type of raising is to be postulated, which I propose to analyze as raising to the left periphery of the dependent clause. In this position it can have some properties of the matrix clause argument; however, it still retains the position within the dependent clause. This explains the relevance of the information structure for the choice of the construction. It also explains why the raised NP still forms a constituent with a lower clause and can not become a subject by the passivization of the matrix verb.

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