

# Case on embedded subjects in Sakha\*

Christine Soh Yue  
csohyue@sas.upenn.edu  
*University of Pennsylvania*

WAFL  
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## 1 Introduction

### 1.1 Sakha and Case Theory

- Sakha adjunct clause constructions have been presented as striking data for uniquely Dependent Case Theory (Baker & Vinokurova 2010, henceforth B&V)
- ACC case can surface on what seems to be the subject of the embedded clause, in *prima facie* absence of a functional head

- (1) Masha Misha-(**ny**) kel-ie      dien jie-ni      khomuy-da  
Masha Misha-ACC come-FUT DIEN house-ACC tidy-PST.3SG  
'Masha tidied up the house (thinking) Misha would come'  
(Vinokurova 2005: 368)

- (2) B&V case assignment for ACC and DAT case
- a. If there are two distinct argumental NPs in the same VP-phase such that NP1 c-commands NP2, then value the case feature of NP1 as dative unless NP2 has already been marked for case
  - b. If there are two distinct argumental NPs in the same phase such that NP1 c-commands NP2, then value the case feature of NP2 as accusative unless NP1 has already been marked for case
- B&V's analysis of ACC in (1): embedded subject Misha raises to the edge of the embedded CP, where it is visible as a case competitor with the matrix subject Masha

- (1) Masha [<sub>CP</sub> Misha-(ny) kel-ie      di-en ] jie-ni      khomuy-da  
Masha [<sub>CP</sub> Misha-ACC come-FUT DIEN ] house-ACC tidy-PST.3SG  
'Masha tidied up the house (thinking) Misha would come'

### 1.2 Our claim

- The structure was analyzed incorrectly in B&V—the adjunct clause is an adjunct ConverbP rather than an adjunct CP
  - The CP is headed by the complementizer *dien*, which is historically derived from a converb form of *di-* 'to say'
  - The ConverbP is headed by the converb of anteriority (CVANT) *di-en* say-CVANT 'after saying'
- Both elements are present synchronically

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- This exceptional ACC on embedded subjects is assigned by converb *di-en* (see also Major, submitted)

- (1) Masha Misha-(ny) kel-ie      **di-en**      jie-ni      khomuy-da  
 Masha Misha-ACC come-FUT say-CVANT house-ACC tidy-PST.3SG  
 ‘Masha tidied up the house (thinking) Misha would come’

### 1.3 Roadmap

§2 Complementizer *dien* vs. Converb *di-en*

§3 Analysis of ACC in adjunct (converb) clauses

§4 Analysis of ACC in complement clauses

§5 Conclusion

## 2 Complementizer *dien* vs. Converb *di-en*

Four tests to resolve lexical ambiguity:

1. Subject agreement morphology
2. Semantic restriction on subjects
3. Insertion of the word *baran* ‘after’
4. Replacement with other converbal forms

### 2.1 Subject agreement morphology

- Converbs can have subject agreement morphology (Pakendorf, 2007)...

- (3) Sahyl-lar kihi iher-in      keor-eon-**ner** kuot-an khaal-byt-tar  
 fox-PL    man come-3SP.ACC see-CVB-3PL run-CVB stay-PST-3PL  
 ‘After seeing the man coming, the foxes ran away.’

- ... but complementizers cannot

- (4) o5o-lor jie-ge      kel-bit-ter      dien-(\***ner**) surakh-tar  
 child-PL home-DAT come-PST-3PL COMP-3PL    rumor-PL  
 ‘The rumors that the children came home’

- *di-en* in adjunct clauses can have subject agreement morphology...

- (5) Misha-(ny) kel-ie      di-em-**min**      jie-ni      khomuy-d-um  
 Misha-ACC come-FUT say-CVB-1SG house-ACC tidy-PST-1SG  
 ‘I, (saying) Misha would come, tidied the house.’

- ... while *dien* in complement clauses cannot

- (6) a. min ehigi-(ni) kel-be-tekh-khit      dien    isti-bit-im  
 1SG 2PL-ACC come-NEG-PST-2PL COMP hear-PST-1SG  
 ‘I heard that you did not come.’

- b. min ehigi-(ni) kel-be-tekh-khit diem-**min** isti-bit-im  
 1SG 2PL-ACC come-NEG-PST-2PL COMP-1SG hear-PST-1SG  
 ‘I heard (something else) after saying that you did not come.’  
 NOT: ‘I heard that you did not come.’
- c. \*min ehigi-(ni) kel-be-tekh-khit dien’-**n’it** isti-bit-im  
 1SG 2PL-ACC come-NEG-PST-2PL COMP-2PL hear-PST-1SG  
 ‘I heard that you did not come.’

## 2.2 Semantic restriction on subjects

- Converbs exhibit subject control; that is, the subject of the converb event is controlled by the subject of the matrix event

- (7) Itini бүтөр-ен min sarsyn bar-ya-m  
 after finish-CVANT 1SG tomorrow leav-FUT-1SG  
 ‘After finishing that, I will leave tomorrow.’ (Petrova 2011, 294a)

- The matrix subject of an adjunct clause construction is restricted to entities that can speak, just like matrix verb ‘say’

- (8) **o5o/#sylgy** ehigi-(ni) be5ehee aan-y sap-pat-akh-khyt di-en khahaa-ttan  
 child/#horse 2PL-ACC yesterday gate-ACC close-NEG-PST-2PL say-CVANT stable-ABL  
 bar-byt  
 leave-PST  
 ‘The child/The horse, (saying) that you didn’t close the gate yesterday, left the stable.’

- (9) **o5o/#sylgy** ehigi-(ni) be5ehee aan-y sap-pat-akh-khyt die-bit  
 child/horse 2PL-ACC yesterday gate-ACC close-NEG-PST-2PL say-PST.3SG  
 ‘The child/#horse said you didn’t close the gate yesterday.’

- The restriction goes away when the *di-en* clause is replaced with a nominalized participial clause

- (10) sylgy [ ehigi aan-y sap-pat-akh-khyt-yttan ] khahaa-ttan bar-byt  
 horse [ 2PL gate-ACC close-NEG-PST.NMLZ-3PL-ABL.3SP ] stable-ABL leave-PST  
 ‘The horse left the stable that you didn’t close the gate.’  
 (lit: ‘from you not closing the gate.’)

- The matrix subject of the complement clause construction does not have such a restriction

- (11) o5o/sylgy ehigi-(ni) kel-bik-kit dien isti-bit  
 child/horse 2PL-ACC come-PST-2PL COMP say-PST  
 ‘The child/horse heard that you came.’

- When the matrix verb is passivized, the sentence becomes illicit, as the grammatical subject is inanimate and unable to speak

- (12) #**aan** ehigi-ni takhsy-bat-akh-khyt di-en sab-ylly-byt  
 gate 2PL-ACC leave-NEG-PST-2PL say-CVANT close-PASS-PST  
 ‘The gate was closed (saying) that you wouldn’t leave’

- In a storybook setting where gates can talk, this sentence becomes licit

### 2.3 Insertion of the word *baran* ‘after’

The word *baran* ‘after’ acts as a postposition when preceded by a converb, making explicit the event order interpretation (Petrova 2008)

- *baran* is available in adjunct clauses

- (13) Masha Misha-(ny) kel-ie di-en **baran** jie-t-in khomuy-da  
 Masha Misha-ACC come-FUT say-CVANT after house-3SP-ACC tidy-PST  
 ‘Masha, after saying that Misha would come, tidied the house.’

- but in a complement clause, we get two different interpretations

- (14) Keskil Aisen-(ny) kel-bet dien (**baran**) isti-bit  
 Keskil Aisen-ACC come-NEG.PST DIEN after hear-PST  
 with *baran*: Keskil, after saying that Aisen is not coming, heard (something else)  
 without *baran*: Keskil heard that Aisen is not coming.

### 2.4 Replacement with other converbal forms

- *-An* marks the converb of anteriority (CVANT) (Petrova 2011)
- There is a rich system of converbs in Sakha

- *-A/I*, the converb of simultaneity (CVSIM)

- (15) Masha Misha-(ny) kel-ie **dii-dii** jie-t-in khomuy-but  
 Masha Misha-ACC come-FUT say-CVSIM-say-CVSIM house-3SP-ACC tidy-PST  
 ‘Masha tidied the house (while) saying that Misha will come.’

- *-At*, the converb of immediate precedence (CVIMM)

- (16) Masha Misha-(ny) kel-ie **di-et** jie-t-in khomuy-but  
 Masha Misha-ACC come-FUT say-CVIMM house-3SP-ACC clean-PST  
 ‘Masha tidied the house right after saying that Misha will come.’

- Replacing complementizer *dien* with other converb forms results in a different interpretation

- *-A/I*, the converb of simultaneity (CVSIM)

- (17) Masha Misha-(ny) kel-ie **dii-dii** isti-bit  
 Masha Misha-ACC come-FUT say-CVSIM-say-CVSIM hear-PST  
 ‘Masha heard (something else) while saying that Misha will come.’

- *-At*, the converb of immediate precedence (CVIMM)

- (18) Masha Misha-(ny) kel-ie **di-et** isti-bit  
 Masha Misha-ACC come-FUT say-CVIMM hear-PST  
 ‘Masha heard (something else) right after saying that Misha will come.’

## 2.5 Summary

<i>Test</i>	Complementizer <i>dien</i>	Converb <i>di-en</i>
Subject agreement	*	✓
Semantic restriction	No restriction	Restricted to speaking entities
<i>baran</i> ‘after’	*	✓
Other converbs	*	✓

## 3 ACC in converb phrases

- Proposal: Source of ACC case on the embedded subject of adjunct *di-en* clauses is *di-en* ‘say-CVANT’
- Matrix *die-* ‘say’ optionally assigns ACC to the embedded subject of its CP complement

- (19) Masha Misha-(**ny**) kel-ie      **die**-bit  
Masha Misha-ACC come-FUT say-PST.3SG  
‘Masha said Misha will come.’

- More formal analysis of the mechanism coming soon

### 3.1 Predictions borne out: Participial constructions

The embedded subject cannot be ACC-marked in adjunct participials, which lack converb *di-en*.

- (20) Masha Misha-(\*ny) kel-en      ih-er-itten      jie-t-in      suui-but  
Masha Misha-ACC come-CVANT come-AOR-ABL.3sP house-3sP-ACC clean-PST  
‘Masha cleaned the house from Misha’s coming.’

### 3.2 Predictions borne out: Nominal complements

The embedded subject cannot be ACC-marked in complement clauses of nouns

- (21) Misha-(\*ny) kel-ie      dien      surakh  
Misha-ACC come-FUT COMP rumor  
‘the rumor that Misha would come’  
NOT: #the rumor, saying that Misha would come

## 4 ACC in complement clauses

Unlike embedded subjects of nominal complements, embedded subjects of verbal complement clauses can bear ACC

- (22) Masha ehigi-(ni) kel-bikkit dien isti-bit  
Masha 2PL-ACC come-2PL DIEN hear-PST  
‘Masha heard that you came.’

**What is the source of ACC here?**

**Claim: ACC is assigned by the matrix verb**

Evidence for this claim

- Participial clause
- Passivization
- Scrambling
- Binding (Conditions A & B)
- Gapping

#### 4.1 Participial clause

- Unlike adjunct participial clauses, complement participial clauses can have ACC on their embedded subjects

- (23) Masha [ ehigi-(**ni**) kel-bik-kit-in ] isti-bit  
Masha [ 2PL-ACC come-NMLZ-2PL-ACC ] hear-PST  
'Masha heard that you came'  
(lit. 'Masha heard your coming.')

- Difference between adjunct and complement clauses captured with proposed analysis

#### 4.2 Passivization

- For our consultants (unlike B&V), matrix passive results in a loss of ACC

- (24) a. En chaasky-ny alja-p-pyt-yn  
2SG cup-ACC break-CAUS-PST-2SG  
'You broke the cup.'  
b. chaasky-(\*ny) aljat-ylyn-na  
cup-ACC break-PASS-PST  
'The cup was broken.'

- When the matrix verb is passivized, the embedded subject cannot have ACC

- (22) Masha ehigi-(ni) kel-bikkit dien isti-bit  
Masha 2PL-ACC come-2PL DIEN hear-PST  
'Masha heard that you came.'

- (25) ehigi-(\*ni) kel-bikkit dien ih-illi-bite  
2PL-ACC come-2PL DIEN hear-PASS-PST  
'It was heard that you came.'

#### 4.3 Scrambling

- While it is not possible for the NOM object to scramble to the left edge of the matrix clause, the ACC object can.

- (26) a. Ayaana Masha-ny ehiil Boston'-n'a kel-ie dien isti-bite  
Ayaana Masha-ACC next.year Boston-DAT come-FUT COMP hear-PST  
'Ayaana heard that Masha will come to Boston next year.'

- b. Masha-\*(ny) Ayaana ehiil Boston'-n'a kel-ie dien isti-bite  
 Misha-ACC Ayaana next.year Boston-DAT come-FUT COMP hear-PST  
 'As for Masha, Ayaana heard that she will come to Boston next year.'

- Leaving behind the embedded subject while scrambling the *dien* clause to the left is licit only with the ACC-marked case.

- (27) a. \*ehiil Boston'-n'a kel-ie dien Ayaana Masha isti-bite  
 next.year Boston-DAT come-FUT COMP Ayaana Misha hear-PST  
 'Ayaana heard that Masha will come to Boston next year.'
- b. ehiil Boston'-n'a kel-ie dien Ayaana Masha-ny isti-bite  
 next.year Boston-DAT come-FUT COMP Ayaana Misha-ACC hear-PST-1SG  
 'Ayaana heard that Masha will come to Boston next year.'

#### 4.4 Binding (Conditions A & B)

- The NOM-marked reciprocal<sup>1</sup> yields a Condition A violation, while the ACC-marked does not, suggesting that the ACC-marked embedded subject is indeed in the matrix clause

- (28) a. \*Aisen uonna Sayaana beie-beie-ler-**e** jie-5e kel-lel-ler dien isti-bit-tere  
 Aisen and Sayaana self-self-PL-NOM home-DAT come-FUT-3PL COMP hear-PST-3PL  
 'Aisen and Sayaana heard that each other would come home.'
- b. Aisen uonna Sayaana beie-beie-ler-**in** jie-5e kel-lel-ler dien isti-bit-tere  
 Aisen and Sayaana self-self-PL-ACC home-DAT come-FUT-3PL COMP hear-PST-3PL  
 'Aisen and Sayaana heard that each other would come home.'

- The NOM embedded subject can be coreferential with the matrix subject, while the ACC-marked one cannot, suggesting that under Condition B of binding, that the ACC-marked subject is in the matrix clause

- (29) (B&V 2010: 41)
- a. [Sarsyn min bar-a-byn dien] ihit-ti-m.  
 tomorrow 1SG(NOM) leave-AOR-1SG DIEN hear-PST-1SG  
 'I heard that I am leaving tomorrow.'
- b. \*[miigin [sarsyn bar-a-byn dien]] ihit-ti-m.  
 1SG(ACC) tomorrow leave-AOR-1SG DIEN hear-PST-1SG  
 'I heard that I am leaving tomorrow.'

#### 4.5 Gapping

- Turkish does not allow gapping of phrases in different clauses (Ince 2007)

- (30) Ali-Ø [Ahmet-in Ankara-ya gittiği]-ni sanıyor, \*Mehmet-Ø de Özgür-ün.  
 Ali-NOM Ahmet-GEN Ankara-DAT went-ACC assuming-3SG, Mehmet-NOM also Özgür-GEN  
 'Ali thinks that Ahmet went to Ankara, and \*Mehmet Özgür.'
- (Ince 2007: 24)

Gapping can be used as a test for clausemate-ness

- (31) Ali-Ø Ahmet-i Ankara-ya gitti sanıyor, Mehmet-Ø de Özgür-ü.  
 Ali-NOM Ahmet-ACC Ankara-DAT went-3SG assuming-3SG, Mehmet-NOM also Özgür-ACC

<sup>1</sup>Reciprocals are used rather than reflexives, which can be logophors

- The gapping test can be applied in Sakha with the same results

- (32) a. \*Min Kesha kel-bit dien isti-bit-im, onton en Lyosha.  
 1SG Kesha come-PST COMP hear-PST-1SG, and 2SG Lyosha  
 ‘I heard that Kesha came, and you Lyosha.’  
 b. Min Kesha-ny kel-bit dien isti-bit-im, onton en Lyosha-ny.  
 1SG Kesha-ACC come-PST C hear-PST-1SG, and 2SG Lyosha-ACC  
 ‘I heard that Kesha came, and you Lyosha.’

## 4.6 Summary

- Passivization test supports the fact that the case-assigning status of the matrix verb matters
- Scrambling, binding, and gapping tests indicate that the ACC object is in the matrix clause, while the NOM object is in the embedded clause
- Case assignment is reduced to a standard verbal object

## 5 Conclusion

- There are two distinct structures, each corresponding to two distinct *dien*: converb *di-en* ‘say-CVANT’ in adjunct clauses and complementizer *dien* in complement clauses
  - Source of ACC in adjunct clauses is converb *di-en* ‘say-CVANT’
  - Source of ACC in complement clauses is matrix verb
- Thus, the Sakha data is fully compatible with a Case-by-Agree approach

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