A Case-by-Agree account for ACC in Sakha adjunct clause constructions

Christine Soh Yue

University of Pennsylvania csohyue@sas.upenn.edu

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Sakha in 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
 Masha Misha-ACC come-FUT DIEN house-ACC
 khomuy-da
 tidy-PST.3SG
 'Masha tidied up the house (thinking) Misha would come'
 (Vinokurova 2005: 368)

Baker & Vinokurova 2010 Proposal

- (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

The B&V analysis of ACC case

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

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

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

Subject agreement morphology

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

(3) Sahyl-lar kihi iher-in keor-eon-**ner** kuot-an fox-PL man come-3sP.ACC see-CVANT-3PL run-CVANT khaal-byt-tar 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'

Subject agreement morphology

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-CVANT-1SG house-ACC tidy-PST-1SG 'I, (saying) Misha would come, tidied the house.'

Subject agreement morphology

... 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.'

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

(7)Itini büter-en 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 child/#horse 2PL-ACC yesterday gate-ACC close-NEG-PST-2PL di-en khahaa-ttan bar-byt say-CVANT stable-ABL 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 child/horse 2PL-ACC yesterday gate-ACC close-NEG-PST-2PL die-bit 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

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

Semantic restriction on subjects: Passivization

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

Insertion of baran 'after'

The word <u>baran</u> '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**Masha Misha-ACC come-FUT say-CVANT after
 jie-t-in khomuy-da
 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.

Other converb forms

- -An marks the converb of anteriority (CVANT) (Petrova 2011)
- There is a rich system of converbs in Sakha, including -A/I, the converb of simultaneity (CVSIM), and -At, the converb of immediate precedence (CVIMM)
- (15) Masha Misha-(ny) kel-ie dii-dii
 Masha Misha-ACC come-FUT say-CVSIM-say-CVSIM
 jie-t-in khomuy-but
 house-3SP-ACC tidy-PST
 'Masha tidied the house (while) saying that Misha will come.'
- (16) Masha Misha-(ny) kel-ie di-et jie-t-in
 Masha Misha-ACC come-FUT say-CVIMM house-3sP-ACC
 khomuy-but
 clean-PST
 'Masha tidied the house right after saying that Misha will come.'

Other converb forms

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

- (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.'
- (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.'

Summary of Complementizer dien vs. Converb di-en

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

Proposed analysis of accusative case

- 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 **di**e-bit Masha Misha-<u>ACC</u> come-FUT say-PST.3SG 'Masha said Misha will come.'
- More formal analysis of the mechanism coming soon

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
Masha Misha-ACC come-CVANT come-AOR-ABL.3SP
jie-t-in suui-but
house-3SP-ACC clean-PST
'Masha cleaned the house from Misha's coming.'

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

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

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

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

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.'

Passivization

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.'

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 Ayaana Masha-ACC next.year Boston-DAT come-FUT COMP isti-bite

hear-PST

'Ayaana heard that Masha will come to Boston next year.'

 b. Masha-*(ny) Ayaana ehiil Boston'-n'a kel-ie dien Misha-ACC Ayaana next.year Boston-DAT come-FUT COMP isti-bite

hear-PST

'As for Masha, Ayaana heard that she will come to Boston next year.'

Scrambling, pt. 2

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 next.year Boston-dat come-fut comp Ayaana Misha isti-bite hear-PST
 - 'Ayaana heard that Masha will come to Boston next year.'
 - b. ehiil Boston'-n'a kel-ie dien Ayaana Masha-ny next.year Boston-dat come-fut comp Ayaana Misha-acc isti-bite hear-PST-1SG

 - 'Ayaana heard that Masha will come to Boston next year.'

Condition A

The NOM-marked reciprocal 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
 Aisen and Sayaana self-self-PL-NOM home-DAT
 kel-lel-ler dien isti-bit-tere
 come-FUT-3PL COMP hear-PST-3PL
 'Aisen and Sayaana heard that each other would come home.'
 - Aisen uonna Sayaana beie-beie-ler-in jie-5e
 Aisen and Sayaana self-self-PL-ACC home-DAT
 kel-lel-ler dien isti-bit-tere
 come-FUT-3PL COMP hear-PST-3PL
 'Aisen and Sayaana heard that each other would come home.'

Note: Reciprocals are used rather than reflexives, which can be logophors

Condition B

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.'
 - *[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.'

Gapping

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

(30) Ali-Ø [Ahmet-in Ankara-ya gittiği]-ni sanıyor,
Ali-NOM Ahmet-GEN Ankara-DAT went-ACC assuming-3sG,
*Mehmet-Ø de Özgür-ün.
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, Ali-NOM Ahmet-ACC Ankara-DAT went-3SG assuming-3SG, Mehmet-Ø de Özgür-ü. Mehmet-NOM also Özgür-ACC 'Ali thinks that Ahmet went to Ankara, and Mehmet Özgür.' (Ince 2007: 25)

Gapping

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

(32) a. *Min Kesha kel-bit dien isti-bit-im, onton en
1SG Kesha come-PST COMP hear-PST-1SG, and 2SG
Lyosha.
Lyosha

Lyosha

'I heard that Kesha came, and you Lyosha.'

b. Min Kesha-ny kel-bit dien isti-bit-im, onton en 1sg Kesha-Acc come-Pst c hear-Pst-1sg, and 2sg Lyosha-ny.

Lyosha-ACC

'I heard that Kesha came, and you Lyosha.'

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

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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Condition A

(33) *Aisen uonna Sardaana miigin/miekhe beie-beie-ler-iger Aisen and Sardaana self-self-3PP-DAT help keomeoleos die-bit-tere

1SG-DAT help-PST-3PL say-PST-PL
'Aisen and Sardaana told me to help each other.'
*miigitten
but need context; strange without context