

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

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- 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 adjunct 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)

The B&V analysis of ACC case:

- (1) Masha [_{CP} Misha-(ny) [_{C'} kel-ie di-en]] jie-ni
Masha [_{CP} Misha-ACC [_{C'} come-FUT DIEN]] house-ACC
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'Masha tidied up the house (thinking) Misha would come'

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- There is a complementizer *dien* that looks identical to the converb
- Both elements are present synchronically
- This exceptional ACC on embedded subjects of adjunct clauses is assigned by converb *di-en* (see also Major, submitted)
- Thus, this phenomena is no longer an argument for dependent case theory

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

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

§3 Analysis of ACC in adjunct (converb) clauses

§4 Analysis of ACC in complement clauses

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

- Complementizer *dien*
 - ▶ Historically derived from the verb of saying (Baker 2011), like many Turkic languages

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- Complementizer *dien*
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- Converb *di-en*
 - (2) di-en
say-CVANT
'after saying'
 - ▶ Converb of anteriority, marked by *-An* 'CVANT'
 - ▶ Converb event is interpreted to occur prior to the main event

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 1

Converbs can optionally 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) oʃo-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 2

di-en in adjunct clauses can optionally 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 3

... while *dien* in complement clauses cannot (and there is no complementizer agreement)

- (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 when there is not an overt second subject; 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 leave-FUT-1SG
'After finishing that, I will leave tomorrow.' (Petrova 2011, 294a)

Semantic restriction on subjects 2

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

- (10) sylgy [ehigi aan-y sap-pat-akh-khyt-yttan]
 horse [2PL gate-ACC close-NEG-PST-3PP-ABL.3SP]
 khahaa-ttan bar-byt
 stable-ABL leave-PST
 'The horse left the stable because you didn't close the gate.'
 (lit: 'from your 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 hear-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 *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**
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 not in a complement clause

- (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.

Insertion of *baran* 'after' and agreement

- Moreover, *baran*-insertion and subject agreement co-vary

- (15) a. min Aisen-(ny) kel-bet diem-(*min) isti-bit-im
1SG Aisen-ACC come-NEG.PST DIEN-1SG hear-PST-1SG
I heard that Aisen is not coming.
- b. min Aisen-(ny) kel-bet dien/m-(min) **baran**
1SG Aisen-ACC come-NEG.PST DIEN-1SG after
isti-bit-im
hear-PST-1SG
I, after saying that Aisen is not coming, heard (something
else)
*I heard that Aisen is not coming.

Other converb forms 1

- *-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)

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

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

- (18) Masha Misha-(ny) kel-ie **di-i-di-i** isti-bit
Masha Misha-ACC come-FUT say-CVSIM-say-CVSIM hear-PST
'Masha heard (something else) while saying that Misha will come.'
- (19) 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*

<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	*	✓

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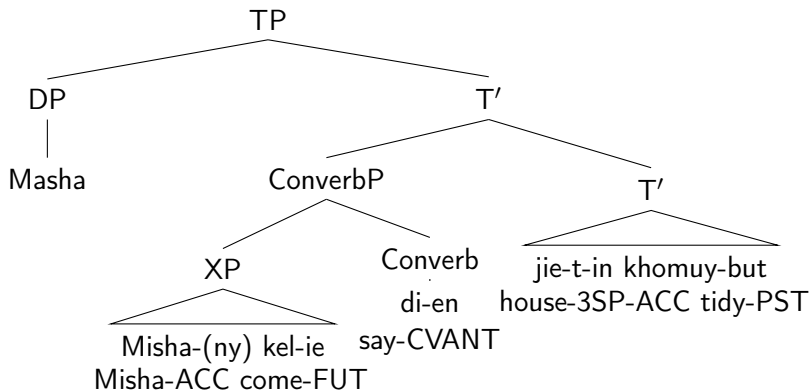
Source of ACC case on the embedded subject of adjunct *di-en* clauses is *di-en* 'say-CVANT'

- Matrix *die*- 'say' optionally assigns ACC to the embedded subject of its CP complement

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

Proposed analysis of accusative case

(21)



‘Masha, saying Misha would come, tidied her house.’

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

- (22) Masha Misha-(*ny) kel-en ih-er-i-tten
Masha Misha-ACC come-CVANT come-NMLZ-3SP-ABL
jie-t-in khomuy-but
house-3SP-ACC tidy-PST
'Masha tidied the house because of Misha's coming.'

Predictions borne out: Nominal complements

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

- (23) 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

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

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

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

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

What is the source of ACC here?

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

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

What is the source of ACC here?

Claim: ACC is assigned by the matrix verb

Tests for ACC in complement clauses

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

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

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

Difference between adjunct and complement clauses captured with proposed analysis (compare with (22))

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

- (26)
- 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.'

Leaving behind the embedded subject while scrambling the *dien* clause to the left is licit only with the ACC-marked, suggesting that the ACC-marked nominal is no longer in the embedded clause.

- (26) a. * $\left[\begin{array}{l} \text{ehiil} \quad \text{Boston'-n'a} \quad \text{kel-ie} \quad \text{dien} \\ \left[\text{next.year} \quad \text{Boston-DAT} \quad \text{come-FUT} \quad \text{COMP} \right] \end{array} \right]$ Ayaana **Masha**
 $\left[\text{next.year} \quad \text{Boston-DAT} \quad \text{come-FUT} \quad \text{COMP} \right]$ Ayaana Misha
 isti-bite
 hear-PST
 'Ayaana heard that Masha will come to Boston next year.'
- b. $\left[\begin{array}{l} \text{ehiil} \quad \text{Boston'-n'a} \quad \text{kel-ie} \quad \text{dien} \\ \left[\text{next.year} \quad \text{Boston-DAT} \quad \text{come-FUT} \quad \text{COMP} \right] \end{array} \right]$ Ayaana **Masha-ny**
 $\left[\text{next.year} \quad \text{Boston-DAT} \quad \text{come-FUT} \quad \text{COMP} \right]$ 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

- (27) 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.'
- b. 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

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

(28) (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.'

Gapping 1

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

- (29) 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

- (30) 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)

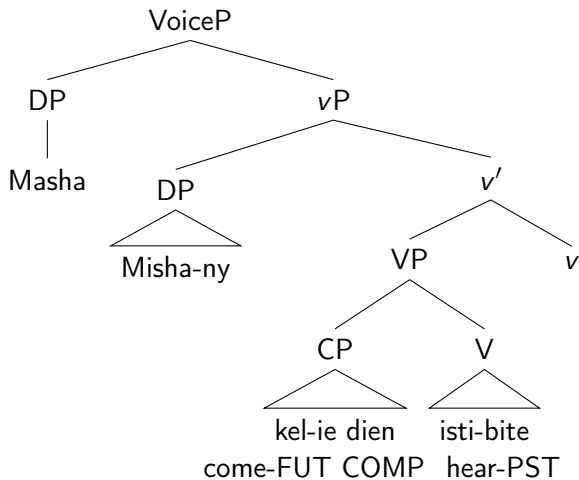
The gapping test can be applied in Sakha with the same results

- (31) a. *Min **Kesha** kel-bit dien isti-bit-im, onton en
 1SG Kesha come-PST COMP hear-PST-1SG, and 2SG
Lyosha ~~kel-bit~~ ~~dien~~ ~~isti-bit-in~~.
Lyosha ~~come-PST~~ ~~COMP~~ ~~hear-PST-2SG~~
 '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 ~~kel-bit~~ ~~dien~~ ~~isti-bit-in~~.
Lyosha-ACC ~~come-PST~~ ~~COMP~~ ~~hear-PST-2SG~~
 'I heard that Kesha came, and you Lyosha.'

- 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 that of a standard verbal object

Analysis of ACC in complement clauses

(32)



'Masha heard that Misha would come.'

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- 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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