

Case on embedded subjects in Sakha*

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WAFL
September 30, 2022

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 adjunct 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)

- 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 [_{CP} Misha-(ny) [_{C'} kel-ie di-en]] jie-ni khomuy-da
Masha [_{CP} Misha-ACC [_{C'} 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 **ConverbP** rather than an adjunct CP
- The ConverbP is headed by the converb *di-en* say-CVB
- 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 khomuy-da
Masha [_{ConverbP} Misha-ACC come-FUT say-CVANT] house-ACC tidy-PST.3SG
'Masha tidied up the house (thinking) Misha would come'

*Thank you to Julie Anne Legate and Martin Salzmann for guidance and discussion. Thank you also to Lefteris Paparounas, Athulya Aravind, and the Penn Syntax Reading Group for discussion. I am very grateful for my consultants: Aiyyna Sleptsova, Maria Menkyarova, and their families, and my heart goes out to the Yakut people in this turbulent time. All errors are my own.

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*

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

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 when there is not an overt 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 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 not in a complement clause (it forces a different structure as seen by the changed interpretation)

- (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.

- 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** isti-bit-im
 1SG Aisen-ACC come-NEG.PST DIEN-1SG after hear-PST-1SG
 I, after saying that Aisen is not coming, heard (something else)
 *I 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), which undergoes full reduplication

- (16) 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)

- (17) 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), which undergoes full reduplication

- (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.’

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

- (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.’

2.5 Summary

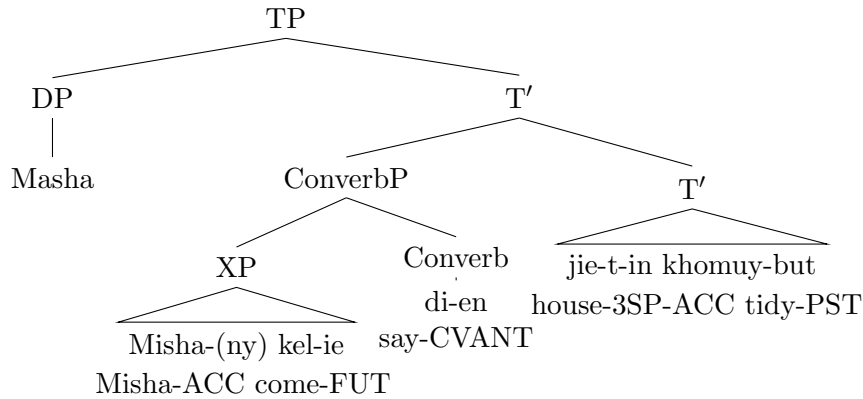
<i>Test</i>	Complementizer <i>dien</i>	Converb <i>di-en</i>
Subject agreement	*	✓
Semantic restriction	No restriction	Restricted to speaking entities
<i>baran</i> ‘after’	*	✓
Other converbs	*	✓

3 ACC in converb phrases

- 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.’

- (21) ‘Masha, saying Misha would come, tidied her house.’



3.1 Predictions borne out: Participial constructions

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

- (22) Masha Misha-(*ny) kel-en ih-er-itten jie-t-in khomuy-but
Masha Misha-ACC come-CVANT come-AOR-ABL.3SP house-3SP-ACC tidy-PST
'Masha tidied 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

- (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

4 ACC in complement clauses

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

- (24) 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

1. Participial clause
2. Passivization
3. Scrambling
4. Binding (Conditions A & B)
5. Gapping

4.1 Participial clause

- 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-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

Compare with(22)

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

4.2 Passivization

- 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.'

4.3 Scrambling

- 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. *[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 reciprocal¹ 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 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

- (28) (B&V 2010: 41)

¹Reciprocals are used rather than reflexives, which can be logophors

- 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)

- (29) 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

- (30) 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
'Ali thinks that Ahmet went to Ankara, and Mehmet Özgür.'

(Ince 2007: 25)

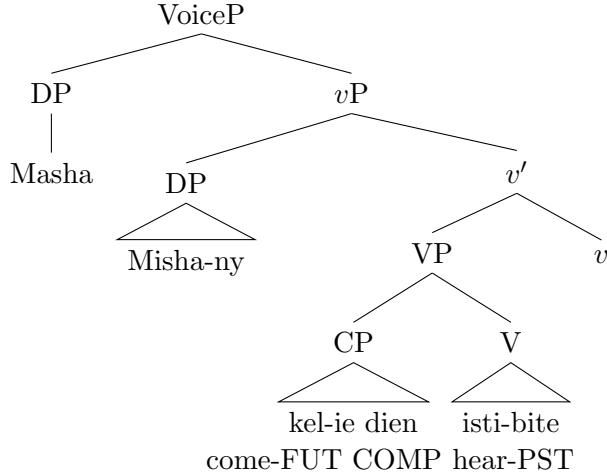
- The gapping test can be applied in Sakha with the same results

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

(32) ‘Masha heard that Misha would come.’



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

References

- Baker, Mark C. 2011. “Degrees of nominalization: Clause-like constituents in Sakha.” *Lingua* 121 (7): 1164–1193.
- Baker, Mark C, and Nadya Vinokurova. 2010. “Two modalities of case assignment: Case in Sakha.” *Natural Language & Linguistic Theory* 28 (3): 593–642.
- Chomsky, Noam. 1999. “Derivation by phase.” Edited by Michael Kenstowicz. *An Annotated Syntax Reader*, 482.
- . 2000. “Minimalist inquiries: The framework (MITOPL 15).” *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155.
- Davies, William D. 2005. “Madurese prolepsis and its implications for a typology of raising.” *Language*, 645–665.
- Ince, Atakan. 2007. “Direct complement clauses as object control structures in Turkish.” *WECOL 2006*, 208.
- . 2009. “Gapping in turkish.” In *Proceedings of thirty-eighth annual meeting of the North East Linguistic Society*, 425–438.
- Johanson, Lars. 1995. “On Turkic converb clauses.” *Haspelmath & König (eds.)* 1995:313–48.

- Legate, Julie Anne. 2008. “Morphological and abstract case.” *Linguistic inquiry* 39 (1): 55–101.
- Lord, Carol. 1993. *Historical change in serial verb constructions*. Vol. 26. John Benjamins Publishing.
- Major, Travis. Submitted. “What Uyghur “says” about Dependent Case Theory.”
- Marantz, Alec. 1991. “Case and licensing.” In *ESCOL’91: Proceedings of the Eighth Eastern States Conference on Linguistics*, Germán Westphal, Benjamin Ao, Hee-Rahk Cae (eds.) 234–253.
- Pakendorf, Brigitte. 2015. *A comparison of copied morphemes in Sakha (Yakut) and Even*.
- Pakendorf, Brigitte, and Eugenie Stapert. 2020. *Sakha and Dolgan, the North Siberian Turkic languages*.
- Petrova, Nyurguyana. 2008. “A Corpus Study of Sakha (Yakut) Converbs: A Case of Baran.” *Working Papers in Linguistics* 27:1.
- . 2010. “Syntax-Pragmatics interface in converbal constructions.” In *LSA Annual Meeting Extended Abstracts*, 1:43–1.
- . 2011. *Lexical and clause-linkage properties of the converbal constructions in Sakha (Yakut)*. State University of New York at Buffalo.
- Predolac, Esra. 2017. “The Syntax of sentential complementation in Turkish.” PhD diss., Cornell University.
- Shimamura, Koji. 2018. “The theory of quotative complementation in Japanese semanticosyntax.” PhD diss., University of Connecticut.
- Vinokurova, Nadezhda. 2005. “Lexical categories and argument structure: a study with reference to Sakha, University of Utrecht.” PhD diss., Ph. D dissertation.
- Wang, Yu-Fang, Aya Katz, and Chih-Hua Chen. 2003. “Thinking as saying: shuo (‘say’) in Taiwan Mandarin conversation and BBS talk.” *Language Sciences* 25 (5): 457–488.