

Cross-clausal A-dependencies

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1. Background and overview

Cross-clausal A-dependencies [CCA]

- A-dependencies: thematic licensing, case, agreement (Move, Merge, and Binding related to these properties).
- Cross-clausal: Case and/or agreement are determined by/within a different predicate/clause than the Θ -role of the DP involved.
- Phenomena: Raising, Exceptional Case Marking [ECM], raising to object, “long-distance” agreement

- (1) a. *I believe **her** to have won the triathlon.*
 b. ***She** seems to have wone the triathlon.*
 c. *There **seem** to be some misconceptions.*

Part 1 — CCA and finiteness

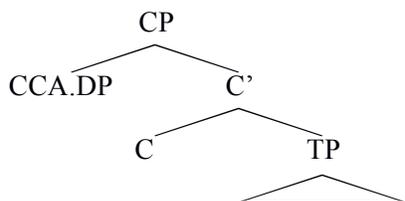
- What type of clause boundaries can CCA apply across?
- (2) a. **I believe (that) **her** won the downhill race.*
 b. **She seems that won the triathlon.*
 c. **It/There seem that (there) are some misconceptions.*
- CCA is possible into finite CPs in several languages.
 - Range of diagnostics for CCA vs. base-generation, prolepsis

Table 1: CCA and finiteness	Non-finite	Finite
English, Icelandic	✓	✗
Turkish, Buryat, Japanese	✓	✓
German, Dutch ECM	✗	✗
Zulu	✗	✓

Part 2 — CCA and CPs

- DP involved in CCA: above C, but still within the embedded clause (in some languages moving further)

(3)



Evidence:
Binding, NPIs, Shifted indexicals

- Conclusion: CP-omission/deletion cannot be a necessary condition for CCA cross-linguistically.

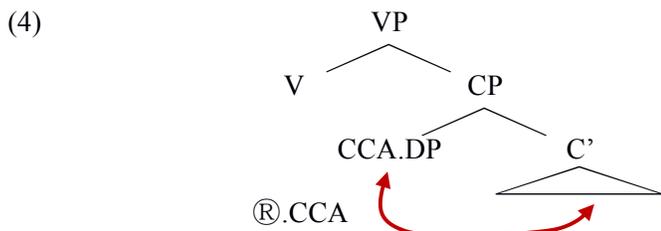
Part 3 — CCA and clause size

- CCA and clause reduction (CP omission/deletion in ECM and raising): comparison with restructuring shows that English-type clause reduction in ECM would be the odd case.

- The type of clause reduction that would be needed for ECM in English is largely in complementary distribution with other attested clause reduction phenomena (contexts that allow one do not allow the other, and vice versa)
- Hypothesis: CCA in general (even in English) does not require clause reduction.

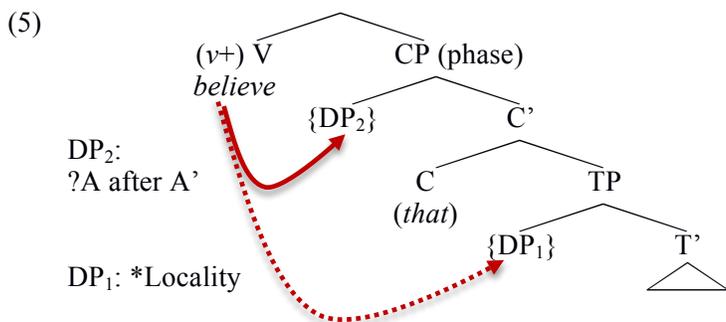
Part 4 — More on the empirical distribution of CCA

- CCA often comes with restrictions on the relation between the DP involved and the embedded clause; these can be very bleached.
- Hypothesis: There is a special semantic relation between the DP involved in CCA and the embedded clause.



Part 5 — Putting things together

- CPs in CCA are (regular) phases.
- CCA and locality (the *Improper* issue)—How can CPs be crossed by A-dependencies?
- Improper A-dependencies: an A-dependency which follows an A'-dependency



- *Improper A after A'*: Flexible approach to typing projections/positions as A or A' (based on van Urk 2015).
- Ingredients for deriving language variation (work in progress): semantic dependency between CCA-DP and C; featural make-up of C; dependency between embedded CP and matrix v/T.

2. Cross-clausal A-dependencies (CCAs)

2.1 Types of CCA

Hyper raising

- Weak pronouns and (certain) quantifiers cannot be topics; they are possible as subjects, hence raising

- (6) a. *Os meninos parecem que fizeram a tarefa.*
 the boys seem.3.PL that did.3.PL the homework
 'The boys seem to have done their homework.' [Nunes 2009: 5, (2)]
- b. *Cê / Alguém parece que está doente.*
 you.WEAK / someone seem that is sick
 'You seem/Someone seems to be sick.' [Ferreira 2009: 24, (18)]

- c. **Cê, João me disse que vai ser aprovada.*
 you.WEAK João me told that will be approved.F
 ‘You, John told me that you will be approved.’ [Ferreira 2009: 24, (19a)]
- d. **Alguém, João me disse que seria aprovado.*
 Someone João me told that would.be approved.M
 ‘You, John told me that you will be approved.’ [Ferreira 2009: 24, (19b)]

Hyper ECM

- Case of embedded argument comes from the matrix predicate
- ACC is possible even when the embedded predicate does not allow ACC, and impossible when ACC is not possible in the matrix.

- (7) a. *Makarna-Ø/*yı ye-n-di.* Turkish
 pasta-NOM/*ACC eat-PASS-PST
 ‘Pasta was eaten.’ [Şener 2011: 2, (5a)]
- b. *John [makarna-yı ye-n-di diye] duy-du.*
 John.NOM [pasta-ACC eat-PASS-PST COMP] hear-PST
 ‘John heard that pasta was eaten.’ [Şener 2011: 3, (5b)]
- (8) a. [*Pelin-Ø Timbuktu-ya gi-ti diye*] *bil-in-iyor.*
 [P-NOM T-DAT go-PST COMP] know-PASS-PRS
 ‘Pelin is known to have gone to Timbuktu.’ [Şener 2011: 3, (6a)]
- b. * [*Pelin-i Timbuktu-ya gi-ti diye*] *bil-in-iyor.*
 [P-ACC T-DAT go-PST C] know-PASS-PRS
 ‘Pelin is known to have gone to Timbuktu.’ [Şener 2011: 3, (6b)]
- (9) a. *xübün badma-da atarxə-nə.* Buryat
 boy Badma-DAT envy-PRS.
 ‘The boy envies Badma.’ [Bondarenko 2017: 2, (5)]
- b. *xübün badmə / ???/*badm-ijə na:dənxə abə-xə gəžə atarxə-nə.*
 boy Badma-NOM / ???/*Badma-ACC toy buy-NMLZ COMP envy-PRS.
 ‘The boy envies that Badma will buy a to.’ [Bondarenko 2017: 2, (6)]
- c. *səjənə [CP ənə xan-ijə badm-ar šərdə-gdə-hən gəžə] mədə-nə.*
 Sajana [CP this wall-ACC Badma-INSTR paint-PASS-PRF COMP] know-PRS
 ‘Sajana knows that this wall has been painted by Badma.’ [Bondarenko 2017: 3, (ii)]

Hyper agreement

- Case is/can be determined in the embedded clause, but an embedded argument enters an agreement dependency with the matrix predicate
- Nez Perce: NOM or ERG depending on the transitivity of the embedded predicate; object agreement is the result of covert raising to object (Deal 2017), which has an effect on the case of the matrix subject (ERG)

- (10) a. *Harold-nim hi-nees-nek-se* [CP *hitemenew’ eet hi-wsiix wiweepcux.*] Nez Perce
 Harold-ERG 3.SUBJ-O.PL-think-IPFV [CP *student.NOM 3.SUBJ-be.PRS.PL smart*]
 ‘Harold thinks the students are smart.’ [Deal 2017: 5, (10)]
- b. *Taamsas-nim hi-nees-nek-se* [CP *mamay’as-nim poo-payata-six Angel-ne.*]
 Taamsas-ERG 3.SUBJ-O.PL-think-IPFV [CP *children-ERG 3/3-help-IPFV.S.PL Angel-ACC*]
 ‘Taamsas thinks the children are helping Angel.’ [Deal 2017: 5, (11)]

2.2 CCA and finiteness

Table 2: ECM and finiteness	Non-finite	Finite
English, Icelandic	✓	✗
Turkish, Buryat	✓	✓
German, Dutch	✗	✗
Zulu	✗	✓

(11) a. *Leó sá Astrid-i borða ís-inn.* Icelandic
 Leo saw Astrid-ACC eat-INF ice-the
 ‘Leo saw Astrid eat the ice cream.’

b. **Leó sá Astrid-i borða-ð-i ís-inn.*
 Leo saw Astrid-ACC eat-PST-3.SG ice-the
 ‘Leo saw Astrid had eaten the ice cream.’

(12) a. *badmə* [_{NP} *namejə* *tʁgə* *ʒbdəl-h-ijə(-mni)*] *mʒd-ʒ.* Buryat
 Badma [_{NP} 1.SG.ACC cart break-NMLZ-ACC(-POSS.1.SG)] know-PST
 ‘Badma found out that I broke the cart.’ [Bondarenko 2017: 10, (40); 23]

b. *sajənə* [_{CP} *namejə* *tʁgə* *ʒmdəl-ʒ(*-b)* *gʒʒə*] *mʒd-ʒ.*
 Sajana [_{CP} 1.SG.ACC cart break-PST(*-1.SG) COMP] know-PST
 ‘Sajana found out that I broke the cart.’ [Bondarenko 2017: 19, (82)]

(13) a. *Sie glaubt (*ihn) Goldfische zu mögen.* German
 She believes (*him.ACC) goldfish to like
 ‘She believes herself (control)/*him (ECM) to like goldfish.’

b. *Sie glaubt er / *ihn mag Goldfische.*
 She believes he.NOM / *he.ACC goldfish to like
 ‘She believes he likes goldfish.’

(14) a. **uZinhle u-bonakala* [*uku-(zo-)* *xova ujeqe.*] Zulu
 AUG.1.Zinhle 1.S-seem [*INF-(FUT)* make AUG.1.steamed.bread]
 ‘It seems that Zinhle will make bread.’ [Halpert 2016b: 186, (3), (187), (5)]

b. *Ngi-funa uSipho* [_{CP} *ukuthi apheke iqanda.*] [Halpert 2016a: 41, (66b)]
 1.SG-want AUG.1.Sipho [_{CP} that 1.SUBJ.cook AUG.5.egg]
 ‘I want Sipho to cook an egg.’

2.3 CCAs vs. prolepsis

(15) a. *I know of Leo that he left.* Prolepsis
 b. *I know DP_i [_{CP} (that) pro_i left.]* Prolepsis & pro drop
 c. *I know [_{CP} DP (that) left.]* CCA

- If a language allows *pro drop*, (15b) and (15c) are superficially the same.
- There is a diverse set of evidence that the DP involved in a CCA originates in the lower clause.
- Prolepsis may still be available as well, but the important point is that it can be shown that not all configurations involve prolepsis and the languages under consideration also allow CCA.
- *Buryat* (Bondarenko 2017), *Mishar Tatar* (Podobryaev 2014), *Nez Perce* (Deal 2017), *Passamaquoddy* (Bruening 2001), *P'urhepecha* (Zyman 2017), *Tsez* (Polinsky and Potsdam 2001), *Turkish* (Şener 2008, 2011), *Uyghur* (Shklovsky and Sudo 2014), *Zulu* (Halpert 2016a, Halpert and Zeller 2015).

- Word order: embedded material » ACC

- (16) a. *Tünügün Ahmet manga [ete Aygül-ni ket-idu] di-di.* Uyghur
 yesterday Ahmet 1.SG.DAT [tomorrow **Aygül-ACC** leave-IPFV.3] say-PST.3
 ‘Yesterday Ahmet said that Aygül would leave tomorrow.’ [Shklovsky and Sudo 2014: 388, (18)]
- b. *ojunə [üsəgəldər badm-ijə na:dənxə ab-a gəzə] məd-3.* Buryat
 Ojuna [yesterday **Badma-ACC** toy take-PST COMP] know-PST
 ‘Ojuna found out that yesterday Badma bought a toy.’ (possible) [Bondarenko 2017: 76, (17)]
- c. *Pelin [dün Mert-i sınav-a gir-di diye] bil-iyor.* Turkish
 Pelin.NOM [yesterday **Mert-ACC** exam-DAT enter-PST COMP] know-PRS
 ‘Pelin thinks that yesterday, Mert took an exam.’ [Şener 2011: 5, (11)]
- d. ‘Aayat-onm hi-nees-nek-se [CP watiisx **mamay’ac** hi-pa-paay-no’.] Nez Perce
 woman-ERG 3.SUBJ-O.PL-think-IPFV [CP 1.day.away **children.NOM** 3SUBJ-S.PL-arrive-FUT]
 ‘The woman thinks the children will arrive tomorrow.’ [Deal 2017: 6, (13)]
- e. *John-ga [mada Mary-wo kodomo-da to] omotta.* Japanese
 John-NOM [still **Mary-ACC** child-COP COMP] thought
 ‘John thought that Mary was still a child.’ [Hiraiwa 2001: 72, (11)]

- Idiomatic readings with embedded verb (also Buryat, Zulu)

- (17) a. *Toqquz qiz-ning tolghaq teng kel-di.* Uyghur
 nine girl-GEN labor together arrive-PST.3
 Lit. ‘Nine girls’ labor pains came all at once.’
 ‘Times are hard.’ [Shklovsky and Sudo 2014: 388, (15a)]
- b. *Tursun [toqquz qiz-ning tolghaq-ni teng kel-di] di-di.*
 Tursun [**nine girl-GEN labor-ACC** together arrive-PST.3] say-PST.3
 ‘Tursun said that times are hard.’ [Shklovsky and Sudo 2014: 388, (15b)]

- No additional overt pronominal subjects

- (18) a. **Ahmet meni u ket-ti di-di.* Uyghur
 Ahmet 1.SG.ACC 3.SG.NOM leave-PST.3 say-PST.3
 ‘Ahmet said that I (=speaker) left.’ [Shklovsky and Sudo 2014: 391, (25)]
- b. *ojunə badm-ijə (*təɾə) üsəgəldər xarşə şərd-3 gəzə məd-3.* Buryat
 Ojuna **Badma-ACC** (*he.NOM) yesterday fence paint-PST COMP know-PST
 ‘Ojuna found out that yesterday Badma had painted the fence.’ [Bondarenko 2017: 7, (32)]

- Neg licensing (Uyghur: base position)

- (19) a. *Men hichkim-ni kör-*(mi)-dim.* Uyghur
 1.SG.NOM nobody-ACC see-*(NEG)-PST.1.SG
 ‘I didn’t see anybody.’ [Shklovsky and Sudo 2014: 388, (16)]
- b. *Ahmet [hichkim-ni ket-mi-di] di-di.*
 Ahmet [**nobody-ACC** leave-NEG-PST] say-PST.3
 ‘Ahmet said that nobody left.’ [Shklovsky and Sudo 2014: 388, (17)]

- NPI/*mo* Japanese: indefinite pronoun and *mo* function as NPI; they do not need to be adjacent but *mo* must command the pronoun. [Takano 2003 claims that some matrix arguments can also be licensed by embedded *mo*, but they all involve control (which may have a raising analysis as well).]

- (20) a. *Masao-ga* [*dare-ga baka-da-to-mo*] *omot-te-inai.* Japanese
 Masao-NOM [anyone-NOM fool-is-COMP-Q] think-STAT-NEG
 ‘For no x, Masao thinks that x is a fool.’ [Sakai 1998: 489, (21a)]
- b. **Dare-ga* [*Takashi-ga baka-da-to-mo*] *omot-te-inai.*
 Anyone-NOM [Takashi-NOM fool-is-COMP-Q] think-STAT-NEG
 ‘For no x, x thinks that Takashi is a fool.’ [Sakai 1998: 489, (21b)]
- c. *Masao-ga dare-o* [*t_i baka-da-to-mo*] *omot-te-inai.*
 Masao-NOM anyone-ACC [*t_i fool-is-COMP-Q*] think-STAT-NEG
 ‘For no x, Masao thinks that x is a fool.’ [Sakai 1998: 489, (21b)]

- Japanese clefts: clefted elements must be clause-mates; ECM DP can be clefted with embedded material; ECM DP (but not other embedded material) can also be clefted with matrix elements—it is either in the matrix or embedded clause (prolepsis may still be an option but it is not obligatory).

- (21) a. [*John-ga* [*t_i t_j muite-na-i to*] *omot-ta no-wa*]
 John-NOM [*t_i t_j suitable-NEG-PRS COMP*] think-PST COMP-TOP]
Mary-wo_i sono sigoto-ni_j da. Japanese
 Mary-ACC the job-DAT COP
 ‘Lit. It is Mary to the job that John considers to be not suitable.’ [Hiraiwa 2001: 72, (13a)]
- b. [*t_i t_j [*sono sigoto-ni muite-na-i to*] *omot-ta no-wa*]
 [*t_i t_j [the job-DAT suitable-NEG-PRS COMP] think-PST COMP-TOP]]
John-ga_i Mary-wo_j da.
 John-NOM Mary-ACC COP
 ‘(Lit.) It is John, Mary that considers to be not suitable for the job.’ [Hiraiwa 2001: 72, (13b)]**
- c. *?*t_i [*Mary-wo t_j muite-na-i to*] *omot-ta no-wa*]
 [*t_i [*Mary- ACC t_j suitable-NEG-PRS COMP*] think-PST COMP-TOP]
John-ga_i sono sigoto-ni_j da.
 John-NOM the job-DAT COP
 ‘(Lit.) It is John, to the job that considers Mary to be not suitable.’ [Hiraiwa 2001: 72 (13c)]**

- PBC violations when complement is moved without CCA DP (Buryat, Japanese, Korean); no PBC violation for control

- (22) a. *mor-ijə_i sajəṅə* [*CP badm-ə t_i ab-a gʒʒə*] *xʒl-ʒ.*
 horse-ACC_i Sajana [*CP Badma-NOM t_i take-PST COMP*] say-PST
 ‘Sajana said that Badma bought a horse.’ [Bondarenko 2017: 6, (25)]
- b. [*CP badm-ə mor-ijə ab-a gʒʒə*]_k *sajəṅə t_k xʒl-ʒ.*
 [*CP Badma-NOM horse-ACC take-PST COMP*]_k Sajana t_k say-PST
 ‘Sajana said that Badma bought a horse.’ [Bondarenko 2017: 6, (26)]
- c. **[CP badm-ə t_i ab-a gʒʒə]_k mor-ijə_i sajəṅə t_k xʒl-ʒ.*
 [*CP Badma-NOM t_i take-PST COMP*]_k horse-ACC_i Sajana t_k say-PST
 ‘Sajana said that Badma bought a horse.’ [Bondarenko 2017: 6, (27)]
- d. **[CP t_i mor-ijə ab-a gʒʒə]_k sajəṅə badm-ijə t_k xʒl-ʒ.*
 [*CP t_i horse-ACC take-PST COMP*]_k Sajana Badma-ACC t_k say-PST
 ‘Sajana said that Badma bought a horse.’ [Bondarenko 2017: 6, (28)]
- e. [*CP PRO_i mor-ijə ab-a-b gʒʒə*]_k *sajəṅə_i t_k xʒl-ʒ.*
 [*CP PRO_i horse-ACC take-PST-1.SG COMP*]_k Sajana_i t_k say-PST
 ‘Sajana said that she bought a horse.’ [Bondarenko 2017: 7, (30)]

- Uyghur: ACC receives *de dicto* interpretation; scope below matrix verb

(23) a. *Tursun* [*tulpar-ni kel-di*] *di-di, ema tulpar yoq.* Uyghur
 Tursun [**winged.horse-ACC** arrive-PST.3] say-PST.3 but winged.horse not.exist
 ‘Tursun said that a winged horse arrived, but winged horses do not exist.’
 [Shklovsky and Sudo 2014: 392, (29)]

- b. *Context:* Ahmet heard from Aslan that one of my friends is from Urumchi, but Ahmet has no idea who that friend is. He thought it could be John, it could be Bill, or it could be Sue.

Ahmet [*bir dostu-m-ni Ürümchilik dep*] *oyla-idu.*
 Ahmet [**one friend-1.SG-ACC** Urumchian COMP] think-IMP.F.3
 ‘Ahmet thinks a friend of mine is from Urumchi.’
 [Shklovsky and Sudo 2014: 393, (32)]

- P'urhepecha: negative matrix object quantifiers cannot take scope under the matrix verb
- CCA QPs can

(24) *Unfortunately, Sophie persuaded no one* [PRO to go to the rock show]. [Zyman 2017: 6, (18)]

- a. *no one* » *persuade*: ‘There was no one who Sophie persuaded to go to the rock show.’
 b. **persuade* » *no one*: ‘*Sophie brought it about by persuasion that there was no one who went...’

(25) *Context:* In a noisy, chat-filled library, a teacher who’s trying to concentrate on her reading says...

(?) *None-ni uetarincha-sin-Ø-ga=ni eska uandana-a-Ø-ka.*
 no.one-ACC need-HAB-PRS-IND1=1sS that talk-FUT-PRS-SBJV
 ‘I need [(for) no one to talk].’ [Zyman 2017: 6, (19)]

- Others (e.g., island sensitivity, Nez Perce, P'urhepecha)

3. ACC in/through/across Spec,CP

3.1 ACC vs. NOM

- ECM DP — embedded Spec,CP (optionally higher)
- Non-ECM NOM below C

(26) Buryat, Mishar Tatar, Turkish, Uyghur

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graph TD
  CP --> DPACC["{DP.ACC}"]
  CP --> C_prime["C'"]
  C_prime --> C["C"]
  C_prime --> TP["TP"]
  TP --> DPNOM["{DP.NOM}"]
  TP --> Ellipsis["..."]
  
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- Uyghur: when the embedded subject is co-referent with the matrix subject, ACC must be an anaphor and cannot be a pronoun; whereas NOM must be a pronoun and cannot be an anaphor.

(27) a. *Men* [*peqet öz-em-ni-la nan ye-men*] *di-dim.* Uyghur
 1.SG [only **REFL-1.SG-ACC-only** bread eat-IMP.F.1.SG] say-PST.1.SG
 ‘I said that only I eat bread.’ [Shklovsky and Sudo 2014: 391, (26a)]

b. **?Men* [*peqet öz-em-Ø-la nan ye-men*] *di-dim.*
 1.SG [only **REFL-1.SG-NOM-only** bread eat-IMP.F.1.SG] say-PST.1.SG
 ‘I said that only I eat bread.’ [Shklovsky and Sudo 2014: 391, (26b)]

- (28) a. *Men* [*peqet men-la* *nan ye-men*] *di-dim.* Uyghur
 1.SG [only **1.SG-NOM-only** bread eat-IMPF.1.SG] say-PST.1.SG
 ‘I said that only I eat bread.’ [Shklovsky and Sudo 2014: 391, (27a)]
- b. **Men* [*peqet meni-la* *nan ye-men*] *di-dim.*
 1.SG [only **1.SG-ACC-only** bread eat-IMPF.1.SG] say-PST.1.SG
 ‘I said that only I eat bread.’ [Shklovsky and Sudo 2014: 391, (27b)]

ACC is in the (binding) domain of the matrix subject, NOM is not.

- Buryat: ACC NPI must be licensed by matrix NEG; GEN/NOM by embedded NEG; NPI require clause-mate NEG at the surface in Buryat.

- (29) a. *badma x3n-i-šjə* *t3rgə 3mdəl-3* *g3žə xar-a-güj* Buryat
 Badma **who-ACC-PTCL** cart break-PST COMP see-PST-NEG
 ‘Badma didn’t see anyone break the cart.’ [Bondarenko 2017: 14, (63)]
- b. **badma x3n-i-šjə* *t3rgə 3mdəl-3-güj* *g3žə xar-a.*
 Badma **who-ACC-PTCL** cart break-PST-NEG COMP see-PST
 Intended: ‘Badma saw that nobody broke the cart.’ [SW] [Bondarenko 2017: 14, (64)]
- c. **badma x3n-šjə* *t3rgə 3mdəl-3* *g3žə xar-a-güj*
 Badma **who.NOM-PTCL** cart break-PST COMP see-PST-NEG
 ‘Badma didn’t see anyone break the cart.’ [Bondarenko 2017: 14, (66)]
- d. *badma x3n-šjə* *t3rgə 3mdəl-3-güj* *g3žə xar-a.*
 Badma **who.NOM-PTCL** cart break-PST-NEG COMP see-PST
 Intended: ‘Badma saw that nobody broke the cart.’ [Bondarenko 2017: 14, (65)]

ACC is in the (negation) domain of the matrix clause, NOM is not.

Combining the inside/outside tests

- DP.ACC that is licensed or bound into by a matrix element can still appear under an *embedded* adverbial.

- (30) a. *badmə* [*üsəgəldər x3n-i-šjə* *t3rgə 3mdəl-3* *g3žə*] *xar-a-güj* Buryat
 Badma [yesterday **who-ACC-PTCL** cart break-PST COMP] see-PST-NEG
 ‘Badma didn’t see anyone break the cart yesterday.’ (possible) [Bondarenko 2017: 18, (78)]
- b. *badmə* [*üsəgəldər örin-gö* *hamg-ijə* *zurəg zur-a* *g3žə*] *m3də-nə.*
 Badma [yesterday **POSS.SELF-REFL wife-ACC** picture paint-PST COMP] know-PRS
 ‘Badma_i knows that his_i wife painted a picture yesterday.’ [Bondarenko 2017: 18, (80)]

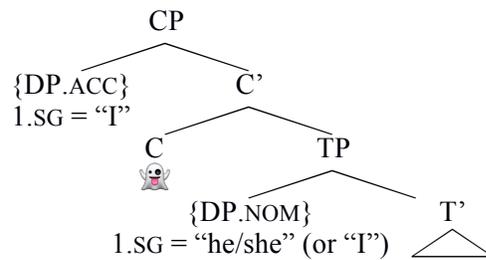
ACC is high enough in the CP to be visible from the outside (and above C—see below), yet still in the embedded clause.

3.2 Shifted indexicals

- (31) a. *Leo said that I left.* I = Susi
 b. *Leo said: “I left.”* I = Leo

- Shifted indexicals: 1st and 2nd person pronouns that do not refer to the speaker but a matrix argument. In languages allowing shifted indexicals, (31a) can mean “Leo said that he left.”
- It can be shown that true embedding is involved and not quotes; matrix—embedded dependencies; e.g., *wh*-movement, Neg licensing, distributive plural pronouns (Shklovsky and Sudo 2014, Podobryaev 2014).

(32)



Buryat, Uyghur, Turkish, Mishar Tatar

ACC/GEN cannot shift
NOM can or must shift

- (33) a. *sajənə naməjə tɜrgə ʒmdəl-ə(*-b) gʒʒə mʒd-ʒ.* Buryat
Sajana 1.SG.ACC cart break-PRT1(*-1.SG) COMP know-PRT1
'Sajana found out that I (=speaker) broke a cart.'
* 'Sajana found out that she (=Sajana) broke a cart.' [Bondarenko 2017: 19, (82)]
- b. *sajənə (bi) tɜrgə ʒmdəl-ə-b gʒʒə mʒd-ʒ.*
Sajana (1.SG.NOM) cart break-PRT1-1.SG COMP know-PRT1
'Sajana knows that I (=speaker) broke a cart.' [T. Bondarenko, p.c.]
'Sajana found out that she (=Sajana) broke a cart.' [Bondarenko 2017: 19, (83)]
- (34) a. *Ahmet [mening kit-ken-lik-im-ni] di-di.* Uyghur
Ahmet [1.SG.GEN leave-REL-NMLZ-1.SG-ACC] say-PST.3
'Ahmet said that I/*he left.' (non-shifted, *shifted) [Shklovsky and Sudo 2014: 383, (4a)]
- b. *Ahmet [men ket-tim] di-di.*
Ahmet [1.SG.NOM leave-PST.1.SG] say-PST.3
'Ahmet said that he/*I left.' (shifted, *non-shifted) [Shklovsky and Sudo 2014: 383, (4b)]
- c. *Ahmet [sen ket-ting] di-di.*
Ahmet [2.SG.NOM leave-PST.2.SG] say-PST.3
'Ahmet said that he/*you left.' (shifted, *non-shifted) [Shklovsky and Sudo 2014: 386, (13a)]
- d. *Ahmet [seni ket-ti] di-di.*
Ahmet [2.SG.ACC leave-PST.3] say-PST.3
'Ahmet said that you/*he left.' (non-shifted, *shifted) [Shklovsky and Sudo 2014: 386, (13b)]

Domain effect, not just about NOM vs. ACC

- Indexical pronouns embedded in ACC cannot shift, whereas they can/must shift when embedded in a NOM.

- (35) a. *badmə [Ø ba:bɛ-mni] jab-a gʒʒə mʒdə-nə.* Buryat
Badma.NOM [Ø father.NOM-1.SG] go-PST COMP know-PRS
'Badma_i knows that his_i father has left.'
'Badma knows that my (speaker's) father has left.' [T. Bondarenko, p.c.]
- b. *badmə [Ø ba:bɛ-jə-mni] jab-a gʒʒə mʒdə-nə.*
Badma.NOM [Ø father.ACC-1.SG] go-PST COMP know-PRS
* 'Badma_i knows that his_i father has left.'
'Badma_i knows that my_k (speaker's) father has left.' [T. Bondarenko, p.c.]

- Turkish, Mishar Tatar: only covert pronouns shift (Şener and Şener 2011, Podobryaev 2014).
- But: the ACC/NOM difference is still visible.

- (36) a. *Alsu [irtägä [pro sestra-m-nɣ] kil-ä-r diep] at'-tr.* Mishar Tatar
Alsu [tomorrow [pro sister-1.SG-ACC] come-ST-POT COMP] tell-PST
'Alsu_i said that my/*her_i sister would come tomorrow.' [Podobryaev 2014: 87, (214)]

- b. *Alsu* [*irtägä* [*pro* *sestra-m*] *kil-ä-r* *diep*] *at'-tr.*
Alsu [tomorrow [*pro* *sister-1.SG*] come-ST-POT COMP] tell-PST
 ‘*Alsu*_i said that my/her_i sister would come tomorrow.’ [Podobryaev 2014: 87, (215)]

- Uyghur: non-modal adjectives take nominalized complement (*-ish*), which can be NOM or ACC (when in ECM context); in both cases, the embedded subject is GEN. Shifting is only possible (in fact required) when the *ish*-complement is NOM (unmarked), and is excluded when it is ACC.

- (37) a. *Ötkür* [*men-ij* *oqu-[-im]* *muhim*] *didi.* Uyghur
Öktür [I-GEN read-NLIZ-1SG.POSS important] said
 ✓ ‘*Öktür* said that his studying is important.’ [shifted]
 × ‘*Öktür* said that my studying is important.’ [non-shifted] [Asarina 2011: 51, (96)]
- b. *Ötkür* [*men-ij* *oqu-[-im-ni]* *muhim*] *didi.*
Öktür [I-GEN read-NLIZ-1SG.POSS-ACC important] said
 × ‘*Öktür* said that his studying is important.’ [shifted]
 ✓ ‘*Öktür* said that my studying is important.’ [non-shifted] [Asarina 2011: 51, (97)]

The relevance for structure

- Case, domain effects: indicate syntactic involvement; e.g., shifting (monster) operator in CP (Anand and Nevins 2004, Anand 2006, Sudo 2012, Shklovsky and Sudo 2014, Podobryaev 2014, Messick 2016).
- Shifting can only occur below that operator (something needs to be said about optionality/mixing)

ECM ACC DPs must be above this operator — i.e., in Spec,CP.

- Anything above ACC does not shift either; multiple arguments are possible in Spec,CP in Uyghur—nothing above ACC can shift (even if the context would favor shifting).

- (38) a. *Context*: I am John. Ahmet said to Muhemmet about me, “John sent a letter to Aygül.” Muhemmet told me what Ahmet said, and I tell Aygül about this.
Ahmet [*sanga* *meni* *xet* *ewet-ti*] *di-di.* Uyghur
Ahmet [2.SG.DAT 1.SG.ACC letter send-PST.3] say-PST.3
 ‘Ahmet said that I sent a letter to you.’ [Shklovsky and Sudo 2014: 395, (39)]
- b. *Context*: I am John. Ahmet said to Aygül, “John sent a letter to you.” Aygül told me what Ahmet said. Now I tell Muhemmet what I heard from Aygül.
 #*Ahmet Aygül-ge* [*sanga* *meni* *xet* *ewet-ti*] *di-di.*
Ahmet Aygül-DAT [2.SG.DAT 1.SG.ACC letter send-PST.3] say-PST.3
 ‘Ahmet said to Aygül that I sent a letter to you (=Muhemmet).’ [Shklovsky and Sudo 2014: 396, (40)]

The final piece

- A shifted indexical interpretation indicates that there is a CP (the operator must be present to trigger shifting).
- If there is also still an ACC DP (which cannot shift), we have strong evidence for the presence of a CP in ECM.
- Mixed shifting in Buryat makes exactly that case (the possible interpretations are given).

- (39) a. *badmä* [CP *mini* *ba:bɛ-jə*  [TP *nam-da* *durə-güj* *gʒə*]] *hanə-nə.*
Badma.NOM [CP 1.SG.GEN *father-ACC*  [TP 1.SG-DAT love-NEG COMP]] think-PRS
 ‘Badma thinks that my father doesn’t love me/him_i.’ [T. Bondarenko, p.c.]

- b. *badmə* [CP  *mini* *ba:bə* *nam-da* *durə-güj* *gʒə*] *hanə-nə*.
 Badma.NOM [CP  **1.SG.GEN** **father.NOM** 1.SG-DAT love-NEG COMP] think-PRS
 ‘Badma_i thinks that my/his_i father doesn’t love me/him_i.’ (all combinations) [T. Bondarenko, p.c.]

Conclusions:

- CCA case is possible into CPs.
- CCA case requires the DP to be above C (if ACC could be lower it should be possible to shift, which is not the case).

3.3 Movement to or through Spec,CP?

Table 3: CCA and movement— variation	ECM DP
Buryat, Uyghur	ACC: optional movement to matrix clause
Nez Perce	Agreeing DP: covert movement to matrix clause
Zulu	obligatory movement to matrix clause (but ECM is optional)
Turkish	ACC: stays in Spec,CP

- Buryat: ACC subjects optionally move to the matrix clause; GEN/NOM subjects don’t.

(40) a. *bi* [*badmə* *üsəgəldər* *tərgə* *əmdəl-ə* *gʒə*] *məd-ə-b*. Buryat
 1.SG [**Badma.NOM** yesterday cart break-PST COMP] know-PST-1.SG
 ‘I found out {*yesterday} that {yesterday} Badma broke a cart.’ [Bondarenko 2017: 9, (35)]

b. *bi* *badm-ijə* *üsəgəldər* [*tərgə* *əmdəl-ə* *gʒə*] *məd-ə-b*.
 1.SG **Badma.ACC** yesterday [cart break-PST COMP] know-PST-1.SG
 ‘I found out {yesterday} that {yesterday} Badma broke a cart.’ [Bondarenko 2017: 9, (34)]

(41) a. *Ahmet* [*istakan(-ni)* *buz-ul-di*] *di-di*. Uyghur
 Ahmet [**cup(-ACC)** break-PASS-PST.3] say-PST.3
 ‘Ahmet said the cup broke.’ [Shklovsky and Sudo 2014: 392, (28a)]

b. *Istakan*(-ni)* *Ahmet* [*buz-ul-di*] *di-di*.
cup*(-ACC) Ahmet [break-PASS-PST.3] say-PST.3
 ‘Ahmet said the cup broke.’ [Shklovsky and Sudo 2014: 392, (28b)]

- Zulu: ECM is optional, but when it does occur, movement to the matrix vP is required.

(42) a. *Ngi-funa* *kabil* [CP *ukuthi* *uSipho* *apheke* *iqanda.*] Zulu
 1.SG-want badly [CP that **AUG.1.Sipho** 1.SUBJ.cook AUG.5.egg]
 ‘I really want Sipho to cook an egg.’ [Halpert and Zeller 2015: 485, (23a)]

b. *Ngi-funa* {*uSipho*} *kabil* [CP {**uSipho*} *ukuthi* *apheke* *iqanda.*]
 1.SG-want {**AUG.1.Sipho**} badly [CP {***AUG.1.Sipho**} that 1.SUBJ.cook AUG.5.egg
 ‘I really want Sipho to cook an egg.’ [Halpert and Zeller 2015: 485, (23b,c)]

- Turkish: ECM ACC DPs cannot be licensed by matrix negation; topics cannot be NPIs (Şener 2008)

(43) a. **Pelin-ø* [*kimse-yi* *bu kitab-ı* *oku-ma-dı* *diye*] *bil-iyor* Turkish
 P-NOM [anybody-ACC this book-ACC read-NEG-PAST C] know-PRES-2PL
 ‘Pelin thinks that nobody read this book.’ [Şener 2008: 16, (38)]

b. **Pelin-ø* [*kimse-yi* *Timbuktu-ya* *git-ti* *diye*] *duy-ma-dı*
 P-NOM [anybody-ACC T-DAT go-PAST C] hear-NEG-PRES
 ‘Pelin hasn’t heard that anybody went to Timbuktu.’ [Şener 2008: 16, (39)]

Conclusion:

- Movement is not a necessary condition/trigger for ECM.
- Language-specific EPP feature on matrix *v*.

3.4 Raising to object in English?

(Against) Argument Type #1 for raising to object

- Word order; elements from the matrix clause can split the embedded subject from the rest of the embedded clause (Postal 1974)

- (44) a. *John believes Mary sincerely* [to be the winner].
b. *John made Mary out* [to be a liar].

- But: Neeleman and Payne 2017 show very convincingly that such cases do not involve movement of the subject but right-adjunction of the intervener and extraposition of the infinitive (without the subject).

(Against) Argument Type #2 for raising to object

- Scope, binding

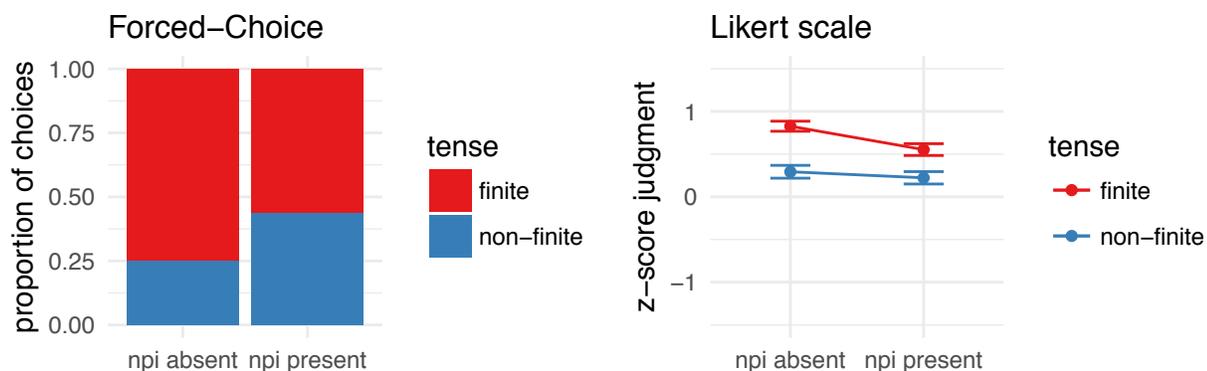
- (45) a. *The district attorney proved [no one to be guilty] during any of the trials.*
b. **The district attorney proved [that no one is guilty] during any of the trials.*

- (46) a. *The district attorney proved [the suspects to be guilty] during each other's trials.*
b. **The district attorney proved [that the suspects were guilty] during each other's trials.*

Disclaimer: the following is work in progress and the results are preliminary; please check with the authors before citing details!

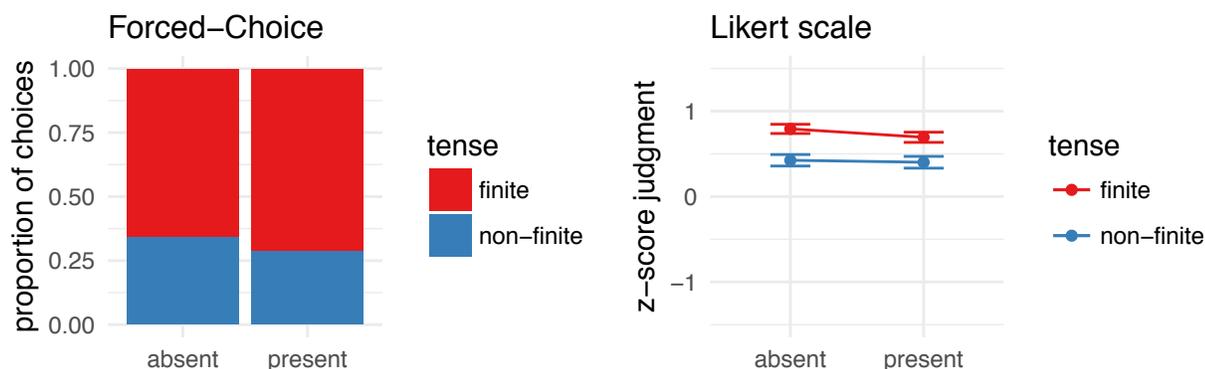
- Experiments (Sprouse & Wurmbrand): forced choice (finite vs. non-finite), Likert scale
- Results do not confirm the predictions/judgments above
- Forced choice: non-finite condition is higher when NPI is present, but overall there are still more choices for the finite condition than the non-finite one
- Likert scale: zero point on the z-score scale for each participant represents the mean acceptability rating that the participant gave for the full set of items in the experiment; balanced the number of grammatical and ungrammatical sentences in the experiment—the zero point on this (grand average) plot is a rough estimate of the mid-point of the acceptability judgment scale. Both finite and non-finite conditions are rated above average.

Figure 2: Full sample analysis for the NPI forced-choice (left panel) and Likert scale (right panel) experiments.



- Similar results for binding: finite choices are higher in the reciprocal condition; both finite and non-finite are rated above average again.

Figure 3: Full sample analysis for the reciprocal forced-choice (left panel) and Likert scale (right panel) experiments.



- However the binding and NPI licensing is achieved in these cases, finiteness does not seem to play a role—embedded NOM subjects can also license matrix elements.
- These results question the validity of the argument for raising to object.

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