

# What ECM may tell us about the cartography of the left periphery

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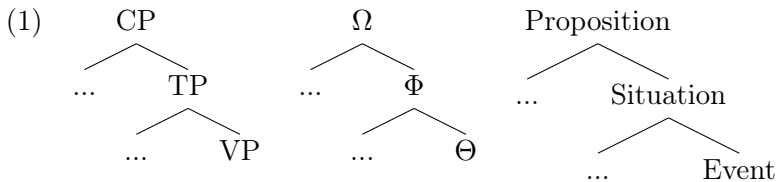
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## Background questions

- What parts of clause structure, if any, are universal?
- Is there a universal set of categories/features/meanings that make up clause structure?
- What evidence can we use to determine clause structure and the order of projections?
- This talk:
  - ↪ Empirical focus: CP-domain
  - ↪ Tools: Containment, implicational hierarchies, truncation

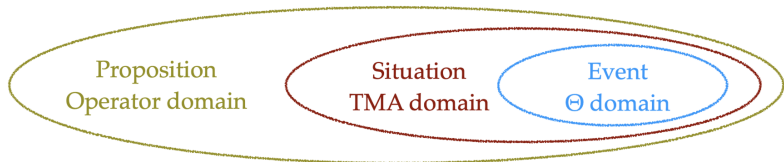
## Basic clause structure

- Abstracting away from labels and specific instantiations, a three-way split is widely assumed.
  - Extended V-projection, labels: Voice, *v*, I, Mod, Asp, C...
  - Clausal domain with specific functions: operator ( $A'$ ), A-properties, argument structure (Grohmann, 2003)
  - Semantic/conceptual sorts (Ramchand and Svenonius, 2014)



## Containment

- Ramchand and Svenonius, 2014: Three sortal domains which are in a containment configuration
  - Events: argument structure, subevents, Aktionsart
  - Situations: include and elaborate Events (combine time/world parameters with existentially closed Event)
  - Propositions: include and elaborate Situations (combine speaker-oriented/discourse-linking parameters with existentially closed Situation).



## Finer grained structure

- Can the fine-grained structures of the broad clausal domains also be defined via containment?
- Empirical focus: Proposition domain
- Hypothesis: There are some containment relations, which may speak for a partially rigid order in the CP.

## This talk

- “Exceptional” Case-marking: Configurations in which a DP receives Case and theta-role from different predicates:
  - Theta-role: embedded predicate
  - Case: matrix predicate
- ECM:
  - cross-linguistically
  - vs. restructuring
  - Germanic micro-variation—a hierarchy?
- CP cartographies
- A CP approach to ECM

## English-type ECM

- Only possible in non-finite contexts
- (2) a. I believe Nova to like salad.  
b. \*I believe Nova (that) likes salad.
- Languages with cross-clausal A-dependencies [CC2] (Lohninger et al., 2022)
- ECM, A-movement, Agreement across a finite CP-boundary
- Tests: Island-sensitivity, A-movement restrictions, A-Minimality, connectivity effects within the embedded clause.

## CC2 (Lohninger et al., 2022)

- Finite ECM involves A-movement or combined A- and A'-movement (van Urk, 2015).

- (3) L-am            auzit pe Mihai [ că repară casa        ].  
him-have.1SG heard DOM Mihai [ that fixes house.the ]  
'I've heard that Mihai is fixing the house.'  
[Alboiu and Hill, 2016: 256, (1c)]
- (4) Na-nun yeki-pwuthe-lul<sub>i</sub> [ t<sub>i</sub> nay ttang-ila-ko        ] mitnunta.  
I-TOP here-from-ACC<sub>i</sub> [ t<sub>i</sub> my land-COP-COMP ] believe  
'I believe my land begins from here.'  
[Yoon, 2007: 647, (52b)]





## Take-home message

- CP-omission cannot be a (universal) condition for ECM.
- It may, of course, be that CC $\mathfrak{A}$  languages have something special going on (deficient C, phase unlocking...).
- But given other problems for a CP-deletion account of ECM, let's see how far we can get by aiming at a uniform approach to both finite and non-finite ECM.

## ECM in Germanic

- Extensive variation across Germanic if/when ECM is possible.
- If not otherwise mentioned, the Swedish and Norwegian data were collected by C. Christopoulos (see also Christopoulos and Wurmbrand, 2020).

## Speech complements

- (7) Jónas sagði \*(Garp) hafa farið í bíó.  
Jonas said \*(Garpur.ACC) have gone to cinema  
'Jonas said that Garpur has gone to the cinema.'  
[Gísli Harðarson, p.c.] Icelandic
- (8) He claimed (\*her) to have gone to the movies. English
- (9) Jeg hevdet (\*henne) å ha fullført oppdraget.  
I claimed (\*her) to have completed mission.the  
'I claimed (\*her) to have completed the mission.'  
Norwegian
- (10) Sie behauptet (\*ihn) gewonnen zu haben.  
She claims (\*him) won to have.  
'She claims (\*him) to have won.'  
German (also Dutch)

## Strong belief complements

- (11) Pétur taliði **Maríu** ekki hafa vaskað upp diskana.  
Peter believed **Maria.ACC** not have washed up dishes.the  
'Peter believed Mary not to have washed up the dishes.'  
[Christensen, 2007: 156, (25a)] Icelandic
- (12) I believe **her** to have won the triathlon. English
- (13) \*Jag tror **henne** (att) vara begåvad.  
I believe **her** (to) be gifted  
'I believe her to be gifted.' Swedish
- (14) \*Jeg tror **ham** (å) være dum.  
I believe **him** to be stupid  
'I believe him to be stupid.' Norwegian
- (15) Ik geloof (\***haar**) slim te zijn.  
I believe (\***her**) smart to be  
'I believe (her) to be smart.' Dutch (also German)

## Weak belief complements

- (16) Eg tel hann vera heimskan.  
I consider him be stupid  
'I consider him stupid.'  
[Holmberg, 1986: 159, (60b)] Icelandic
- (17) I consider her to have won. English
- (18) Han måste anse Peter att inte vara lika klok som jag.  
He must consider Peter to not be as clever as I  
'He must consider Peter to not be as clever as me.'  
[Johnson and Vikner, 1994: 78, (47a)] Swedish (colloquial)
- (19) Jag anser honom (\*att) vara dum  
I consider him (\*I/C) be stupid  
'I consider him stupid'  
[Holmberg, 1986: 159, (61b)] Swedish (standard)

## Weak belief complements

(20) %Vi anser **henne** å være intelligent.

We consider **her** to be intelligent

‘We consider her to be intelligent’

[Sigurdsson, 1989: 83, (3) OK] Norwegian

(21) Internett-brukerne anser **dette** å være en fordel.

internet-users.DEF consider **this** to be an advantage

‘The internet users consider this to be an advantage.’

[Lødrup, 2008: 162, (26)] Norwegian

(22) Dutch, German: no verb *consider* that takes infinitive

## Germanic ECM Hierarchy

(23) I decided (\*Leo) to go to the party. \*in all Germanic languages

|               | finite CP | <i>say</i> | <i>believe</i> | <i>consider</i> | <i>decide, try</i> |
|---------------|-----------|------------|----------------|-----------------|--------------------|
| Icelandic     | *         | ✓          | ✓              | ✓               | *                  |
| English       | *         | *          | ✓              | ✓               | *                  |
| Swedish       | *         | *          | *              | ✓               | *                  |
| Norwegian     | *         | *          | *              | (✓)             | *                  |
| German, Dutch | *         | *          | *              | *               | *                  |



## How to (not) approach the variation

Why do some languages never have ECM?

## No “exceptional” Case?

- An issue with *exceptional* Case?
- E.g., Case and theta-role must come from the same predicate?
- Problem: **All** Germanic languages have small clauses, AcI—which involves exactly such a split.

(24) Eg let {\*að} Jón {\*að} fara.  
I let {\*to} Jon {\*to} go  
'I let Jon go.'

[Icelandic, Holmberg, 1986, 158:57a]

- (25) Vi horde { \*att } dem { \*att } komma  
We heard { \*to } them { \*to } come.  
'We heard them come.'  
[Swedish, Holmberg, 1986, 158:57b]
- (26) Han hade ikke set eller hørt mig (\*at) bestille noget.  
He had not seen or heard me (\*to) do anything  
'He hasn't seen or heard me do anything.'  
[Danish, Holmberg, 1986, 155:49b]
- (27) Vi lot / hørte Jon (\*å) synge i dusjen.  
We let / heard Jon (\*to) sing in shower.the  
'We let/heard Jon sing in the shower.'  
[Holmberg, 1986, 155:49a] Norwegian
- (28) Ich sah / hörte / ließ ihn (\*zu) spielen  
I saw / heard / let him (\*to) play  
'I saw/heard/let him play.'  
[German]

## Lack of matrix case?

- Coincidence that all ECM verbs do not license accusative?

(29) Ich erwarte ein Paket / eine Entschuldigung / eine  
I expect a.ACC package / an.ACC apology / a.ACC  
Freundin.  
friend.FEM

‘I am expecting a package/an apology/a girlfriend.’

*expect* + DP (Theme)

(30) Ich erwarte, PRO rechtzeitig informiert zu werden.  
I expect PRO timely informed to be.PASS  
‘I expect to be informed in time.’

Subject control

(31) \*Ich erwarte ein Paket geliefert zu werden.  
I expect a package delivered to be.PASS  
‘I expect a packaged to be delivered.’

\*ECM

## No CP-deletion?

- Based on the common account that ECM requires CP-deletion, one could approach the lack of ECM via a restriction on omitting CPs.
- This, however, would contradict (and lead to a serious problem) what we know about these (and other) languages regarding restructuring.
- Detour: CP-omission is also the crucial factor for restructuring (aka clause union, complex predicates).

## Restructuring

- German and Dutch show extensive restructuring properties (verb clusters, scrambling, pronoun fronting, long passive...)

(32) Sie hat {einen Frosch} beschlossen / versucht, {einen Frosch} zu  
She has {a frog} decided / tried {a frog} to  
küssen.  
kiss  
'She decided/tried to kiss a frog.'

## Restructuring restriction

- In propositional infinitives, however, these properties are typically blocked.
  - Propositional infinitive: speech, belief
- (33) Sie hat {\*einen Frosch} behauptet / geglaubt, {einen Frosch} geküsst  
She has {\*a frog} claimed / believed {a frog} kissed  
zu haben.  
to have  
'She claimed/believed herself to have kissed a frog.'

## The puzzle: Restructuring but no ECM

- This is typically accounted for by the obligatory presence of a CP despite differences in the approaches to restructuring, one common claim is that restructuring is always blocked in the context of a (real) CP.)
- It is then, however, particularly puzzling why these languages do not ever allow ECM.

(34) weil ihn Leo [~~ihn~~ zu treffen ] erwartet hat.  
since him.ACC Leo [ him to meet ] expected has  
'since Leo expected to meet him.' TP-complement

(35) weil ich (\*den Leo) rechtzeitig anzukommen erwartet habe.  
since I (\*the.ACC Leo) on.time to.arrive expected have  
'since I expected (Leo) to arrive on time.' \*ECM



## Complementation

- The typological and theoretical works have shown that different types of complements are more or less dependent, transparent, integrated into the matrix clause.
- At least broadly, the conclusions converge on a hierarchy like the one below (see Wurmbrand and Lohninger, 2019).



## Implicational transparency hierarchy

| Transparency     | Proposition | Situation | Event |
|------------------|-------------|-----------|-------|
| Romance          | *           | *         | ✓     |
| Germanic, Slavic | *           | ✓         | ✓     |
| Not found        | ✓           | *         |       |
| Not found        |             | ✓         | *     |

- This hierarchy can be explained by **containment and truncation**:
  - Since Propositions contain a Situation and an Event, they are necessarily the most complex and the most difficult to establish dependencies across.
  - Certain operations require less complex complements—**truncation**.
  - Situation complements may lack the highest domain; Event complements may lack the higher two domains.
  - Proposition complements cannot lack the (entire) highest domain.

## The dilemma

- The contexts that resist restructuring involve proposition compliments (attitude and speech).
- But these predicates are the (only) ones that allow ECM in Germanic (tendentiously also cross-linguistically; but some situation ECM is occasionally found).
- ECM | restructuring: (almost) complementary distribution

|               | Type   | Proposition    | Situation | Event |
|---------------|--|----------------|-----------|-------|
| Restructuring | Romance, Buryat, Takibakha Bunun             | *              | *         | ✓     |
| Restructuring | Germanic, Slavic, most Austronesian, Kannada | *              | ✓         | ✓     |
| ECM           | Germanic                                     | ✓ (restricted) | *         | *     |

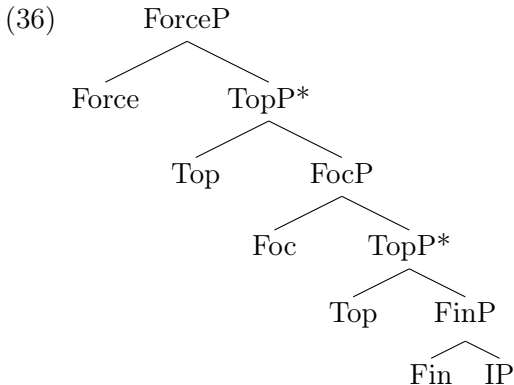
## A new direction

- ECM must involve some part of the CP.
- Finite ECM is then in principle also expected (see Lohninger et al., 2022).
- Understanding the structure of the CP can bring us to a possible approach for deriving the ECM hierarchy.
- Basic idea:
  - Restructuring requires omission of **all** CP-layers.
  - ECM in Germanic requires omission of **some** CP-layers.

# CP cartography

## Rizzi's left periphery

- Information structure based (Rizzi, 1997)

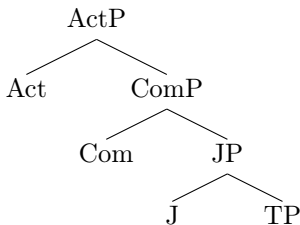


## Cinque's hierarchy

- Semantic hierarchy of clause structure: applied to adverbs, auxiliaries, verbal affixes (Cinque, 1999, Cinque, 2001/2004/2006).
- (37) **speech act (frankly, honestly) >> evaluative ((un)fortunately, luckily) >> evidential (allegedly, reportedly) >> epistemic (probably, presumably) >> past (yesterday) >> future (tomorrow) >> irrealis (perhaps) >> alethic (necessariamente) >> habitual (usually, generally) >> repetitive(I) (repeatedly, again) >> frequentative(I) (often) >> volitional >> celerative(I) (quickly) >> anterior (already) >> terminative (no longer) >> continuative (still) >> retrospective (just) >> proximative (soon) >> durative (long, briefly) >> generic/progressive (usually) >> prospective (almost) >> obligation (necessarily) >> permission/ability (possibly) >> completive (completely) >> VoiceP (well) >> celerative(II) (quickly, fast) >> repetitive(II) (again) >> frequentative(II) (often)**

## Krifka's speech act hierarchy

- Speech act information integration (Krifka, 2018)



- Propositions (*Situations* in the Ramchand and Svenonius, 2014 terminology): locate the event time/word with respect to the speech time/world.
- Judgments (JP): express a private judgement about a proposition; JP makes a judge parameter available; evidential, epistemic (e.g., *probably*)
- Commitments (ComP): express a public commitment to a judgement (*I REALLY did not steal the chocolate; I swear...; honestly*)
- Speech act (ActP): expresses common ground update; identifies the judge with the speaker (typically) (*I hereby declare...; Again, ...*).



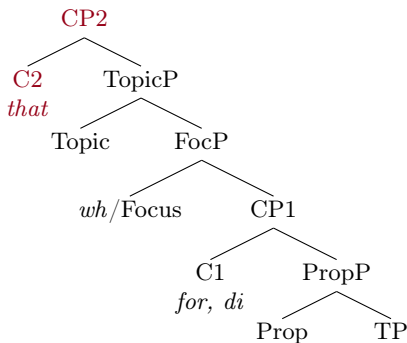
## What now?

- Cinque's and Krifka's semantic hierarchies are similar, except in details and motivation.
- Krifka's hierarchy is defined via containment: ActP is built on ComP; ComP is built on JP.
- Are these semantic hierarchies separate from Rizzi's syntactic hierarchy (is there motivation for ActP, ComP, JP being syntactic projections)?
- Non-cartographic aside: Is there motivation for information-structural TopP, FocP being syntactic projections?

## Hypotheses

- The syntactic CP-domain combine syntactic and semantic properties.
- Projections defined via containment yield rigid orders.
- Projections not defined via containment may still be ordered rigidly if they lead to implicational universals.
- Extent (and order?) of left periphery projections may vary across languages.
- Order diagnostic: truncation options, stopping points—higher projections entail lower projections

## A combined hierarchy



- Based on Satık, 2022
- C2: obligatorily absent in infinitives (cf. Pesetsky, 2019, *exfoliation*)
- C1: low complementizer (infinitives, subjunctives)
- Prop: Proposition (e.g., Krifka's ComP and JP)

(38) *Infinitive Size Generalization*

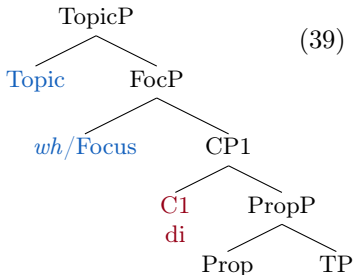
[Satık, 2022: 17, (49)]

No infinitive projects CP2.

No infinitive can co-occur with a high complementizer.

## Truncation: C2

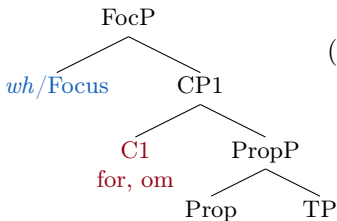
- Italian infinitives (also Irish, Catalan; Satik, 2022)



- (39) a. Gli sembra, **il tappeto**, **di** averlo  
 To.him seems, the carpet, to have-it  
 venduto.  
 sold  
 'It seems to him that the carpet has sold.'
- b. Gli ho detto [ **dove** andare ].  
 Him I told [ where go.INF ]  
 'I told him where to go.'

## Truncation: C2, Top

- English infinitives (also Dutch, French, Spanish; Satık, 2022)

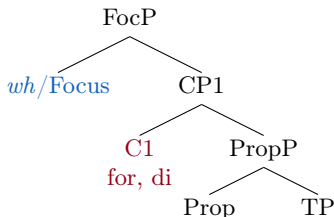


- (40) a. \*I decided, [your book], to read.  
b. I wonder *where* to find good cheese.  
c. I decided for Grey to get flying lessons.  
d. I claimed to be the Queen of Catan.

## Containment: *wh*/Foc » C1

(41) *Wh-Infinitive Generalization* [Sabel, 2020: 146, (37)]

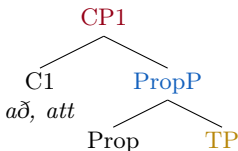
If a language has *wh*-movement to Spec CP in infinitives, then this language has the option of filling the C-system of this (type of) infinitive with an overt complementizer.



↔ **Infinitival complementizer** does not entail the option of *wh*-infinitives, but *wh*-infinitives entail the option of a complementizer.

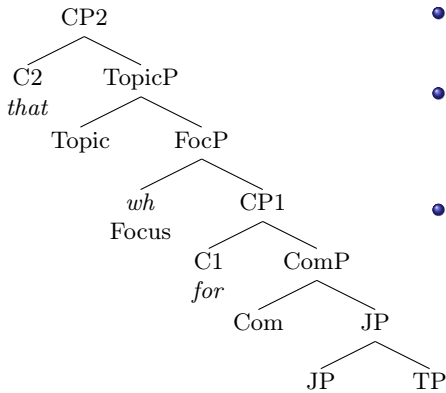
↔ Impossible: **OP in Spec,CP** (infinitive) and no **infinitival complementizer**.

## Truncation: C2, Top, Foc, C1, Prop



- Icelandic, Swedish: infinitives are maximally **CP1** (infinitival complementizer, but no *wh*, topic etc.).
- German: infinitives are maximally **PropPs**.
- Turkish, Hindi: infinitives are maximally **TPs**—propositional complements are obligatorily finite.

## Interim summary

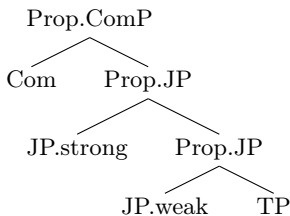


- Different infinitival CP sizes are well-motivated cross-linguistically.
- Whether the containment relations are universal, however, is still an open question.
- E.g.: Russian does not seem to fit this picture (it has *wh*-infinitives, but no propositional infinitives, no C2 complementizer). There may be other variables (e.g., whether there is *wh*-movement to the CP-domain at all).



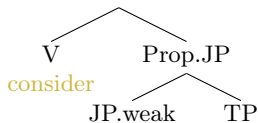
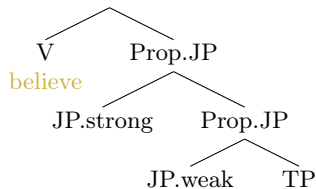
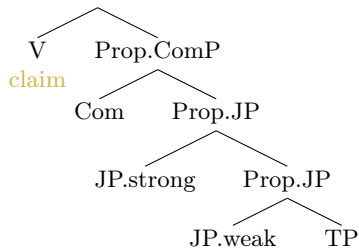
## Clausal embedding restrictions

- Clausal embedding (Krifka, 2018):
  - Speech verbs embed (at least) a ComP.
  - Belief verbs embed (at least) a JP.
- Suggested modification: weak and strong *beliefs*
  - *believe* (strong) embeds (at least) a JP.strong.
  - *consider* (weak) embeds (at least) a JP.weak.



## Minimally necessary structures

- All infinitives are truncated (see above).
- The degree of truncation can differ depending on language (see above), or construction.
- Based on the matrix verb, these are the maximal truncations, for a construction to be interpretable.

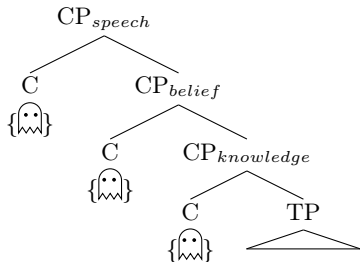


## Indexical Shift

- (42) “if indexical shift is effected in the scope of a non-speech attitude predicate, it must also be effected in the scope of a speech predicate.” (Sundaresan, 2018: 29).

|                  | speech | belief | evidential/knowledge |
|------------------|--------|--------|----------------------|
| Zazaki           | ✓      | *      |                      |
| Tamil            | ✓      | ?      | *                    |
| Navajo, Laz      | ✓      | ✓      | *                    |
| Tamil, Nez Perce | ✓      | ✓      | ✓                    |

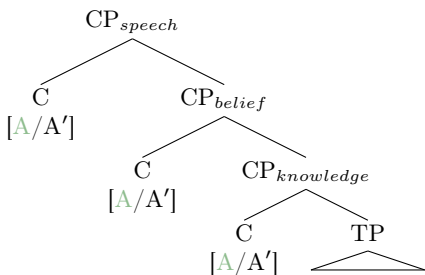
## Hierarchy via containment & truncation



- Language variation: Shifting operator 👻 can occur in different CP positions (at least the PropPs).
- If 👻 is in the highest CP position, it will only be present when the full structure is produced.
- Truncation eliminates 👻 associated with the truncated projection.
- If 👻 is associated with a lower CP position, it will also be present when higher projections are added.

## Back to ECM

## Hierarchy via containment & truncation

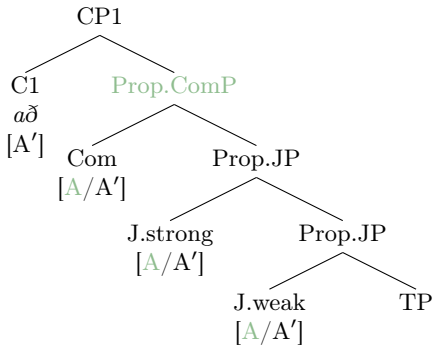


- Assumption: ECM involves at least a PropP (see Appendix for some thoughts).
- Language variation: CP-projections may involve A-qualities (van Urk, 2015; Lohninger et al., 2022).
- The A-domain of a clause extends into the CP-domain, with language-specific endpoints.
- Germanic: PropPs may have A-qualities; C1 never does.

## Icelandic ECM

- (43) Jónas sagði \*(Garp) hafa farið í bíó.  
Jonas said \*(Garpur.ACC) have gone to cinema  
'Jonas said that Garpur has gone to the cinema.'  
[Gísli Harðarson, p.c.]
- (44) Pétur taliði Maríu ekki hafa vaskað upp diskana.  
Pétur believed Maria.ACC not have washed up dishes.the  
'Peter believed Mary not to have washed up the dishes.'  
[Christensen, 2007: 156, (25a)]
- (45) Ég tel {\*að} hann {\*að} vera heimskan.  
I consider {\*to} him {\*to} be stupid  
'I consider him stupid.'  
[Holmberg, 1986: 159, (60b)]

## Icelandic A-domain

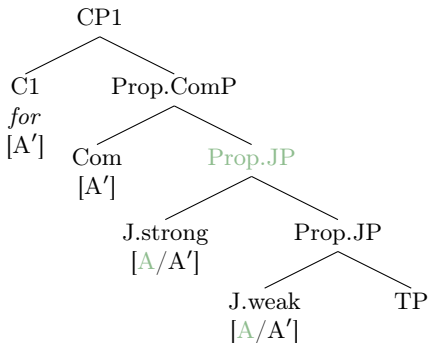


- Since all PropPs are mixed [A/A'] positions in Icelandic, further A-dependencies are allowed.
- Since (*\*að*) is in C1 (see Appendix), which does not have A-properties, it must be truncated in ECM.



## English ECM

- (46) a. I claim (\*her) to be happy.  
 b. I believe/consider her to be happy.

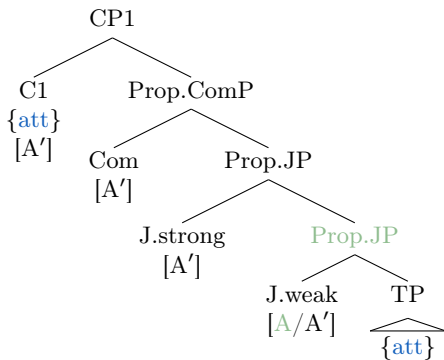


- Truncation in infinitives:
  - *claim*: minimally ComP.
  - *believe*: minimally JP.strong.
  - *consider*: minimally JP.weak.
- Since ComP is a pure [A'] domain in English, A-dependencies across it are blocked.
- Truncation of CP1 & ComP, creating a mixed [A/A'] domain, is only possible in *believe* and *consider* contexts, hence only these allow ECM.

## Swedish ECM

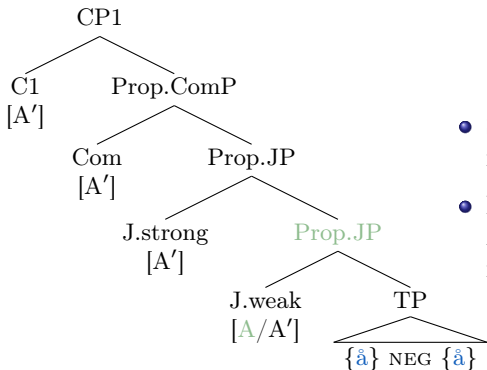
- (47) Jag anser Peter (att) vara dum.  
I consider Peter (to) be stupid  
'I consider Peter to be stupid.' [Johnson and Vikner, 1994: 78, (46a)]
- (48) Han må ste anse Peter att inte vera lika klok som jag.  
He must consider Peter to not be as clever as I  
'He must consider Peter to not be as clever as I.'  
[Johnson and Vikner, 1994: 78, (47a)]
- (49) \*Han måste anse Peter inte att vara lika klok som jag.  
He must consider Peter not to be as clever as I  
Intended: 'He must consider Peter to not be as clever as me.'  
[Johnson and Vikner, 1994: 78, (47b)]

## Swedish A-domain



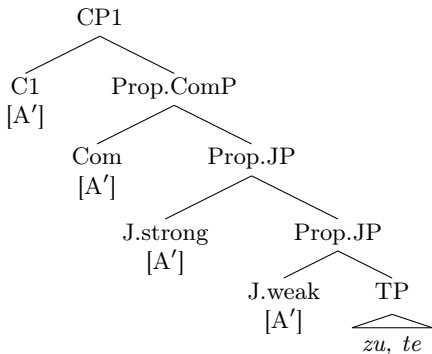
- Truncation in infinitives:
  - *claim*: minimally ComP.
  - *believe*: minimally JP.strong.
  - *consider*: minimally JP.weak.
- ComP and JP.strong are a pure [A'] domains in Swedish; A-dependencies across them are blocked.
- Truncation down to JP.weak is only possible in *consider* contexts, hence only these allow ECM.
- Att is either in T or C (see Appendix); optionally present in ECM (when in T).

## Norwegian A-domain



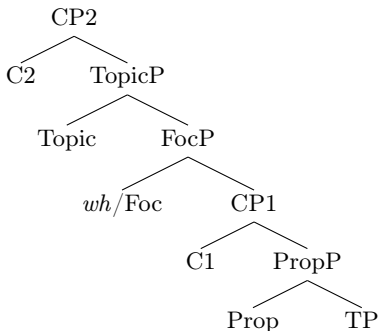
- Same as Swedish (if the construction is possible).
- Difference: å is either in *v* T (see Appendix), hence obligatorily present in ECM (like in English).

## German, Dutch A-domain



- No propositional projection can include A-features.
- ECM is blocked throughout.

## Composite A/A' status of other CP-layers?



- No cut-off point—CP2 [A/A']: Finite ECM (Buryat, Mongolian)
- Maximally TopicP [A/A']: Finite ECM/LDA with Topic restrictions (Tsez, Turkish).
- Maximally FocP [A/A']: Finite ECM with Focus (Mursell, 2020).

## Still to be developed

- Why does ECM require a propositional domain? Semantic property? See Appendix for some options but no full explanation yet.
- What are the A-features that “travel” up into the CP-domain? See Lohninger et al. (2022) for a connection to predication.
- ECM and ECM hierarchy beyond Germanic?

## Take-home conclusions

- ECM typically, but not necessarily (cf. finite ECM), involves truncation of *some* CP-layers.
- But it also requires the presence of the lowest CP-layer—at least a weak propositional domain.
- A-domain can be extended into the CP, with language-specific endpoints.
- PropPs cannot just be seen as extensions of the TP-domain.
  - PropPs are part of the CP-domain—semantically PropPs are distinct from the TP-domain (Ramchand and Svenonius, 2014).
  - The distribution of traditional restructuring draws a clear line between the TP-domain and the CP-domain, and PropPs belong to the CP-domain.
- Since ECM, a syntactic property, seems to follow the semantic CP hierarchy, if the ECM distribution can be confirmed in a broader empirical context, it could offer support for the syntactic presence of semantic projections.



Thank you!

## How to define ECM: English perspective

- Pesetsky (1992): ECM requires a non-agentive matrix verb in English.
  - Moulton (2009): ECM constructions report attitudes of acceptance/belief
    - ECM verbs (since they ascribe beliefs) cannot report lies, whereas speech verbs can.
    - Attitude (holder) is put into the complement clause—F head, F<sub>DOX</sub>
- (50) a. No ECM  
 He whispered, said, asserted, declared, conjectured, ... that Mary was guilty ...but he knew she wasn't. [Moulton, 2009: 171, (73)]
- b. ECM possible  
 He believed, held, fancied, suspected, understood, remembered, assumed... her to be guilty/that she was guilty  
 ... #but he knew she wasn't. [Moulton, 2009: 171, (73)]

## Alternative

Both of these accounts:

- Do not seem to carry over to Icelandic where ECM is obligatory with speech complements (even without changing them to beliefs).
- Do not cover the variation.

### *Combined syntax and semantics requirements*

- ECM requires a Judge (or perhaps some evidentiality).
- Like in Moulton's account this would mean that ECM is in part licensed semantically (the connection, however, is not clear yet; also not in Moulton's account).
- The specific distribution among different types of *Propositions* is a language-specific syntactic property—how high the A-features can occur.

## Infinitival marker

| Language  | Infinitival marker | Finite complementizer |
|-----------|--------------------|-----------------------|
| Icelandic | að                 | að                    |
| Swedish   | att                | att                   |
| Danish    | at                 | at                    |
| Norwegian | å                  | at                    |

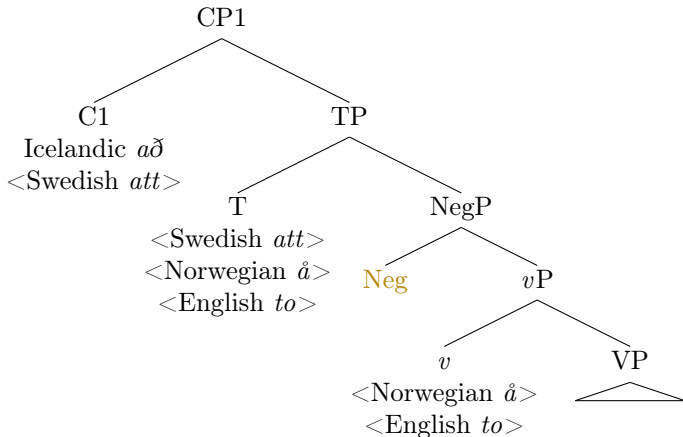
- “Although the infinitival marker is a homophone of the finite clause complementizer in Danish, Swedish and Icelandic, this is largely an orthographic convention. In all but slow and formal speech the pronunciation of the infinitival marker is not the same as that of the complementizer. For instance, in Swedish infinitival *att* is pronounced /o/, while the finite clause complementizer is pronounced /at/. The infinitival marker is commonly assumed to be historically derived from a preposition.”
 

[Holmberg, 1986: 164, fn 7]

## Some disagreement

| Language  | IM  | Holmberg (1986);<br>Platzack (1986) | Johnson and Vikner<br>(1994) |
|-----------|-----|-------------------------------------|------------------------------|
| Icelandic | að  | C                                   | C                            |
| Swedish   | att | C                                   | Infl                         |
| Danish    | at  | Infl                                | T/V                          |
| Norwegian | å   | Infl                                | T/V                          |

## Structure assumed here



## Ordering with negation: English

- (51) a. I tried {to} not {to} eat all the cookies.  
b. I wanted to eat all the cookies, but I tried {\*to} not {to}.  
c. You can leave, but I will not.

## Ordering with negation: Icelandic

(52) Icelandic: optional V-to-T; two positions for adverbs

- a. \*það væri vitlaust ekki að strax lesa þessa bók.  
 it be.SUBJ stupid not to immediately read this book  
 ‘It would be stupid to not immediately read this book.’  
 [Christensen, 2007: 153, (19b)]
- b. það væri vitlaust að ekki lesa þessa bók strax.  
 it be.SUBJ stupid to not read this book immediately  
 ‘It would be stupid to not immediately read this book.’  
 [Christensen, 2007: 154, (19d)]
- c. það væri vitlaust að lesa ekki þessa bók strax.  
 it be.SUBJ stupid to read not this book immediately  
 ‘It would be stupid to not immediately read this book.’  
 [Christensen, 2007: 154, (20b)]



## Ordering with negation: Swedish

- (53) a. Han må ste anse Peter **att inte** vera lika klok som jag.  
 He must consider Peter **to not** be as clever as I  
 ‘He must consider Peter to not be as clever as I.’  
 [Johnson and Vikner, 1994: 78, (47a)]
- b. \*Han må ste anse Peter **inte att** vera lika klok som jag.  
 He must consider Peter **not to** be as clever as I  
 ‘He must consider Peter to not be as clever as I.’  
 [Johnson and Vikner, 1994: 78, (47b)]
- c. Han lovade **att inte** lasa boken.  
 He promised **to not** read book.the  
 ‘He promised not to read the book.’ [Holmberg, 1986: 154, (46b)]

## Ordering with negation: Norwegian

- Holmberg (1986), Johnson and Vikner (1994) (77, fn.13): *å* appears after negation
- Faarlund (2015), Christensen (2007): it may either precede or follow negation in control infinitives.
- Faarlund (2015) (p. 2): ‘This word order (*ikke å*) was the predominant one far into the 20th century, and was until recently (and still is in certain circles) prescriptively recommended. In contemporary speech it is very rare, but it is still not judged as ungrammatical by today’s speakers.’ And the footnote: ‘A Google search for *prøve ikke å* (try not to) yields 11200 hits; *prøve å ikke* (try to not) yields 315000 hits’.
- Also double marking is possible.

## Ordering with negation: Norwegian

- (54) a. NN oppmodar alle som skal søkje om å ikkje å sende inn  
 NN encourages all who shall apply P to not to send in  
 søknaden i siste liten.  
 application.the in last moment  
 ‘NN encourages all those who are going to apply not to submit  
 their application at the last moment.’ [Faarlund, 2015: 2, (4)]
- b. Han lovet ikke å lese boken.  
 He promised not to read book.the  
 ‘He promised not to read the book.’ [Holmberg, 1986: 154, (46d)]
- c. Det er viktig å ikkje betale for mykje.  
 it is important to not pay too much  
 ‘It is important to not pay too much.’ [Faarlund, 2015: 1, (2b)]

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