

# A Derivational Theory of Clause Type and the Unity of Movement

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## Handout 1: A Derivational Theory of Clause Type

### 1. So many kinds of clauses

- **A puzzle:** Why are there so many sizes of clause — not just full finite CPs but also clauses missing all sorts of things in their C and T systems?

#### (1) kinds of English clauses

- full:**  
Mary thinks [that Sue is reading a book].
- no overt C:**  
Mary thinks [Sue is reading a book].
- that→for, no tense marking or agreement in T**  
Mary would be happy [for Sue to be reading a book].
- no overt C, no tense marking or agreement in T**  
Mary believes [Sue to be reading a book].
- no overt C, no tense marking or agreement in T (and subject raised)**  
Mary seemed [ \_\_\_ to be reading a book].
- no overt C, no tense marking or agreement in T (and subject = PRO)**  
Mary planned [PRO to be reading a book].
- no overt C, no tense marking or agreement in T, -ing version (subject raised or PRO)**  
Mary started [ \_\_\_/PRO reading a book].
- no overt C, no T at all**  
Mary saw [Sue read a book].
- and more ...!*

#### (2) German restructuring (Wurmbrand 1998; 2002): looks like bare VP "long passive"

weil [der Lastwagen und der Traktor] zu reparieren versucht wurden/\*wurde  
 since [the truck and the tractor]-NOM to repair tried were/\*was  
*meaning:* 'since somebody tried to repair the truck and the tractor'  
*but literally:* 'since the truck and the tractor were tried to repair'

#### (3) Tamazight Berber anti-agreement (examples from Ouali 2006, 5, ex. (10)-(12)) subject agreement reduced

- thamttut thɣla araw* (full agreement)  
 woman 3SG.FEM.see.PERF boys  
 'The woman saw the boys'
- mani thamttut ag ɣlan araw* (reduced agreement)  
 which woman COMP see.PERF.Part boys  
 'Which woman saw the boys?'
- \*mani thamttut ag thɣla araw* (\*full agreement)  
 which woman COMP 3SG.FEM.see.PERF boys  
 'which woman saw the boys?'

- **Naïve observation:** In all non-full-and-finite clauses, the subject is doing something interesting.
- **Bolder version of the conjecture:** In all non-full clauses, the subject has moved.

#### Even when subject movement is not obvious #1: English that-less finite clauses

- **Claim:** In *that*-less finite complement clauses like (1b), the subject has moved from spec,TP to spec,CP (Pesetsky and Torrego 2001).
- Adverbials may not precede subject in complementizerless declarative clauses (English)**
    - She claimed [\*(that) soon Mary would arrive].
    - She insisted [\*(that) most of the time they accepted this solution].  
 (Grimshaw 1997, 411, ex. (43a))
    - Mary is claiming [\*(that) for all intents and purposes John is the mayor of the city].  
 (Pesetsky and Torrego 2001, 375, ex. (37b))
  - Adverbials may follow subject in complementizerless declarative clauses (English)**
    - She claimed [Mary soon would arrive].
    - She insisted [they most of the time accepted this solution].
    - Mary is claiming [John for all intents and purposes is the mayor of the city].
  - **Conjecture:** Not a special fact about adverbials, but a fact about the position of the subject, which is in spec,CP in *that*-less finite clauses — higher than any position where the adverbials in (4) may occur:
  - Adverbials impossible as specifier of CP**
    - \*She claimed [soon that Mary would arrive].
    - \*She insisted [most of the time that they accepted this solution].
    - \*Mary is claiming [for all intents and purposes that John is the mayor of the city]

- (7) **Adverbials that may precede *that* may also precede the subject in *that*-less finite clauses (observation of Doherty 1997)**
- She says [when we get home (that) things will be different].
  - I believe [next year (that) she'll be fine].
  - I suppose [ordinarily (that) you would go somewhere else].
  - He thinks [in some circumstances (that) things would be better].
- (Doherty 1997, 203, ex. (16)-(17))

### Even when subject movement is not obvious: obligatory control infinitivals

- ... where Landau argues, following earlier insights of Chierchia, that a semantically vacuous minimal pronoun moves from spec,TP to spec,CP — creating a  $\lambda$ -expression denoting a property:

(8) Mary tried [PRO C [     to ... ]]

**Core proposal #1:** Clauses smaller than full finite CPs are always syntactically derived — their smaller-than-full size a consequence of the subject moving. Clause-size differences are not part of what a clause is born with, but arise in the course of the derivation.

**Core proposal #2:** It is the creation of a specific configuration as a result of subject raising — a structurally adjacent T and C that have both attracted the same element — that triggers deletion of elements of T or C or both: a *dissimilation process* (not unknown in syntax elsewhere).

### **Ingredients:**

- Conventional view of merge, probes, goals, EPP
- a semi-conventional distribution of movement-triggering features
- a specific version of the ban on "improper movement"
- successive cyclicity requiring extraction from CP to always proceed via Spec,CP
- the Dissimilation rule

### **A personal note:**

- Much of this material was first developed in work that I thought motivated a process of "Exfoliation" (deleting outer layers of a clause) — but Exfoliation now plays a very minor role as a limiting case of *dissimilation*.
- It may (or may not) be interesting to discuss where I went wrong and why, as an object lesson in wrongness. Happy to do that if it is requested.

## Part 1: Clause reduction due to dissimilation

### 2. Complementizer-trace effects

#### Subject/non-subject asymmetries (English)

- The "*that*-trace effect" in English

(9)  $\bar{A}$ -extraction of the local subject  $\rightarrow$  \*overt complementizer

- \*Who do you think [that     met Sue]?
- ✓Who do you think [     met Sue]?

(10)  $\bar{A}$ -extraction of object or anything other than local subject  $\rightarrow$  ✓overt complementizer

- ✓Who do you think [that Sue met    ]?
- ✓Who do you think [ Sue met    ]?

#### What moving elements produce the effect?

- $\bar{A}$ -extraction of any element that seems to satisfy the obligatory-subject requirement of English clauses ("EPP") behaves like (9)

(11) **Locative inversion shows the *that*-trace effect (Bresnan 1972)**

*In this room can be found the best examples of Minoan sculpture.*

- \*In which room do you think [that     can be found the best examples of Minoan sculpture]?
- ✓In which room do you think [     can be found the best examples of Minoan sculpture]?

(12) **Predicate inversion shows the *that*-trace effect**

*Even more important than syntax is global warming.*

- \*How much more important than syntax do you think [that     is global warming]?
- ✓How much more important than syntax do you think [     is global warming ]?

- $\bar{A}$ -extraction of *anything* other than a local subject behaves like (10)

(13) **Extraction of a non-local subject: subject extraction does not produce a *that*-trace effect in higher clauses**

- ✓Who do you think [**that** they said [ \_\_ met Sue]]?
- ✓Who do you think [ they said [ \_\_ met Sue]]?

(14) **Extraction of a local high adjunct does not show the *that*-trace effect**

- ✓Why did you say [**that** they met Sue \_\_ ]? (Huang 1983; Lasnik & Saito 1986)
- ✓Why did you say [they met Sue \_\_ ]?

- **Summary:** the effect concerns extraction from an embedded clause of *the pre-verbal phrase that satisfies the subject requirement ("EPP") of that clause.*

**Effect of fronting material between Spec,TP and Spec,CP**

(15) **Material intervening between C and Spec,TP eliminates the *that*-trace effect**  
(Bresnan, 1977, 194 fn. 6; Culicover 1993)

- Sue met the man who Mary is claiming that [for all intents and purposes] \_\_ was the mayor of the city.
- Bill, who Sue said that [to the rest of us] \_\_ might seem a bit strange, turned out to be quite ordinary.

**3. Why should we care about the *that*-trace effect?**

- Versions of the effect are found in **languages all over the globe** — and never an opposite asymmetry or other simple-to-describe variants.

**The challenge:** Why should the input data to the child just happen to be similar in this fashion in unrelated speech communities — with the result that the same subject/non-subject asymmetry is acquired by children growing up in them?

- **C unpronounced when local subject extracted (like English):**

(16) **Levantine Arabic** (Kenstowicz 1983; 1989)

- ʔayy fuʃtaan [Fariid kaal (innu) l-bint iʃtarat \_ ] (object extraction)  
which dress Fariid said that the-girl bought  
'Which dress did Fariid say that the girl bought?'
- ʔayy bint Fariid kaal [( \*innu) \_\_ iʃtarat l-fuʃtaan] (subject extraction)  
which girl Fariid said that bought the dress  
'Which girl did Fariid say bought the dress?'

(17) **Wolof (\**l-a* with LD subject extraction)** (Martinović 2014)

- L-an l-a Aali xam ni l-a xale bi gis  
CM-Q L-CWH Ali know that L-CWH child DEF.SG see  
'What did Ali know that the child saw?'
- \*K-an l-a Aali xam ni l-a \_\_\_ gis xale bi  
CM-Q L-CWH Ali know that L-CWH see child DEF.SG  
'Who did Ali know saw the child?'

- **Ban on local subject extraction (like English) — but no C-omission rescue strategy**

(18) **Russian** (Pesetsky 1979)

- %Kogo ty xočeš', čtoby Maša vstretila \_\_? (object extraction)  
who.ACC you.NOM want, that.SJN Maša.NOM meet.SJN.F.SG  
'Who do you want Masha to meet?'
- \*Kto ty xočeš', čtoby \_\_ vstretil Mašu? (subject extraction)  
who.ACC you.NOM want, that.SJN meet.SJN.M.SG Maša.ACC  
'Who do you want to meet Masha?'

(19) **Nupe** (Kandybowicz 2006, 220-221)

- Ke u: bè [ke Musa du \_\_] na o? (object extraction)  
what 3.SG seem COMP Musa cook NA O  
'What does it seem that Musa cooked?'
- \*Zèè u: bè [ke \_\_ du nakàn] na o? (subject extraction)  
who 3.SG seem COMP cook meat NA O  
'Who does it seem cooked meat?'

- **C takes an alternate form when subject extracted (like English)**

(20) **French**

- Qui penses-tu [que Marie a rencontré \_\_]? (object extraction)  
who think-you that Marie met  
'Who do you think Marie met?'
- \*Qui penses-tu [qu' \_\_ a rencontré Marie]? (subject extraction)  
who think-you that has met Marie  
'Who do you think met Marie?'
- Qui penses-tu [**qui** \_\_ a rencontré Marie]?

- **Material intervening between C and Spec,TP cancels the *that*-trace effect (cf. (15))**

- (21) **Adverb intervention ameliorates *que*-trace effect** (Bošković 2016)  
 ?Quelle étudiante crois-tu [que dans deux jours \_\_ va partir?  
 which student believe-you that in two days goes leave.INF  
 'Which student do you believe that in two days is going to leave?'

### Nupe

- (22) **Adverb intervention ameliorates *that*-trace effect** (Kandybowicz 2006)  
 Zèé Musa gán [gánán pányi lèé \_\_ ní enyà] o?  
 who Musa say COMP before PST beat drum O  
 'Who did Musa say that a long time ago beat the drum?'

### Dutch (Marcel den Dikken, p.c. circa 2000)

- (23) **Object parsable as fronted → no *that*-trace effect (Dutch)**
- Subject extracted from below Spec,TP*  
 Wie denk je [dat er komt]?  
 who think you C EXPL comes
  - Subject extracted from Spec,TP*  
 \*Wie denk je [dat \_\_ komt]?  
 who think you that comes
  - OK because the direct object has been fronted above Spec,TP?*  
 ✓Wie denk je dat dat ( ) zag?  
 who think you C DEM saw  
 'Who do you think saw that?'
- (24) **PP parsable as fronted → no *that*-trace effect** (Dutch "PP-over-V")
- PP arguably intervenes between C and subject*  
 ?Wie denk je [dat aan het eten ( ) had gedacht]?  
 who think you C about the food had thought  
 'Who do you think had thought about the food?'
  - PP does not intervene*  
 \*Wie denk je [dat \_\_ had gedacht aan het eten]?

- (25)a. *PP arguably intervenes between C and subject*  
 Wat denk je [dat in Den Haag ( ) zetelt]?  
 what think you C in the Hague resides  
 'What do you think is based in the Hague?'
- b. *PP does not intervene*  
 ??Wat denk je [dat \_\_ zetelt in Den Haag]?
- c. *not just an incompatibility of PP-over-V with subject extraction*  
 Wat denk je [dat al sinds mensenheugenis zetelt in Den Haag]  
 what think you C since time immemorial resides in the Hague  
 'What do you think has been based in the Hague since time immemorial?'

• Versions of the effect are found in languages all over the globe — and never an opposite asymmetry or other simple-to-describe variants.

**Why should the input data to the child just happen to be similar in this fashion in unrelated speech communities?**

- **"Poverty of the stimulus":** The data actually available to children is too sparse to support learning of the relevant contrasts (Philips 2013)
- **And often, when a language fails to show a *that*-trace effect, we think we know why: the *skipping strategy*** (Rizzi 1981; 2014)
- (26) **Italian: apparent absence of *that*-trace effects**
- Chi pensi che i linguisti hanno incontrato \_\_?  
 who you.think C the linguists AUX.3PL met  
 'Who do you think the linguists have met?'
  - Chi pensi che ha [incontrato i linguisti \_\_]?  
 who you.think C AUX.3SG met the linguists  
 'Who do you think met the linguists?'

### **Argument:**

- (27) **The "skipping strategy"**  
 Rizzi (1982): the obligatory use of clitic *ne* diagnoses extraction directly from a vP-internal object position rather than from Spec,TP
- ↓
- Quante hai detto che \*(ne) sono [VP cadute \_\_] ?  
 how.many.F.PL have.2SG said that of.them AUX.3PL fallen.F.PL  
 'How many of them did you say fell?'

- Does material intervening between C and the subject position interact with skipping? (rendering it unnecessary to extract from a  $\nu$ P-internal position)

In Catalan, yes — and also in some N.Italian dialects (Enrico Flor, p.c.)

- (28) Catalan: left-periphery interveners make skipping unnecessary
- a. Quants has dit que ??han/√n'han caigut?  
how.many have.you said that have / CL=have fallen  
'How many (of them) have you said have fallen?'
- b. Quants has dit que, segons els dos germans, √han/?n'han caigut?  
how.many have.you said that according.to the two brothers have/CL=have fallen  
'How many (of them) have you said that, according to the two brothers, have fallen?'  
(Núria Bosch Masip, personal communication)

In Standard Italian, however, no — a puzzle (Stanislao Zoppi, p.c.)

#### 4. Local $\bar{A}$ -movement of the subject also produces effects akin to the *that*-trace effect

- Think of the *that*-trace effect in English and elsewhere as a *reduction or alteration of C when the subject is extracted*.

Speculatively: "alteration" is always reduction (even if it's not obvious, as in *que~qui*).

- New: Such reductions and alterations are found *even when the subject is not extracted from its clause, but merely moved to its edge*:

#### Silencing or loss of C

- (29) Wolof: \**l-a* also when subject is short-distance *wh*-moved (cf. Error! Reference source not found.)
- aot ~~stana~~) jox Musaa téere bi?  
CM-AN CWH hand Musa book DEF.SG (\**l-a*)  
'Who handed the book to Musa?'
- b. K-an l-a Musaa gis?  
CM-AN L-CWH Musa see

#### Alteration of C

- (30) French *que/qui* alternation (cf. (20)) with local  $\bar{A}$ -movement of subject
- a. Je me demande qui **que** Marie voulait voir \_\_\_ ?  
I wonder who C Marie wanted to.see  
'I wonder who Marie wanted to see?'
- b. Je me demande qui \_\_\_ **qui** voulait voir Marie.  
I wonder who QUI wanted to.see Marie  
'I wonder who wanted to see Marie.'
- (31) Bùli *ā̀tì/ā̀lì* alternation (Sulemana 2017)
- a. (Ká) b<sup>w</sup>ā ā̀tì bí:ká ðìgì: \_\_\_ ?  
Q what ā̀tì child.DEF cook  
'What did the child cook?'
- b. (Ká) wānā \_\_\_ ā̀lì ðìg lāmmú:?  
Q who ā̀lì cook meat.DEF  
'Who cooked meat?'

#### Reduction of T: anti-agreement

- (32) Tamazight Berber anti-agreement (examples from Ouali 2006, 5, ex. (10)-(12))
- subject agreement reduced*
- a. *thamtut thɣla araw* (full agreement)  
woman 3SG.FEM.see.PERF boys  
'The woman saw the boys'
- b. *mani thamtut ag ɣlan araw* (reduced agreement)  
which woman COMP see.PERF.Part boys  
'Which woman saw the boys?'
- c. \**mani thamtut ag thɣla araw* (\*full agreement)  
which woman COMP 3SG.FEM.see.PERF boys  
'which woman saw the boys?'

#### Local subject extraction obligatorily from (post-verbal) $\nu$ P-internal position

- (33) Italian short-distance subject extraction (compare (27))
- \*Quante \_\_\_ sono cadute? / ✓Quante **ne** sono cadute \_\_\_?  
how.many are fallen CL.GEN  
'How many (of them) have fallen?'

## 5. What do local and long distance $\bar{A}$ -movement of the subject have in common?

**Answer:** Their first step (even if not the last):  
*local  $\bar{A}$ -movement of the subject from Spec,TP to Spec,CP*

### Proposal:

- Both the *that*-trace family of effects found with long-distance  $\bar{A}$ -movement and the similar effects found with short-distance  $\bar{A}$ -movement have the same origin ...

... a consequence of short-distance movement to spec,CP from the specifier of the complement of C (henceforth "TP")

### (34) Kinyalolo Dissimilation (first version)

In [<sub>CP</sub> ... C [<sub>TP</sub> ... T ...]], where TP is the complement of C, if both T and C have triggered movement of the same phrase, one or the other must undergo featural reduction.

**The "skipping strategy":** The phrase that moves to spec,CP did not pass through spec,TP.

**The ameliorating effect of fronting material between TP and CP:** if the material occupies a specifier or modifier position in a projection between TP and CP, the environment for Kinyalolo Dissimilation is not met.

**Assumption:** only feature deletion is an acceptable form of "featural alteration" (but this will not be crucial), so we might just say "alteration" in the statement of the rule

**Examples so far:** No pronounced C (right analysis to be determined), C changes its shape, T loses agreement morphology

### To be discussed:

Which head (C or T or both) undergoes dissimilation under which circumstances.

- Closely related to proposed *anti-locality constraints*, with which it basically shares an environment, e.g.

### (35) Anti-locality

Movement to the edge of CP must cross a phase boundary.

(cf. Saito & Murasugi 1998; Bošković 1994; Ishii 1999; Grohmann 2003, Erlewine 2015)

- The proposal here does not *ban* very local movement — it permits it and even *requires* it. But it singles out such movement as triggering an effect.

### My ambition: Total world domination.

*Claim:* Kinyalolo Dissimilation is responsible for much of the look of the world's less-than-full clauses (and more).

## 6. The unity of movement: Kinyalolo Dissimilation triggered by Hyper-raising

- Hyper-raising** = A-movement from a finite clause

### Two languages in which hyper-raising triggers a *that*-trace effect

#### Lusaamia (Bantu, Kenya) shows hyper-raising with a *that*-trace effect:

"The reconstructed reading is blocked by the presence of a complementizer in the embedded clause." (Carstens & Diercks 2013)

(36) *Scenario: You find that the watering hole is empty. Though there are no cows on site, you can say:*

#### a. **no raising**

Bi-bonekhana koti eng'ombe chi-ng'were amachi  
8SA-appear that 10cow 10SA-drink 6water  
'It appears that the cows drank the water'

#### b. **R1, no complementizer**

Eng'ombe chi-bonekhana chi-ng'were amachi  
10cow 10SA-appear 10SA-drink 6water  
'The cows appear to have drunk the water'

... *but not:*

#### c. **R1, complementizer**

\*Eng'ombe chi-bonekhana koti chi-ng'were amachi  
10cow 10SA-appear that 10SA-drink 6water  
'The cows appear as if they have drunk the water' (Carstens & Diercks 2013)

**Moro (Kordofanian, Sudan):** Hyper-raising incompatible with complementizer (as is subject relativization) (Jenks & Rose)

(37) \*Complementizer in hyper-raising

- a. *Kúku g-a-rámát-ia* [ (\*tá) g-é-<sup>↓</sup>fáð-á ugi ]  
 K. CLG-RTC-continue-IPFV COMP1 CLG-DPC1-chop-IPFV CLG.tree  
 'Kuku kept chopping the tree'
- b. *orán g-a-n-ó Kúku:u-ŋ* [ (\*tá) g-é-<sup>↓</sup>lanḡ-ó lwúr ]  
 man CLG-RTC-hear-PFV Kuku-ACC COMP1 CLG-DPC1-close-PRFV CLJ.door  
 'The man heard Kuku close the door'

**English:** Hyperraising surprisingly tolerable if followed by  $\bar{A}$ -movement of the hyperraised nominal — as discovered by Danckaert and Haegeman.

(38) Hyperraising in English

- a. %McDonald's has also seen an increase in the standard of hygiene across restaurants which \_\_\_ is felt \_\_\_ is attributable to the fact that the programme is now specifically about McDonald's restaurants.
- b. %A recording was also made of each School and was then used to transcribe the minutes and any quotes which \_\_\_ were felt \_\_\_ were relevant to the process.
- c. % [The church leaders] disagreed as to which books \_\_\_ were thought \_\_\_ were "Godly inspired". (Danckaert and Haegeman 2017, 27-28, ex. (1), (4), % added)

(39) Complementizer-trace effect with hyperraising (English)

- These organisations will now have the opportunity to bid for the new city funds, which are hoped (\*that) \_\_\_ will help up to 150 families facing eviction.  
 (Danckaert and Haegeman 2017, 30, ex. (9))

**The skipping strategy and hyper-raising**

(40) No COMP-trace effect:  $\bar{A}$ -extraction co-occurring with complementizer (Greek)

*Pjos nomizis oti telefonise?*  
 who think.2S that phoned (Roussou 2002, ex. 32b)

(41) Hyperraising co-occurring with complementizer (Greek)

*Ta pedhia arxisan na trexoun*  
 the children.NOM started.3PL COMP.SUBJ run.3PL  
 'The children started to run' (Alexiadou and Anagnostopoulou 1999, ex. (11))

- **Conjecture:** The skipping strategy obviates the COMP-trace effect for hyperraising as it does for  $\bar{A}$ -extraction.

**Another way to skip?**

(42)  $\bar{A}$ -movement shows no complementizer-trace effect (Zulu)

*ubani uSipho o-cabanga ukuthi u-zo-fika?*  
 AUG.1who AUG.1Sipho 1REL-think COMP 1SG-FUT-arrive  
 'Who does Sipho think will arrive?' (Claire Halpert, personal communication; field notes)

(43) Hyperraising co-occurring with complementizer (Zulu)

- a. *ku-bonakala* [ukuthi iqhina li-zo-phuma embizeni]  
 17s-seem COMP AUG.5steinbok 1s-FUT-exit LOC.3cooking.pot
- b. *iqhina li-bonakala* [ukuthi \_\_\_ li-zo-phuma embizeni]  
 AUG.5steinbok 5s-seem COMP 5-FUT-exit LOC.3cooking.pot  
 'It seems that the steinbok will leave the cooking pot.' (idiom)  
 i.e. 'It seems that the cat will be out of the bag.' (Halpert 2018, 6, ex. (19a-b))

- Halpert (2018): Raising verb first agrees with CP, then with raised subject — optional which agreement is realized on verb:

(44) Raising verb agrees with raised subject or with complement clause (Zulu)

- a. *ku bonakala* [ukuthi uZinhle u zo xova ujeqe] *no Raising/CP agr.*  
 17 seem that AUG.1Zinhle 1S FUT make AUG.1bread
- b. *uZinhle u-bonakala* [ukuthi \_\_\_ u-zo-xova ujeqe] *Raising/subj. agr.*  
 AUG.1Zinhle 1s-seem COMP 1-FUT-make AUG.1bread
- c. *uZinhle ku-bonakala* [ukuthi \_\_\_ u-zo-xova ujeqe] *Raising/CP agr.*  
 AUG.1Zinhle 17s-seem COMP 1s-FUT-make AUG.1steamed.bread  
 'It seems that Zinhle will make steamed bread.'  
 (Halpert 2018, 14-15, ex. (35a-b),(36); citing Halpert 2012, 2016)

- Halpert (2018): Agreement of higher verb with CP complement "unphases" it — making it possible to skip successive-cyclic movement through its edge. Can be incorporated in the present approach with the same logic as skipping: no dissimilation will be triggered!
- **Prediction:** Raising + CP-agreement → no evidence of dissimilation in embedded clause.

Fernández-Salgueiro (2005, 2008), for example, observes that several Romance languages (Spanish, Galician, European Portuguese, Italian and Catalan) allow hyperraising with one of the two patterns observed in Zulu: invariant 3SG agreement on the higher verb, which we might plausibly analyze as agreement with the embedded clause: Spanish, Galician, European Portuguese, Italian and Catalan.

Simonović and Arsenijević (2014), building on observations by Klajn (2007), note a similar possibility in Serbian with the modal verb *trebati* 'ought/need' — proscribed by the normative tradition, but described by Simonović and Arsenijević as "not problematic for most speakers"

**Hyperraising with 3SG agreement on the raising verb**

- (45) a. Estes nenos parece [que son moi listos]. *Galician*  
 these kids seem.3SG COMP are.3PL very smart.M.PL  
 'These kids seem to be very smart.' (Fernández-Salgueiro 2008, 299, (5))
- b. Mi ne treba [da dođemo], ali ipak dolazimo. *Serbian*  
 we NEG should.3SG COMP come.1PL but nevertheless come.1PL  
 'We shouldn't come, but we're coming nevertheless.'  
 (Simonović and Arsenijević 2014, 6, (3b); translation mine)

**7. Infinitivization and long-distance A-movement**

- [Non-hyper]-Raising =  
 A-movement from a clause that is **non-finite**.
- **General observation:** Infinitival clauses have *something funny going on with their subjects*.

**Terminology for this class of phenomena:**

R1 = "Raising to subject"

R2 = "Raising to object" / ECM

- (46) **Complementizerless nonfinite clause (with propositional semantics) only if embedded subject is extracted**
- |   |           |
|---|-----------|
| a. Sue considers Mary to have solved the problem. | R2        |
| b. Mary seems to speak French well.               | R1        |
| c. *It seems Mary to have solved the problem.     | unacc. V  |
| d. *It was believed Mary to speak French well.    | passive V |
| e. *Mary is aware Bill to be the best candidate.  | A         |
| f. *Mary's belief it to have been raining         | N         |

**Infinitivization conjecture**

- **Conjecture (to be supported in the next sections):**  
**Infinitivization is another possible result of Kinyalolo Dissimilation**
  - ... in (46), the result of long-distance A-movement via Spec,CP ...
  - ... which, since it is limited in English to the embedded subject, **entails that C bears a  $\phi$ -probe with a movement-triggering (EPP) property in such constructions.**

Of course, there is a more established account of the paradigm in (46) as a consequence of the Case Filter. More on that soon.

**Long-distance  $\bar{A}$ -movement can also trigger infinitivization**

- (47) **The "Kayne paradigm"** (Kayne 1984)
- \*I assure you Mary to be the best candidate.
  - ✓ Mary, who I assure you \_\_ to be the best candidate...  
 [note also: \**Mary was assured you \_\_ to be the best candidate...*]
- (48) **English *wager*-class verbs (Postal 1974; Pesetsky 1991)**
- \*We wagered Mary to be the most likely winner.
  - Mary, who we wagered to be the most likely winner...
  - Mary was wagered to be the most likely winner.
- (49) **French *believe*-class verbs (Kayne 1980)**
- \*Je croyais cet homme être arrivé.  
 I believed this man AUX.INF arrived  
 'I believed this man to have arrived.'
  - l'homme que je croyais être arrivé...  
 the.man that I believed AUX.INF arrived  
 'the man that I believed to have arrived...'
  - %Marie a longtemps été crue avoir résolu ce problème.  
 Marie AUX long.time been believe.FEM have solved this problem  
 (also 'consider', 'suppose', 'say', 'guess'...; Pollock 1984)

**No infinitivization if no Kinyalolo Dissimilation environment**

- **No infinitivization when there is Zulu-style agreement of a raising verb with its CP complement, as is possible in Serbian and Bosnian:**
- (50) **Bosnian judgments: V agreement with CP complement → no infinitivization (Nedžad Leko, p.c.)**
- Mi treba [da pjevamo], a ne da plačemo.  
 we should.3SG COMP sing.1PL, and not COMP cry.1PL.1PL
  - Mi ✓trebamo/\*treba pjevati, a ne plakati.  
 we should.1PL/3SG sing.INF, and not cry.INF  
 'We should sing, and not cry.'



(51) **Zulu: no raising from an infinitival clause (because no stopping off at spec,CP)**

- a. ku-bonakala [ukuthi iqhina li-zo-phuma embizeni]  
17S-seem that AUG.5steinbok 1S-FUT-exit LOC.3cooking.pot
- b. iqhina<sub>i</sub> li-bonakala [ukuthi t<sub>i</sub> li-zo-phuma embizeni]  
AUG.5steinbok<sub>i</sub> 5S-seem that t<sub>i</sub> 5S-FUT-exit LOC.3cooking.pot
- c. \*iqhina<sub>i</sub> li-bonakala [t<sub>i</sub> uku-(zo)-phuma embizeni]  
AUG.5steinbok<sub>i</sub> 5S-seem t<sub>i</sub> INF-(FUT)-exit LOC.3cooking.pot  
'It seems that the secret will come out.'  
(literal: 'It seems that the steinbok will leave the cooking pot.')

**Zulu:** CP agreement obligatory even if not morphologically detectable.

**BCS:** CP agreement an option (in certain registers)

• **Extraction of a non-subject does not have the consequences of subject extraction**

(52) **No that-trace effect for  $\bar{A}$ -extraction of a direct object**

- a. Who do you think that Sue met \_\_\_? (cheating slightly here)
- b. Who do you think (\*that) \_\_\_ met Sue?

(53) **No infinitivization licensed by direct object extraction**

recall:

*It seems Mary to have solved the problem.	unacc. V
*It was believed Mary to speak French well.	passive V
*Mary is aware Bill to be the best candidate.	A

extracting the object does not improve these structures:

- a. \*What does it seem Mary to have solved?
- b. \*Which language was it believed Mary to speak well?
- c. \*How good a candidate is Mary aware Bill to be?

**8. Infinitivization and short-distance A-movement**

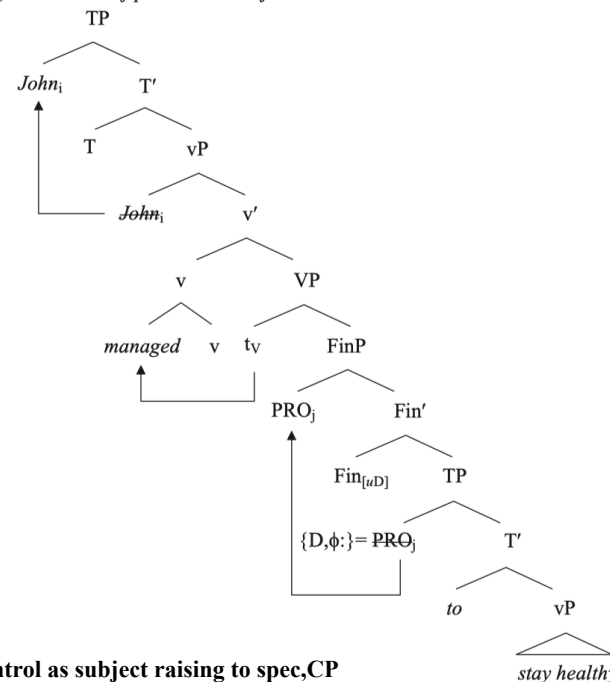
**Is infinitivization also triggered by short-distance A-movement?**

- **Control:** A-movement of PRO (a semantically vacuous minimal pronoun) from Spec,TP to Spec,CP creates the necessary configuration for predicative interpretation ...

... triggers Kinyalolo Dissimilation in the form of infinitivization (reducing the featural content of T)

(54) **An analysis of Obligatory Control from Landau (2015, 26) (building on Chierchia 1984)**

(32) *Derivation of predicative subject control*



(55) **Control as subject raising to spec,CP**

- a. Sue promised [<sub>CP</sub> PRO C [<sub>TP</sub> \_\_\_ to leave early]]
- b. [<sub>CP</sub> PRO C [<sub>TP</sub> \_\_\_ to leave early]] would be rude.

- **Even in Zulu this yields an infinitive** — since local subject movement to Spec,CP does take place and de-phasing by a higher verb is irrelevant.

(56) **Zulu control complement is infinitival**

- uMandla u-thanda uku-cula  
AUG.1Mandla 1S-like INF-sing  
'Mandla likes to sing.'

(Halpert 2015: Ex. (60a))

(57) **English infinitival relative clause, too/enough construction built on local subject**

- a. I need [a book \_\_\_ to read on the plane].
- b. ?This student is too young \_\_\_ to take the bar exam [without someone talking to pg first].  
(Brillman 2014)