

*What the PCC tells us about “abstract” agreement,  
head movement, and locality*

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## 1. What this talk is about

- When you talk to syntacticians, you’ll often hear things like:
  - “Sure, language *L* doesn’t have object agreement on the surface; but that’s just a fact about morpho-phonology.”
- ➔ My first goal today is to show you that this kind of thinking, when it comes to agreement, is almost always wrong:
  - Generally speaking, there is no agreement where you can’t see agreement.*
- In the course of this investigation, we’ll run into an interesting wrinkle:
  - as far as the relevant diagnostics are concerned, clitic doubling behaves as though it were agreement
- This is surprising, because clitic doubling is an instance of movement —
  - and because, contra Chomsky (2000, *et seq.*), movement does not generally involve an initial agreement step
- ➔ In figuring out why it is that clitic doubling does have to be prefigured by agreement, we will uncover some interesting things about:
  - locality
  - head movement
  - the locality of head movement
  - the *anti*-locality of phrasal movement

## 2. What this talk is not about

- Recent years have seen a cottage industry of *reductions-to-agreement* —

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- i.e., attempts to reduce various other linguistic phenomena to the same formal operation hypothesized to underpin agreement
  - e.g. Chomsky’s (2000, 2001) *Agree*
- INCL.: Binding Theory (Kratzer 2009, Reuland 2011, Rooryck & Vanden Wyngaerd 2011), negative concord (Zeijlstra 2004, 2008b); modal concord (Zeijlstra 2008a); noun-modifier concord (Baker 2008, Carstens 2000, Mallen 1997); and even the formation of in-situ questions (Bobaljik & Wurmbrand 2014)

- This talk is not about these (attempted) reductions.
- When I say ‘agreement’ I mean:
  - $\varphi$ -features covarying between a noun phrase and some verbal head
    - where ‘ $\varphi$ -features’ is some non-empty subset of {PERSON, NUMBER, GENDER/NOUN-CLASS}

## 3. Outline

- §4: A quick refresher on, or very brief introduction to, the Person Case Constraint (PCC)
- §5: Why the PCC is fundamentally a syntactic phenomenon (Albizu 1997, Rezac 2008b)
- §6: The sensitivity of the PCC to overtiness, and the consequences of that sensitivity for linguistic theory (SPOILER: *no null agreement!*)
- §7: The clitic-doubling caveat
- §8: A non-explanation for the caveat: the fallacy of agreement as a precursor to all DP movement
- §9: A more promising alternative:
  - an *A-over-A* explanation of why head movement tends to be maximally local (Hornstein 2009, Roberts 2010)
  - c-selection, agreement, and the *Principle of Minimal Compliance* (Richards 1998, 2001)
  - bonus: the *Head Movement Constraint* (Travis 1984) meets *Anti-Locality* (Abels 2003)
- §10: Learning the distribution of unvalued  $\varphi$ -features: *no null agreement* as an acquisition strategy
- §11: Conclusion

#### 4. A quick refresher on, or very brief introduction to, the Person Case Constraint

- The Person Case Constraint (PCC; a.k.a., the “\**me-lui* Constraint”):
  - a family of restrictions limiting the PERSON features of different arguments in relation to one another
    - usually affecting combinations of multiple internal arguments of a single predicate
  - ⇒ most commonly illustrated using the direct and indirect objects of a ditransitive verb
- Cross-linguistically, the constraint comes in (at least) four varieties: *Strong*, *Weak*, *Me-First*, and *UltraStrong*
  - see Anagnostopoulou (2005) and Nevins (2007), and references therein

#### Example:

- (1) STRONG PCC IN BASQUE DITRANSITIVES:  
In finite clauses, the direct object of a ditransitive verb must be 3rd person.
- (2) a. Zuk niri liburu-a saldu d-i- $\phi$ -da-zu  
you.E me.D book-ART<sub>sg</sub>(A) sell 3.A- $\sqrt$ -sg.A-1sg.D-2sg.E  
‘You have sold the book to me.’
- b. \* Zuk harakin-ari ni saldu n-(a)i- $\phi$ -o-zu  
you.E butcher-ART<sub>sg</sub>.D me(A) sell 1.A- $\sqrt$ -sg.A-3sg.D-2sg.E  
‘You have sold me to the butcher.’ [Laka 1996]
- As you can see from (2a–b), the PCC is *asymmetric* —
    - (1) is restriction on the features of the DO in the presence of an IO;
    - but there is no corresponding restriction on the features of the IO in the presence of a DO
  - The PCC is also *person-specific* —
    - it is a restriction on the PERSON features of the DO in the presence of an IO;
    - but there is no corresponding restriction on the NUMBER features of the DO in the presence of an IO (see Nevins 2011, *a.o.*)<sup>1</sup>

#### 5. The PCC is syntactic (Albizu 1997, Rezac 2008b)

- Albizu (1997) and Rezac (2008b) show that the PCC is a fundamentally syntactic effect
  - and not, say, a morphological filter (cf. Bonet 1991, 1994, *a.o.*)
- They focus on two-place unaccusatives —  
(verbs that take an ABS DP and a DAT DP, but no ERG DP)  
— which Rezac calls “applicative unaccusatives.”
- It turns out that there are two classes of applicative unaccusatives in Basque:
  - DAT  $\gg$  ABS verbs
  - ABS  $\gg$  DAT verbs
 (for reasons that I won’t get into here, all true ditransitives, i.e., triadic verbs, are DAT  $\gg$  ABS in Basque; see Elordieta 2001, Rezac 2008b)

(3) **DAT  $\gg$  ABS:**

- a. Kepa-ri bere buru-a gusta-tzen zako  
Kepa-DAT his head-ART<sub>sg</sub>(ABS) like-HAB AUX  
‘Kepa likes himself.’
- b. \* Kepa bere buru-a-ri gusta-tzen zako  
Kepa(ABS) his head-ART<sub>sg</sub>-DAT like-HAB AUX

(4) **ABS  $\gg$  DAT:**

- a. \* Kepa-ri bere buru-a ji-ten zako ispilu-a-n  
Kepa-DAT his head-ART<sub>sg</sub>(ABS) come-PROG AUX mirror-ART<sub>sg</sub>(ABS)-LOC  
*Intended:* ‘Kepa is approaching himself in the mirror.’
- b. Miren bere buru-a-ri mintzatu zaio  
Miren(ABS) his/her head-ART<sub>sg</sub>-DAT talk-PRT AUX  
‘Miren talked to herself.’ [Rezac 2008b:75]

<sup>1</sup>But see Coon et al. (in prep.) for a more nuanced view—as well as evidence, from copular clauses in German, for the existence of a corresponding NUMBER effect. Importantly, Coon et al.’s results are fully compatible with the approach taken here. That is because the NUMBER effect that they find only arises in configurations where the intervener stays in place after PERSON agreement has been attempted. In canonical PCC configurations, like the ones discussed here, the intervener (in this case, the indirect object) undergoes clitic doubling right after PERSON probing, and ceases to be an intervener; see Béjar & Rezac (2003) and Preminger (2009), *a.o.*, for details.

This compares favorably with approaches such as Nevins 2007, where the PERSON-specificity of the PCC is derived from an ontological difference between PERSON and NUMBER features. The latter would have trouble accommodating data of the sort Coon et al. discuss.

• Crucially, DAT ≫ ABS verbs show the PCC, while ABS ≫ DAT ones don't:

(5) DAT ≫ ABS:

a. Miren-i gozoki-ak gusta-tzen  $\phi$ -zai-zki-o  
Miren-DAT sweet-ART<sub>pl</sub>(ABS) like-IMP 3.ABS-√-pl.ABS-3sg.DAT  
'Miren likes candy.'

b. \*/?? Ni Miren-i gusta-tzen na-tzai- $\phi$ -o  
me(ABS) Miren-DAT like-IMP 1.ABS-√-sg.ABS-3sg.DAT  
'Miren likes me.'

(6) ABS ≫ DAT:

Ni Peru-ri hurbildu na-tzai- $\phi$ -o  
me(ABS) Peru-DAT approach 1.ABS-√-sg.ABS-3sg.DAT  
'I approached Peru.'

[Albizu 1997:21, Rezac 2008b:73]

• **Things to note:**

- the 'target forms' in (5b) and (6) are identical
  - they are not merely *phonologically* identical; they are *morpho-syntactically* identical:
    - the two express the same set of features, {1sg.ABS, 3sg.DAT}
- the distinction between the two cases is only in the finer hierarchical organization of the relevant arguments

NB: This is also a good argument against 'usage'- or 'grammaticalization'-based approaches to the PCC (e.g. Haspelmath 2004). Whatever you want to say about the target form in (5b), it is clearly not missing from the grammatical vocabulary of the language.

• This is a distinction that lives in the module of grammar known as syntax.

- In particular, the PCC as it applies to ditransitives (see (1–2), above) is a subcase of a broader pattern:

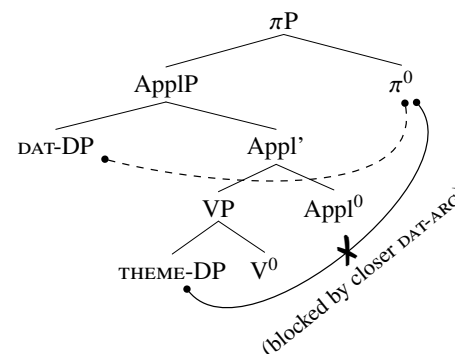
(7) “GENERALIZED” PCC IN BASQUE:

In finite clauses that have a DAT argument located higher than the ABS argument, the ABS argument must be 3rd person.

(Recall that all triadic ditransitive verbs are DAT ≫ ABS.)

• A sketch of a syntactic account of the PCC (following Béjar & Rezac 2003):

(8)



- roughly: a 1st/2nd person argument that could have, case-wise, been targeted for  $\phi$ -agreement—but wasn't—is cause for ungrammaticality
- lots more to say here... but the crucial point for us right now is this:
  - syntactic accounts like (8) are the ones equipped to predict (5–6)
  - because the interruption of agreement shown in (8) will only obtain if the DAT DP is structurally higher than the THEME DP

**6. The PCC is sensitive to the overtness of  $\phi$ -agreement**

- The PCC is famously absent in environments that lack overt agreement morphology with the internal arguments of the verb
- This is true cross-linguistically —
  - Hebrew lacks agreement morphology with internal arguments; and Hebrew does not exhibit the PCC:

(9) a. DAT ≫ ACC ...

ha-mehapnet-et<sub>k(i/\*i)}</sub> ta-cig la-cofe<sub>i</sub> et acmo<sub>i</sub>  
the-hypnotist-F FUT.3sg.F-introduce DAT.the-spectator.M ACC REFL.M  
'The (female) hypnotist<sub>k(i/\*i)}</sub> will introduce the (male) spectator<sub>i</sub> to himself<sub>i</sub>.'  
(lit. 'The (female) hypnotist<sub>k(i/\*i)}</sub> will introduce to the (male) spectator<sub>i</sub> himself<sub>i</sub>')

b. ... BUT NO PCC

ha-menahel-et ta-cig la-hem oti<sub><1sg, DO></sub>  
the-manager-F FUT.3sg.F-introduce DAT.the-them ACC.me  
'The manager will introduce me<sub><1sg, DO></sub> to them.'

- And it is also true intra-linguistically —
  - non-finite environments in Basque (incl. nominalizations) lack agreement morphology; and these environments do not exhibit the PCC:

(10) \* Zuk harakin-ari ni saldu *n-(a)i-φ-o-zu*  
 you.E butcher-ART<sub>sg,D</sub> me(A) sell 1.A-√-sg.A-3sg.D-2sg.E  
 ‘You have sold me to the butcher.’ [=(2b)]

(11) Gaizki irudi-tzen *φ-zai-φ-t* [zuk ni harakin-ari sal-tze-a]  
 wrong look-IMP<sub>F</sub> 3.A-√-sg.A-1sg.D you.E me(A) butcher-ART<sub>sg,D</sub> sold-NMZ-ART<sub>sg(A)</sub>  
 ‘It seems wrong to me for you to sell me to the butcher.’ [Laka 1996]

- the embedded non-finite clause in (11) contains the same verb, and the same combination of arguments, as the ungrammatical (10)
  - but this embedded clause lacks agreement morphology, and the PCC does not arise

Now let us juxtapose this with the results of §5:

- We have, in the PCC, a **syntactic effect** par excellence—which nevertheless only arises in the presence of **overt agreement morphology**

⇒ *How can something in narrow syntax be sensitive to the overtness of agreement morphology?*

As best I can tell, the only possible answer is this:<sup>2</sup>

The mechanisms of agreement & intervention, implicated in the PCC, are only in place when we can see them.

- To put it another way:
  - **there is generally no such thing as “abstract” agreement, null across the entire paradigm**

(There is no prohibition against particular cells being null in what is otherwise an overt paradigm: the PCC still arises in such cases.)

⇒ The PCC goes away in the absence of overt agreement morphology not because it is a morphological filter —

(we already saw in §5 that the PCC cannot be a morphological filter)

— but because, in the absence of overt agreement morphology, *there is no agreement there*, not even “abstract” agreement.

## 7. The clitic-doubling caveat

- Our characterization so far of the intra- and cross-linguistic distribution of PCC effects has been idealized in one important respect:
  - it abstracted away from the distinction between *φ*-**agreement** and **clitic doubling**, treating them both as “agreement morphology”

A quick refresher:

- (12) a. ***φ*-agreement**: valuation relation between a functional head H<sup>0</sup> and DP— as a result of which, the *φ*-feature values associated with the interpretation of the DP ([participant], [plural], etc.) come to be expressed on H<sup>0</sup>
- b. **clitic doubling**: the occurrence of a D<sup>0</sup>-like morpheme, which is *φ*-feature-matched to the doubled DP, and appears alongside an appropriate host

- Clitic doubling, in contrast to *φ*-agreement, bears the hallmarks of movement
  - in particular, clitic doubling creates new antecedents for binding—and thus, repairs Weak Crossover (WCO) violations, for example:

*(Modern Greek; Anagnostopoulou 2003:207)*

- (13) a. [Kathe mitera]<sub>i</sub> sinodhepse [<sub>vP</sub> t<sub>i</sub> (t<sub>v</sub>) [to pedhi tis]<sub>i</sub> ]  
 [every mother].NOM accompanied [the child hers].ACC  
 ‘[Every mother]<sub>i</sub> accompanied [her<sub>i</sub> child]<sub>k</sub>.’
- b. ?\* [I mitera tu]<sub>k</sub> sinodhepse [<sub>vP</sub> t<sub>i</sub> (t<sub>v</sub>) [to kathe pedhi]<sub>k</sub> ]  
 [the mother his].NOM accompanied [the every child].ACC  
 ‘[His<sub>k</sub> mother]<sub>i</sub> accompanied [every child]<sub>k</sub>.’
- c. [Kathe mitera]<sub>i</sub> to<sub>k</sub> sinodhepse [<sub>vP</sub> t<sub>i</sub> (t<sub>v</sub>) [to pedhi tis]<sub>i</sub>]<sub>k</sub> ]  
 [every mother].NOM CL.ACC accompanied [the child hers].ACC  
 ‘[Every mother]<sub>i</sub> accompanied [her<sub>i</sub> child]<sub>k</sub>.’
- d. [I mitera tu]<sub>k</sub> to<sub>k</sub> sinodhepse [<sub>vP</sub> t<sub>i</sub> (t<sub>v</sub>) [to kathe pedhi]<sub>k</sub> ]  
 [the mother his].NOM CL.ACC accompanied [the every child].ACC  
 ‘[His<sub>k</sub> mother]<sub>i</sub> accompanied [every child]<sub>k</sub>.’

<sup>2</sup>The only possible answer that maintains the modularity of syntax vs. morpho-phonology, that is.

Morphological considerations (Arregi & Nevins 2008, 2012):

•  **$\varphi$ -agreement:**

- there is no particular reason to expect that the exponents of  $\varphi$ -agreement will resemble the free-standing pronouns of the language<sup>3</sup>
- moreover, it is possible for these exponents to exhibit allomorphy, and even suppletion, based on the (other) features of the head H<sup>0</sup>
  - a common example would be the agreement exponents in one tense/aspect differing from those found in another tense/aspect
    - e.g. *am - are - is* vs. *was - were - was*

• **clitic doubling:**

- doubled clitics do not, in contrast to  $\varphi$ -agreement, exhibit allomorphy based on specific features of their hosts
- we may expect that at least in some cases, doubled clitics will bear morpho-phonological resemblance to the free-standing pronouns of the language

Another example of clitic doubling:<sup>4</sup>

(Basque; Laka 1996)

- (14) *Guraso-e-k*        *ni-ri*        *belarritako ederr-ak*        *erosi*  
 parent(s)-ART<sub>pl</sub>-ERG    *me-DAT*    earring(s)    beautiful-ART<sub>pl</sub>(ABS)    bought  
*d-i-zki-d<sub>a</sub>-te.*  
 3.ABS-√-pl.ABS-1SG-DAT-3pl.ERG  
 ‘(My) parents have bought me beautiful earrings.’

Further issues:

(i) **apparent sensitivity to referential properties of the doubled nominal**

- clitic doubling is not, generally speaking, conditioned by factors like *animacy, specificity, definiteness*, etc. etc.

<sup>3</sup>Diachronically,  $\varphi$ -agreement in the narrow sense often develops from clitics, which themselves often develop from free-standing pronouns. Consequently, it is *possible* for the forms in question to retain their resemblance. The point here is merely that once the synchronic grammar of the speakers involves  $\varphi$ -agreement rather than clitic doubling, there is no longer any principled reason to expect such similarity. Indeed, it is possible that sound changes affecting doubled clitics could serve as a catalyst for the diachronic reanalysis of clitics into  $\varphi$ -agreement in the narrow sense.

<sup>4</sup>For extensive argumentation that these are indeed instances of clitic doubling, see Arregi & Nevins (2008, 2012), as well as Preminger 2009.

- nor is it optional, in the general case
- clitic doubling in (14), for example, is entirely obligatory, irrespective of the properties of the doubled nominals
  - they can be definite or indefinite; quantificational or not; rigid designators or not; etc.

⇒ therefore, even in languages where clitic doubling looks like it is sensitive to such nominal properties —

(Porteño Spanish; Suñer 1988:396)

- (15) a. *La<sub>i</sub> oían*        [*a Paca / a la niña / a la gata*]<sub>i</sub>.  
 CL hear.PAST.3pl    A Paca / A the girl / A the cat  
 ‘They listened to Paca / the girl / the cat.’  
 b. (\**La<sub>i</sub>) buscaban*    [*a alguien que los ayudara*]<sub>i</sub>.  
 (\*CL) search.PAST.3pl    A somebody COMP CL.pl help.SBJUNCT  
 ‘They were looking for somebody who could help them.’

— it would be a mistake to build this sensitivity into the clitic-doubling operation itself

- instead, these properties regulate *movement* of the full noun phrase
  - into a position from which clitic doubling is then both possible and obligatory (Diesing 1992, Sportiche 1998, Merchant 2006, *a.o.*)
- importantly, animacy/definiteness/specificity are known to regulate A-movement of DPs, even in languages that lack clitic doubling entirely
  - cf. *Object-Shift* in Scandinavian, Turkic, Yiddish, ... (Diesing 1997, Diesing & Jelinek 1993, *a.o.*)
- it would therefore be redundant to build this sensitivity into the clitic-doubling operation itself

(ii) **locality**

- for the purposes of locality, doubled DPs behave like traces of A-movement (Anagnostopoulou 2003, *a.o.*)
  - which are known to be non-interveners, at least for  $\varphi$ -agreement / further A-movement operations (Holmberg & Hrǫarsdóttir 2003, *a.o.*)

- example:<sup>5</sup>

- (16) a. [[Miren-entzat]<sub>PP</sub> [harri horiek]<sub>(ABS)</sub> altxa-tze-n] probatu  
Miren-BEN stone(s) those<sub>pl</sub>ABS lift-NMZ-LOC attempted  
[d-it-u-zte]<sub>aux</sub>  
3.ABS-pl.ABS-√-3pl.ERG  
‘They have attempted to lift those stones for Miren.’
- b. [[Lankide-e-i]<sub>DAT</sub> [liburu horiek]<sub>ABS</sub> irakur-tze-n] probatu  
colleague(s)-ART<sub>pl</sub>-DAT book(s) those<sub>pl</sub>(ABS) read-NMZ-LOC attempted  
[d-φ/\*it-u-(z)te]<sub>aux</sub>  
3.ABS-sg/\*pl.ABS-√-3pl.ERG  
‘They have attempted to read those books to the colleagues.’  
[Preminger 2009:640–641]

⇒ dative DPs are interveners in Basque

- but they aren’t interveners when they’ve been clitic-doubled;  
compare (16b) with (14):

- (14) Guraso-e-k ni-ri belarritako ederr-ak erosi  
parent(s)-ART<sub>pl</sub>-ERG me-DAT earring(s) beautiful-ART<sub>pl</sub>(ABS) bought  
d-i-zki-da-te.  
3.ABS-√-pl.ABS-1sg.DAT-3pl.ERG  
‘(My) parents have bought me beautiful earrings.’

- in (14) (a monoclausal ditransitive), the dative DP has been clitic-doubled, and agreement with the plural absolutive DP goes through

### (iii) clitic doubling vs. cliticization

- since clitic doubling exists, and *pro* exists, I am going to assume there is no third thing called (syntactic) ‘cliticization’;
- rather, there is simply clitic doubling of *pro*

For more on clitic doubling, see Anagnostopoulou (2006, to appear), and references therein.

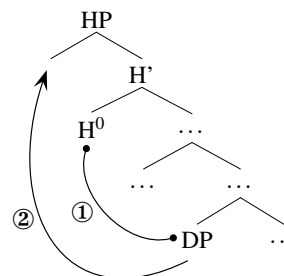
⇒ But if clitic doubling is not agreement, *why is its occurrence enough to give rise to PCC effects?*

## 8. A non-explanation: agreement as a precursor to all DP movement

Here’s an answer that doesn’t work: “Because clitic doubling is DP movement, and all DP movement is prefigured by an agreement relation.”

- (17) A TWO-STEP APPROACH TO DP MOVEMENT (Chomsky 2000, 2001)

- ① H<sup>0</sup> enters into an *Agree* relation in  $\varphi$ -features with a DP  
→ *and subsequently/consequently*:
- ② the DP moves to the domain of H<sup>0</sup> (= [Spec,HP])



**We know that (17) is wrong** (at least as a general requirement). Here’s why:

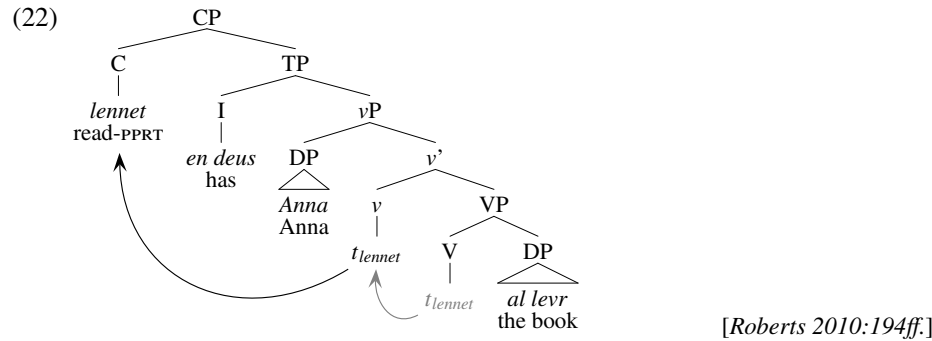
- Overt agreement in  $\varphi$ -features is double-dissociable from DP movement
  - e.g. in Icelandic, there are sentences where agreement targets a nominative non-subject, while a non-nominative DP (e.g. a dative) moves to subject position despite failing to control  $\varphi$ -agreement:

- (18) [Einhverjum stúdent]<sub>i</sub> finnast t<sub>i</sub> tölvurnar ljótar  
some student.SG.DAT find.PL computers.the.PL.NOM ugly  
‘Some student finds the computers ugly.’ [Holmberg & Hróarsdóttir 2003:999]

- The standard retort to this is the abstractness gambit:

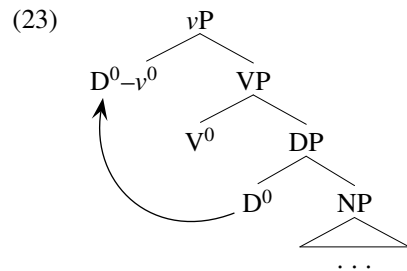
<sup>5</sup>The data in (16a–b) are from “substandard” varieties of Basque; see Etxepare (2006:303n2).



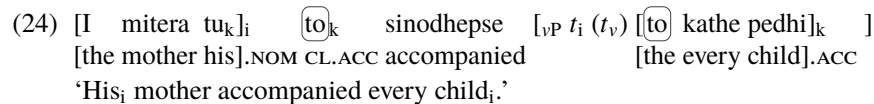


- for discussion and, crucially, for arguments that these Breton data indeed involve long head movement (rather than, say, remnant VP-fronting) —
  - see Borsley & Kathol (2000), Borsley et al. (1996), Jouitteau (2005), Roberts (2004, 2010), Schafer (1994) and Stephens (1982)
- and for evidence of long head movement in other empirical domains —
  - see Harizanov (2016), Lambova (2004), Lema & Rivero (1990), Rivero (1991), Vicente (2007, 2009) and Wilder & Čavar (1994)

• So here’s the structure of clitic doubling:



• At this juncture, you might be asking: why, then, is D<sup>0</sup> pronounced twice?

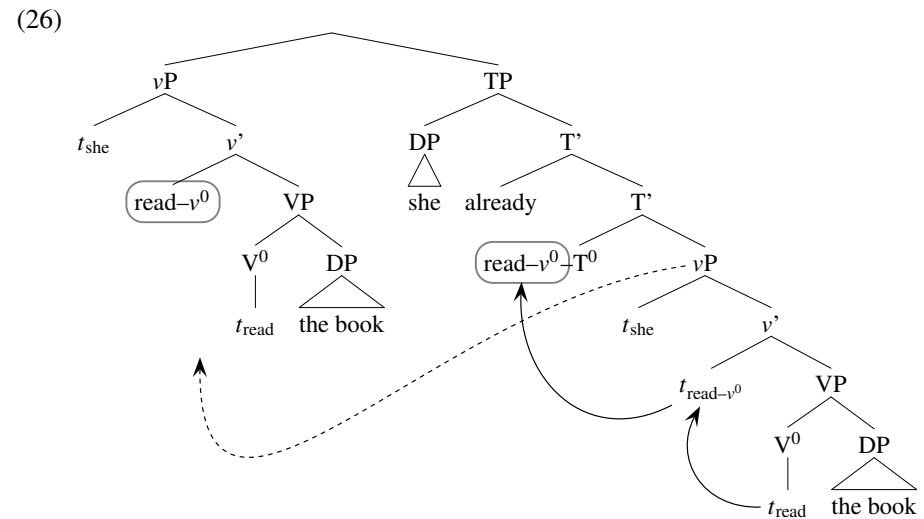
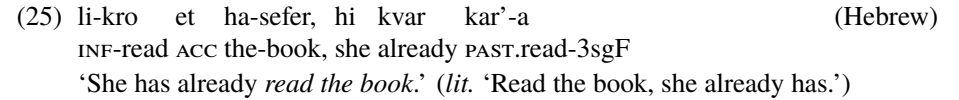


[Modern Greek; =(13d)]

• ANSWER:

Under certain conditions, head movement gives rise to “double pronunciation”

- as an example, consider predicate clefting in Hebrew (see Landau 2006 for details on this construction)



- of course, what we really need is a theory for when head movement does and does not result in double pronunciation;
- here’s a theory that I think works:

(27) CONDITIONS ON PHONOLOGICAL CHAIN REDUCTION OF HEAD MOVEMENT

Let X<sup>0</sup> be a head that undergoes movement to Y<sup>0</sup>, and let α be the lower copy of X<sup>0</sup>. α will be phonologically deleted **iff** either of the following conditions is met:

- (i) α and Y<sup>0</sup> are not separated by a phasal maximal projection (incl. XP)
- (ii) X and Y are part of the same extended projection (Grimshaw 2000), and Y<sup>0</sup> c-commands α in the surface structure (i.e., no constituent containing α but not Y<sup>0</sup> has undergone subsequent movement to a position above Y<sup>0</sup>)

- for reasons of time, I won’t go into this in more detail here
  - see Preminger (to appear)



- and for ways in which (something like) (27.i–ii) might be derivable from more basic assumptions, see Gribanova & Harizanov 2016

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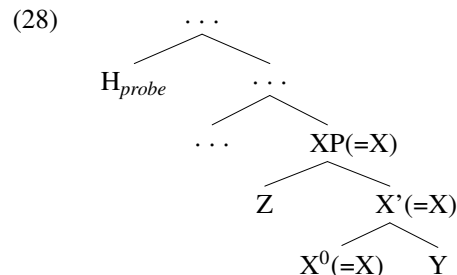
↔ To recap, what we’re looking for is this:

- a reason why, unlike phrasal movement, non-local head movement (as in (23)) *does* require a prior agreement relation
  - because that would explain why clitic doubling triggers the PCC (which, you’ll recall, is contingent on syntactic agreement)

### 9.2. Head movement & locality

- Here, I build on an idea by Hornstein (2009:72–74) and Roberts (2010:33–40):
  - Bare Phrase Structure + iterative downward search conspire to yield an *A-over-A*-like effect —
    - ruling out most, **but not all**, instances of head movement
- Here’s how it works:
  - Bare Phrase Structure (Chomsky 1994) tells us that the label of the entire phrase (“XP”) is nothing but the head itself
    - in other words, the distinction between  $X^0/X_{\min}$  and  $XP/X^{\max}$  can be defined *relationally* —
      - but it cannot be defined *featurally*

- if movement is viewed from the perspective of the attractor (or in earlier versions of the theory, the perspective of the landing site) —
  - an iterative downward search algorithm,<sup>6</sup> looking for a node to move (or remerge), will encounter the phrasal node first



- and because the two are literally one and the same object:
  - there is no possible featural search criterion that would result in skipping the phrasal label (“XP”) in favor of the head (“X<sup>0</sup>”)

As it stands, this predicts that head movement should never be possible, which is obviously too strong...

### 9.3. The Principle of Minimal Compliance (Richards 1998, 2001)

- (29) a. \* [Which book]<sub>k</sub> did the journalist spread the rumor that the senator wanted to ban *t<sub>k</sub>*?
- b. ? [Which journalist]<sub>i</sub> *t<sub>i</sub>* spread the rumor that the senator wanted to ban [which book]<sub>k</sub>?

<sup>6</sup>Here is an explicit algorithm for iterative downward search:

- a. Let  $\mathcal{P}$  be a syntactic probe, and let XP be  $\mathcal{P}$ ’s sister
- b. QUERY: Is XP a viable goal? If so, **halt with “XP” as the search result**
- c. For every specifier ZP of XP, QUERY: Is ZP a viable goal? If so, **halt with “ZP” as the search result**
- d. QUERY: Is XP a phase? If so, **halt with no goal**
- e. QUERY: Does  $X^0$  have a complement? If not, **halt with no goal**
- f. Return to step (b), using the constituent in [Compl,X] as the new “XP”

See also Kitahara (1994, 1997), Koizumi (1995), Müller (1996, 1998) and Takano (1994), *a.o.*; and for discussion of the adequacy conditions on iterative downward search algorithms, see Preminger (to appear).

- Looking at (29a–b), one might be tempted to proffer an explanation along the following lines:
  - “(29b) is better because, in that example, the *wh*-phrase generated inside the island does not try to move out”
- What Richards (1998, 2001) shows is that such an explanation is at best insufficient...

- (30) a. \* [Koja kniga]<sub>k</sub> razprostranjaše žurnalistâ [mâlvata če senatorâ  
which book spread journalist rumor that senator  
iska da zabrani t<sub>k</sub>]?  
wanted to ban  
‘[Which book]<sub>k</sub> did the journalist spread the rumor that the senator  
wanted to ban t<sub>k</sub>?’
- b. ? [Koj žurnalist]<sub>i</sub> [koja kniga]<sub>k</sub> t<sub>i</sub> razprostranjaše [mâlvata če  
which journalist which book spread rumor that  
senatorâ iska da zabrani t<sub>k</sub>]?  
senator wanted to ban  
‘[Which journalist]<sub>i</sub> t<sub>i</sub> spread the rumor that the senator wanted to  
ban [which book]<sub>k</sub>?’

- once one *wh*-phrase has moved to [Spec,CP] of the interrogative clause —
  - other potential movers to the same position are exempt from Subjacency (or whatever else is responsible for strong islands)

[NB: This is pretty bad news for the idea that syntactic islands can be derived from the spellout (or Transfer) of phases.]

- Importantly, these effects pertain to multiple relations established with the same probe / landing-site; accordingly —
  - the amelioration exemplified by (30b) does not arise if the island-violating movement targets a C<sup>0</sup> that no other, well-formed movement has targeted:

- (31) \* [Kakvo]<sub>k</sub> kazva tozi služitel na [žurnalistite, kojto]<sub>i</sub> [t<sub>i</sub> razsledvat t<sub>k</sub>], če  
what tells this official to journalists who investigate that  
komunistite sa zabludele im?  
communists AUX deceived editors their

Intended: ‘[What]<sub>k</sub> does this official tell journalists who<sub>i</sub> [t<sub>i</sub> are investigating t<sub>k</sub>] that the communists have deceived their editors?’

[Richards 1997:256]

(32) PRINCIPLE OF MINIMAL COMPLIANCE (PMC)

[my version; slightly revised from Richards 1998, 2001]

Once a probe *P* has successfully targeted a goal *G*, any other goal *G*’ that meets the same featural search criteria, and is dominated or c-commanded by *G* (= dominated by the mother of *G*), is accessible to subsequent probing by *P* irrespective of locality conditions.

9.4. Minimal Remege, head movement, and Anti-Locality

- Given the PMC, only the first syntactic relation targeting *X* will be subject to the aforementioned *A-over-A*-like locality condition
  - in other words, only the first syntactic relation is obligated to target XP/*X*<sup>max</sup>
- But this, on its own, is not enough to give rise to head movement
  - that’s because, as we already pointed out, there is no featural search criterion that could favor *X*<sup>0</sup>/*X*<sub>min</sub> over XP/*X*<sup>max</sup>

⇒ So the question remains: how does head movement (i.e., movement of *X*<sup>0</sup>/*X*<sub>min</sub> alone) ever arise?

• **Proposal:**<sup>7</sup>

(33) MINIMAL REMERGE

If *X*<sup>0</sup>/*X*<sub>min</sub> is movable, move only *X*<sup>0</sup>/*X*<sub>min</sub>.

- Recall: in many (perhaps most) cases, *X*<sup>0</sup>/*X*<sub>min</sub> is not movable
  - because of the *A-over-A*-like locality condition
- Only when some prior syntactic relation has already targeted XP/*X*<sup>max</sup> does the PMC nullify this locality condition, rendering *X*<sup>0</sup>/*X*<sub>min</sub> movable.

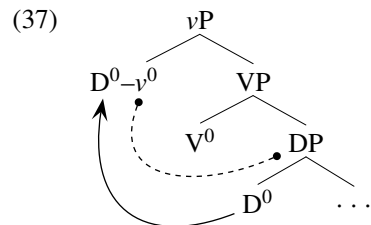
.....

⇒ Now it’s time to ask: what are examples of such “prior syntactic relations” that would give rise to the possibility of head movement?

<sup>7</sup>There is a certain affinity (in spirit, though, crucially, not in technical detail) between (33) and Chomsky’s (1995:262ff.) suggestion that—all else being equal—feature-movement is the preferred mode of syntactic movement. See also Donati (2006:29–30).



- It is by virtue of this prior agreement relation that the *A-over-A*-like condition has already been satisfied once —
  - and, due to the PMC, subsequent relations are no longer subject to it



- **But doesn't this violate the earlier dictum on “no null agreement”?**
  - after all, in many cases of clitic doubling, there seems to be no overt morpho-phonological expression of a prior agreement relation:

(38) Le vi al profesor ayer (Leísta Spanish)  
 CL I.saw A-the professor yesterday  
 ‘I saw the professor yesterday.’ [Bleam 1999:45]

- in (38), for example, there is no overt exponence of an agreement relation between  $v^0$  and the object —
  - (the verb displays subject-agreement, but that is irrelevant here; the point is that there is no object-agreement independent of the clitic)
  - and this is paradigm-wide, i.e., it is not a matter of the particular  $\varphi$ -features of *profesor*

NB: There are instances of clitic doubling where, alongside the clitic itself, one finds overt agreement with the doubled argument. For example: clitic doubling of subjects in certain Northern Italian dialects (Poletto 2000). While this may provide circumstantial support for the idea that clitic doubling is prefigured by syntactic agreement as in (37), it does not change the facts of (38) and many cases like it.

- The answer, obviously, is “yes”:
  - this does violate the aforementioned dictum (“no null agreement”)
 ⇒ meaning this dictum cannot be an actual, combinatorial principle of grammar

- Before moving on, it is worth pointing out that *were* this dictum an actual principle of grammar, it would raise the same modularity issue discussed in §6
  - as a grammatical principle, a ban on null agreement would require simultaneous reference to syntax and morpho-phonology
- The problem would be even more severe, in fact, because the principle would have to be *trans-derivational*:
  - it is not the morpho-phonological content of a particular terminal in a particular derivation that is at issue;
  - the requirement is that some cells in the paradigm must be overt

My proposal is that the *no null agreement* dictum is not a principle of grammar at all; it is an **acquisition strategy**.

- The learner starts with the assumption in (39):

(39) INITIAL STATE OF ACQUISITION  
 There are no unvalued  $\varphi$ -features on any functional heads.

- There is a specific set of triggers that can prompt the learner to revise (39), and posit unvalued  $\varphi$ -features on a particular functional head:
  - (i) overt morpho-phonological covariance in  $\varphi$ -features between a functional head and a DP
  - (ii) long-distance head movement (of a D head)
- But crucially, the list of things that may prompt the learner to revise (39) is anything but open-ended —
  - for example, the list absolutely cannot include “there’s a binding / fake-indexical / ... relation between F and a DP”
    - that would render it impossible to properly account for the distribution of PCC effects
      - recall that binding / fake-indexicals / ... do not give rise to the PCC;
      - it only arises in the presence of overt  $\varphi$ -agreement or clitic doubling (and recall that this cannot be a morphological matter)
    - the conclusion, as already argued elsewhere—and on independent grounds—is that these other relations do *not* involve syntactic agreement in  $\varphi$ -features
      - see also Preminger 2013, 2015, Preminger & Polinsky 2015

Returning to the main point... we now have an acquisition roadmap for how a “PCC language” is acquired:

- The learner starts with the assumption that there are no unvalued  $\varphi$ -features on  $v$  (as mandated by (39))
- Very quickly, however, she will be driven to revise this assumption:
  - either because  $v$  shows overt covariance in  $\varphi$ -features with the direct object, as in Basque
  - or because there is a D associated with the direct object that cliticizes to  $v$  (i.e., D undergoes long-distance head movement), as in Spanish
    - meaning there has to be a prior agreement relation between  $v$  and DP
      - satisfying the *A-over-A*-like condition once, and allowing (through the PMC) for subsequent operations to ignore it
  - and, importantly, misidentifying one of these ( $\varphi$ -agreement or clitic doubling) as the other will be completely innocuous, at this stage
    - since, in both cases, syntactic agreement in  $\varphi$ -features will have been posited
  - this is good news because agreement vs. clitic doubling is a frequent nexus of diachronic change (~ misanalysis)
    - see, e.g., van Gelderen (2011) and references therein
- Once unvalued  $\varphi$ -features on  $v$  have been posited, the PCC arises as a consequence of the mechanisms and agreement & intervention discussed in §5

## 11. Conclusion

In this talk, we have seen:

- That the PCC is a fundamentally *syntactic* phenomenon (§5)
- That it is nevertheless sensitive to the presence of overt  $\varphi$ -agreement, meaning there is no agreement where we cannot see agreement (*no null agreement*; §6)
- That there is a caveat to this, whereby clitic doubling behaves as though it involved agreement (even though clitic doubling is itself not agreement; §7)
- That we cannot maintain that *all* movement (or even just all DP movement or A-movement) is prefigured by  $\varphi$ -agreement (§8)
  - and so this cannot explain the clitic-doubling caveat

- That a more promising alternative can be found by investigating the interplay of Bare Phrase Structure, iterative downward search, and the Principle of Minimal Compliance (§9)
  - in particular, the idea is that movement always “wants” to move only the head, but this is seldom possible due to an *A-over-A*-like locality condition
  - but if the landing site stands in some prior syntactic relation (e.g. c-selection or  $\varphi$ -agreement) to the relevant phrase, this satisfies the locality condition once
    - and, given the PMC, subsequent syntactic operations need not adhere to the locality condition
    - ⇒ thereby enabling head movement
- Clitic doubling, *qua* long-distance head movement, cannot be prefigured by c-selection (a strictly local relationship)
  - and therefore, requires a prior agreement relation to have satisfied the *A-over-A*-like locality condition
  - ⇒ explaining why clitic doubling always entails a syntactic agreement relation
    - and thus, why clitic doubling “counts” for the purposes of the PCC (§10)
- Finally, I showed how this picture could arise through a conservative acquisition strategy regarding the distribution of unvalued  $\varphi$ -features on functional heads
  - which has, as its consequence, the *no null agreement* generalization, as well as its clitic-doubling caveat



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