

# On Feature Misplacement: Case, Agreement, and (Non)-Configurationality\*

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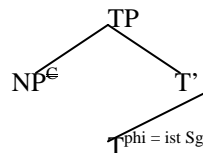
## 1. Introduction

In their 2001 paper, Pesetsky and Torrego 2001 (P&T 2001 from now on) make a proposal they call Relativized Extreme Functionalism (REF) which states that all features are interpretable on *some* head but may become uninterpretable if placed on the wrong head, i.e. if misplaced. In this paper I adopt their view. Building on their idea that nominative case is a tense (T) feature on D, I will treat case features in general as misplaced T, v, P features on the NP/DP, indicated as NP<sup>C</sup>. Similarly, phi-features are misplaced nominal features on T, i.e. T<sup>phi</sup>. Further extending Pesetsky and Torrego's proposal I advance two related claims. First, I propose that feature misplacement is not universal. It is a strategy languages use to create PF records of thematic relations within the vP between the verb and at least one of its arguments; in absence of misplaced features thematic relations are recorded via rigid word order. Second, focusing on how the absence vs. presence of case features interacts with the presence of agreement features, I argue that the absence of case features on NPs in presence of agreement leads to non-configurationality. While the first claim (that misplaced features are not universal) is crucial in order to advance the second one, in this paper I will provide evidence and argumentation focusing mainly on the second claim. For reasons of space I will set aside languages that lack agreement but have case features. Before we proceed with the data and the arguments some important assumptions are in order.

### 1.1 Some important preliminaries

I will assume, following Chomsky 2000, that a probe (T with misplaced phi-features on it) must perform a deletion operation in return for agreement. This is the nature of probe-hood. However, unlike Chomsky 2000, I do not assume that a goal has to be 'active', i.e., has to have an undeleted case feature in order for the T to agree with it; any goal would do. If an NP has a case feature, and the T agrees with the NP, the case feature gets deleted, resulting in the overt agreement on T and a morphologically unmarked nominative case on the NP:

(1)



However, if there is no case feature on the goal, the probe will delete the lexico-semantic content of the NP including the phi-features in return for agreement, leaving a featureless null pro behind as a

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residue of deletion. I further take the feature structure of the NP to involve bundled phi-features – person, number, and gender, along with semantic content. If a misplaced feature appears on the NP, it is not an inherent part of the lexical item, but is placed on the node  $N^0$ . Finally, I take morphologically unmarked case to have two sources: deletion of a case feature or inherent absence one. As we shall see shortly, these options yield distinct consequences for configurationality. Importantly, while case and agreement features are not universal, once a language makes a particular parametric choice with respect to feature misplacement, it is fixed for the language.

## 2. Mohawk: no case features on NPs, agreement with both NP arguments

The following Mohawk data is taken from Baker 1996. Mohawk is a Polysynthetic language that requires agreement with both thematic arguments (agent and theme). There is no morphological case on NPs. Word order in Mohawk is free; overt NPs can also be freely omitted as illustrated below:

- (2) a. Wa'- ke - tshvri                      b. Wa'-ke- tshvri-                      kkv kahure  
 Fact- 1sS- find-PUNC                      Fact- 1sS-find-PUNC this gun  
 I found it    I found this gun
- c. Kkv kahure wa'- ke- tshvri-  
 this gun Fact 1sS- find-PUNC  
 I found this gun
- d. Ne kkv wa'- ke- tshvri- ne kahure  
 NE this Fact 1sS- find-PUNC NE gun  
 I found this gun

Crucially, as argued in Baker 1996 and prior to that in Jelinek 1984, overt NPs cannot appear in argument positions. They must be dislocated. Baker 1996 presents extensive arguments for obligatory dislocation of NPs. Here I choose three of them: disjoint reference effects, absence of NP anaphors, and absence of non-referential quantifiers such as “no one” and “everyone” (Baker 1996). Let us consider each of them in turn, starting with disjoint reference effects illustrated in (3) for English. Thus, in English, it is not possible to get co-reference between a pronoun and an NP in a sentence:

- (3) \*He(i) took John's(i) hat

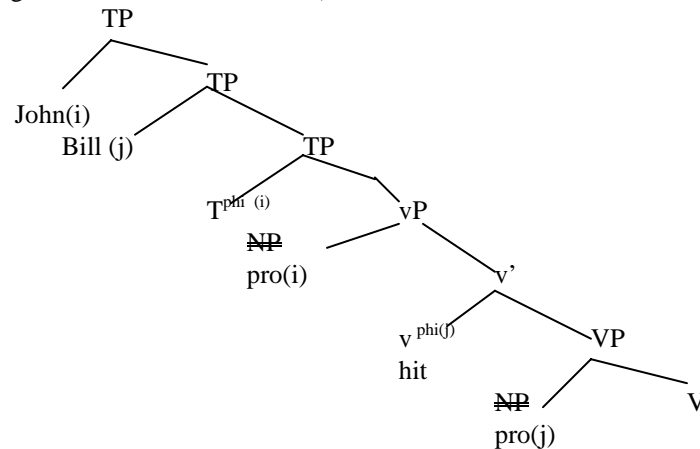
However, the Mohawk counterpart of this sentence is possible. This is explained if the NP ‘John’s hat’ is actually outside of the c-command domain of the subject, adjoined to the IP (Baker 1996: p.47). The second kind of evidence comes from the absence of NP anaphors such as “self” or “himself” in Mohawk. Absence of NP anaphors in Mohawk is consistent with the claim that argument positions are occupied by small *pro*, while overt NPs are adjuncts for the following reason: since an anaphor in the object position has to be bound by the subject *pro*, it would entail that the subject *pro* and the object *pro* are co-indexed, which would violate condition B. Hence, NP anaphors are not possible. Finally, and most importantly, Mohawk lacks non-referential quantified NPs such as “everyone” and “no one” (Baker 1996: p.53). Absence of non-referential quantifiers supports the claim that overt NPs in Mohawk are obligatorily dislocated because quantified NPs cannot appear in dislocated positions since variables cannot be locally A' bound by a quantifier (Rizzi 1986, Baker 1996).

Baker 1996 explains the obligatory dislocation of NPs in Mohawk as follows. He argues that agreement with both the subject and the object absorbs case and consequently overt NPs cannot appear in argument positions or they would violate the Case Filter. Consequently, only small *pro* that does not need case can appear in A-positions. Overt NPs must be adjoined. (This is a bit different from Jelinek’s 1984 explanation. She argues that the agreement morphemes that appear on the verb are arguments in Mohawk).

Departing from both Baker 1996 and Jelinek 1984 I argue that obligatory NP dislocation results from the fact that NPs in Mohawk lack case features, while the language has both subject and object

agreement. The probe deletes both NPs, leaving only featureless *pros* behind. Any overt NPs we see must be in adjunct positions, co-indexed with the null *pro*. The tree below illustrates this.

(4) Mohawk (English is used for convenience):



Thematic relations in Mohawk are recorded on the verb in the form of agreement.

### 3. Bantu (Kinande): no case features on NPs, obligatory subject<sup>1</sup> agreement

Bantu languages present an interesting contrast to Mohawk because while they also have no case morphology on the nouns, they only have obligatory subject agreement. Object agreement is optional<sup>2</sup>. In this paper I will focus on Kinande – a Bantu language discussed in Baker 2002; however, same arguments can also be extended to other Bantu languages. Baker 2002 shows that in Kinande if the NP/XP is agreed with, it must be dislocated.

Focusing on subject agreement, obligatory dislocation of subjects in the presence of agreement is seen from the obligatory presence of the augment vowel on the subject and from the fact that Kinande has no *wh-* in situ (Baker 2002). Let us consider these arguments in turn.

Kinande has an augment vowel on the nouns. If the augment vowel is omitted, the noun gets a non-specific narrow-scope interpretation, which is not possible for dislocated NPs (Rizzi 1986, Cinque 1990, Baker 2002). Consequently, if the subject is dislocated, it must appear with the augment vowel:

(5) a. \*Mu-kali mo-a-teta-gul-a eritunda  
 CL1-woman AFF-1-S/T-Neg/Past-buy-FV fruit  
 No woman brought a fruit

b. Si- ha- li n'-omukali n'-omuyima oyo u-a-gula eritunda  
 neg-there-be by-woman by-one that 1Swh-T-buy-FV fruit  
 There is not a single woman who bought a fruit

In contrast, subjects that appear postverbally, without agreement as in the subject-object reversal construction (6) can appear without the augment vowel.

(6) Olukwi si- lu-li-seny-a ba-kali  
 Wood.11 Neg- 11S-Pres-chop-Fv CL2-women  
 Women[focused] do not chop wood

<sup>1</sup> Subject agreement in Bantu is not the same as it is in Mohawk – in Bantu agreement need not be with an argument but can be with any fronted XP. This distinction while important is not vital for the current discussion.

<sup>2</sup> Some argue that object agreement is actually object incorporation (Bresnan and Mchombo 1984).

Related evidence comes from the fact that pre-verbal agreed-with subjects must be interpreted as specific since narrow scope interpretation is unavailable to dislocated constituents.

- (7) Omukali a-gul-a obuli ritunda  
 Woman.1 1.S/T-buy-FV every fruit  
 A (single) woman bought every fruit

The second kind of evidence for NP dislocation in presence of agreement comes from the fact that wh -in situ is impossible with agreed-with subjects, while it is possible with non-agreed-with post-verbal subjects. Clefting of the interrogative subject is obligatory, as illustrated in (8).

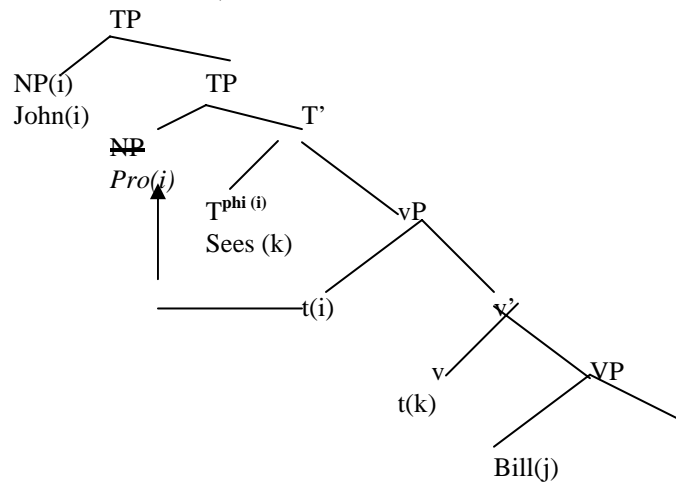
- (8) a. \*(Iyo)ndi a-gul-a eritunda  
 Who 1S/T-buy-Fv fruit  
 Who bought a fruit?
- b. Iyondi yo u-a-gul-a eritunda  
 Who Foc.1 1Swh-T-buy-Fv fruit  
 Who is it that bought fruit?

Wh-in situ is possible with VP-internal subjects that are not agreed with as in the locative inversion construction:

- (9) Omo-mulongo mw-a-hik-a ndi  
 Loc-18.village 18S-T-arrive-Fv who  
 Who arrived at the village?

Like in Mohawk, obligatory dislocation of NPs in Kinande is due to two factors: that the NPs in the language are caseless and that probe must perform a deletion in return for agreement.

- (10) Kinande (English is used for convenience):



In Bantu, like in Mohawk, the A-position (spec TP) is filled with small *pro* which is co-indexed with the overt NP in an adjunct position<sup>3</sup>. Thematic relations within the vP in Kinande are recorded via a combination of agreement and rigid word order.

<sup>3</sup> Object NP-dislocation is also required in the presence of object agreement which is otherwise VP internal (Baker 2002). Importantly, thematic subjects must be VP internal when they are not agreed with as in locative inversion and subject-object reversal constructions. The same holds for non-agreed-with objects.

#### 4. Greek/Spanish - case feature on the theme, no case feature on the agent, obligatory agreement with the subject

So far, we have only considered languages that do not misplace case features on any NPs. What if a language were to misplace case features only on one of the arguments? Evidence from Greek and Spanish discussed in Alexiadou and Anagnostopoulou 1998 (A&A 1998) suggests that these languages exemplify this typological option. Greek and Spanish have no case morphology on pronouns or nouns in the subject position – the nominative is unmarked; there is case morphology on the pronouns/clitics in the object position. Subject agreement is obligatory. The unmarked nominative case may indicate that the case feature is simply deleted under subject agreement, however, as we shall see shortly, facts about subject dislocation indicate that the case feature on the subject is actually missing.

A & A 1998 argue that SVO orders in Spanish and Greek involve left dislocation of the subject, while the verb has risen to I (similar arguments are also presented in Platzak 2003, Phillipaki-Warbuton 1985, Barbosa 1994 for Romance languages). Here I will mainly quote the evidence from Greek indicating subject dislocation in presence of subject agreement. The first kind of evidence comes from distribution of preverbal subjects:

- (11) O Petros xtes meta aop poles prospathies sinandise ti Maria  
 The Peter yesterday after from many efforts met Mary  
 After many efforts, Peter met Mary yesterday

A& A 1998 argue that an adverb can intervene between the preverbal subject and the verb because the subject is in an A' position. Assuming that adverbs cannot adjoin to an X' position, the relative position of the subject, the order of the adverbs and the verb indicates that the verb and the subject are not in spec-head relation; they are not within the same maximal projection (A&A 1998: 503).

Additional evidence comes from scope: a preverbal subject has unambiguous wide scope much like what we saw in Kinande (12).

- (12) a. #Enas oreos andras pandreftike kathe sinadelfo mu persi  
 A handsome man married every colleague of mine last-year  
 A handsome man married every colleague of mine last year
- b. Persi pandreftike enas oreos andras kathe sinadelfo mu  
 last year married a handsome man every colleague of mine  
 Last year a handsome man married every colleague of mine

Since the preverbal subject only has a wide-scope interpretation, the example in (a) has only the polygamous reading. Similar evidence comes from interpretation of indefinites that have only specific or partitive interpretation in preverbal position:

- (13) Ena pedhi diavase to 'Paramithi horis Onoma'  
 A child read the 'Fairy-tale without title'  
 A certain child/ one of the children read a 'Fairy tale without a title'

The strong interpretation of preverbal subjects is consistent with a CLLD analysis of Greek subjects which have obligatory wide scope due to their inability to reconstruct.

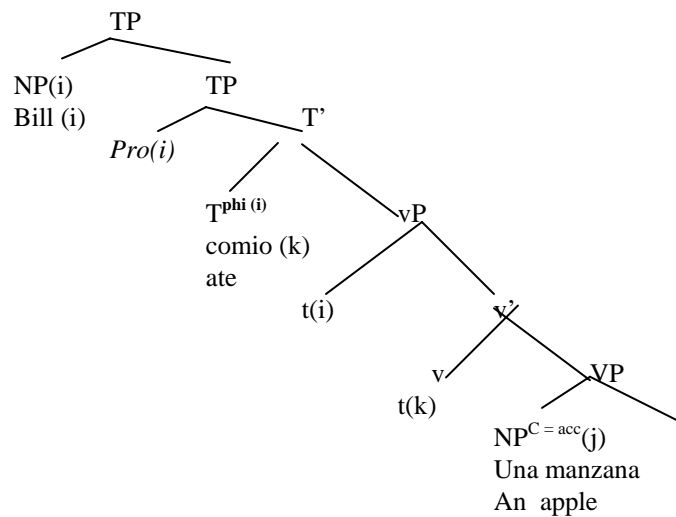
Finally, overt pronouns cannot be interpreted as bound variables if they are pre-verbal. A&A 1998 attribute it to the fact that preverbal subjects are in A' position and hence cannot be interpreted as bound variables. The following Catalan example from Sola 1992, Barbosa 1994 indicates that:

- (14) a. \*Tots els estudiants(i) es pensan que ells(i) aproveran  
 All the students think that they pass-fut  
 All the students think that they pass

- b. Tots els jugadores(i) estan convencus que guanyaran ells(i)  
 All the players are convinced that will win they  
 All the players are convinced that they will win

Based on the above facts, A& A 1998 conclude that the SVO orders in Greek and Spanish involve subject-left dislocation<sup>4</sup>. They account for the dislocation facts by claiming that in pro-drop languages the EPP is satisfied via verb movement. Consequently, the overt NP is always adjoined in SVO construction. Departing from their explanation, I argue that the Greek and Spanish facts are accounted for in a similar way to the Mohawk and Kinande facts: the subject NP lacks case and is deleted when the T agrees with it. The overt NP we see is actually an adjunct doubling the subject *pro*. Unlike Mohawk and Kinande, however, Greek and Spanish have a case feature on the object which receives the accusative case.

(15) Greek/ Spanish: Case feature on the theme, subject-agreement on the verb



Thematic relations in Spanish and Greek are preserved via a combination of case on the theme and subject agreement on the verb.

**5. Russian: case features on both NPs, obligatory subject agreement**

Russian, also English (among other Indo-European languages) unlike Greek and Spanish have case features on both NPs. Consequently the probe deletes only the case feature when it agrees with the subject. This results in the unmarked nominative case on the subject, subject agreement, but no subject dislocation. The absence of subject dislocation is evidenced by the availability of narrow scope for preverbal subjects in Russian (16).

- (16) Kakoj-to student vstretil kazhduju devochku  
 Some student met every girl-acc  
 Some student met every girl (both *every* >> *some* and *some* >> *every* readings are available)

<sup>4</sup> Departing from A&A 1998, I treat VSO as also involving subject-dislocation. (See a recent proposal in Platzack 2003 for a similar argument). Different scope options in VSO and SVO sentences are due to the fact that different adjunction sites of the subject lead to different scope possibilities.

Overt pronouns can have a bound variable reading in contrast to the Catalan example above.

- (17) Vse(i) studenty dumajut chto oni(i) vyigrajut  
All students think that they win-fut  
All the students think that they will win

Finally, there is no unambiguous specific interpretation of indefinites in subject position in Russian and English, unlike Spanish and Greek.

However, while NP dislocation is not required, scrambling is allowed as seen from the example below:

- (18) Dima vchera, posle dolgix usilij v konce koncov vstretil Mashu  
Dima yesterday, after long efforts in end of ends met Masha-acc  
Dima yesterday, after many efforts, finally met Masha

Thus, Russian unlike Greek and Spanish illustrates the option of misplacing case features on both NPs. Consequently, phi-features on T that yield subject agreement delete only the subject's case feature leaving its lexico-semantic content intact. Case and agreement features record thematic relations within the vP.

## 6. Southeast Puebla Nahuatl: case features on both NPs, subject and object agreement

An interesting contrast to Mohawk is presented by Southeast Puebla Nahuatl (S.P. Nahuatl), a language discussed in MacSwan 1998. All the NPs in this language are morphologically bare. There is agreement with both the subject and the object. However, not all word orders are possible, unlike Mohawk. Consider the following data from Southeast Puebla Nahuatl taken from MacSwan 1998:

- (19) a. Ne ni-k- tlasoitla in Maria  
I 1S-3O-love IN Maria  
I love Maria  
b. \*In Maria ni-k-tlasoitla ne  
IN Maria 1S-3O-love I  
I love Maria

Overt NPs are not dislocated: the probe deletes case features, leaving NPs intact. Furthermore, S.P.Nahuatl unlike Mohawk has non-referential quantifiers – 'kada' = 'each/every'.

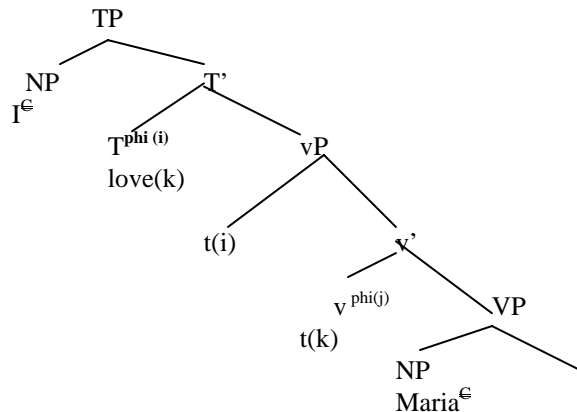
- (20) Kada tlakatl o-ki-pipitzo in i-siwa  
Each man Past-3S-3S-kiss IN 3Pos-wife  
Each man kissed his wife

The quantifier in S.P. Nahuatl also exhibits weak cross-over effects, as would be expected:

- (21) a. \*N-i-kni ki- tlasojtla kada ichpochtle  
In-3Sposs-brother 3S3O-love each girl  
Her brother(i) loves each girl(i)  
b. Kada ichpochtle ki- tlasojtla n-i-kni  
Each girl 3S-3O-love in-3Pos-brother  
Each girl(i) loves her brother(i)

A language that has object and subject agreement, as well as case features will be configurational

(22) *Nahuatl*



The probe deletes only case features in return for agreement, leaving the lexico-semantic content of NPs intact. Overt NPs can appear in A positions. Thematic relations in S.P. Nahuatl are recorded via agreement.

## 7. Haitian Creole: no case features on NP, no agreement on T

As stated at the beginning of this paper, it is possible for a language to have no case and no agreement features. However, in this case, thematic relations must be preserved at PF via rigid word order. Creole languages, among which is Haitian Creole, exemplify this situation.

Data from Deprez 1991:

(23) Li /Jan ap sote /estenene / rive  
 He/John Asp jump /sneeze / arrived  
 He / John is jumping /sneezing / arrived

(24) a. Timoun yo ap kase ve a  
 Children Det-Pl Asp break glass Det  
 The children will break the glass

b. \* Ve a timoun yo ap kase  
 Glass det children-DetPL asp break  
 The children broke the glass

There is no case on either NPs or pronouns/determiners, and no agreement on the verb. Rigid SVO word order is required in HC in order to represent thematic relations at PF (via linear mapping). Chinese is another language that behaves this way.

## 8. Conclusion

I have argued, building on the proposal in Pesetsky and Torrego 2001, that misplaced features create records of thematic relations within the vP so that the records are represented overtly at PF. However, misplaced features are not universal (contra Sigursson 2003, Chomsky 2000, inter alia). Focusing on case features, I have argued that languages can misplace no case features on any NPs (e.g. Mohawk, Kinande, H.C.); they can misplace case features on some NPs (e.g. Spanish, Greek – only the theme); and finally languages can misplace features on all argument NPs (Russian, Nahuatl). Furthermore, because probes (Ts with phi-features) are deletors, the presence/absence of case-features in presence of agreement has consequences for configurationality: caseless agreement-rich language will be non-configurational. A language that has a mixture of case and agreement (Russian) may allow

some scrambling, but will not require NPs to be dislocated. Finally, a language that lacks both case and agreement will have a rigid word order since the only way to preserve thematic relations at PF is via linear mapping of the vP (Haitian Creole).

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