The distribution of subjects in non-finite clauses: an account without Case

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1 Introduction

The role of syntactic Case in accounting for the overt distribution of DPs has diminished of late. Clause-internal raising is now essentially taken care of by the EPP (Marantz, 1991; Chomsky, 2001):

(1) a. My computer$_i$ was stolen t$_i$.
b. Heather$_i$ appeared t$_i$ in an example.

But it still plays a central role in accounts of the distribution of subjects in embedded clauses, specifically for data like 2:

(2) a. * John$_i$ seems that t$_i$ is sick.
b. * It seems (for) John to be sick.
c. * John tried (for) Frank to get the beer.

I'm going to argue today that we don't even need Case for the latter. The structure of the talk will be as follows:

Section 2 will examine just what syntactic Case is and what predictions are made by a theory that incorporates it

Section 3 presents evidence that, contrary to the subjects are possible in several non-finite clause-types, without a unifying feature which could be responsible for the Case licensing

Section 4 examines the clause-types where subjects are not possible, and shows that they constitute a natural class, susceptible to an explanation that has nothing to do with Case

Section 5 looks at the distribution of PRO and shows that Case-based accounts are stipulative at best and empirically incorrect at worst

2 The nature and implications of syntactic Case

What's the real claim of Case theory? The Case requirement 3:

(3) DPs by themselves are in some sense defective and require formal licensing from some other syntactic element.

Crucially, this is above and beyond the need for intergration into the semantic interpretation, and thus must be empirically justified. This predicts:

⇒ Even among potential θ-positions, those where DPs can actually appear should form a natural class, defineable in terms of a restricted set of Case-licensers.

⇒ θ-positions where DPs can **not** appear should constitute the elsewhere case.

I will argue that subjects **are** possible in an array of non-finite clause-types with no common source of Case-licensing. The real natural class are clause-types where subjects cannot appear, so instead of 3 I will propose:

(4) Nominal phrases do not require abstract licensing beyond what is needed for integration into the semantic interpretation.

It is thus the instances where subjects are **not** possible that we must explain.

A quick note on some non-trivial assumptions I am making before we proceed:

- The facts of morphological case have no bearing on the existence of syntactic Case, because the two are quite clearly independent (Yip, Maling, and Jackendoff, 1987; Marantz, 1991; Harley, 1995a,b; Schütze, 1997; Sigurðsson, 1991, 2001; McFadden, 2002)
- The EPP, however it is to be formulated, is an empirical fact of English and many other languages:[1]

  (5) *(It) is likely that John will be sick.

3 Subjects are generally possible in non-finite clauses

3.1 Complements of adjectives and *want*-class verbs

Consider the contrast in 6:

(6) a. It is unfortunate (that) John is sick.
b. * It is unfortunate John to be sick.
c. It is unfortunate for John to be sick.

[1] See McFadden (2002, 2004) for additional arguments in favor of prefering the EPP over syntactic Case.

One is tempted to think that *for* shows up to provide Case-licensing for overt subjects in non-finite clauses, because it looks like the preposition *for*. But there's good evidence that it isn't really a P.

☞ Note that its distribution closely parallels that of the complementizer *that* (Pesetsky and Torrego, 2001).

Optional in post-verbal position:

(7) a. I would like (for) him to buy the book.
b. I believe (that) he bought the book.

Obligatory when heading a subject clause (8):

(8) a. [*(For) him to buy the book] would be preferable
b. [*(That) he bought the book] was unexpected.

Impossible when a subject wh-trace follows (the *that*-trace or COMP-trace effect):

(9) a. Who$_i$ do you think (*that) t$_i$ bought the book?
b. What$_i$ do you think (that) he bought t$_i$?
c. Who$_i$ would you like (*for) t$_i$ to buy the book?
d. What$_i$ would you like (for) him to buy?

- However we explain the distribution of *that*, it doesn't seem to have anything to do with Case.
- Instead, people have generally tried to handle this in terms of constraints on non-overt complementizers, from Stowell (1981)'s ECP story to Bošković and Lasnik (2003)'s null-complementizer affixation.

The data above suggest that we should treat *for* in the same way. So the problem with 6b is not that the subject isn't licensed, but that the null counterpart of *for* isn't.

☞ Case simply plays no role.

But if this is correct, and *for* is not a Case-licenser, then what licenses the subject in such clauses?

Hypothesis: Non-finite T is exceptionally a Case-licenser in such clauses.

As is, this would be pure stipulation.

Hypothesis revised: Special Case-licensing non-finite T is selected for by *for* in C.

But this, as well as the idea that *for* itself is a Case-licenser, run into serious trouble with the pattern in 7a.

☞ *for* is optional, so how can a subject be licensed in its absence?

Two takes:

1. The non-overt counterpart of *for* can do the job.

   ☞ But this undermines the attractive simplicity of the story, since we must abandon the correlation between overt *for* and overt subjects.

   ☞ We'd still need an independent theory of overt complementizer distribution to explain why 8a etc. are bad.

2. *want*-class verbs can license the embedded subject via ECM.

   ☞ But the embedded subject with these verbs do not show the close association with the matrix clause found with the standard ECM *believe*-class.

   ☞ E.g., under passivization, the embedded subject can become the subject of matrix *believe*-class verbs, but not of *want*-class verbs (for additional evidence and discsussion, see Lasnik and Saito, 1991; Bošković, 1997; Martin, 2001):

   (10) a. John$_i$ was believed/proven/made out t$_i$ to be sick.
   b. * John$_i$ was wanted/preferred/liked t$_i$ to be sick.

   ☞ So while we could argue that the embedded subject gets Case from matrix *believe*-class verbs, it will be hard to claim this for the *want*-class.

The point isn't that it's impossible to develop a theory of Case-licensing for these clause-types, rather that what we end up with when we try to get all the details is far more stipulative and less attractive than the simple idea that *for* shows up to license overt subjects.[2]

Still, if all the non-finite clause-types that allow overt subjects can optionally have *for*, then we still have a natural class, and the Case requirement isn't in serious trouble. But when we turn our gaze beyond the complements of adjectives and *want*-class verbs, this pattern does not hold up.

3.2 Gerundival clauses

Other non-finite clause-types allow overt subjects, yet show no trace of the element *for*, including small clauses and gerundivals:

(11) a. John remembered (*for) Frank buying the beer.
b. (*For) Frank buying the beer was unexpected.
c. (*For) Frank being too sick to move, John had to buy the beer.

What could be licensing subject Case here?

- For 11a we could entertain the possibility of ECM.

[2]For additional arguments against taking *for* to be a Case-licenser, see McFadden (2004)

- But this is not possible for 11b, because the clause is in subject position, not c-commanded by the matrix verb.
- In 11c the clause is an adjunct, and both structural Cases of the matrix clause have been assigned to other nominal arguments.

Again, saying that *-ing* is a Case-licenser just restates the distribution of subjects, unless it can be shown that it has something in common with finite T and the T under *for*.

3.3 Cross-linguistic evidence

Licensing of overt subjects in non-ECM non-finite clauses can be found cross-linguistically as well, e.g. in the European Portuguese inflected infinitive (examples from Raposo, 1987):

(12) a. Será difícil [eles aprovarem a proposta].
will-be difficult they to-approve-AGR the proposal
'It will be difficult for them to approve the proposal.'

b. * Será difícil [eles aprovar a proposta].
will-be difficult they to-approve the proposal

c. Será difícil [PRO aprovar a proposta].
will-be difficult PRO to-approve the proposal
'It will be difficult to approve the proposal.'

It's again tempting to say that the overt agreement licenses subjects, i.e. that Case is licensed by AGR in EP.

☞ But an agreement requirement for overt subjects doesn't generalize to other languages.

☞ In fact, it's probably not even right for Portuguese, as Brazilian dialects which have lost agreement have **not** lost overt subjects in these infinitives (from Pires, 2002):

(13) a. A Maria ligou antes de nós/ eu/ *mim sair
The Maria called before of we/ I:NOM/ *me:ACC leave-INF
'Maria called before we/I left.'

b. [O Carlos e o Pedro/ eu/ *mim chegar cedo] não
[The Carlos and the Pedro/ I:NOM/ *me:ACC arrive-INF late] not
surpreendeu ninguém.
surprised no one
'Carlos and Pedro/me arriving late did not surprise anyone.'

One could argue that the subject in 13a is licensed by the preposition *antes de*, but this won't help for 13b.

- Note also that these dialects have lost pro-drop, so we can't say that the loss of agreement hasn't progressed far enough to affect the syntax.

So why is 12b bad?

☞ Not because the subject isn't licensed in the absence of agreeement, but because agreement is obligatorily triggered in the presence of a subject.

An even worse language for Case-theory is classical Latin, with its accusative with infinitive construction:

(14) a. Thalēs Mīlēsius aquam dīxit esse initium rērum.
Thales Milesius water:ACC said be beginning things:GEN
'T. M. said that water was the first principle of things.' – or –
'T. M. claimed water to be the first principle of things.' (C., *N.D.*, 1. 10, 25)

b. Est inūsitātum rēgem reum capitis esse.
is extraordinary king:ACC answerable:ACC head:GEN be
'It is an extraodinary thing for a king to be tried for his life. (C., *Dei.*, 1. 1)

c. Hominem-ne Rōmānum tam Graecē loquī?
man:ACC-PART Roman:ACC such Greek:ABL speak
'A Roman speak such good Greek? (To think that a Roman should speak such good Greek.)' (Plin., *Ep.*, iv. 3, 5)

- The subject licensing in 14a could be explained as ECM. .
- But overt subjects are also allowed in subject clauses, the complements of nouns and adjectives (14b) and root infinitive types, like the historical and exclamatory infintives (14c).
- Yet there is no EP-style agreement, and there is no evidence for an analogue of English *for*.

Again, we could just stipulate that Latin non-finite T is a Case-licenser, but this is not an explanation. This continues the general pattern:

- A number of non-finite clause-types in English and elsewhere allow overt subjects without any other unifying feature.
- Positing Case-licensers in each clause-type without any theoretical connection between them is thus suspect and fails to make any strong predictions.

Let's see if we can do better by considering the alternative view which I laid out in 4.

4 Handling raising and ECM

Overt subjects are not allowed in the non-finite complements of raising predicates:

(15) a. * Is likely John to be sick.
b. John$_i$ is likely t$_i$ to be sick.

Either Case or the EPP could handle this, but things get interesting when the embedded clause is finite:

(16) a. It is likely that John will be sick.
b. * John$_i$ is likely that t$_i$ will be sick.

The expletive in 16a is standardly taken as evidence for the EPP, but the ungrammaticality of 16b seems to require Case.

- The EPP should be satisfied in both clauses.
- *John* has its Case checked in the embedded clause, and thus cannot properly satisfy the requirements of the matrix clause, either in the form of the ICF or the Activity Condition.

But the ICF and the Activity Condition are probably too strong:

- A-movement from object position in transitive clauses is blocked already by relativized minimality (see Marantz, 1991).
- Worse, A-movement from PPs is possible even though Ps must be seen as Case-licensers:

  (17) a. George Washington sat in this chair.
  b. [This chair]$_i$ has been sat in t$_i$.

- Assuming something like 'abstract P incorporation' just to maintain the ICF/Activity condition is not reasonable.

Fortunately, the raising in 16b will be blocked independent of Case-related concerns. Consider 18:

(18) [That John will be sick]$_i$ is likely t$_i$.

☞ The embedded finite clause is a potential satisfier of the EPP.

☞ So the raising of the subject from the embedded finite clause in 16b is parallel to that in 19 and constitutes a relativized minimality violation:

(19) * Frank$_i$ seems [the picture of t$_i$] to be hanging askew.

The other datum which has been assumed to require Case is 20:

(20) * It seems John to be sick.

The EPP is satisfied in both clauses, and there's no potentially illicit raising. This looks like lack of Case-licensing by non-finite T.

☞ But note that these sentences don't improve when we replace the overt subject with PRO:

(21) * It seems PRO to be on edge lately.
intended: 'People seem to be on edge lately.'

Again, another explanation is available. Expletive *it* can only appear with clauses that can raise to matrix subject position and thus do not allow their own subjects to be extracted out:

(22) a. * John$_i$ is likely [that t$_i$ will be sick]. (finite clauses)
b. [That John will be sick] is likely.
c. It is likely [that John will be sick].

(23) a. * John$_i$ would be odd [for t$_i$ to be sick]. (*for* ... *to* infinitives)
b. [For John to be sick] would be unfortunate.
c. It would be unfortunate [for John to be sick].

(24) a. * PRO$_i$ would be unfortunate [t$_i$ to be sick]. (arbitrary PRO infinitives)
b. [PRO to be sick] would be unfortunate.
c. It would be unfortunate [PRO to be sick].

(25) a. John$_i$ is likely [t$_i$ to be sick]. (raising infinitives)
b. * [John to be sick] is likely.
c. * It is likely [John to be sick].

In other words, the expletive-associate relation places certain restrictions, as with *there*. The problem with 20 is with *it*, not the licensing of an overt subject.

There are two main possibilities for the complements of *believe*-class verbs:

- If one assumes with Postal (1974); Lasnik (2001) that ECM subjects (can) raise overtly into the matrix clause, then they are exactly parallel with raising subjects.
- If one assumes that they remain in the embedded clause, then this is just one more class of non-finite clauses that allows subjects.

So overt subjects can't appear in non-finite raising clauses, not because of a lack of Case-licensing, but because the needs of the matrix clause force them to raise out.

5 On the distribution of PRO

Contrary to what one might think, PRO has always been problematic for Case theory. Two major theories:

1. The standard GB idea, embodied in the PRO theorem, was that PRO appears in ungoverned positions where Case is not licensed.
   - ☞ But PRO should need Case like any other DP.
   - ☞ Government was notoriously problematic (e.g. why must finite Infl governs its subject while non-finite Infl does not?) and has since been abandoned

2. Chomsky and Lasnik (1993) argued that PRO has a special 'null' Case, licensed by non-finite T.

   ☞ But null Case is another stipulation which does not correlate with any morphological reality. PRO is assigned the same morphological cases as other subjects (Sigurðsson, 1991):[3]

   (26) a. Strákarnir vonast til að PRO komast allir í skóla.
   the boys:NOM hope for to NOM get all:NOM to school
   'The boys hope to all get to school.'
   b. Strákarnir vonast til að PRO leiðast ekki öllum í skóla.
   the boys:NOM hope for to DAT bore not all:DAT in school
   'The boys hope not to all be bored in school.'

   ☞ PRO and overt subjects are **not** in complementary distribution:

   (27) a. John remembered (**for*) Frank buying the beer.
   b. John remembered (**for*) PRO buying the beer.

   There is no difference in the embedded clauses in 27a and 27b that would lead us to expect a difference in Case. This is problematic for both theories of PRO.[4]

   ☞ In the end, the distribution of the Case features ends up being stipulated, merely restating the distribution of overt versus PRO subjects.

So Case-based accounts of the distribution of PRO turn out to be strikingly inadequate. The relevant data can't really be counted as evidence in favor of the Case requirement.

? So what **does** regulate the distribution of overt and non-overt subjects in non-finite clauses?

PRO and control remain a difficult issue in general and are once again a hot topic (see e.g. Martin, 1996; Hornstein, 1999; Landau, 1999; Manzini and Roussou, 2000; Martin, 2001; Culicover and Jackendoff, 2001; Wurmbrand, 2001; Landau, 2003; Boeckx and Hornstein, 2003).

- There's no real consensus, and I won't pretend to have a complete solution to the various problems.
- But there is some movement towards unifying the distribution of PRO with its interpretation.

This is a promising avenue to pursue:

[3]Similar data have been presented for Latin and Greek by vanden Wyngaerd (1994) and for Russian by Moore and Perlmutter (1999).

[4]Both overt subjects and PRO can appear in the complements of *want*-class verbs as well, but there one could attempt to argue that the clauses with PRO do not contain a *for*, not even covertly, and thus constitute a different environment than the clauses with overt subjects.

- PRO and overt DPs clearly differ in their interpretation, the former having a highly restricted and dependent reference.
- It is less obvious that they differ in a purely syntactic way that would lead to different licensing requirements.

As an example of how this might work, consider instances of 'obligatory control', as in the complements of verbs like *try*:

(28) a. John tried PRO to get a keg.
b. * John tried for Frank to get a keg.

The problem with 28b is traceable to the semantics of *try*, which implies agentive involvement of its subject in the embedded eventuality (as suggested also by Schütze, 1997; Wurmbrand, 2002).

- Note how the felicity of an embedded subject varies according to the lexical verb:

> ...from perfect with *want* to somewhat marginal with *hope (for)* to quite difficult with *try (for)* to impossible with *start* (Schütze, 1997, p. 35).

In fact, it is possible to get overt subjects below *try* given the right semantic/pragmatic context:

(29) I've actually tried for him to catch the ball. He just wouldn't move.

- Found in a google search on a message board discussing the beta version of a soccer game, where the speaker controls – in a sense actually is – the goalie.
- Other similar examples are not hard to find.

The full range of relevant facts is considerable, and what I have just said is merely suggestive of how they might be dealt with.

☞ But they do not really provide support for the assumption of a Case requirement.

Consider the account of Hornstein (1999):

- It is a thoroughly syntactic treatment, whereby obligatory control is movement, and PRO is really just a trace.
- Though the particular formulation depends on Case, there is nothing in it that could not be translated into the Case-less theory advocated here.
  - ◇ E.g., Horstein blocks control into finite clauses, because in his terms it would be movement from a Case position.
  - ◇ But this is just the same raising out of finite CP that I argued can be blocked by RM.
- In particular, Hornstein argues quite strongly **against** the theory of null Case.

6 Conclusion

So there is good reason to think that syntactic Case is not necessary. A theory that could handle all of the environments where subjects are possible in non-finite clauses would be more complicated and stipulative than the theory sketched out here of the environments where subjects are **not** possible.

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