A CASE FOR NO CASE

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It seems quite reasonable to say that case marking of nominals is a dimension of grammatical variation. Looking at different languages in the world, we see that some exhibit case distinctions (Latin, English, German), some do not (Thai, Vietnamese, Chinese). Since the early 80's, however, it has generally been assumed that at some level of abstraction, all languages have case distinctions. Specifically, the theory of UG is enriched with a primitive, Case, whose implicit definition, call it Case Theory, plays a crucial role in detemining the form of syntactic derivation.[1]

For example, in the probe-goal system of Chomsky (1998, 1999), henceforth MI/DBP, it is assumed that a goal must have Case to enter into agreement with a probe. In (1), the external argument *John* can agree with T, while the shifted object *what* cannot. The reason is that *John* bears Case, while Case of *what* has been deleted by v at an earlier stage in the derivation.[2]

(1) $[_{TP}$ T $[_{vP}$ what$_i$ John$_{[Case]}$ read t$_i$]]

Thus, Case Theory constrains agreement. It also constrains movement, in the following way. If a head H bears the EPP feature, H must merge with something beyond its s-selectional requirement. In MI/DBP, there exists a disjunctive hierarchy of syntactic objects (SOs) that can satisfy EPP on H.[3]

(2) SO can satisfy EPP on H if
  a. SO is in the subarray
  b. SO agrees with H

Consider (1) again. Assume that there is no expletive in the subarray. By hypothesis, T bears EPP. Because T agrees with *John*, not with *what*, *John* will raise to [Spec, T], not *what*. There is evidence that the subject does move to [Spec, T] in wh-questions. Thus, it precedes non-raised auxiliary verbs and follows the auxiliary that raises to C.

(3) what can John be reading

Note that in (1), *what* in [Spec, v] does not intervene between T and *John* via defective intervention. This is because both *what* and *John* are specifiers of the same head, hence are equidistant from T.[4]

Thus, Case Theory constrains syntactic derivation. But why the name 'Case'? The reason seems to be that Case/agreement in syntax is related to the phenomenon of morphological case marking in a more a less systematic way. Specifically, DPs that agree with v tend to have a different morphology from those that agree with T. To capture this correlation, it is assumed that when a goal agrees with a probe, its Case is given a value as a function of the category of the probe. Consequently, agreement with v and agreement with T result in different Case values. Keeping to traditional terminology, the former is called [accusative] and the later [nominative]. These values are then interpreted by the morphology, and it is this interpretation that is subject to parametric variation, hence to language particular idiosyncracies. For example, Latin morphology distinguishes [nominative] from [accusative] in most of the nominal system, English morphology distinguishes them only in part of the pronoun system, while Chinese morphology makes no distinction at all. To put in more precise terms what we

said above: not every language has case distinctions, but every language has Case distinctions. This seems to be the general concensus.[5]

Let us now ask what a language would look like if its grammar is exactly like MI/DBP except for the absence of Case Theory. Call such a language E' and such a grammar MI/DBP'. First, there would be no agreement in E', as Case is the necessary condition for agreement. This means that in E', φ-features would enter into the semantic interpretation of DPs but would not play any role in syntactic computation. Second, the disjunctive hierarchy (2) would mutate slightly. Specifically, the lower disjunct would change in such a way that agreement will be absent from it.[6] We might imagine something like (4).

(4) SO can satisfy EPP on H if
  a. SO is in the subarray
  b. SO is closest to H

Note that the absence of Case Theory in E' does not imply that E' has no morphological case marking. All we said above was that languages differ in how morphology interprets Case values. Nothing prevents the morphology of a language from having principles which determine the overt shape of nominals, i.e. their 'case', on some basis other than Case values induced by syntactic agreement, for instance on the basis of syntactic functions or θ-roles. Thus, E' may or may not exhibit morphological case marking.

This means that if we just look at the morphology of English, we would not know whether Case Theory features in its syntax or not. The fact that English has the morphological distinctions *he*/*him*, *she*/*her*, *I*/*me*, *we*/*us*, may suggest that its grammar contains Case Theory but does not imply that it does. We have to look at how the syntax of English works to find evidence for Case and Case Theory. Of course, facts are evidence only in the context of a certain analysis.

One place to look is wh-question formation. Suppose that English is like E', i.e. that its grammar is MI/DBP'. At some point in the derivation of a wh-question, we have (5).[7]

(5) $[_{vP}$ John $v_{[EPP]}$ $[_{VP}$ see what]]

By hypothesis, there is no agreement between v and *what*. The EPP feature of v requires that it have an additional specifier. Two XPs are equally close to v and closer to v than any other XP: VP and *what*.[8] There are reasons to think that even if Case Theory is taken out of the grammar, other principles will prohibit merging VP in [Spec, v]. One could be some version of the Head Movement Generalization (HMG), proposed in Pesetsky and Torrego (2001), henceforth P&T.

(6) *HMG*
  if XP is the complement of Y, the second merge of XP to Y must be head movement of X to Y, i.e. adjunction of X to Y

So merging *what* in [Spec, v] is the only option left of satisfying EPP on v, assuming that head movement cannot satisfy EPP. After this operation is carried out, T is merged into the structure. By assumption, T has EPP.[9]

(7) $[_{TP}$ $T_{[EPP]}$ $[_{vP}$ $what_1$ John $v_{[\sout{EPP}]}$ $[_{VP}$ see $t_1]]]$

It is at this point that MI/DBP' makes the wrong prediction for English. Specifically, it predicts that the next step in the derivation can be any of two possibilities: raising *what* or raising *John* to [Spec, T]. This choice exists in MI/DBP' since in this theory, EPP satisfaction is not constrained by φ-feature matching. Instead, locality is all that matters, and in terms of locality, *John* and *what* are equally good candidates for raising to [Spec, T] since they are equidistant to T.

Raising *John* will output a well-formed sentence, which has the subject in [Spec, T] and the wh-phrase in [Spec, C], as in (8).

(8) $[_{CP}$ what$_1$ … $[_{TP}$ John … $[_{vP}$ t_1 t_2 … $[_{VP}$ … $t_1]]]]$

But raising *what* will lead to a state of affairs which is non-existent in English: the object wh-phrase raising to [Spec, T] and subsequently to [Spec, C], with the subject remaining in situ.

(9) $[_{CP}$ what$_1$ … $[_{TP}$ t_1 … $[_{vP}$ t_1 John … $[_{VP}$ … $t_1]]]]$

Thus, MI/DBP' overgenerates: a derivational path which it makes available is excluded in English. Since MI/DBP' does not work for English, while MI/DBP does, and MI/DBP' differs from MI/DBP only in that the former lacks Case Theory while the latter does not, we have evidence that the grammar of English does contain Case Theory.

As said above, the general assumption is that this holds not only for English, but for all languages. In other word, the interpretation of Case might be subject to parametric variation, but the existence of Case is not.

In what follows, I discuss some facts which might be taken to pose a challenge for the above assumption. Specifically, I provide evidence that Case does not exist in the grammar of Vietnamese. First, I present some puzzling facts about wh-movement in Vietnamese, and show how these can be explained if we assume that Vietnamese is E', i.e. that its grammar is MI/DBP', not MI/DBP. Then I consider a number of scope and binding phenomena in Vietnamese and show that they can be understood as conforming to a generalization established independently in Nevins and Anand (2003), provided Case does not to exist in Vietnamese. To the extent that the evidence is convincing, the existence of Case is subject to parametric variation, and Case Theory might not be a part of UG.

Let us look now at wh-movement in Vietnamese. Note that while wh-movement is usually associated with question formation, this is not the only function of this syntactic operation. In English, wh-movement forms questions, but it has other uses as well, as we can see in (10).[10]

(10) a. what an excellent article he has written
b. I believe what he says
c. whatever John says, don't let him in

In Vietnamese, wh-movement does not effect question formation. In fact, the wh-phrase generally stays in situ in questions. Instead, wh-movement results in a quantificational sentence with universal force.

(11) a. John se doc gi
John will read what
'what will John read'
b. gi John cung se doc
what John C will read
'∀x. John will read x'

Fronting of the wh-phrase necessitates the appearance of the morpheme *cung*, which I gloss as C, anticipating the analysis proposed below, namely that *cung* is a C head that attracts the wh-phrase to its specifier. This kind of universal quantification structure shows the standard properties of wh-movement, namely unboundedness and island sensitivity.

(12) a. gi John cung nghi Mary se doc
what John C think Mary will read
'∀x. John thinks Mary will read x'
b. *gi John cung tin chuyen Mary se doc
what John C believe story Mary will read
('∀x. John believes the story that Mary will read x')

In (11b) and (12a), the subject appears between the fronted wh-phrase and the C head *cung*. However, this is not the only possible word order. The subject can also stay in situ, below C and T. The meaning which is induced in this case is also universal quantification, with a slight difference: the subject is focused, and receives an exhaustive interpretation.

(13) gi cung se John doc
what C will John read
'∀x. it will be John who will read x'

Let us use the mnemonics SCT, suggesting subject > C > tense, and CTS, suggesting C > tense > subject, to denote the the patterns in (11b) and (13), respectively. The fact that Vietnamese has both SCT and CTS indicate that syntactic derivation in this language is not constrained by Case Theory, i.e. that its grammar is MI/DBP', not MI/DBP. I turn now to showing why this is the case.

Let us start by introducing two principles of Economy: *Attract Closest X* (*ACX*) of P&T, and the *Principle of Minimal Compliance* (*PMC*) of Richards (1998).

(14) *ACX*
if a head K attracts X, no constituent Y is closer to K than X (K attracts X when K has some uninterpretable feature which is deleted only if X moves to [Spec, K])

(15) *PMC* (taken from P&T)
Once an instance of movement to α has obeyed a constraint on the distance between source and target, other instances of movement to α need not obey this constraint

In addition, let us be precise about what we mean by 'close'. Again, let us adopt P&T's definition of closeness, which seems to be what is generally assumed.

(16) *Closeness* (taken from P&T)
Y is closer to K than X if K c-commands Y and Y c-commands X

Now let us consider SCT and CTS, exemplified in (11b) and (13), repeated here as (17a) and (17b), respectively.

(17) a. gi John cung se doc (SCT)
what John C will read
'∀x. John will read x'

b. gi cung se John doc (CTS)
what C will John read
'∀x. it is John who will read x'

Suppose, as seems plausible, that (17a) and (17b) have the same Numeration, which is N = {C = *cung*, T = *will*, v, *John*, V = *read*, *what*}. At some stage in the derivation, we have (18).

(18) $[_{TP}\ T_{[EPP]}\ [_{vP}\ what_1\ John\ v_{[\sout{EPP}]}\ [_{VP}\ read\ t_1]]]$

Now let us say that Vietnamese grammar does not contain Case Theory. Then the next step in the derivation can be any of two possibilities: raising of *John* or raising of *what* to [Spec, T] to satisfy EPP on T. Suppose *John* raises. We have (19).

(19) $[_{TP}\ John_2\ T_{[\sout{EPP}]}\ [_{vP}\ what_1\ t_2\ v_{[\sout{EPP}]}\ [_{VP}\ read\ t_1]]]$

Next, C is merged into the structure. Let us say that C bears an uninterpretable [wh] feature, and that this feature is deleted only if C has a wh-phrase in its specifier.[11]

(20) $[_{CP}\ C_{[wh]}\ [_{TP}\ John_2\ T_{[\sout{EPP}]}\ [_{vP}\ what_1\ t_2\ v_{[\sout{EPP}]}\ [_{VP}\ read\ t_1]]]]$

Thus, C will have to merge *what* in its specifier at some point. Now ACX and PMC will dictate that before it can do that, it must first merge with an XP which is closest to it. There are two XPs which are equally close to C and are closer to C than any other XP: TP and *John*. If TP is chosen, we will have T-to-C head movement, as required by the HMG. This is an option that English has, but Vietnamese doesn't, hence we see T-to-C movement in wh-questions in the former but not in the latter. In Vietnamese, overt heads are not allowed to adjoin to each other. The reason might be that this language is morphologically isolating, i.e. that all of its overt morphemes are minimal free forms, unable to adjoin and be almagamated in the morphology. In any case, Vietnamese only has the second option: raising of the subject. Thus, *John* raises to [Spec, C], satisfying ACX. After that, the non-local *what* in [Spec, v] raises to the outer specifier of C. We have (21a), which is the representation of (17a), repeated in (21b).

(21) a. $[_{CP}\ what_1\ John_2\ C_{[\sout{wh}]}\ [_{TP}\ t_2\ T_{[\sout{EPP}]}\ [_{vP}\ t_1\ t_2\ v_{[\sout{EPP}]}\ [_{VP}\ read\ t_1]]]]$

b. gi John cung se doc
what John C will read
'∀x. John will read x'

Thus, SCT is derived.[12] Now let us see how CTS is generated. Go back to the derivational stage (18). Suppose that instead of raising *John*, we choose to raise *what* to [Spec, T]. After that, C is merged, and we have (22).

(22) $[_{CP}\ C_{[wh]}\ [_{TP}\ what_1\ T_{[\sout{EPP}]}\ [_{vP}\ t_1\ John_2\ v\ [_{VP}\ read\ t_1]]]]$

The next step, then, must be raising of *what* to [Spec, C]. This operation satisfies ACX and checks off [wh] on C at the same time. We have (23a), which represents (17b), repeated here in (23b)

(23) a. $[_{CP}\ what_1\ C_{[\sout{wh}]}\ [_{TP}\ t_1\ T_{[\sout{EPP}]}\ [_{vP}\ t_1\ John_2\ v\ [_{VP}\ read\ t_1]]]]$

b. gi cung se John doc
what C will John read
'∀x. it will be JOHN who will read x'

CTS is thus derived.[13] We have seen, then, that MI/DBP' works for Vietnamese: it generates both SCT and CTS. It remains to show that MI/DBP does not work for Vietnamese, which is what we turn to now.

Again, go back to the derivational stage in (18). Suppose now that Vietnamese grammar is MI/DBP, i.e. that it contains Case Theory. T will then bear uninterpretable φ-features in addition to EPP, and *John* will bear Case.

(24) $[_{TP}\ T_{[\varphi][EPP]}\ [_{vP}\ what_1\ John_{[Case]}\ v\ [_{VP}\ read\ t_1]]]$

T probes down, finds *John* which bears Case, and agrees with it. This means that the next step in the derivation, which is satisfaction of EPP on T, is uniquely determined: given the disjunctive hierarchy (2), it must be raising of *John* to [Spec, T].

(25) $[_{TP}\ John_{[\sout{Case}]}\ T_{[\sout{\varphi}][\sout{EPP}]}\ [_{vP}\ what_1\ t_{John}\ v\ [_{VP}\ read\ t_1]]]$

The next steps to (25) are also uniquely determined: merging C, then raising the local *John* to [Spec, C] to satisfy ACX, then raising the non-local *what* to [Spec, C] to satisfy [wh]. The result is (26), which is SCT.

(26) $[_{CP}\ what_1\ John_{[\sout{Case}]}\ C\ [_{TP}\ t_{John}\ T_{[\sout{\varphi}][\sout{EPP}]}\ [_{vP}\ t_1\ t_{John}\ v\ [_{VP}\ read\ t_1]]]]$

We see that given MI/DPI, only SCT can be derived, i.e. MI/DBP undergenerates. Thus for Vietnamese, MI/DBP does not work while MI/DBP' does, and since MI/DBP' differs from MI/DBP only in the fact that the latter has Case Theory while the former does not, this is evidence that Vietnamese grammar does not have Case Theory.[14]

Of course, the assumption that Case Theory does not contrain syntactic derivation in Vietnamese should have other consequences than just the fact that both SCT and CTS are possible in Vietnamese. In the following, I consider some of these consequences.

First, we predict that Vietnamese has A-movement of the object to [Spec, T], in the following way. Suppose that the Numeration is N = {T, v, V = *read*, *John*, *this*, *book*}. At some stage of the derivation, we have (27).

(27) $[_{vP}\ John\ v\ [_{VP}\ read\ [_{DP}\ this\ book]]]$

Once the vP phase is complete, EPP can be inserted in v. Assume that it is. Then, the object will raise to [Spec, v], i.e. Object Shift. After that, T is merged to vP.

(28) $[_{TP}\ T_{[EPP]}\ [_{vP}\ [_{DP}\ this\ book]_1\ John\ v_{[\sout{EPP}]}\ [_{VP}\ read\ t_1]]]$

Given MI/DBP', both *this book* and *John* are equally good candidate for raising to [Spec, T]. Suppose that the object raises. We then have (29).

(29) $[_{TP}\ [_{DP}$ this book$]_1$ $T_{[EPP]}$ $[_{vP}$ t_1 John v $[_{VP}$ read $t_1]]]$

This pattern is indeed possible in Vietnamese. Thus (30) is perfectly grammatical. Again, the subject must bear focus, and have an exhaustive interpretation.[15, 16]

(30) quyen-sach nay se John doc
book this will John read
'John will be the one who reads this book'

In MP/DBP, (30) would be impossible to generate. T would agree with the subject and it would be the subject that raises to [Spec, T], according to the hierarchy (2). On the other hand, MI/DBP' predicts that A-movement to [Spec, T] of both subjects and objects is possible. That the latter is the case in Vietnamese suggests that the grammar of this language is MI/DBP', not MI/DBP. In other word, movement to [Spec, T] in Vietnamese is an operation that is implemented purely by EPP and does not involve Case and agreement. For convenience, let us use the term 'EPP-driven' to denote this kind of movement.

Note that in English, we also find cases of EPP-driven movement, namely in raising constructions. Thus, movement from *t* to *t'* in (31) is driven only by EPP on the embedded T and does not involve Case and agreement.

(31) $[_{TP}$ John$_1$ seems $[_{TP}$ t' to be likely $[_{TP}$ t to be intelligent$]]]$

It has been argued in that EPP-driven movement has a special property: it cannot reconstruct. Thus Nevins and Anand (2003) proposes the *Purely EPP Eliminates Reconstruction* (*PEPPER*) generalization, which says just that.

(32) *PEPPER*
If the only feature-checking relation a probe and goal G stand in is EPP, then G cannot reconstruct.

If PEPPER is true, we predict that movement to [Spec, v] and to [Spec, T] are both non-reconstructable in Vietnamese, since in this language, both are EPP-driven. In the following, I briefly go through the argument for PEPPER, then present evidence that in Vietnamese, reconstruction is indeed impossible for the movement operations in question.

Evidence has been given that in English, inverse scope results from two operations: QR of the object and reconstruction of the subject (Hornstein (1995), Johnson and Tomioka (1997)). Let us consider one data point that supports this argument. Start with (33a-b).[17]

(33) a. every girl$_1$ kissed John before she$_2$ left the party
b. John kissed every girl$_1$ before she$_1$ left the party

These sentences show that both the object and the subject can bind a variable inside an adverbial clause. Let us assume, then, that the adjunct CP is base generated adjoined to vP. The subject can bind into CP because it is in [Spec, T]. As for the object, let us assume that for type reason, it QRs to the closest position that c-commands the propositional vP at LF

(Heim and Kratzer (1998), Fox (2000)). This position would naturally be above the adjunct. Let us say it is an outer specifier of v. Thus, the LF of (33b) is (34).

(34) $[_{TP}$ John$_2$ T $[_{vP}$ [every girl]$_1$ $[_{vP}$ [before she$_1$ left the party] $[_{vP}$ t$_2$ v $[_{VP}$ kissed t$_1$]]]]]

Now consider (35a-b).

(35) a. a girl kissed every boy$_1$ before he$_1$ left the party ($\exists > \forall$, $\forall > \exists$)
b. a girl$_1$ kissed every boy before she$_1$ left the party ($\exists > \forall$, $*\forall > \exists$)

While (35a) tells us that inverse scope is possible, it does not tell us what the LF that induces inverse scope looks like. It could be that the subject reconstructs back into vP, below the QRed object, or it could be that the object raises to a position above [Spec, T]. (35b) shows that it must be the first option, namely lowering of the subject. Thus, when the subject binds a variable inside the adjunct CP, inverse scope is impossible. This means that inverse scope can be obtained only when the subject is in a position lower than that from which it can bind into the adjunct, e.g. its base position. In other word, there is no QR above [Spec, T], and inverse scope must result from reconstruction.

Given this, let us turn to the evidence that EPP-driven movement cannot reconstruct. Consider the contrast in (36).[18]

(36) a. [some student$_1$ seems to every professor [t$_1$ to be intelligent]]
($\exists > \forall$, $\forall > \exists$)
b. [some student is likely [t' to seem to every professor [t to be intelligent]]]
($\exists > \forall$, $*\forall > \exists$)

In (36a), the existential quantifier can take scope over or under the universal. We have seen that the low scope reading of the subject is induced by reconstructing the latter to the lower [Spec, T] position. On the other hand, (36b) allows only the reading in which the existential has wider scope than the universal. In other word, the existential cannot reconstruct to *t'* and then to *t* in (36b). PEPPER predicts this fact: the step from *t* to *t'* is EPP-driven, hence reconstruction is impossible here.

Nevins and Anand use further data from Hindi, English and Russian to support PEPPER. I take the evidence to be convincing and will assume that PEPPER holds in general.

I now proceed to show that in Vietnamese, movement to [Spec, T] is EPP-driven, hence unable to reconstruct. Let us begin with modal sentences containing quantified subjects. In Vietnamese, unlike in English, the subject in these sentences must have scope over the modal. Thus, while the English sentence (37a) can have both readings in (38), the Vietnamese sentence (37b) can only mean (38a).

(37) a. a Russian artist must play this piece
b.

mot	nghe-si	Nga	phai	danh	bai	nay
an	artist	Russian	must	play	piece	this

(38) a. there is a Russian artist who must play this piece
b. the player of this piece must be a Russian artist

Given PEPPER, this difference between English and Vietnamese follows if we assume that in the latter, but not in the former, the subject moves to [Spec, T] purely for EPP. A question that might be raised at this point is whether in (37b), the subject is base generated above the modal, so the lack of scopal ambiguity in this sentence has nothing to do with PEPPER. Independent evidence shows that the subject is not base generated above the modal: it can appear below the modal, as in (39).

(39) bai nay se phai mot nghe-si Nga danh
piece this will must an artist Russian play
'the player of this piece will have to be a Russian artist'

In (39), it is the object that moves to [Spec, T], with the subject remaining in situ. Recall that this is possible in Vietnamese. (39) has the analysis in (40).

(40) $[_{TP}$ [this piece]$_1$ will must $[_{vP}$ t_1 [a Russian artist] v $[_{VP}$ play $t_1]]]$

In (39), the subject must have scope below the modal. In other word, (39) must mean (38b), which is consistent with the fact that there is no QR above [Spec, T].[19, 20]

The fact that (37b) and (39) are both limited to surface scope interpretation, i.e. scope interpretation isomorphic to surface structure, is reflected in the contrast between (40a) and (40b), which is completely analogous to that between (41a) and (41b).

(40) a. ??mot nghe-si Nga phai danh bai nay. Heifetz chang-han
an artist Russ. must play piece this. Heifetz for example
b. bai nay phai mot nghe-si Nga danh. Heifetz chang-han
piece this must an artist Russ. play. Heifetz for example

(41) a. ??there is a Russian artist who must play this piece. Heifetz for example
b. the player of this piece must be a Russian artist. Heifetz for example

It seems reasonable to say that adding *Heifetz for example* forces the existential in the previous sentence to have lower scope than the modal, and that (41a) is strange because this sentence only allows the wide scope reading for the subject. That we can observe the same effect in (40a) suggest that the subject in this sentence cannot reconstruct below the modal.

Another piece of evidence that [Spec, T] freezes scope in Vietnamese has to do with yes/no questions. These are formed by inserting the morpheme *co* in T and placing the negation *khong* at the end of the sentence.[21]

(42) John co thich Mary khong
John T_Q like Mary Neg
'does John like Mary?'

A curious fact about yes/no questions in Vietnamese is that it is impossible to have an existential quantifier in the subject position.

(43) *mot sinh-vien co thich Mary khong
a student T_Q like Mary Neg
('does a student like Mary?')

Note that in English, both options are possible.

(45) a. does John like Mary?
b. does a student like Mary?

I will give a tentative, or more precisely a speculative, analysis of the data above which reduces them to the fact that in English, the subject can reconstruct below T while in Vietnamese it cannot. It is as follows. Let us say that in yes/no questions, T bears a designated feature, call it [y/n]. Furthermore, let us say that the meaning of a yes/no question varies slightly depending on whether the subject reconstructs below $T_{[y/n]}$ or not. Thus (45a) is ambiguous between the two readings in (46).

(46) a. for x = John, tell me whether x likes Mary (no reconstruction)
b. tell me whether John likes Mary (with reconstruction)

Both readings are commands that in principle can be obeyed. Now consider (45b). This question contains an existential claim. If the existential is interpreted above $T_{[y/n]}$, we might expect an interpretation along the line of (47a). If it is interpreted below $T_{[y/n]}$, the meaning might be something like (47b).

(47) a. there is a student x, now tell me whether x likes Mary (no reconstruction)
b. tell me whether there is a student x who likes Mary (with reconstruction)

While (47b) is perfectly coherent, (47a) is a command that cannot be obeyed: the hearer does not know which student the speaker talking about, so how can he say whether this student likes Mary or not? We see that if (47a) is the kind of meaning that results when an existential subject does not reconstruct below $T_{[y/n]}$, then an existential subject had better reconstruct below $T_{[y/n]}$.

If this analysis is somewhere near the truth, then the data above might receive an explanation. In English, subjects can reconstruct below T. This allows English to generate an LF which induces a meaning that can be used felicitously. In Vietnamese, on the other hand, reconstruction of the subject below T is impossible. Consequently, existential subjects in yes/no questions must be interpreted in their surface position, which leads to meanings that cannot be used felicitously.

Additional evidence that movement to [Spec, T] in Vietnamese does not reconstruct comes from binding facts. Vietnamese has an anaphor, *minh* ('self'), which behaves like the English anaphor in that it must be bound.[22]

(48) a. $John_1$ yeu me $minh_{1/*2}$
John love mother self
b. moi John yeu me minh (sloppy/ ?*strict)
only John love mother self
c. * me minh yeu John
mother self love John

On the other hand, pronouns like *no* ('he') can be bound, but does not have to be.

(49) a. $John_1$ yeu me $no_{1/2}$
John love mother his

b.	moi	John	yeu	me	no	(sloppy/strict)
	only	John	love	mother	his	
c.	me		$no_{1/2}$	yeu	$John_1$	
	mother		his	love	John	

R-expressions must be free, i.e. Condition C is operative.

(50)	*no_1	yeu	me	$John_1$
	he	love	mother	John

Now let us look at sentences in which the object moves to [Spec, T] and the subject remains in situ, i.e. sentences of the form (51).

(51) $[_{TP}$ object … $[_{vP}$ t' subject … t]]

By hypothesis, the object cannot reconstruct to *t'*. If we say, as generally assumed, that reconstruction cannot skip intermediate positions, then the fact that the object in (51) cannot reconstruct to *t'* implies that it cannot reconstruct to *t*. We then predict the binding judgements below.

(52) a. * $[_{TP}$ $[_{object}$ …$self_1$…] … $[_{vP}$ t' $John_1$ … t]]
b. $[_{TP}$ $[_{object}$ …$John_1$…] … $[_{vP}$ t' he_1 … t]]

(52a) violates Condition A because the anaphor inside the object is unbound. (52b) satisfies Condition C because John will not be bound by subject pronoun. The predictions are all born out by robust facts.

(53)	a.	* tho	cua	$minh_1$	phai	$John_1$	doc
		poem	of	self	must	John	read
	b.	tho	cua	$John_1$	phai	no_1	doc
		poem	of	John	must	he	read

('it is JOHN who must read John's poems')

At this point, let us remind ourselves of the claim being made here: EPP-driven movement does not reconstruct, and both movement to [Spec, T] and movement to [Spec, v] in Vietnamese are EPP-driven movement. So far, we have seen evidence that movement to [Spec, T] does not reconstruct. That has not validated the claim: maybe no movement in the language reconstructs, whether EPP-driven or not, or maybe movement to [Spec, v] does reconstruct, showing that it is not EPP-driven. Thus it remains to be shown that (a) movement in Vietnamese can in principle reconstruct, and (b) movement to [Spec, v] does not reconstruct.

Both of these points can be proved by looking, again, at wh-movement. Recall that there are two patterns of wh-movement construction, SCT and CTS. Let us begin with SCT, which is schematized in (54a) and exemplified in (54b).

(54) a. $[_{CP}$ wh_1 $subject_2$ C $[_{TP}$ t_2 T $[_{vP}$ t_1 t_2 v $[_{VP}$ V $t_1]]]]$ (SCT)

b.	bai	tho	nao	John	cung	se	doc
	the	poem	which	John	C	will	read

'John will read every poem'

The arrow in (54a) represent a step of movement that is not EPP-driven, but is implemented by the wh-feature of $C_{[wh]}$. There is evidence that this movement reconstructs. Thus let us assume that it does, we then predict the following binding judgements.

(55) a. $[_{CP}\ [_{object}$ which poem of $self_1]\ [_{subject}\ John_1]\ [_{TP}\ \ldots\ [_{vP}\ t_{object}\ \ldots\ ]]]$
b. * $[_{CP}\ [_{object}$ which poem of $John_1]\ [_{subject}\ he_1]\ [_{TP}\ \ldots\ [_{vP}\ t_{object}\ \ldots\ ]]]$

(55a) should satisfy Condition A since the reconstruction site is below the subject.[23] (55b) should be a violation of Condition C because the name will be bound by the pronoun at the reconstruction site. The predictions are born out with relatively clear cut judgements from every speaker whom I consulted.

(56) a. bai tho nao cua $minh_1$ $John_1$ cung se doc
the poem which of self John C will read
'John will read every poem written by himself'
b. * bai tho nao cua $John_1$ no_1 cung se doc
the poem which of John he C will read
('John will read every poem written by himself')

Now consider CST. This pattern is schematized in (57a) and exemplified in (57b).

(57) a. $[_{CP}\ wh_1\ C\ [_{TP}\ t_1\ T\ [_{vP}\ t_1$ subject v $[_{VP}\ V\ t_1]]]]$ (CTS)

b. bai tho nao cung se John doc
the poem which C will John read
'it will be JOHN who reads all the poems'

We predict that in CTS, the judgement will be the reverse of (55). Specifically, Binding Theory will only be violated if the wh-phrase contains an anaphor. Since the movement step indicated by the arrow in (57a) is the only step that can reconstruct, even after reconstruction, the subject is still below the object. In other word, we expect the following binding judgements.

(58) a. * $[_{CP}\ [_{object}$ which poem of $self_1]$ C $[_{TP}\ t_{object}\ \ldots\ [_{subject}$ $John_1]\ldots]]$
b. $[_{CP}\ [_{object}$ which poem of $John_1]$ C $[_{TP}\ t_{object}\ \ldots[_{subject}$ $he_2]\ldots]]$

Again, speakers give strong judgements that confirm the prediction.

(59) a. * bai tho nao cua $minh_1$ cung se John doc
the poem which of self C will John read
('it will be John who reads all the poems written by himself')
b. bai tho nao cua $John_1$ cung se no_1 doc
the poem which of John C will he read
'it will be John who reads all of his poems'

Thus, it is not the case that no movement can reconstruct in Vietnamese. The case is strengthened that the reason movement to [Spec, T] cannot reconstruct is that it is EPP-driven. Now, it remains to show that movement to [Spec, v] cannot reconstruct either. For this, we need to look at cases of wh-movement where the wh-phrase passes through more than one CPs, i.e. cases of successive cyclic wh-movement.

First, let us assume that in cases of successive-cyclic wh-movement, every embedded C whose specifier the wh-phrase passes through bears the wh-feature.[24] In (60), then, the wh-phrase moves through the specifiers of the embedded vP, then the embedded CP, then the matrix vP and then the matrix CP, as shown in (61).

(60)

bai	tho	nao	cua	minh	John	cung	nghi	Mary	se	thich
the	poem	which	of	self	John	C	think	Mary	will	like

(61) $[_{CP}\ [_{wh}$ which poem of self$]_1$ John $C_{[\text{wh}]}$…$[_{vP}$ t'''…think $[_{CP}$ t'' Mary $C_{[\text{wh}]}$…$[_{vP}$ t'…like t]

We have seen evidence above that movement to [Spec, $C_{[wh]}$] can reconstruct. Thus the anaphor in (60) can be bound by John. If movement to [Spec, v] can also reconstruct, we expect there also to be a reading in which the anaphor is bound by Mary. The LF for this reading might be generated by first reconstructing the wh-phrase to *t'''*, then to *t''*, then to *t'*. If movement to [Spec, v] cannot reconstruct, we expect that the anaphor cannot be bound by Mary, since the step from *t'''* to *t''* is not allowed.

Facts show that the step from *t'''* to *t''* is indeed not allowed: (60) is clearly unambiguous, and *John* must be the binder of the anaphor. Thus, (60) can only mean that 'John thinks Mary will like everyone of his poems'.[25, 26] Thus, we conclude that movement to [Spec, v] cannot reconstruct in Vietnamese.

Let us recap. We have seen several pieces of evidence that in Vietnamese, syntactic computation is not constrained by Case Theory. Specifically, DPs in this language enter the derivation without Case, T and v bear no uninterpretable φ-features, and there is no syntactic agreement. EPP and operator features such as [wh] on C are all that implements displacement in this language. Furthermore, we have seen how the differences between Vietnamese and English follow quite nicely from the assumption that while the former lacks Case Theory, the latter does not.

I will end with a few speculative notes. While the facts reviewed in this paper do not necessarily imply that Case Theory is not part of UG, they do imply that if Case Theory is part of UG, then it can be inactivated by positive evidence. Thus children might be born with the assumption that every language is like English, and learn that Vietnamese does not have Case through observing that there is A-movement of the object to [Spec, T], for example. If Case Theory is not part of UG, then children are born assuming that every language is like Vietnamese, and have to learn that English has Case by looking at something indicative of Case, for example morphological case distinctions. It might be that the dissociation of Case from case is actually not that radical, and that morphological case is the means to learn that the language has Case. Note that although English has an impoverished case marking system whose distinctions consist only of the pairs *I*/*me*, *he*/*him*, *she*/*her*, *we*/*us* and *they*/*them*, children are confronted with these distinctions all the time, since these are among the most frequent words. If this is the case, then we would expect that languages which have no Case show no case distinctions, while languages which have Case must show at least some case distinctions. This seems to me to be closer to the truth.

Notes

[1] See Chomsky (1981), Chomsky (1992), Chomsky (1998), Chomsky (1999), among others, also Bobaljik and Wurmbrand (2006), Legate (2005), Richards (2007). For an alternative view, see Marantz (1991) and Bobaljik (2005).

[2] It is assumed throughout that wh-movement of the object to [Spec, C] involves it moving to the edge of vP (see Chomsky (1986), Chomsky (1998, Chomsky (1999), also Fox (2000)).

[3] The assumption that there is such a hierarchy is never spelled-out in Chomsky (1998, 1999), but it is evident that it exists. See Miyagawa (2005) for an explicit statement of the assumption that in languages with agreement, the EPP on T 'picks out the agreeing phrase and raises it to the Spec of TP.'

[4] See Chomsky (1995), Chomsky (1998), among others.

[5] See Ura (2001), Li (1990). For an alternative view, see Marantz (1991) and Bobaljik (2005).

[6] Agreement involves φ-feature matching, Case and locality. In (4b), only locality is retained.

[7] It is assumed that after vP is complete, EPP can be inserted in v only if it has an effect later in the derivation, i.e. if it induces wh-movement or object shift (see Chomsky (1999)). This is look ahead, and it is a problem. However, it is a general problem, not specific to the proposal which will be given below. I do not attempt to discuss or tackle this problem here.

[8] We will come to a definition of closeness below.

[9] T has been assumed to bear EPP universally (see Chomsky (1981) and subsequent works). For an argument that EPP on T is subject to parametric variation, see Wurmbrand (2006).

[10] For a wh-movement analysis of exclamatives, see Pesetsky and Torrego (2001). For such an analysis for free relatives, see Groos and van Riemsdijk (1979), Chomsky (2005), Donati (2004).

[11] In other word, C attracts the wh-phrase. Note that while Case Theory constrains movement, not all movement require the presence of Case on the moving element.

[12] The movement of the wh-phrase from [Spec, T] to [Spec, C] across the subject in the lower [Spec, C] shows WCO effects, as expected of A'-movement. Thus (i) is bad when the wh-phrase is construed as the binder of the possessive pronoun inside the subject. (ii) is the analysis of (i).

(i) *dua-tre nao me no cung se do
child which mother his C will console
('for every child x. x's mother will console x')

[13] Note that the movement of the object from its base position to [Spec, v] does not induce WCO effect. This indicates that it is not A'-movement, whatever that might mean.

(i) dua-tre nao cung se me no do
child which C will mother his console
'for every child x. it is x's mother that will console x'

(ii) $[_{CP}$ [which child]$_1$ C $[_{TP}$ t_1 will $[_{vP}$ t_1 [his$_1$ mother] v $[_{VP}$ console $t_1]]]]$

[14] Our analysis predicts that when wh-movement takes place in Vietnamese, the subject must either raise to [Spec, C], or remain in situ in [Spec, v]. If the subject raises to [Spec, T] and stops there, with the object raising to [Spec, C] pass [Spec, T], ACX is violated without repair by the PMC. Thus, (i) is predicted to be ungrammatical.

(i) ?* gi cung John se doc
what C John will read

[15] Another interpretive contraint on (30), and generally on sentences in which the object A-moves to [Spec, T], is that the object must be a definite noun phrase. This might be an indication that the previous step to the A-movement is indeed Object Shift (see Thráinsson (2001).

[16] Note that (ia) is ungrammatical in Vietnamese, just as (ib) is ungrammatical in English.

(i) a. *John se quyen-sach nay doc
John will book this read
b. *John will this book read

Thus, it seems that in order for EPP to be inserted in v, the shifted object must escape the vP later in the derivation, either raising to [Spec, T] or to [Spec, T] and then to [Spec, C] as in Vietnamese, or directly to [Spec, C] as in English (of course if that is true generally, then some accounts for object shift in Scandinavian languages must be modified). As far as I know, this fact still has no principled explanation.

[17] These data are originally from Hornstein (1995), who provides a different explanation. They are used to support Johnson and Tomioka (1997) in Anagnostopoulou and Fox (2007). For other data supporting the same conclusion, see Johnson and Tomioka (1997).

[18] The example is a slight modification of one given in Nevins and Anand (2003), who cite Aoun (1982).

[19] To have scope over the modal, the subject does not have to QR above [Spec, T]. Adjunction to the XP headed by the modal is enough. Thus the correct generalization seems to be that only EPP can get a QP out of vP. Once QP gets out, however, it is free to be interpreted in its derived position (see Fox (2000)).

[20] Given what we have said, it is expected that if the A-moved object in (39) is an existential quantifier, it will scope above the modal. The reason this cannot be tested is that in order for the object to raise to [Spec, T], it must be definite (see note 10).

[21] The position of *khong* does not interest us here. For an analysis of Vietnamese yes/no questions, in particular evidence that *co* is in T, see Trinh (2004).

[22] When *minh* is unbound, it can be understood to refer to either the speaker or the hearer. Thus (48a) can mean 'John loves my/your mother', (48c) can mean 'my/your mother loves John' etc. I take this to be a separate phenomenon which does not affect the argument here.

[23] It does not matter whether the ACX movement of the subject from [Spec, T] to [Spec, C] reconstructs or not. Even of it does, the subject would still be higher than the position whither the object reconstructs, namely [Spec, v]. Since there is no way to decide whether movement driven purely by the need to satisfy ACX reconstructs, I will pass over this issue in silence.

[24] This is a fairly standard assumption. See Pesetsky and Torrego (2001), McCloskey (2002), among others.

[25] Note that *minh* can be bound non-locally.

(i) John nghi Mary thich tho cua minh
John think Mary like poem of self
'John thinks Mary likes his/her poems'

This fact does not affect the argument given here. Thus it is still the case that if the wh-phrase can reconstruct to *t'* in (61), then there is a reading in which Mary is the antecedent of the anaphor.

[26] Note that English is different. (i) is ambiguous between the matrix and the embedded subject being the antecedent of himself.

(i) which picture of himself$_{1/2}$ did John$_1$ think Bill$_2$ liked

This suggests that movement to the matrix [Spec, v] can reconstruct in (i), even though this movement does not involve Case/agreement. It might be that v in English bears [wh], not EPP in cases of wh-movement.

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