

References

- Boskovic, Zeljko. 1997. *The Syntax of Nonfinite Complementation: An Economy Approach*. MIT Press.
- Bowers, John. 2001. "On Reducing Obligatory Control to Movement". Ms. Cornell University, Ithaca.
- Carstens, Vicki. 2001. "Multiple agreement and case deletion: Against phi-(in)completeness". *Syntax*. 4.3.
- Chomsky, Noam. 2001. "Derivation by Phase". In *Ken Hale: A life in language*, ed. M. Kenstowicz. MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Programme*. MIT Press.
- Hornstein, Norbert. 1999. "Movement and Control". *LJ* 30: 69-96
- Hornstein, Norbert. 2001. *Move! A Minimalist Theory of Construal*. Blackwell
- Landau, Idan. 1999. Elements of Control. PhD dissertation. MIT
- Landau, Idan. 2001. "Control and Extraposition. The case of Super-Equi". *NLLT* 19: 109-152
- Manzini, Rita and Anna Roussou. 1999. "A Minimalist Theory of A-movement and Control". *Lingua* 110
- Ndayiragije, Juvénal. 2000. "Strengthening PF". *Linguistic Inquiry* 31:3. 485-512
- Ndayiragije, Juvénal. 1999. "Checking Economy". *Linguistic Inquiry* 30:3. 399-444
- Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris
- Wurmbrand, Suzanne. 1998. *Infinitives*. PhD. Dissertation. MIT

Department of French
University of Toronto
Scarborough Campus
1265 Military Trail, Toronto
ON, Canada M1C 1A4

juvenal@utsc.utoronto.ca

Derivations without the Activity Condition*

Andrew Nevins
Massachusetts Institute of Technology

The EPP cannot be reduced to the Inverse Case Filter (contra Boskovic 2002) and remains for the moment axiomatic in phrase-marker construction. Feature-splitting, Agree, and the EPP allow for a range of derivational options that have been constrained by the Activity Condition (Chomsky 2001 et seq). The phenomenon of non-nominative subjects (including A-movement of structurally-Case marked elements) runs afoul of the activity condition. This paper explores the hypothesis that all derivational options ruled out by the activity condition can be ruled out by independent principles of locality and a constraint against multiple Case valuation.

1. Movement in a Post-Agree Landscape

The major conclusion of this paper will be the proposal that the Activity Condition is not necessary nor desirable constraint on derivations. Prior to the discussion of the Activity Condition however, a few fundamental questions about the nature of displacement in syntax will be addressed and discussed at length. Why do DPs move from their theta position to a functional head F^0 ? Two relatively uncontroversial answers used to be to check agreement features on F^0 , or to be assigned Case (which F^0 can do)¹. However, with the introduction of *Agree*, a feature-valuation operation "at a distance" (i.e. under closest c-command), there is no need for actual movement (i.e. *re-merger*: creation of a new sisterhood relation) to accomplish feature valuation. Schematically, valuation of agreement features on Tense occur purely under *Agree* with the postverbal DP in (1):

- (1) There seem to be two fish in that tank (seem > 2, ? 2 > seem)

The associate, *two fish*, can't be "moving at Logical Form" since its scope with respect to the intensional verb would have to be obligatorily wide in that case,

* The conclusions reached in this paper can be chronologically traced as the result of conversations in chronological order: Milan Rezac, Karlos Arregi, Pranav Anand, Shigeru Miyagawa, John Bailyn, Howard Lasnik, Usama Soltan, Noam Chomsky, Brent DeChene, Julie Legate, Klaus Abels, Norbert Hornstein, and Cilene Rodrigues. In addition, audiences at the MIT Phase Workshop (Jan 2003) and at Kanda University (Oct 2003) and Tsukuba University (Oct 2003) were very encouraging and thought-provoking. I doubt that any of the aforementioned parties are in full agreement with the conclusions I have drawn.

¹ As the locution "It is the case that..." or "It is not the case that" is highly prevalent in this paper, I will capitalize all instances of Case when referring to the technical term.

counter to fact. Similar arguments (due to H. Lasnik, among others) against re-merger of the DP at any conferred-upon level of representation can be mustered from the inability of the postverbal DP to bind an anaphor (2) or license a negative polarity item (3).

- (2) *There seem to each other to be some biolinguists making progress.
- (3) *There seem to any of the biolinguists to be no philologists making progress.

The evidence that features can be valued at a distance (whether ultimately modeled with *Agree* or another operation) demonstrates that feature-valuation cannot be what drives movement of a DP to FP as *Agree* should always be an option. There are two less-conferred upon answers as to why DPs move (to A-positions). *The Inverse Case Filter* answers that F^0 needs to assign Case to something (in a spec-head relation, no less). *The EPP* answers that there is a structural requirement that the immediate projection of F^0 is in a sisterhood relation with a DP. As the Inverse Case Filter is stated in terms of the requirement for an overt specifier-head configuration, the only divergent predictions from the EPP pivot upon whether or not the moved DP is actually assigned Case in the specifier of F^0 . A range of evidence to be discussed below demonstrates that the re-merged DP is not assigned Case by F^0 . The EPP in its pure form remains as the best answer to our opening question. Whether or not this is a sad conclusion for the hypothesis that movement is only driven by uninterpretable feature-checking is an evaluation left for the reader. We turn to the arguments that Movement can occur without Case, Agreement, or Inverse Case valuation.

2. The Inverse Case Filter does not Subsume EPP Effects

The Inverse Case Filter (ICF henceforth) is “the requirement that traditional Case assigners assign their Case features” (Boskovic 2002: p. 170; see also Martin 1999 for an earlier formulation) in an overt spec-head relationship. Thus, (4) is modeled as illicit because finite matrix T has not assigned nominative Case to anything.

- (4) *Is likely that Agboh helped Mbaya.

The failure of matrix T to assign nominative Case in (4) poses no legibility problems for the LF interface, as the Visibility requirement (Chomsky 1981) -- that all arguments of all predicates bear Case -- is met (even by the CP, though not morphologically visible). It could be that the unmet lexical requirement on T to assign Case renders it ineligible for phonological spellout at PF, but I prefer to view the ICF as a syntax-internal constraint within models that posit it.

- (5) *was told Njoroge that Assefa left.

- (6) *Qasba believes to have been told Sasha that Yves left.

After all, (5) shows that nominative Case assignment to the DP object isn't enough: Nominative must be assigned in a configuration resulting from overt movement². (6) shows the same for accusative: it cannot be assigned at a distance in order to satisfy the ICF, but requires displacement. Why should PF be unable to spellout a predicate that has discharged its Case feature, but not in a spec-head configuration? The answer remains obscure; hence, let's consider the ICF purely syntax-internal. Note that it still does not subsume all EPP effects. Though (4)-(6) are ruled out by the EPP, there is a class of derivations that the EPP can rule out that the ICF can't: those without successive-cyclic movement through intermediate specifiers of TP. Evidence for this intermediate movement is easy to find: in (7), neither the surface nor the theta-position are sufficient to bind the anaphor, but the intermediate specifier of nonfinite T is³:

- (7) Thelonious seems to Mrs. Monk to appear to himself to be a genius

Thus, above and beyond the ICF, a representational principle ensuring successive-cyclic movement is required in models that attempt to model derivations without the EPP. Suppose we make this move, temporarily. What about (8), an Icelandic sentence in which there is no nominative Case being assigned?

² The ICF may also be employed to rule out instances of *there*-existentials without an associate, e.g. **There seems that Kate knows everything*. However, sentences like these independently crash due to lack of a DP to value the phi-features of matrix T. An ICF-based explanation in terms of Overt Case assignment adds nothing to this independent syntactic requirement. In addition, blocking effects (the availability of an *it*-expletive variant) and perhaps semantic requirements on *there*-existentials are additional sources of explanation.

³ Grohmann, Drury, and Castillo (2000) attempt to provide an alternative explanation for (7), in which there is no intermediate A-movement, but rather, that *himself* is a logophor in the complement of *appear*, citing the following sentence as evidence (with the judgement that it is grammatical):

- (i) John kissed Mary because it appeared to himself that the earth was flat

I find the status of this sentence egregious, as do all of the people that I have asked. In any event, more nuanced arguments for successive-cyclic movement can be found with quantifiers. Sauerland (2003) uses data such as the following to argue for successive-cyclic movement through vP:

- (i) Every student mustn't get an A. (*must* > *neg* > *every*)

[...At most a third of them can get one.]

- (ii) Every child, doesn't seem to his, father to be smart. (*neg* > *every*)

(i) rules out the possibility that when negation scopes over a universally-quantified subject, it is due to neg-raising, rather than reconstruction, as negation cannot scope above the modal. (ii) shows that the universally-quantified subject can reconstruct below negation, to a position still high enough to bind the experiencer pronoun. (It also cannot be the case that the lowest copy of *every* child is Quantifier-Raising to bind the pronoun, as that would constitute a weak-crossover violation). The LF position, then, must be an intermediate projection, which Sauerland argues to be specifier of the v above *seem*, with movement triggered by an EPP feature.

- (8) a. Okkur var hjelpað
We-dat was helped
'We were helped'
- b. Það logaði a kertinu
There flamed-3.sg at the.candle
'There flamed at the candle'

To maintain the ICF as operative in (8a), we must analyze it as follows: "Quirky subjects have a structural nominative, not morphologically realized, on top of the inherent Case" (Boskovic 2002, p. 171). (8b) represents a class of unaccusatives which have *no* argument capable of bearing Case (Sigurdsson 1989/1992: chapter VI), not even a quirky one. Perhaps a similar claim could be made, that *there* bears nominative Case in these constructions. Suppose we make these moves, temporarily, to keep the ICF afloat, and assume, contra morphological evidence, that datives and expletives actually bear an invisible nominative Case. Consider now structures in which the only DP in the clause is postverbal:

- (9) Into the room rolled the basketball

Let's not enter into the debate about the ultimate surface position (A or A') of the locative; it's irrelevant for the present discussion. But recall that nominative Case must be assigned overtly (i.e. in a Spec-Head configuration) on the ICF account. For (9) to converge, the matrix T must assign nominative Case overtly. Hence it would have to be to *into the room* for the ICF to remain empirically correct. The conclusion is thus forced that the preverbal PP bears nominative Case, the lone instance of a preposition bearing nominative Case in the literature. It cannot be the case that *the basketball* has checked nominative Case overtly in Spec, T (say, with subsequent verb-raising even higher). Coopmans (1989) demonstrates that it is not structurally high enough to control into an adjunct (10), while canonical preverbal subjects are (11):

- (10) *Near the oasis lay two sheiks [without PRO talking]
- (11) Two sheiks lays near the oasis [without PRO talking]

The postverbal DP cannot be receiving nominative Case on the ICF account, as it never targets a high enough position for a spec-head configuration with T. Hence, the next question is, what Case *is* assigned to *the basketball* in (9)? Notice that the ICF, as stated, requires overt movement for accusative case as well (cf. (6) above). But it can't be the case that the postverbal subject in (9) is moving overtly to, say, AgrO or *v*, as that would license pseudogapping (if we follow Lasnik's account).

- (12) *Into John's office rolled a basketball, and into Mary's did a volleyball

Pseudogapping (12) is extremely degraded. The explanation without overt movement is simple: the postverbal subject cannot move to AgrO, hence can't escape the ellipsis site. With the ICF, something extra must be stated. Let's conclude, then, that *the basketball* isn't being assigned accusative Case. The standard account, of course (see Collins 1997, Soltan 2003) is that the postverbal subject has nominative case, assigned at a distance: incompatible with the ICF.

Suppose then that locative inversion structures don't contain a nominative-assigning Tense, and that the postverbal subject is being assigned 'partitive' case (though definite NPs in this position sound quite acceptable, so the semantic determination of partitive Case would have to be abandoned) under sisterhood with the verb. Lasnik (1992), based on Belletti (1988) suggests that some instances of postverbal subjects (e.g., in expletive constructions) are assigned partitive Case. If this were to occur in (9), it would not constitute a violation of the ICF, as partitive case isn't structural, and all structural case assigners (trivially satisfied here, as there would be none, by stipulation) have assigned their Cases. But then why is (13) completely ungrammatical:

- (13) *rolled the basketball into the room

The ICF cannot rule out (13) on the partitive account for the postverbal DP, cannot rule in (9) on the overtly-assigned nominative account, and cannot rule out (12) on the overtly-assigned accusative account. Suppose we amend the ICF account of (13): partitive Case can be assigned to the postverbal DP, and nominative Case must then be assigned to the PP in an overt spec-head relation. Baroque or not, this captures the facts considered so far. The reader is no doubt weary of the number of theoretical options we have considered and discarded in order to preserve the ICF account of word order. In the next section, however, we turn to evidence from quantifier scope that even this last emendation cannot be maintained.

2. Moving without Structural Case & Structural Case without Moving

Kuno (1971) noticed a scope contrast between locative inversion structures and postverbal locative structures, demonstrated here:

- (14) Some actress stood on every stage ($\exists > \forall, \forall > \exists$)
- (15) On some stage stood every actress ($\exists > \forall, * \forall > \exists$)

The contrast can be explained by a version of the generalization from Nevins & Anand (2003) in (16)

- (16) Non-nominative subjects cannot take narrower scope than their surface position

Obviously, the assumption needed by the ICF for theory-internal reasons that the PP has nominative case in (15) leads to the inapplicability of (16) in explaining the quantification contrasts with (14). In short, the ICF assumption that

nominative case is always overtly assigned (even to PPs and morphologically dative subjects) not only complicates PF, it obscures contrasts at LF.

The alternative is the EPP. XPs move without doing so in order to value structural case. The locative in (15) moves and does not receive structural Case. The postverbal subject in (15) does not move (at least, not enough to license pseudogapping or adjunct control) and yet does receive structural Case. We have what biolinguists call "a double dissociation". The EPP as a purely formal principle of structure-building enables us to model this. The contrasts in (14)-(15) extend to many kinds of non-nominative subjects (ergatives in Hindi, datives in Greek). We return to Russian accusative subjects below.

For the moment, though, consider another domain in which movement seems to occur completely independently of structural Case assignment. Though it is obligatory that at least one left-peripheral head (usually T(ense)) bears the EPP property in English, it is often optional for lower functional heads to bear an EPP property. Concretely, we will assume that there is a head H distinct from (but quite cartographically close to ECM v)⁴ which may optionally bear EPP, inducing a movement of the ECM subject completely independent of Case assignment.

Recall that the ICF requires overt movement for structural Case assignment. However, the order of the ECM subject and a particle of the matrix verb may vary, as Lasnik has shown with the ECM verb *make out*⁵:

(17) I made Cuijian out to be a fool

(18) I made out Cuijian to be a fool

The optionality of word order in (17) & (18) looks like good evidence for a head H with an optional EPP, whose specifier is linearly after the verb and before the particle. In fact, as (16) can more strongly be formulated as (19), there is a prediction for quantifier scope, attested in (20) and (21), from Lasnik (2001)

(19) Movement of a QP only for the EPP does not reconstruct for scope

(20) I made out every Mersenne number not to be prime ($neg > \forall, \forall > neg$)

⁴ In the current model, perhaps rather empirically naively, it is assumed that V-to-v raising is overt in English.

⁵ *Make out*, for the unfamiliar, has two relevant meanings in the ECM construction: one is roughly *convince*, e.g.

(i) I made out my missing homework to have been eaten by the dog

The other is roughly *discover*, e.g.

(ii) I finally made out close tabs to have been kept on me all along by the CIA

A third meaning, used later in this paper, is roughly *steal*, as in

(iii) I made out like a bandit

The fourth, meaning roughly *reciprocally kiss and embrace*, is probably more common than any of these, but unhelpful in this paper (though the imaginative reader can substitute it in (22)).

(21) I made every Mersenne number out not to be prime ($*neg > \forall, \forall > neg$)

To be clarify the readings: (20) can mean either that I discovered/let on that all Mersenne numbers aren't prime (i.e., they're all composite): this is the $\forall > neg$ reading. It can also mean that I discovered/let on that it's not the case that they're *all* prime: the 237th one isn't. This is the $neg > \forall$ reading, which (21) lacks. Recall, now, that the ICF does not allow structural Case assignment without movement. Hence Boskovic maintains that object shift is always overt in all of (17),(18),(20),(21), and hypothesizes that *the particle* has two different positions, one before and one after the position of object-shift for the ICF; let's call them both OutP for clarity's sake. How then, to capture the scope contrasts in (20)-(21)? Boskovic suggests that the ambiguity is not due to reconstruction of the DP, but to neg-raising, "a sort of QR...bounded by OutP" (p. 206)⁶. In other words, in (20), negation can neg-raise over the universal quantifier, leading to the non-surface reading. However in (21), negation cannot neg-raise past OutP, hence it cannot move to a position c-commanding (and outscoping) the universal quantifier. This captures all of the facts in (20)-(21); after all, by themselves they underdetermine a unique analysis. The claim that OutP bounds QR, however, is false. (22) can clearly describe a scenario in which a different guest absconds with each dessert.

(22) Some guest (or other) made out with every dessert ($\exists > \forall, \forall > \exists$)

Suppose then, that the account is revised, and that outP only blocks QR negation, but not universal quantifiers. Then it is predicted that while (22) may allow the inverse scope reading, (21) cannot. Again, the facts underdetermine an analysis, and this aspect of the revised ICF model is consistent with (21)-(22). It's wrong for the contrast in (23)-(24).

(23) I made out some guest to have eaten every dessert ($\exists > \forall, \forall > \exists$)

(24) I made some guest out to have eaten every dessert ($\exists > \forall, *\forall > \exists$)

Putative movement of outP should be irrelevant for QR of the universal quantifier if it is only *neg-raising* that is affected. However, the contrast in (23)-(24) receives an explanation if the different structures are due to movement of the DP. The contrast is straightforwardly predicted by (19) and the explicit axiom that structural Case can be checked *without movement*.

It has been demonstrated that Case valuation can occur without movement (leading to vP internal nominative subjects and IP-internal ECM subjects) and that movement can occur without Case valuation (leading to frozen scope). The ICF predicts neither, and hence misses empirical generalizations about the interaction between Case, word order, and logical

⁶ Further doubt can be cast on *neg-raising* due to its unavailability to provide negation with scope over modals and quantificational adverbs: *You must not leave* has only the *must > not* reading. No proponent of *neg-raising* (when invoked as a counterexplanation to DP-reconstruction) has provided a principled set of constraints on its application.

form. The best answer we have at present for why a DP moves to the specifier of a functional head F^0 is the EPP. Non-nominative subjects in A-positions (as diagnosed by lack of weak crossover, ability to bind subject-oriented anaphors, and ability to control into adjuncts; cf. Ura 2000) are precisely that: non-nominative.

3. Non-nominative Subjects and the Activity Condition

We have seen that while inherently-case marked (i.e. dative, ergative) and prepositional-phrase subjects can be argued to have a (morphologically invisible) nominative case, such a theory-internal stipulation complicates Case theory. On the empirical side, there is a more difficult problem: the lack of a distinction between agreeing and non-agreeing subjects eliminates the representational vocabulary to describe scope contrasts between nominative and non-nominative subjects; only the former display narrow scope with respect to a lower DP (Nevins & Anand 2003). Even if a characterization of subject properties were to include the stipulation that inherently-case marked elements have obligatorily wide scope, the adversity impersonal construction in Russian (Lavine & Freidin 2002, Bailyn 2003) presents a more serious challenge to proposals that inherent-case bears a hidden nominative, as the accusative subject is structurally case-marked:

- (25) Soldat ranilo puljami
Soldiers-acc wounded-past.nonagr bullets-instr

The accusative subject is in an A-position: it can bind the Spec-T -oriented anaphor *svoj* and it does not induce weak-crossover violations (Bailyn 2003). Moreover, it is an instance of structural case: it undergoes the genitive of negation, which inherent accusative does not (Lavine & Freidin 2001). The verb is in default form and shows no agreement with the subject. Finally, the accusative subject shows obligatorily wide scope with respect to the instrumental (Nevins & Anand 2003). This latter fact, that the accusative-initial order has semantic effects (namely, freezing scope at LF), effectively rules out a “Stylistic Fronting” analysis (e.g., Holmberg 2000) for these constructions, in which non-nominative subjects are displaced only at PF. All three of the above papers thus agree that the most fruitful analysis of the construction has the following properties:

- (26) **Subject Position is Spec-T:** The accusative subject is in Spec-T, an A-position, allowing anaphor binding and obviating WCO.
- (27) **EPP-Only Movement Exists:** Movement of the accusative subject to Spec-T is triggered by the EPP, a requirement that a functional head have a DP specifier. Movement of the accusative does not involve instances of Agree or uninterpretable feature valuation.

The analysis of adversity impersonals in Russian, whereby movement of a non-nominative subject can occur “only for the EPP”, finds parallels in

analyses of ergative and dative subjects crosslinguistically; however, it is the clearest instance of an already structurally case marked DP satisfying the EPP. Movement of this type, however, involves an operation between T(ense) and a phrase that has already valued all of its uninterpretable features. In the framework of Chomsky (2001 *et. preq.*), however, an element that has already eliminated its uninterpretable features (28) cannot enter into further operations (29)

- (28) **Inactivity of an XP:** An XP that eliminates its uninterpretable features (case, *wh-*) is rendered *inactive*.
- (29) **The Activity Condition:** Inactive elements are not accessible for further operations.

The models in (26)-(27) and in (28)-(29) are directly incompatible. Hence I will argue that the latter (specifically (29), as (28) may remain terminologically useful) must be abandoned, and that its role in constraining derivations must find other sources. I argue that the Single Case Constraint, the locality of A-movement (in its formulations under Relativized Minimality or the Minimal Link Condition) and the Phase Impenetrability Condition (itself a locality condition) are sufficient to rule out derivations that (29) does, rendering (29) unnecessary.

4. The Role of the Activity Condition in Phased Derivations

Once (27) becomes an active part of the model, the question arises as to what rules out movement of case-marked elements to satisfy the EPP. Specifically, consider a configuration in which a nominative DP in a finite clause is c-commanded by an athematic-subject verb, which in turn will be c-commanded by a T(ense) with an EPP requirement and uninterpretable phi-features. Consider (30)-(31), where unbracketed left-to-right linear order denotes c-command, lower occurrences of moved phrases are shown as copies, and some functional structure is omitted:

- (30) $T_{EPP, u\phi}$ is likely Rhoda_{Nom} is intelligent
- (31) Rhoda_{Nom, Nom} T is likely Rhoda_{Nom, Nom} is intelligent

Agreement of matrix T with the embedded subject is an illicit derivational move. This derivational step could be ruled out by (29), as Agreement and Movement occurs for an inactive XP. However, consider another detail. As nominative case assignment will accompany ϕ -valuation, the DP in (31) is assigned nominative case twice. A universal generalization about derivations is that DPs cannot be valued with more than one case feature:

- (32) **The Single Case Constraint:** A DP that is valued with more than one case feature is illegible to PF.

The generalization in (32) has been upheld by Schütze (2001), who demonstrates that an apparent counterexample, the appearance of “case-stacking” in Korean is not an instance of multiple case markers, but rather that the second morpheme is a focus marker and simply cannot be analyzed as case-related. I propose that the implementation of (32) occurs in the morphological component⁷.

Incidentally, some readers might wonder, if (32) is all that is active in constraining movements, why is **A book read John* ungrammatical. Satisfaction of the EPP by the object in fact presents no problem, but in order to move above the subject, *a book* must undergo topicalization. The ban on improper movement (from an A' to an A position), discussed below, will thus rule out this sort of example.

As the subject position in (30) is athematic, the only derivational option is to merge an expletive, which will yield a convergent derivation. A variant of (30), however, that will not run afoul of (32), is a configuration with a non-finite T(ense), (spelled out as *to*), with no uninterpretable ϕ -features. Consider (33)-(34), where unbracketed left-to-right linear order denotes c-command, lower occurrences of moved phrases are shown as copies, and *some functional structure is omitted* (italics intentional this time):

(33) to_{EPP} be likely Rhoda_{Nom} is intelligent

(34) Rhoda_{Nom} to be likely Rhoda_{NomNom} is intelligent

The derivational step in (34) is illicit (as can be verified by the fact that a continuation of the derivation with an expletive, e.g. **It is certain Rhoda to be likely is intelligent* is ungrammatical). If movement of the DP is only to satisfy EPP on nonfinite T, however, what rules out this step? Suppose we put aside derivations in which an expletive is available in (33). If an expletive is not available at the point of (33), then the finite TP that eventually dominates (33) will not have access to an expletive either. Hence movement of the DP in (34) will always result in movement to specifier of a finite TP, yielding an eventual violation of (32). Note that this explanation, however, though correct due to the fact that finite TPs are at every root, provides no account for the illicit local step in (34).

In ruling out the local derivational step in (34), we note that (29) clearly bans movement of inactive elements, yielding an apparent argument for the activity condition. Closer examination of the structure of (33), however, reveals that there is an independent factor that prevents this movement.

An active hypothesis in models of the relationship between functional structure and case assignment is that nominative case valuation by T(ense) requires the “participation” of a c-commanding C(omplementizer). Specifically,

⁷ In a lexicalist morphology, (32) would be implemented as a ban over precompiled DPs with more than one formal case feature. In a realizational morphology, (32) can be implemented through the ordering of rewrite rules (Anderson 1992, Noyer 1992) or through Vocabulary Insertion (Halle & Marantz 1993) that requires a one-to-one pairing between the Vocabulary Item inserted and the feature realized under a single terminal node.

Iatridou (1993) demonstrated that nominative case assignment in Greek always implicates the presence of CP structure. Rizzi (1982, Chapter 4) implicates a C-Nominative relationship, Aygen (2002) continues this line of research for Turkish nominative case, and Chomsky's *Beyond Explanatory Adequacy* formalizes within the *Agree* framework that the C-T relationship enables nominative case.

(35) C^0 -Nominative Valuation: Nom. case is valued by T immediately within a CP.

The empirical data in Greek & Turkish, in addition to English, if we consider the optional nonpronunciation of *that* in the finite complement of *is likely* and *seems*, demand (35). Further confirmation comes from Icelandic (facts due to Halldór Sigurdsson), in which a matrix verb may agree with an embedded subject (36), just as long as the embedded clause is not tensed, regardless of the presence of a complementizer (37)

(36) Mér virðast margar bækur vera
Me-DAT seems-pl many books-nom-PL be-INF
skemmtilegar
interesting
'To me seem many books to be interesting'

(37) *Mér virðast margar bækur eru/séu
Me-DAT seems-pl many books-nom-PL are-pl-ind/subj
skemmtilegar
interesting
'*To me seem many books are interesting'

(38) Mér virðist að margar bækur séu
Me-DAT seems-sg that many-books-nom-PL are
skemmtilegar
interesting
'To me, seems that many books are interesting'

A closely related Germanic language thus reveals that finite T in (37) implicates the presence of a strong phase boundary, preventing agreement into it. With (35) in mind, we return to the structure of (34) and the illicit derivational step. The light verb *v* above *be likely*, athematic in this case as it introduces no external argument, is included as well.

(39) to_{EPP} v be likely [_{CP} C Rhoda_{Nom} is intelligent]

(40) Rhoda_{Nom} to v be likely [_{CP} C Rhoda_{Nom} is intelligent]

The derivational step in (40) is illicit because it is A-movement out of a CP. Research from van Riemsdijk (1978) to Chomsky (2001) has established that no syntactic operations can relate a phrase outside a CP to a phrase c-commanded by the head of that CP:

- (41) *Phase Impenetrability of CP*: No phrases in the complement of C^0 may Move to or Agree with phrases higher than CP.

Since (40) involves Movement from the complement of an embedded C^0 to the specifier of a T which dominates the embedded C, (41) rules out (40). In the implementation of Phase Impenetrability in Chomsky (2001), in which the complement of CP becomes inaccessible only upon the introduction a dominating v , nonfinite T will not be able to induce EPP movement of the embedded subject. No appeal to the Activity Condition is necessary.

Recall that all of the non-nominative subjects whose existence motivates the impossibility of (29) originate within the vP . A likely possibility is that vP in these configurations is simply not a strong phase⁸.

To summarize, (41), an independently motivated locality condition on syntactic operations, rules out EPP satisfaction by DPs that are embedded too far from the attracting T. The case valuation of the attractee is irrelevant.

Before concluding, we should however consider what Bob Franks has called the implicit *Phase Penetrability Condition* within (41): that movement to the specifier of CP allows further movement out of CP. This derivational option should be considered for (12), traditionally ruled out under the rubric of improper movement.

- (42) Rhoda_{Nom} to v be likely [_{CP} Rhoda_{Nom} C_{EPP,Top} Rhoda_{Nom} is intelligent]

The first question that arises with respect to (42) is what features the embedded C^0 bears. Clearly an EPP feature is present, to enable movement to the specifier position. All intermediate specifier, CP landing sites of successive-cyclic A' movement bear an EPP feature. And the DP in question is not a *wh*-phrase, so the embedded CP cannot be interrogative. Suppose that it is topicalization-driven. Then movement to specifier of the higher nonfinite T will still be banned, as that would constitute improper movement.

The ban on improper movement should be considered in tandem with another effect of A' movement: it renders the moved argument invisible as an

⁸ When considering the role of the Phase Impenetrability Condition, however, it is important to recall that vPs (including unaccusatives and passives, according to the successive-cyclic movement and nuclear stress diagnostics advanced in Legate 2003b) may constitute a strong phase, at least in English. If (41) is to be invoked in blocking derivational steps in which T attracts or agrees with a DP inside a strong phase, it looks like the same constraint will block T from Agreeing with the vP -internal DP in an unaccusative expletive construction:

- (i) There T seem to have v arrived three ships.

Although the v in (i) does not introduce an external argument, it still constitutes a strong phase. Legate (2003a) proposes that the apparent agreement of T and the postverbal DP is actually mediated by v . The unaccusative v Agrees with its internal object, valuing its case as nominative. Recall that the complement of v is inaccessible. However, T(ense), requiring ϕ -valuation, can enter into an Agree relationship with v , resulting in plural agreement. The difference between C- and v -headed phases, then, with respect to apparent accessibility of the complement, is due to the fact that a higher Probe can ϕ -Agree with v , but not with C.

intervener for ϕ -Agree. Consider negative quantifier movement in Icelandic, which displaces an object DP above the base position of the subject, licenses parasitic gaps, and induces weak crossover violations (Svenonius 2000):

- (43) Strákarnir_i höfðu [engu grjóti] t₁ [hent t₂ íbilana]
The.boys had no rock thrown at.the.cars

If the Activity Condition were correct, (43) should induce a defective intervention constraint, similar to superraising, as the moved object intervenes between T and the in-situ position of the subject. Why should a case-valued DP that intervenes between a Probe and Goal while occupying an A position incur a Minimality violation, while a case-valued DP intervening between Probe and Goal while occupying an A' position does not? It appears as though A'-moved elements become invisible for ϕ -Agree once they have targeted their final landing site (see e.g., Rezac 2003):

- (44) A'-agreement renders a DP's categorial and ϕ -features invisible

The solution pursued here does not assume that A'-operations render A-operations invisible, but simply that they occur necessarily later. This rests on changing a few assumptions about the way in which phrase markers are built. Bottom-up application of Merge requires that embedded clauses are fully constructed before matrix clauses. Suppose that trees are not built in this way, but rather, that embedded clauses and matrix clauses are built in parallel, in separate workspaces. The embedded vP and matrix vP are constructed at the same derivational step, and the embedded IP and matrix IP are constructed in the same derivational step. Finally, the embedded CP and matrix CP are joined at the same cycle of phrase-marker construction. In essence, this is a derivational rendering of the model in Williams (2003), and is schematized in (45)

- (45) *Workspace 1* *Workspace 2*
John T_{PAST} v say ϕ Mary T [_{vP}who v saw <who>]

At this point, C is merged in each of the subtrees and the *wh*- phrase moves to Spec, C:

- (46) *Workspace 1* *Workspace 2*
[_C did John T v say ϕ] [_{CP} who C Mary T [_{vP}who v saw <who>]]

At this point, the syntactic object ϕ is merged with the CP, and the *wh*- phrase may move on to matrix CP

- (47) *Workspace 1*
[_{CP} who did John T v say ϕ [_{CP} <who> C Mary T [_{vP}who v saw <who>]]]

I will address technical questions that have no doubt arisen. What is the status of ϕ ? In this model, it serves essentially as a 'placemark' for the embedded CP. One theoretical option is that it literally is a place marker, and

that fusion of two subtrees always involves variable-substitution: the sister of *say* is literally replaced with the CP, reminiscent of a generalized transformation. No de-merge of ϕ would be necessary; it would be replaced by the CP. Though the number of operations in the model has increased, it is not immediately obvious that any empirical problems of overgeneration necessarily arise from substitution of this sort⁹, given constraints on where variables can be inserted and what types of phrases may substitute for them.

However, I will pursue another theoretical option, needed for independent reasons. The representation in (47) does not commit to intermediate movement through the matrix vP. However, there is some evidence that A' movement is successive-cyclic through every vP, which is theoretically enforced by making vP a strong phase. Strong phases, however, necessarily contain no uninterpretable features. The placemaker ϕ is clearly uninterpretable at the interfaces. Hence the matrix vP in (47) is not a strong phase until substitution of the CP occurs. When substitution occurs, the vP is eligible for spellout, and requires movement of the *wh*-phrase to its edge.

- (48) *Workspace 1* *Workspace 2*
 [CP ...T [vP who v say [CP <who> C Mary T [vP <who> v saw <who>]]]]

Thus, three new aspects of phrase-marker construction have been introduced. First, trees are not built strictly bottom-up, but rather respect *Parallel Cyclicity*. Second, interarboreal fusion occurs as a substitution operation. Third, a phrase becomes a Strong Phase only once it is interpretable at the interfaces. That is, transfer of a strong phase to the interfaces can take place after, say, the vP has been merged with higher material.

The reader may find these three new aspects of syntactic computation wholly unmotivated. Let us see how, in the spirit of Williams (2003) (though his model is, as its name implies, thoroughly representational), improper movement is ruled out by these very principles of tree construction.

Improper movement is A-to-A'-to-A movement. However, as subtrees are built in parallel, the highest A position will necessarily be filled by the time the embedded A' movement occurs. Consider the point in the derivation in which a T has been merged in both subtrees:

- (49) *Workspace 1* *Workspace 2*
 [T v seems ϕ] [T [vP who [Mary [v saw <who>]]]]

EPP satisfaction of both T(ense)s must occur immediately. In *Workspace 2*, this is accomplished by movement of the agent, *Mary*. In *Workspace 1*, the EPP property of T must be satisfied somehow. Workspaces 1 and 2 have not been fused yet, and will not be until a C is merged. Hence no

⁹ Of course, it may be possible to view ϕ as more than a placemaker: suppose that the visibility criterion for arguments is correct in every detail, but that the formal implementation is that every argument is dominated by a Kase head that that must be valued. CP arguments will need Case. ϕ could be a Kase head that *say* values the Case of, in turn merging with the embedded CP.

existing XP in the derivation can satisfy the EPP of matrix T, and an expletive must be merged.

- (50) *Workspace 1* *Workspace 2*
 [IP It T v seems ϕ] [IP Mary T [vP who [<Mary> [v saw <who>]]]]

The CP layer is built, and the embedded *wh*- moves to specifier of the embedded C. It's clearly *too late* for improper movement to occur, as the A-position in the matrix clause is already filled.

- (51) *Workspace 1* *Workspace 2*
 [CP does [it T v seem ϕ] [CP who C Mary T]]

- (52) *The Generalized Ban on Improper Movement* (Williams 2003): A movement operation cannot move an element from X_{n+1} in the embedded clause to X_n in the matrix clause (where $X_{1..n}$ denotes the selection sequence of functional projections, i.e. from embedded C to matrix T, from embedded T to matrix v, etc.)

(52) is implemented here in a derivational model by a *Relativized Extension Condition* that forces extension within each derivational workspace, without the possibility of delaying EPP satisfaction until after CP-level merger. Identical remarks apply in banning the derivational step in (42) that motivated the present discussion. (42) and the class of movements from an embedded A-position to a matrix A-position are thus prevented by (41), which rules out movement from within (i.e. the non-edge of) a strong phase, while movement through the edge will occur after the matrix A-position has necessarily been filled, by (52). No appeal to the Activity Condition is needed to rule out movement from one Case position to another.

5. A note on Hyperraising

Though the focus of the current paper is to dispense with the Activity Condition, as it wrongly rules out A-movement of a structurally case marked DP to satisfy EPP, it is worth briefly considering other configurations that pose a problem for the Activity Condition about which I have only a little to say at present. In the last section, I have shown that A_{movement} out of a tensed-clause in English is ruled out by the Phase-Impenetrability Condition, with no appeal to the Activity Condition necessary. *Hyperraising* is a phenomenon in which there is apparent movement of a DP from a tensed embedded clause (often with a complementizer) to matrix Case position, often of an athematic-subject verb. Ura (1994) presents a comprehensive study of such constructions. I will report facts here from Brazilian Portuguese (BP; Ferreira 2000, Rodrigues 2003):

- (53) O João parece que está doente
 The John seems-sing. that is-sing. sick-sing.

- (54) Ninguém parece que está doente
 Nobody seems-sing that is-sing. sick-sing.

A few remarks on (53) are in order. Skeptics that this is hyperraising would have to reckon with the fact that if *O João* were base-generated in the higher clause, it could not receive a theta-role. Hence it seems reasonable to assume that *O João* entered the derivation in the embedded clause. Another objection to waylay is that *O João* might be topicalized (A'-moved) from the embedded clause, with a null expletive in the matrix Spec, TP. But Ferreira (2000) shows that negative quantifiers, which make lousy topics, can undergo hyperraising (54).

What could be the difference between languages that allow hyperraising, such as BP, and languages that do not, such as English? If the account provided here for English is correct, there must be two properties of BP that differentiate it from English. The first is that the surface subject is not receiving Case in either the matrix or embedded position. Ura in fact suggests that the embedded position does not assign Case hyperraising configurations. He points out a striking one-way correlation: if a language has hyperraising, it will have *pro*. One reason that Brazilian Portuguese is particularly interesting is because it seems to have lost *pro* due to morphological change (Rodrigues 2003). Hence, I will not pursue the *pro*-related analysis, and instead adopt another possibility here, based on the phenomenon of copy-raising (also discussed by Ura). Consider the English example below:

- (55) John seems like he is often in trouble
 (56) John seems like he just told everyone that he will resign
 (57) *John seems like it was told him that he must resign

In (55), *John* must receive a theta-role. The only place to get it is in the embedded clause. I will adopt the proposal of Fujii (2003), in which (55) involves movement of *John* from the embedded clause, with evidence from the impossibility of superraising (57). How does the DP come to bear two Cases, in apparent contravention of the single case constraint? It doesn't; I suggest that what is going on here is *peeling* (a term due to M. Starke): moving a DP out of a larger KaseP, and re-merging the DP in the matrix clause under another KaseP (see also Boeckx 2003 for a very similar approach to A'-resumption). The remnant KaseP in the embedded clause is spelled out as *he*, as it only bears nominative Case features, and agreement features (valued through concord with the DP):

- (58) [_K Kase_{Nom} [DP <John>]] seems like [_K Kase_{Nom} [DP <John>]] is often...
 (59) PF: John seems like he is often...
 (60) *...John to seem that (he) left

Contrast the current proposal, which rules out (60) due to the Strong-Phasehood of the CP, with the Activity condition, which rules it out due to freezing of DPs in a Case position. Both proposals must assume something like a Kase-peeling analysis for (56)-(60). Why is Kase-Peeling not applicable in (60)? In fact, I will suggest that it is, but that the movement still runs afoul of the Phase Impenetrability Condition.

The Activity Condition, for its proponents, must be bolstered with a statement that Kase-peeling is not available with *that*, but it is available with *like*, with no connection between the environment where it is available and the mechanism itself. In other words, the Activity Condition *could* be relaxed specifically for *as-if* constructions.

In the current proposal, where there is no Activity Condition, Kase-peeling is *always* available¹⁰, but the movement is bounded by phases, and *as-if* does not head a strong Phase¹¹. Potsdam & Runner (2001), who pursue a non-movement analysis in which an A-chain is "generated" between the matrix subject and the embedded pronoun, pursue a similar intuition: *like* and *as* are prepositions, not complementizers (see also Heycock 1984)¹².

Returning to hyperraising: the suggestion would be that hyperraising always constitutes an instance of Kase-peeling¹³. Languages that allow Kase-peeling spell out the remnant as an empty category, recoverable through morphological agreement or other means. English allows Kase-peeling, but must spell-out the remnant as a pronoun¹⁴.

¹⁰ The reader may wonder if Kase-peeling is allowed, say, from object position to subject position. This would be fine, but then, of course, the DP would get two theta-roles, which is illicit. Of course, from the perspective of Hornstein (2001), this could be precisely what is happening: there is movement to a second theta position, and the spellout of a remnant accusative KaseP is *himself*.

¹¹ Prepositional *as* and *like* heading an IP seem to select for a 'defective' IP, as the EPP of the tensed verb does not even seem to need to be satisfied (Postal 2002):

- (i) Lasers can, as is[-EPP] obvious, cut through walls
 (ii) Lasers can, as was[-EPP] proved by Mike, cut through walls

My hope is that the non-phasehood of *as*-headed IPs and the lack of an EPP on the T head can be related in further research.

¹² Further evidence comes from the fact that *like* can co-occur with *that* (Shimada 2004):

- (i) Their idea was something like that the government was airport security to be tough

¹³ Ura (1994) has one argument (p. 133) against hyperraising as an instance of copy-raising: replacing the empty position in a hyperraising structure with a full pronoun blocks the idiomatic interpretation with idiom chunks. Note that this does not occur in English: *The cat seems like it's out of the bag*. My guess is that the emphatic nature of full pronouns in *pro*-drop languages is incompatible with an idiomatic interpretation. Stressing the pronoun in English copy-raising with idioms yields a fairly bizarre result: *The cat seems like IT is out of the bag*, while not with non-idioms: *John seems like HE is the one to do the job*.

¹⁴ It is tempting to relate the necessity of spelling out a remnant in English to the necessity of overt possessors. Consider *get*-passives, such as *John got his wallet stolen*. My analysis of these constructions is that *John* receives a theta-role as possessor, and moves to the higher position for Case, where it receives no theta-role. The obligatory "affectedness" and "possessor" requirements of *get*-passives (Oehrle and Nishio 1981) are automatically derived. If *John* is in fact A-moving from Spec, DP – a left branch extraction, it must leave a resumptive *his*. The corresponding *get*-passives

Brazilian Portuguese is not out of the woods, yet, however. Recall that, remnant *spell-out notwithstanding*, the difference between licit and illicit finite-clause-to-finite-clause raising has been reduced to the Phase Impenetrability Condition. How do configurations like (53) skirt this derivational locality requirement?

An uninteresting solution is to suggest that the C heading the embedded clauses in these cases does not head a Strong Phase. While this seems like an unmotivated stipulation, hyperraising often out of subjunctive and irrealis/future embedded clauses, known to be more permeable than indicative tensed clauses (and hence, perhaps not Strong Phases). As the repertoire of functional heads includes a v_{def} (passives) and a T_{def} (infinitives), the existence of a C_{def} (subjunctive/irrealis) might be expected. However, I will pursue another possibility here, based on an interpretation of the Phase Impenetrability Condition offered in Lightfoot & Rodrigues (2003), in their analysis of clitic-climbing in Romance.

The formulation of the Phase Impenetrability Condition in (41) was sufficient for our discussion at that point, and indeed, could even be understood as a representational constraint on well-formed A-chains, if one wanted such things in one's theory. However, let us consider the derivational formulation of the PIC offered by Chomsky (2001).

- (60) When a strong phase is completed, the next phase down (i.e. the specifier, the phase head, and the complement of the phase head) becomes inaccessible to further operations.

Suppose that there is a projection FP in between CP and TP in Brazilian Portuguese (Uriagereka 1997). Suppose, furthermore, that the embedded subject raises to Spec, FP after raising to Spec, TP¹⁵. On the view of the PIC in (60), when CP is completed, the *next phase down* will be spelled-out. The next phase down is the entire TP projection. Hence, when an English embedded CP is completed, the entire TP projection is inaccessible, including

in Japanese, on the other hand, have no overt possessor, yet all the same require obligatory affectedness and possession between the matrix subject and the subject of the passive participle.

¹⁵ Some preliminary evidence for BP subject-raising to a position higher than Spec, TP comes from quantifier float above TP-oriented adverbs. While quantifier-float is known to be a dubious diagnostic for A-traces (see Bobaljik 2003), the following BP sentence (C. Rodrigues, personal communication, January 2004) may indicate that the subject occupied embedded FP:

- (i) ? As vítimas me parecem que todas inesperadamente resolveram testemunhar
the victims Cl-1Sg seem-pl that all-pl unexpectedly decided-3pl witness-inf
a favor dos policiais.
in favor of.the-pl policemen
"The victims seem to me to have unexpectedly all decided to witness in favor of the policemen."

On the hypothesis that *inesperadamente* is a TP-level adverb, and that there is V-to-T raising in BP, the presence of *todas* on the left of the adverb may diagnose movement through embedded Spec, FP. Further research is clearly needed.

the embedded subject in Spec, TP, as we saw in the discussion around (34). In Brazilian Portuguese, on the other hand, the embedded subject moves to Spec, FP. When the CP phase is completed, though the TP projection is inaccessible, FP is still accessible. Hence the embedded subject is available for further raising to the matrix spec, TP (possibly through the edge of spec, vP , if it is a strong phase when introducing *parece*).

Hyperraising, then, is only allowed in languages that manage to avoid the embedded subject being trapped by the PIC. On the account developed here, it has nothing to do with the (un)availability of Case-assignment in the embedded clause, nor with the Activity Condition.

To conclude this section: I have shown that the existence of accusative subjects in Russian contravenes the Activity Condition. The Activity Condition does not seem to be operative with extraction from certain types of vPs (and, perhaps, certain types of CPs). The generalization that there is no A-movement from a Case-position is wrong, but most of its effects can be captured by independent principles (the Single Case Constraint, and the Phase Impenetrability Condition).

6. Obligatory Pied-Piping for Internal Experiencers

This section concludes with a few more puzzles. There is one more derivation that, at first blush, looks like an instance in which case-valued DPs cannot undergo EPP movement. Consider the experiencer argument of an athematic subject verb, and the illicit derivational step of preposition-stranding to satisfy the EPP:

- (61) to_{EPP} seem [to [Eddie_{OBL}]] [_{CP}that California is in political trouble]
(62) *Eddie_{OBL} to seem [to {Eddie_{OBL}}] [_{CP}that CA. is in political trouble]

The formulation of the EPP in (27) should allow for satisfaction by a non-nominative subject. Prepositions can be stranded under A-movement, as is known from pseudopassives:

- (63) Eddie_{EPP,Nom} was v_{pass} spoken to t_{Eddie} on the train by a maniacal lawyer.

There is no violation of The Single Case Constraint in (62), and no appeal to strong-phase locality can block the derivational step in (62). The Activity Condition can rule out (62), however, as the experiencer already bears oblique Case¹⁶.

However, Brent DeChene (personal communication, October 2003) has pointed out that there are two structurally analogous configurations to (62) that

¹⁶ The Activity Condition would have trouble, of course, with the corresponding Icelandic examples, in which the experiencer is dative and not contained within a preposition, since raising them is perfectly grammatical. This reinforces that suggestion that preposition stranding is what is problematic in English.

should allow perfectly licit EPP movement of the experiencer, without contravention of the Activity Condition. Both involve passivized verbs. Compare (63) with (64), and (65) with (66):

- (64) *Eddie_{Nom} was said [to {Eddie}] [_{CP}that California is in trouble.]
 (65) *This charity_{Nom} has been given [to [t_{charity}]] a book about adverbs¹⁷.
 (66) This charity_{Nom} has been donated [to [t_{charity}]] by nearly everyone.

There is no constraint against A-movement with p-stranding of the experiencer/goal in a passivized verb *when a non-argument follows*. However, when an argument follows, A-movement with p-stranding is impossible. The relevant configuration seems to involve an "internal gap". Kuno's (1973) formulation of the *Clause Nonfinal Incomplete Constituent Constraint* roughly captures this set of facts, though nonfinal must be appropriately delimited to refine the generalization, and its source remains puzzling.

To demonstrate that (non)finality is relevant, consider a contrast in A'-movement of the experience with p-stranding, which obtains between internal and external (i.e., extraposed) gaps:

- (67) *Who does Luisa seem [to [t_{who}]] to be a genius?
 (68) Who does Luisa seem to be a genius to t_{who}?

Though an explanation is lacking for the "internal-gap" restriction on experiencer preposition-stranding (possibilities involving remnant movement suggest themselves), it should be clear that the impossibility of (62) does not constitute an argument for the Activity Condition, as it is related to a much broader class of phenomena unrelated to case-valuation.

One potential problem arises with the verb *surprise*, which disallows A-movement of the experiencer (69)-(71) but allows A'-movement (72):

- (69) To_{EPP} surprise Mary that John won
 (70) It is certain t_{it} to surprise Mary that John won
 (71) *Mary to surprise t_{Mary} that John won
 (72) Who did it surprise t_{who} that John won?

There is a possibility, however, that the experiencer is assigned case by a null preposition, similar to McGinnis' (1998) analysis of *strike* in *John struck Mary as a complete fool*. The obligatory pied-piping of internal experiencers developed in this section would ban (71), a case of preposition stranding. A

¹⁷ There is no Case problem in this example; pied-piping is what's relevant. Consider *To that charity had been donated a book about metathesis, and to this charity has been given a book about adverbs*.

pied-piping derivation is disallowed because PP-experiencers cannot satisfy the EPP:

- (73) *[To Eddie] seemed t that Zak would survive

Aside from its postulation of null prepositions (also argued for by Hornstein 2003 for the object of *promise* in subject control uses), the restrictions on movement of the experiencer of *surprise* can be understood. A' movement in (72) arguably involves pied-piping.

A final question arises concerning the difference between *strike* and *surprise* with respect to A-movement across the experiencer. Contrast (74)-(75) and (76):

- (74) John struck Mary [_{XP} t_{John} as a fool]
 (75) John seemed to Mary [_{IP} t_{John} to be a fool]
 (76) *John surprised Mary that t_{John} was so foolish

The Phase Impenetrability Condition will rule out (76)¹⁸, as the subject has A-moved from out of a CP. Returning to our main conclusion, there is a generalized ban on preposition-stranding of internal experiencers that requires investigation, but in no way supports the Activity Condition.

7. Concluding Remarks

I will summarize the argumentation of the entire paper. DPs move because there is an EPP, independent of Case-valuation¹⁹. The Inverse Case Filter does not subsume EPP effects, and can be abandoned with no loss of empirical coverage; on the contrary, EPP-only movement affords the theoretical vocabulary to describe many contrasts in quantifier scope. EPP-only movement in Russian shows that a structurally-Case marked DP may move only to satisfy the EPP. The putative generalization that A-movement of structurally-Case-marked DPs is impossible falls under the Activity Condition, suggesting that the latter should be abandoned. A number of configurations that the Activity Condition rules out can be ruled out instead by a morphological constraint (only one Case-valuation is possible), and two syntax-internal constraints (Phase Impenetrability, taken as an axiom, and the Ban on Improper Movement, derived as a consequence of parallel cyclicity in subtree construction). Hyperraising is assimilated to Copy-

¹⁸ It is worth considering why the complement of *surprise* should contain more structure than *strike*. Howard Lasnik (personal communication, November 2003) suggests that it the additional structure of the complement may come from factivity:

- (i) It surprises me that it's raining, #but it's actually not raining
 (ii) It strikes me that it's raining, but it's actually not raining

¹⁹ Though I have assumed the EPP is axiomatic within phrase-marker construction, for an explanation involving the need for an intervening XP in the linearization of the head C and phase below, under an interpretation of the Linear Correspondence Axiom, see Richards (2002).

Raising, and argued to be the result of Kase-peeling: moving a DP out of its Kase-phrase. A few remaining puzzles concerning the impossibility of moving DPs from within PPs are shown to be equally problematic for the Activity Condition and the model developed here, hence providing no argument for the former.

References

- Anderson, Stephen. (1992). *Amorphous Morphology*. Cambridge University Press.
- Aygen, Gulsat. (2002). *Finiteness, Case, and Clausal Architecture*. Doctoral Dissertation, Harvard University.
- Bailyn, John Frederick. (2004). Generalized Inversion. *Natural Language and Linguistic Theory* 22, pp. 1-50.
- Belletti, Adriana. (1988). The Case of Unaccusatives. *Linguistic Inquiry* 17, pp. 375-416.
- Bobaljik, Jonathan. (2003). Floating Quantifiers: Handle with Care. In Lisa Cheng and Rint Sybesma, eds. *The Second Glot International State-of-the-Article Book*. Mouton de Gruyter, pp. 107-148.
- Boeckx, Cedric. (2003). *Islands and Chains: Resumption as Stranding*. John Benjamins.
- Boskovic, Zeljko. (2002). A-Movement and the EPP. *Syntax* 5.2.
- Chomsky, Noam. (1981). Lectures on Government and Binding. Foris: Dordrecht.
- Chomsky, Noam (1993). A minimalist program for linguistic theory. In Kenneth Hale and Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger* MIT Press.
- Chomsky, Noam. (2001). Derivation by Phase. In Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*. MIT Press.
- Collins, Chris. (1997). *Local Economy*. MIT Press.
- Coopmans, Peter. (1989). Where Stylistic and Syntactic Processes Meet: Locative Inversion in English. *Language* 65, 728-51.
- Ferreira, Marcelo. (2000). Hyperraising and Null Subjects in Brazilian Portuguese. Ms., Universidade Estadual de Campinas.
- Fujii, Tomohiro. (2003). Licit and Illicit Long Subject-to-Subject Raising. In Yukio Otsu (ed.), *The Proceedings of the Fourth Tokyo Conference on Psycholinguistics*. pp. 109-133. Hituzi Syobo.
- Grohmann, Kleanthes, K., John Drury, and Juan Carlos Castillo. (2000). No More EPP. In the Proceedings of WCCFL 19. Somerville, MA: Cascadilla Press.
- Halle, Morris and Alec Marantz (1993). Distributed Morphology and the Pieces of Inflection. In Kenneth Hale and Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, Cambridge, Mass.: MIT Press.
- Heycock, Caroline. 1994. *Layers of Predication*. New York: Garland.
- Holmberg, Anders. 2000. Stylistic Fronting. *Linguistic Inquiry* 31: 445-483.
- Hornstein, Norbert. (2003). On Control. In Randall Hendricks (ed.) *Minimalist Syntax*. Blackwell.
- Iatridou, Sabine. (1993). On Nominative Case Assignment and a Few related Things. In J. Bobaljik and C. Phillips (eds.), MITWPL 19, pp. 175-196.
- Kuno, Susumu. (1973). Constraints on Internal Clauses and Sentential Subjects. *Linguistic Inquiry* 4.3, pp. 363-385.
- Lavine, James and Robert Freidin. (2002). The subject of defective T(ense) in Slavic. *Journal of Slavic Linguistics* 10(1-2).
<http://www.facstaff.bucknell.edu/jlavine/publicationspage.htm>
- Lasnik, Howard. (1992). Case and Expletives. *Linguistic Inquiry* 23, pp. 381-405.
- Lasnik, Howard. (2001). On a Scope Reconstruction Paradox.
<http://cognet.mit.edu/library/books/chomsky/celebration/essays/lasnik.html>
- Legate, Julie. (2003a). Identifying Phases. Paper presented at the EPP/Phases Workshop at MIT. <http://john.ling.yale.edu/jlegate/phasews.pdf>
- Legate, Julie. (2003b). Some Interface Properties of the Phase. *Linguistic Inquiry* 34(3).
- Lightfoot, David and Cilene Rodrigues. (2003). Subject Inversion and Clitic Climbing. In I. Calgri, L. Meroni, and G. Tesan (eds.) University of Maryland Working Papers in Linguistics 12.
- Martin, Roger. (1999). Case, the Extended Projection Principle, and minimalism. In S. Epstein and N. Hornstein (eds.), *Working Minimalism*. MIT Press.
- McGinnis, Martha. (1998). *Locality in A-Movement*. Doctoral Dissertation, MIT. Distributed by MITWPL.
- Nevins, Andrew and Pranav Anand (2003). Some AGREEMENT Matters. In G. Garding and M. Tsujimura (eds.), *The Proceedings of WCCFL 22*. Cascadilla.
- Noyer, Rolf. (1992). *Features, Positions, and Affixes in Autonomous Morphological Structure*. Doctoral Dissertation, MIT. Distributed by MITWPL.
- Oehrle, Richard T. and Hiroko Nishio. (1981). Adversity. In K. A. Farmer and C. Kitagawa (eds.), *Proceedings of the Arizona Conference on Japanese Linguistics*. Coyote Papers, University of Arizona, Volume 2.
- Postal, Paul. (2002). A Paradox in English Syntax. Ms., NYU.
<http://www.nyu.edu/gsas/dept/lingu/people/faculty/postal/papers/skeptical/>
- Potsdam, Eric and Jeffrey T. Runner. (2001). Richard returns: Copy Raising and Its Implications. *Proceedings of Chicago Linguistics Society*.
- Rezac, Milan. (2003). The fine structure of Cyclic Agree. *Syntax* 6.2.
- van Riemsdijk, Henk. (1978). *A case study in syntactic markedness: The Binding Nature of Prepositional Phrases*. Lisse: The Peter de Ridder Press.
- Richards, Norvin (2002). Why there is an EPP. Paper presented at Movement and Interpretation Workshop, Meikai University.
- Rizzi, Luigi. 1982. Issues in Italian Syntax. Dordrecht: Foris.
- Rodrigues, Cilene (2003). Doctoral Dissertation, University of Maryland, College Park.
- Schütze, Carson. (2001). On Korean "Case Stacking": The varied functions of the particles *ka* and *lul*. *The Linguistic Review* 18(3): 193-232.
- Sauerland, Uli. (2003). Intermediate Adjunction with A-Movement. *Linguistic Inquiry* 34, pp.308-314.
- Sigurdsson, Halldor. (1992). *Verbal syntax and Case in Icelandic*. Institute of Linguistics, University of Iceland.
- Soltan, Usama. (2003). Locative Inversion: A Phase-based Analysis. Ms, University of Maryland, College Park.
- Svenonius, Peter. (2000). Quantifier Movement in Icelandic. In Peter Svenonius (ed.), *The Derivation of VO and OV*, John Benjamins.
- Ura, Hiroyuki. (1994). *Varieties of Raising and the Feature-Based Bare Phrase Structure Theory*. MITOPL 7. Distributed by MITWPL.
- Ura, Hiroyuki. (2000). *Checking Theory and Grammatical Functions in Universal Grammar*. Oxford University Press.
- Uriagereka, Juan. (1997). An F position in Western Romance. In K. Kiss (ed.) *Discourse Configurational Languages*. Oxford: Oxford University Press.
- Williams, Edwin. (2003). *Representation Theory*. MIT Press.

Department of Linguistics and Philosophy
E39-245 MIT
77 Massachusetts Avenue
Cambridge, MA 02139
USA

anevins@mit.edu

Phase edge and extraction: a Tagalog case study*

Andrea Rackowski and Norvin Richards
MIT

In this paper, we examine evidence for the phase theory of movement (Chomsky 2000, 2001), in the context of Tagalog, arguing in particular that Tagalog has overt morphology that signals movement of arguments to check EPP on the head of the *vP* phase. We show that this morphology interacts with extraction in ways which Chomsky's theory leads us to expect, and develop a theory of the Tagalog facts which also accounts for the effects of Huang's (1982) CED.

1. Introduction

According to the phase-based theory of syntax (Chomsky 2000, 2001), in order for some element to be extracted out of a phase, it must be located at the edge of that phase, either by merging into that position or moving there. Movement to the edge of the phase is accomplished by an EPP feature that forces some argument within the domain of the phase head to move to check it. In this paper, we examine evidence for this theory in the context of Tagalog.

In particular, we argue that Tagalog has a process of 'object' shift for specific arguments. We argue that, just as in Germanic languages, specific arguments are forced to move to the edge of the *vP* phase in order to receive the correct semantic interpretation. In Tagalog, this movement is signaled by morphology on the verb which agrees with the shifted argument (in Case, we will claim; see Rackowski 2002 for arguments), and also by the marker *ang* (or *si* for proper names) on the shifted argument. The shifted argument is underlined in the following examples, and the agreement morphology on the verb is in bold (Maclachlan 1992):

- (1) Agent, -um-
a. B-**um**-ili ang bata ng tela sa palengke para sa nanay
Nom.asp-buy ANG child CS cloth DTmarket P DTmother
'The child bought cloth at the market for mother.'

- Theme, -in
b. B-in-ili- \emptyset ng bata ang tela sa palengke para sa nanay
asp-buy-Acc CS child ANGcloth DT market P DTmother
'The child bought the cloth at the market for mother.'

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MITWPL is an organization of the
graduate students in linguistics at MIT.
Department of Linguistics, 32-D808 MIT
77 Massachusetts Avenue
Cambridge, MA 02139

mitwpl@mit.edu
<http://web.mit.edu/mitwpl/>