

EXISTENTIALS, A-CHAINS AND RECONSTRUCTION
(Construções Existenciais, Cadeias-A e Reconstrução)

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ABSTRACT: This paper provides a new minimalist analysis of existential constructions that reconciles two salient properties: (i) the fact that the local relation between there and its associate mimics the locality involved in movement relations and (ii) the fact that the associate is interpreted where it sits. Assuming that A-chains can only have one visible link at LF, I argue that, due to certain properties of there, reconstruction into the foot of the associate chain is the only option that yields interpretable results.

KEY WORDS: Existential Constructions, A-Chains, Expletives, Reconstruction

RESUMO: Este trabalho propõe uma nova análise minimalista de construções existenciais que reconcilia duas propriedades salientes: (i) o fato de a relação local entre o expletivo e seu associado reproduzir a localidade encontrada em relações de movimento e (ii) o fato de o associado ser interpretado na posição em que se encontra. Assumindo que cadeias-A só podem ter um elo visível em LF, eu argumento que, devido a certas propriedades do expletivo, a reconstrução na cauda da cadeia do associado é a única opção que produz resultados interpretáveis.

PALAVRAS-CHAVE: Construções Existenciais, Cadeias-A, Expletivos, Reconstrução

1. The Problem

Every time syntactic theory changes, existential constructions (ECs) are reanalyzed. The turn towards minimalism is no exception. *there*-constructions have been the center of repeated theoretical speculation. Chomsky has developed no less than three different proposals (1995: chap. 2, 3 and 4). Lasnik has contributed two (Lasnik 1992, 1995). Yet another is offered here. Why are ECs so interesting? In my opinion, it is because these constructions must satisfy a pair of competing requirements that appear to pull in opposite directions. In particular, a successful account must reconcile two salient properties of ECs: the fact that there is a local relation between the expletive and its indefinite associate and

the fact that the associate's scope is determined by its overt position. There is a clear tension between these two properties. The former suggests that the associate moves to the position of the expletive at LF, the latter that the associate stays in place.

Different kinds of data motivate each half of the puzzle. Moving the associate to the expletive finds strong support in the locality facts extensively described in Chomsky 1986. These data show that the distance between *there* and its associate is identical to the span of an A-chain link, i.e. the distance between two successive members of a licit A-chain. This follows, Chomsky 1986 persuasively argues, if the associate A-moves to the expletive at LF. It accounts for the following kinds of data.

- (1) a. *There is the man in a room
- b. *There seems that a man is in the room
- c. *There is the picture of a man in the room
- d. *There seems that Bill saw a man

Chomsky 1986 assimilates the unacceptability of the sentences in (1) to that in (2), in which the indefinite has overtly moved to Spec IP.

- (2) a. *A room is the man in t
- b. *A man seems that t is in the room
- c. *A man is the picture of t in the room
- d. *A man seems that Bill saw t

The locality violations that render the overt movements ungrammatical in (2) are covertly present in (1) on the assumption that the indefinite associate A-moves to the neighborhood of the expletive at LF. If these locality restrictions are respected an acceptable sentence results.

- (3) a. There is a man in the room
- b. A man is in the room

Current approaches to ECs maintain Chomsky's 1986 movement story though the details differ in important ways. I outline some of the current technology below.

The second salient property of ECs appears to clash with an LF movement story. The rub comes with the observation that the scope properties of the associate coincide with its overt position rather than its putative LF site. The data below illustrate this.¹

- (4) a. There aren't many men in the room
b. Many men aren't in the room
- (5) a. There must be someone in John's house
b. Someone must be in John's house
- (6) a. There wasn't anyone in the room
b. *Anyone wasn't in the room
- (7) a. Some applicants seem to each other to be eligible for the scholarship
b. *There seem to each other to be some applicants eligible for the scholarship
- (8) a. Someone_i seems to his_i mother to be in the room
b. *There seems to his_i mother to be someone_i in the room
- (9) a. There might only be one man in the room
b. *One man might only be in the room
- (10) a. John expected no one that I did to be elected
b. *John expected there to be no one that I did elected

The contrasts in (4)-(10) all point in the same direction; the associate's interpretive properties diverge from those of its overt paraphrase and the contrasts are all accommodated if the associate is interpreted from its overt position.

Consider for example the contrast in (4). (4a) requires that *many men* be interpreted within the scope of negation. This contrasts with (4b) where scoping *many men* over Neg provides the preferred reading. The fixed scope relation between *many men* and negation in (4a) follows if the former's scope is fixed by its overt position. In this structure, Neg asymmetrically c-commands *many men*. The observed scope relations follow as a matter of course. If, however, *many men* raises at LF, it is unclear why the Neg over *many men* reading is the only one available. Shouldn't the covert LF movement of the associate to Spec IP permit it to scope over Neg just as the overt movement in (4b) does?

¹ These data have been culled from the literature. The Neg-scope data and modal data are first discussed in Milsark (1974). The binding data and focus data are presented in den Dikken (1995). The ACD contrasts are mentioned in Hornstein (1995).

Similar conundrums emerge from the other pairs of examples. Each indicates that the scope of the associate in an EC is quite different from the scope of the indefinite in the corresponding overt raising structure. This emerges in the restricted binding powers of the associate in examples like (7) and (8). It is what permits the associate to be licensed by focus and negation in (6) and (9) but forbids it to scope over the main verb in (10) (a requirement for a licit ACD reading) or the modal in (5). In each case the contrasts follow if the associate's scope coincides with its overt position. Taken together these data cast a long shadow on the Chomsky's (1986) assumption that the associate raises to the neighborhood of the expletive at LF.²

To summarize. Chomsky 1986 has shown that the associate and the expletive in ECs must be near each other. This locality condition follows on the assumption that the associate covertly A-moves at LF to the expletive or some spot nearby. We have also seen that there exists considerable evidence that the scope position of the associate is fixed by its overt syntactic position rather than the LF position it would occupy were it to move at LF to the neighborhood of Spec IP. This follows if the associate does *not* move at LF. The problem is to reconcile these contradictory conclusions in a non-*ad hoc* manner.

In the context of MP the problem is spicier still. In a GB style account it is always possible to stipulate that scope in ECs is sensitive to S-Structure (SS) position while LF movement is required as well.³ This option permits one to reconcile the antagonistic data, albeit in a less than elegant fashion. However, this descriptive option is not readily available for the minimalistically inclined as SS does not exist in MP. Consequently, this brute force reconciliation of the conflicting data is not a viable option. The theoretical problem that ECs pose stands out clearly once this GB option is set aside. The aim of this paper is to outline a set of assumptions consistent with the spirit of MP that allows us to have our cake and eat it; to show that the associates move at LF to the expletive as Chomsky 1986 argues but that at LF this raised expression must delete thereby leaving only the copy in the launching

² This is essentially the conclusion in den Dikken (1995).

³ This is one way of reading Diesing's (1990) proposal. She provides an analysis of definiteness effects within ECs. However, she says nothing about the locality effects noted by Chomsky. In contrast, Chomsky has an account of the locality effects but has little to say about the interpretive data. This paper shows how to unite these two stories consistently.

site for interpretation. The next section outlines the assumptions required to arrive at this happy conclusion.

2. Some Assumptions

Several key assumptions drive MP analyses of ECs. Consider them in turn.

(11) Expletives satisfy the EPP

In minimalist terms, (11) requires *there* and *it* to check the D-features of Infl projections, *viz.* the strong D-feature on T⁰ or Agrs⁰. (11) is not novel with MP though the formulation in terms of checking D-features is. This implementation is intended to code the standard assumption that expletives occupy subject positions (in overt syntax) in a technically congenial fashion.

(12) Agr/Tns/V have features like Case and agreement that must be checked.

These features must be checked for the derivation to converge.⁴ In other words, for a derivation to be licit, the features on the verb must be checked against an appropriate expression by LF. I assume here that these features are weak and so are checked covertly. These contrast with D-features, which are strong and so must be checked in overt syntax.⁵

(13) *It* and *there* have features

The various approaches to ECs mentioned above differ in how they treat the feature composition of these expressions. Chomsky (1995: chap.

⁴ Case features on T and V are universally non-interpretable. Agreement features are interpretable on D/NPs and Chomsky (1995:chap. 4) seems to assume that they are interpretable on T and V as well. This need not be so, however. It is quite possible that ϕ -features on nominals are interpretable while being uninterpretable on T and V. This is true, for example, for D-features which are interpretable on nominals but must be checked on Infl and, perhaps, expletives like *there*.

⁵ But see the conclusion for some discussion of weak D-features.

3) assumes that *there* only differs from *it* in being unspecified for ϕ -features. He assumes (following Belletti (1988) and Lasnik (1992)), that the associate bears partitive Case. This means that *there* checks both the Case and D-features of Infl. The ϕ -features of V are checked against the features of the associate at LF by raising the latter to Infl.

In later work, Chomsky (1995: chap. 4) drops the assumption that *there* has Case features. He supposes that ϕ -features are interpretable and so need not be checked. Case, in contrast, is the canonical uninterpretable feature. Consequently, the associate must be raising at LF to check its Case. As a by-product, the Case and ϕ -features of Infl also get checked.

In sum, the standard assumption is that *there* is somehow less featurally endowed than *it*. *It* has a complete feature specification; D-feature, Case and ϕ -features. In contrast, *there* has a D-feature but may be bereft of either Case or ϕ -features or both. In Chomsky's various accounts, movement of the associate compensates for the reduced feature checking capabilities of *there*. Lasnik (1992, 1995) forces movement in a very different manner (see below).

- (14) Greed, interpreted as “enlightened self-interest”, governs movement

This version of Greed is proposed in Lasnik (1995). Chomsky (1995: chap. 4) adopts it in its essentials. The restriction on movement, on this interpretation, is that it is only licit if it results in a feature checking configuration in which some uninterpretable features are checked. What distinguishes this from earlier stricter versions of Greed is that it need not be features of the moved expression that get checked. For example, in an ECM embedded clause – *John expects [Bill to leave]* – the D-feature of the embedded Infl is checked by raising a nominal (*Bill*) to its Spec position. No feature of the raised expression is checked that needs to be. However, the movement is licit because the D-feature of the embedded Infl is checked as a result of this operation.

- (15) *There* is an LF affix

(15) has been assumed in various guises since Chomsky (1989)⁶. Chomsky (1995: chap. 4) uses it to force the associate to adjoin to *there* at LF.⁷ This is how Chomsky explains the definiteness effect.⁸ Chomsky operationalizes this proposal by assuming that *there* has a weak affixal N-feature that must be checked.⁹ Raising the associate to *there* at LF suffices to check this feature.

Lasnik makes more fundamental use of (15). Following Belletti (1988), Lasnik proposes to account for the definiteness effect via partitive Case. Thus, the associate does not move for Case. It moves, rather, to check an LF affix feature on *there*. To make this account empirically viable, Lasnik (1995) proposes that the affix feature on *there* must be checked by a partitively Case marked nominal expression.¹⁰

There is something odd about assumption (15) that becomes apparent once one considers the ways that Chomsky and Lasnik exploit it. *There* is endowed with special properties; for both it is an affix, for Lasnik it is an affix that can only be checked by a specially Case marked associate. The problem is that the more idiosyncratic these characteristics are to *there* the less we have an explanatory account of ECs. In other words, if we track the properties of ECs by ascribing distinctive properties to *there* we are no longer explaining the properties of ECs by bringing them under general grammatical principles. This is why Chomsky wants to treat *there* as just another determiner. However, as is perfectly clear, it is not just like other determiners. It cannot overtly do what Chomsky and Lasnik propose it covertly does; combine with an NP or N' to yield a licit DP, e.g. **there a book*, **there dog*. Conversely, unlike standard determiners *there* need not have an overt nominal restriction, e.g. *I saw him in there/the* (**room*). In Lasnik's account the properties of *there* are even more tailored to the observed data. The intimate relation between *there* and its associate is captured by restricting LF affix checking to

⁶ Reprinted in Chomsky (1995:chap. 2).

⁷ More specifically, it is the features of the associate that so move. Where it does not matter, I will talk of the category as a whole moving rather than its features. See fn. 11 for a discussion of category versus feature movement.

⁸ Chomsky also uses this assumption to account for why in transitive expletive constructions in languages like Icelandic the word order is expletive-associate rather than the reverse, see Chomsky (1995:chap. 4).

⁹ He follows Longobardi (1994) in assuming that this is so for all determiners.

¹⁰ Observe that this appears to assume that partitive Case does not delete once checked.

partitive Case marked NPs. All things being equal, I assume that it is better not to encumber *there* with such special morphological properties.¹¹

(16) *there* has no interpretation

(16) has a special significance since Chomsky (1986). It requires that *there* be rendered LF invisible for a fully acceptable EC to result. If *there* has not been “disappeared” by the LF interface uninterpretability results. Chomsky (1995) insists that this should not be confused with ungrammaticality. If *there* survives to the interface the derivation converges but gibberish results. The distinction between non-convergence and convergence as gibberish prevents the free deletion of *there* at LF. This accounts for why *there* is paired one to one with an associate.

Consider an example. Assume that *there* could be freely deleted. This would allow the derivation of **There seems there to be a man here* as follows. The lower *there* checks the D-feature of the lower IP. The indefinite *a man* raises to check the Case and phi-features of the matrix Infl. We then delete the lower *there* and all should be well. However, the sentence is unacceptable. This follows if such a free deletion is not allowed.

What prevents freely deleting *there*? If derivations with *there* converge then freely deleting the expletive is *prohibited* by economy considerations. In sum, ECs with “too many” expletives converge but are unintelligible.¹² Derivations are driven by narrow mechanical requirements of feature checking only, not by a “search for intelligibility” or the like. Free deletion of “excess” expletives is thereby prohibited by economy considerations, *viz.* deletion is an operation with a cost which cannot be incurred unless required for convergence.

¹¹ A similar problem affects the account of ECs in Groat 1995. This paper assumes that in ECs the syntactic features of the associate move at LF to check features of Infl but that the semantic features stay in place. This is how he accounts for the observation that the associate is interpreted from its SS position. The problem with this account is that it appears that only ECs involve the kind of feature movement postulated, i.e. one in which syntactic features move but semantic features remain in place. If this is so, then the account turns on postulating special *ad hoc* properties to associates in ECs. It appears that nothing else moves in quite this way.

¹² See Chomsky 1995:201. Here Chomsky argues that convergent derivations might still result in unintelligible sentences. As he puts it, “Derivations are driven by narrow mechanical requirements of feature checking only, not by a ‘search for intelegibility’ or the like”.

I have beaten this horse silly for two reasons. First, it is the sole method within MP of prohibiting the free deletion of “meaningless” expressions like *there*. Second, this reasoning appears to be incompatible with treating *there* as an LF affix. Recall that technically this means that *there* has a feature that needs checking. By assumption, if this feature is not checked, the derivation crashes. However, this implies that deleting *there* does not violate economy as it permits the derivation to converge. In short, if *there* has an affixal feature that needs checking then the economy account barring free deletion is inadequate.¹³ A *man* should be able to check the affixal N-feature in the embedded *there* and then raise to check the affixal N-feature in the matrix *there*. This should be possible as, being interpretable, the N-feature of the associate does not delete on checking the affixal feature. In short, unless the feature of the associate relevant for checking the affixal feature of the expletive deletes (after checking the affix), we lose the fact that *there* expletives are biuniquely related to associates. To accommodate this fact, it would be necessary to further assume that the associate cannot “excorporate” from the expletive even after it has checked the affixal feature of *there*.

(17) The associate in ECs is assigned partitive Case

Chomsky (1995: chap. 3) uses (17) to account for the definiteness restriction observed in ECs. As noted, he abandons this assumption in chap. 4. Lasnik crucially assumes (16) in his accounts. In English, partitive Case is assigned by *be*, unaccusatives, and passives.

(11)-(17) are exploited by Chomsky and Lasnik in their various treatments of ECs. Of these, (15) and (17) are, in my opinion, the most problematic. Treating *there* as an LF affix is quite *ad hoc*. In addition, it raises technical problems that are better avoided. Partitive Case is also problematic. Lasnik (1995) does heroic work in domesticating the idea in minimally acceptable terms. However, the core idea that the definiteness effect is explained in terms of partitive Case is a real stretch.

¹³ There is actually a second technical problem with the assumption that *there* has a feature that needs checking, especially if this feature is an N-feature as Chomsky (1995:chap. 4) proposes. Categorical features like N-features are interpretable. Hence they do not delete. But this means that a single associate should be able to check multiple N-features that require checking. Consider (i).

(i) *There seems there to be a man in the room

This is not so much an explanation as a redescription. What partitive Case has to do with indefiniteness has never been made clear.¹⁴ In what follows I drop these two assumptions.

In their place I substitute two others.

(18) An A-chain has one and only one visible link at LF

(18) requires that links delete in order for the derivation to converge. The simplest assumption is that deletion is essentially free. This amounts to allowing reconstruction in A-chains, analogous to what Chomsky (1995: chap. 3) proposes for A'-chains. Hornstein (1995, 1996) argues in favor of (18) and parries the arguments in Chomsky (1995: chap. 4) against A-chain reconstruction. Technically, following Chomsky (1995: chap. 3), I assume that reconstruction is a function of the fact that movement is actually copy-plus-deletion. Trace positions are copies of moved expressions. Reconstruction amounts to deleting the moved expression and retaining the original at LF. (18) assumes that in an A-chain one and only one member of the chain is visible at the CI interface. This requires deleting all copies but one. (18) treats such deletion as a convergence requirement, i.e. multi-membered A-chains violate full interpretation.¹⁵ The requirement that A-chains must delete all but one member and that either the head or the tail can delete to satisfy this requirement is central to the proposed analysis of ECs below.

(19) The mapping hypothesis proposed in Diesing (1992) is essentially correct

Diesing (1992), building on work by Heim and Kratzer, proposes a mapping hypothesis that relates LF phrase markers to post LF propositional structures. In particular, she proposes that nominals within the VP (lexical) shell are mapped into the nuclear scope of a proposition while nominals outside it are mapped into the restrictive clause. The effect of this is to provide a structural account of definites. Nominals

¹⁴ There are also a slew of problems revolving around the inherent nature of partitive Case. Vikner (1990) has an illuminating discussion of this as it relates to Icelandic. Lasnik's discussion is also illuminating. Suffice it to say, that this idea needs a lot of careful technicalia to make it work. For that reason alone it is suspect.

¹⁵ A and A' should be cast in terms of movement to L-related and non-L-related positions. I dispense with the technical niceties here. See Chomsky (1995: chap. 3) for discussion.

are interpreted as indefinite if and only if they are inside the lexical shell at LF. As Diesing (1990) argues, this provides an elegant handle on the definiteness effect observed in ECs given the VP internal position of associates. In what follows, I assume that this is basically the correct approach to the definiteness effect and I show how to exploit Diesing's suggestion and still allow LF movement of the associate out of the lexical shell.¹⁶

One last point. A key virtue of Diesing's approach, in my opinion, is that it relates the definiteness effect to the new/old information structure of the proposition. Nominals in the restrictive clause are presupposed and hence definite. If we assume that presupposed information is old from the point of view of the hearer and that definites are generally presupposed (See Diesing, 1992, Enç 1991, Heim 1982) then we get a pretty fair description of what is permitted in the associate position in ECs. See below for further discussion.

To sum up this section. I have reviewed the assumptions deployed in two influential minimalist accounts of ECs. In so doing I have cast aspersions on two; the notion that *there* is an LF affix and the idea of partitive Case as an account of the definiteness effect. I adopt the other assumptions. In particular, I assume that *there* only contains a D-feature, that movement is driven by enlightened Greed, that *there* is uninterpretable and yields unacceptability unless deleted, and that features on Infl must be checked. I further assume (18) and (19). Section 3 outlines how these assumptions suffice to derive the scope and locality data sketched in section 1.

¹⁶ For present purposes it does not matter whether Diesing's specific proposal is right. I mean two things by this. First, that the VP shell internal/external cutoff may not be the right one empirically. What is important is that some form of the principle be correct and that associates are interpreted as indefinite because of their being mapped into the nuclear scope. Second, nothing that I say below requires accepting Diesing's account of the mapping facts. In effect, Diesing provides a descriptive generalization and an explanation of this generalization. The description is that elements inside the VP/lexical shell at LF are interpreted as indefinite while expressions outside the shell are interpreted as definite or specific. The explanation of this fact is the hypothesis that expressions inside the lexical shell are mapped into the nuclear scope while expressions outside the shell are mapped into the restrictive clause. Being in one or the other position accounts for an expression's in/definite properties. For my purposes here, all I require is that the descriptive generalization is correct. Whether it is best explained in Diesing's terms is a separate issue, albeit an interesting one.

3. The Basic Analysis

I've observed that a successful account of ECs must reconcile two salient properties; the fact that there exists a local relation between the expletive and the associate and the fact that the associate's scope is determined by its overt position. The former suggests LF movement while the latter argues that the associate remains in situ at LF. The theoretical problem is to retain a movement relation between the expletive and the associate (and thereby to account for the locality facts) and show why this movement nonetheless requires that the associate be interpreted in its overt position at LF. These twin goals are achieved if reconstruction *must* follow the movement of the associate.¹⁷ This is required given (16), (18) and (19) above. Consider a sample derivation.

- (20) a. [there is a man in the room]
 b. [_{IP} [[a man]+there] is [_{sc} [a man] in the room]]
 c. [_{IP} ([[a man]+there)] is [_{sc} [a man] in the room]]

(20a) is the phrase marker in overt syntax. At LF, the associate raises and adjoins to the expletive, as shown in (20b). Given the standard definition of checking domain (see Chomsky 1995, chap. 3: 177ff) this move puts the associate in the checking domain of the finite Infl. Here the associate checks its Case and the Case features of the finite Tns as well as the agreement features that coincide with finite tense. The movement of the associate to *there* creates the two-link chain – (*a man+there, a man*). In order to converge, (18) requires that one of these links delete. If the foot of the chain deletes, then *there* survives to the CI interface and yields a deviant output albeit one that converges (see (16)), i.e. a grammatical but uninterpretable sentence. If, on the other hand, the head of the chain deletes then (20c) results. The structure is well formed and all of the expressions that make it up are interpretable. Consequently, a fully acceptable sentence results.

¹⁷ Recall, that the movement should not be encumbered with idiosyncratic properties manifest only in ECs. The problem, then, is to explain why this application of A-movement, *in contrast to other applications of the same operation at LF*, requires that the moved expression, the associate, be interpreted from its launching site. For relevant contrasts see Hornstein (1995:chap. 8) where the movement of quantified DPs is discussed.

Observe that (18) is crucial in allowing the expletive to delete. Recall that economy considerations prevent the free deletion of offending expletives. As chain link deletion is a convergence requirement, it trumps economy considerations. The upshot is that expletive deletion is permitted just in Case the expletive is part of a multi-membered chain. In this circumstance, given (18), deletion finesses economy. Adjoining the associate to the expletive creates a chain that includes the offending expletive. This affords the option of deleting *there* while respecting economy.

This analysis reconciles the tension highlighted above. The account crucially requires that the associate adjoin to the expletive. This movement accounts for the locality effects reported in (1). Furthermore, the only fully acceptable output is the one in which the associate chain at LF contains only the link corresponding to the overt syntactic position of the associate. In effect, only the structure that has undergone obligatory reconstruction yields a fully acceptable LF as only in such an LF phrase marker has *there* been licitly deleted. Note that the reconstructed associate is back in its “S-Structure” position. This is just where we want it in order to explain the interpretive data reviewed in (4) through (10). Coupled with (19), this further provides an account of the definiteness effect in terms of the mapping hypothesis. The reconstructed position is inside the lexical small clause and this position can only be filled by expressions with indefinite interpretations.

To illustrate the mechanisms more fully consider once again the locality and binding data reviewed in section 1. The locality data follow straightforwardly. The present account adopts the basic story developed in Chomsky (1995: chap. 3 and 4). Consider (1b) for illustration, repeated here in (21).

(21) *There seems that a man is in the room

Its unacceptability derives as follows. To be fully acceptable, the associate must raise, check its Case features, those of the matrix Infl and “disappear” the expletive. However, raising fails to check the Case features of the matrix finite Infl. Prior to movement (21) has the structure (22).

(22) [there [[₀+finite] seems [that [[a man] [₀+finite] is [[a man] in the room]]]]]

In the embedded clause *a man* is in the Spec of a finite IP. Here both its Case and the Case of the embedded Infl are checked. Once checked, the Case features of *a man* are no longer available for further checking. Consequently, raising *a man* to the expletive at LF will leave the Case features of the matrix Infl unchecked. These unchecked features cause the derivation to crash, hence the unacceptability of (21).¹⁸

The other locality violations succumb to the same sort of account. In the three remaining examples in (1), repeated below in (23), the indefinite is in a Case checking configuration. In (23a,b) it is inside a PP and in (23c) it is the object of a Case marking verb. If the indefinite were to raise at LF to the associate, therefore, the Case of the matrix Infl would remain unchecked and the derivation would crash.

- (23) a. *There is the man in a room
 b. *There is the picture of a man in the room
 c. *There seems that Bill saw a man

There is another derivation to consider for the Cases in (23); to raise *the man*, *the picture of a man* and *Bill* at LF. This option runs afoul of the definiteness effect. The present account treats this as a violation of the mapping principle (19); the assumption that an D/NP can be interpreted as definite if and only if it is outside the VP shell at the CI interface. The contemplated derivations leave the definite inside the VP shell. Consider (23a) for example. The relevant LF after raising the associate is (24).

- (24) [[[the man]+there] [_{VP} is [_{SC} [the man] in the room]]]

Note that raising *the man* to *there*, checks the relevant features of Infl. However, for the derivation to converge, one of the two links of the chain formed by adjoining *the man* to *there* must delete (cf. (18)). To comport with the mapping principle (cf. (19)), the lower link must delete.

¹⁸ Lasnik (1995) provides a rather different account of the unacceptability of (1b), which is not compatible with the present account. He relies on the assumption that *there* is an LF affix whose affixal feature is checked by a partitively marked associate that raises to check this feature at LF. The present analysis eschews the assumption that *there* is an LF affix and dispenses with partitive Case. Therefore, a derivation along these lines is unavailable.

This, however, leaves *there* visible at the CI interface and yields uninterpretability given (16). If, on the other hand, the upper link deletes, *the man* is inside the VP and so cannot receive the right interpretation (cf. (19)). In other words, (19) and (16) cannot both be satisfied.

In the Case of an acceptable EC like (20a), the associate that reconstructs to inside the lexical shell is indefinite and so this problem does not arise. (20c) is syntactically well formed, the uninterpretable *there*, has been deleted and the reconstructed indefinite associate is inside the small clause where it can be interpreted while respecting the mapping principle.

This approach to the definiteness effect (DE) has some advantages over the one advocated in Chomsky (1995). The latter ties the DE to checking an affixal N-feature carried by *there*. NPs can check this feature as they carry the N-feature. DPs cannot. If one assumes that definites are DPs then this accounts for the observed DE. However, as Chomsky (among others) has observed, definites are not strictly prohibited from being associates. Rather, they carry special interpretations if they are. This observation raises a difficulty for Chomsky's proposal. It is unclear how ECs with indefinite associates can carry any interpretation on this account of the DE. If *there* has an N-feature that must be checked in order for the derivation to converge and N-features cannot be checked by DPs then structures with definite associates should be strictly ungrammatical.

The present account does not face analogous problems. The DE is accounted for in terms of the mapping principle, not via checking morphological features of LF affixes. No grammatical requirement prohibits associates from being definite. The restriction is interpretive. Assume, for example, that definites typically involve presupposed – “old” – information. If we take this to mean information that is new/old with respect to the hearer, then we expect to find some ECs with definite associates. The literature is filled with these. Consider the following discourse.

- (25) a. – Who will we get to play Hamlet?
 b. – Well there's (always) Bill/the guy with the red hair

Here *Bill/the guy with red hair* is novel information for the questioner in the sense that s/he does not presuppose it to be true. Note that (25b) is not a felicitous answer to (26).

(26) Which of these guys can we get to play Hamlet

The reason is that to ask (26) felicitously the potential relevant Hamlet candidates must be presupposed in the discourse.

Of course, things are more complex than this. However, what even these cursory observations suggest is that the DE does not hinge on the morphological structure of *there* or the feature composition of DPs and NPs. Rather, it reflects how an LF is interpreted. (19) provides a plausible mechanism. Being an associate imposes certain interpretive requirements on an expression. If a definite can carry the requisite interpretation it can be an associate. Typically this is not the interpretation that definites have. However, in certain contexts it is and in those contexts definites are permitted. In sum, the present account delivers what is required; not an absolute prohibition against definite associates but one that ties their admissibility to the interpretation available (see Chomsky 1995: 384, n. 44).

Obligatory reconstruction of the associate also provides a clean account of the scope, binding and focus data reviewed in (4)-(10). Recall that the data are explained if the associate is interpreted at LF as if it resides in the position it occupies in overt syntax. If reconstruction is obligatory, as proposed here, this is precisely where the associate must be. Consider some examples in detail.

In (4) and (5), repeated below in (27) and (28), *many men* must be interpreted as within the scope of negation in (27) and *someone* is obligatorily interpreted as within the scope of the modal *must* in (28). This follows if reconstruction is required to get fully interpretable ECs. Consider the derivation of (28) in (29).

(27) There aren't many men in the room

(28) There must be someone in John's house

- (29) a. [[someone+there] must be [someone in John's house]]
 b. [[(someone+there)] must be [someone in John's house]]

At LF, the associate *someone* raises to check its Case and the features of the finite Infl. To converge with a coherent interpretation the head of the chain deletes leaving a copy inside the small clause asymmetrically

c-commanded by the modal. If scope tracks c-command, this requires that the associate be interpreted as within the scope of the modal. A parallel derivation obtains for (27) with similar interpretive effects.

The account for the remaining data is analogous. Binding of the reciprocal by the associate is forbidden in (7) because the associate does not c-command the reciprocal at LF. Pronoun binding in (8) is similarly prohibited. In fact, all the data fall into place given the fact that the associate occupies its overt position at LF despite having raised to *there* to check features. Nothing additional need be said. Chomsky (1995) notes some data that suggests that the associate binds from its raised position. He observes that control into adjuncts is possible in sentences such as (30) though this is not generally possible from object position.

- (30) There arrived three men without PRO identifying themselves
 (31) *I met three men without PRO identifying themselves

Citing Cardinaletti, he observes that the possibility for control into adjuncts appears to correlate with whether or not the main verb agrees with the associate or not. In French, for example, where ECs do not show agreement with the associate, such control is impossible.

- (32) *Il est entré trois hommes sans PRO s'annoncer
 expl is entered three men without announcing-themselves
 'There entered three men without announcing themselves'

Chomsky and Cardinaletti suggest that the PRO in the adjunct is bindable just in Case the associate raises at LP and induces agreement. The theoretical presupposition seems to be that unless this raising takes place, the object is not in the right c-command position to control the PRO.

This presupposition, however, has an empirical difficulty. It seems to only really hold for unaccusative constructions. Consider for example cases such as (33) and (34).

- (33) a. Several men were believed to be in the room after PRO betraying
 themselves by sneezing
 b. *There were believed to be many men in the room after PRO
 betraying themselves by sneezing

- (34) a. No one was taken to be on staff until PRO interviewed by Sill
 b. *There was taken to be no one on staff until PRO interviewed by Bill

In these examples, the favored reading has the adjunct modifying the matrix clause. Thus, in (33a) the believing follows the sneezing and in (34b) the *until* phrase modifies the matrix and is licensed by the negative *no one*. The ECs in (33b) and (34b) are both unacceptable with these readings. The only readings available have the unnatural interpretation in which the adjunct modifies the embedded clause. This is quite unexpected given the Chomsky-Cardinaletti analysis. Note that the matrix Infls agree with the associates in these cases. Consequently, the associate must move to this region at LF. Nonetheless, the indicated binding of PRO is impossible.

What this suggests is that the Control possibilities noted here have little to do with the associate c-commanding the PRO at LF. Note that this conclusion must be right on independent grounds. Objects are able to bind into adjuncts quite freely. Thus, at LF there must be structures in which they c-command the adjunct.

- (35) John met no one_i before Bill introduced him_i.

However, they cannot control PRO. This indicates that the problem with (31) is independent of whether objects c-command adjuncts at LF. In short, there is as yet no argument against the reconstruction of associates. Note, furthermore, that controlled a PRO in an adjunct does not correlate with having wide scope in other respects.

- (36) There didn't enter many men (last night) without PRO introducing themselves

Neg scopes over *many men*, in (36) despite the latter's ability to control PRO. This is a problem on the Chomsky-Cardinaletti proposal for presumably if the associate is high enough to bind the PRO it should be high enough to scope over the neg.

I conclude from this that the correlation noted above between control and agreement has little if anything to do with the LF position of the

associate. For an analysis of these constructions consistent with this conclusion see Hornstein (1995a). The present account forgoes the assumption that *there* is an LF affix in any sense other than that adjunction to *there* is permitted. The movement is driven by Case theory, as in Chomsky's account. The interpretive features of ECs are related to the fact that the associate is in its *in situ* position at LF. The mechanism that makes this story possible is A-chain reconstruction. What forces it to take place in ECs is the uninterpretability of *there*. What allows it to occur and still respect economy is the requirement that (A-)chains have only a single visible link at LF.

4. Some More Data

Lasnik (1992, 1995) argues against one key assumption made above. Modifying Belletti (1988), Lasnik presents empirical arguments against the position that the associate in ECs has its Case checked by raising at LF, the "transmission hypothesis". These arguments provide strong support for the dual contention that associates carry partitive Case and that *there* is an LF affix. In fact, the latter assumption is almost inescapable if one takes associates to have partitive Case. The reason is that without it Greed as a condition on movement is at risk. More specifically, if the associate bears partitive Case then it need not raise to Infl to check Case. Further, if phi-features are interpretable the associate need not raise to check them either. Thus, there seems to be no grammatical motivation for raising the associate at LF at all. However, as Lasnik agrees, there is strong empirical evidence that associates do raise at LF. Why do they move? To check the affix features of *there*, Lasnik suggests. In short, the path from partitive Case on associates to *there* as an LF affix is a short and steep one. This section argues that the evidence Lasnik provides does not tell against the transmission hypothesis. In sum, the assumption that associates move at LF to check Case is empirically well founded.

4.1. Adjacency Effects

Lasnik (1992) notes that accusative objects must be adjacent to the verbs that check their accusative Case. Since Stowell (1981), this has

been regularly diagnosed as a fact about Case, *viz.* in licensing accusative Case, the licensor and licensee must be linearly adjacent. Stowell (1981) proposes that accusative Case be assigned under government *plus* adjacency. Lasnik (1992) is less specific as his point does not rely on the details of Case licensing. He merely observes that adjacency and Case licensing are closely related. He uses this correlation to argue that the associate is assigned partitive Case by unaccusatives and *be* in English. Lasnik highlights the following contrasts.

- (37) a. I believe there usually to be a solution (available)
 b. *I believe there to be usually a solution (available)
- (38) a. There usually arrives a bus (at this time)
 b. *There arrives usually a bus (at this time)

On the basis of these-data, Lasnik reasons as follows. If the associates Case is checked at LF via movement to the expletive then such Case checking cannot be subject to adjacency. If, however, the associates Case is checked locally by *be* or the unaccusative verb, then as with accusative Case, we might expect to see an adjacency restriction come into play, as in (37) and (38). The contrasts displayed here seem quite analogous to the one in (39) which, since Stowell (1981) have been attributed to the requirement that accusative Case be licensed under adjacency.

- (39) a. John usually eats peaches
 b. *John eats usually peaches

In sum, if Case adjacency accounts for (39), then the rather similar contrast in (37) and (38) should be attributed to the same restriction. This, in turn, argues against the transmission hypothesis and for Belletti's partitive Case hypothesis.

This line of reasoning, however, is inconclusive. First, theoretically, Case adjacency is hard to reconcile with a minimalist theory of Case (see Chomsky 1995: 329ff). 'Therefore, the observations in (37)-(39), though interesting, are unlikely to be linked to Case theory given minimalism. However, unless Case theory is implicated there is no reason to postulate a Case relation between the associate and *be* or *arrive*.

Second, there are empirical problems with attributing adjacency effects to Case regardless of one's theoretical commitments. Adjacency is required quite generally between a verb and its complement.

- (40) a. John usually looks into such matters
 b. *John looks usually into such matters
- (41) a. John usually looks over the resumes
 b. *John looks usually over the resumes

(40) and (41) involve selected PP complements. Here, the verb does not Case mark the PP yet an adjacency effect is evident. This suggests that adjacency effects do not involve Case.

Further support for this conclusion comes from the existence of similar effects inside DPs.

- (42) a. The student of physics with long hair
 b. *The student with long hair of physics
- (43) a. My interest in physics which has been rekindled
 b. *My interest which has been rekindled in physics

(42) and (43) involve nouns with the selected complements *of physics* and *in physics*. These do not permute with adjuncts despite the only relevant Case marking being between *physics*, and the preposition.

In sum, the data in (40)-(43) suggest that adjacency and Case should be divorced from one another. The relevant factor is not being Case marked by a verb but being the complement of a head. The generalization seems to be that internal arguments cannot be separated from their heads in English.

This perspective on adjacency suggests an alternative analysis of the requirement. Assume that there is some grammatically imposed relation between hierarchy and linear order (Kayne 1994, Chomsky 1995). All the current proposals keep elements in structural configurations like (44) together.

- (44) [x' X⁰ YP]

(44) is the X'-structure that relates complements to heads. On the (standard) assumption that non-complements are outside the immediate X' projection of the head, all linearization algorithms prevent separating X⁰ from YP. In other words, the two will be linearly adjacent. This is so regardless of YP's category. All that is relevant is that YP be the internal argument of X'. This puts YP in the complement domain of X'. Your favorite linearization algorithm does the rest.

Note that linearization only assures that X⁰ and YP are adjacent if they form a phrasal unit like (44) at the point that linearization applies. This is what obtains in (37)-(43). Consider (38a) for example, repeated here.

(45) There usually arrives a bus (at this time)

A *bus* is the internal argument of *arrive*. Consequently, it merges with *arrive* in a structure like (44). The adverb *usually* is outside this projection. As English verbs do not raise, *a bus* remains in the immediate X' projection of *arrives* at Spell Out. On the assumption that linearization applies at this point, *a bus* and *arrives*, must be adjacent to one another. It is impossible to interpose *usually* between the two and respect any of the current algorithms for linearization.

The same reasoning extends to examples that do not involve Case, as in (42) and (43). ECM constructions like (46) provide additional instances of adjacency without Case.

- (46) a. John strongly expects there to be a man in the room
 b. *John expects strongly there to be a man in the room

In (46), *there* is not Case marked by the ECM verb *expects* (see Chomsky 1995). The IP of which *there* is the Spec is the complement of *expects*. Consequently, *strongly* cannot intervene between the two expressions without violating linearity.

We have observed that linearity prevents an expression from intervening between a head and its complement if some linearization procedure exists. Note, however, that if the verb raises, then linearization won't prevent an adverb from intervening between the head and its complement. This is what happens in finite *be* ECs.

- (47) a. there is usually a bus on this corner
 b. [there [_{Infl} Present usually [be a bus on this corner]]]
 c. [there [_{Infl} be_i+Present usually [t_i [_{SC} a bus on this corner]]]]

(47b) displays the complement structure of the sentence. Lasnik (following Stowell 1981), assumes that *be* takes a small clause complement in ECs. If *be* is infinitival, then we observe adjacency effects, as in (37) above. If however, *be* is finite, then it raises to Infl and we get a structure like (47c) at Spell Out. When this is linearized, *is* is not in the same immediate X' projection with its complement and so standard linearization algorithms won't require them to be adjacent. The same analysis applies to verb raising languages like French in which adjacency does not hold between the finite verb and its complement.

I have proposed treating adjacency effects as the reflex of a linearization procedure that holds at Spell Out. For current purposes, the specific details of this procedure do not matter. All current proposals have the consequence that items in the same immediate X' projection at Spell Out will be adjacent. This suffices to derive the observed data. Moreover, the account proceeds without invoking Case in any way. If this analysis is roughly correct, adjacency effects in ECs are not evidence against the transmission hypothesis.

4.2. *The Distribution of Associates*

Lasnik (1992, 1995) observes that associates in English are only found in close proximity to *be* and unaccusatives. When either of these is absent, we fail to get acceptable ECs. He points out that this is directly accounted for if associates are partitively Case marked by these verbs. Lasnik observes two particularly interesting gaps; there are no unergative ECs and no small clause existentials.

- (48) a. There arrived many men
 b. *There a man jumped
 c. There is a man jumping
 (49) a. *I expect there someone here at 2
 b. I expect there to be someone here at 2

The contrast in (48) follows if unaccusatives and *be* can assign partitive Case and associates must be so Case marked. The problem with (48b), then, is that there is nothing to assign partitive Case to *a man*. As soon as this is remedied, as it is in (48c) with the addition of *is*, the sentence is well formed. (49a) presents an analogous problem. In contrast with (49b) no partitive Case marker/checker exists to license the associate *someone*.

The contrasts in (48) and (49) are easily accounted for if associates are assigned partitive Case by *be* and unaccusatives. They appear to be problematic, however, for an account that assumes a version of the transmission hypothesis. The problem is to pinpoint what makes these structures unacceptable if not Case.

Consider the examples in inverse order. Even apart from Case, (49a) is problematic. It is unclear what the structure of the small clause in (49a) is supposed to be. What phrase structure position does *there* occupy? If, like Lasnik, we follow Stowell (1981), the structure of a simple non EC small clause is (50).

(50) I expect [_{SC} someone [here at 2]]

The small clause in (50) is headed by *here*. To add *there* to this structure requires licensing another Spec position. This, however, requires the addition of another head in English. The problem with (49a), then, is that there is no place for *there*. The embedded small clause has but a single Spec position. To get another, one must add another verbal element. This is what (49b) does with the addition of *be* to the array. This then allows the construction of a larger IP structure that permits a further Spec position for *there*, to occupy. In short, the contrast in (49) is not due to Case theory but is a reflection of the phrase structure of English; too many nominals and not enough slots to put them in!

(48) is more of a challenge. There is nothing obviously wrong with the structure underlying (48b).

(51) [there [Past [_{VP} a man [jumped]]]]

(51) licenses a Spec IP position in virtue of being finite. Hence, two Spec positions are available; Spec IP to house *there*, and Spec VP

for *a man*. So the problem cannot be too many D/NPs but too few positions to house them.

There is, however, another way to rule out (48b) given current minimalist assumptions. For concreteness assume the version of MP outlined in Chomsky (1995, chap. 3) plus the theory of bare phrase structure. Observe, first, that (51) cannot underlie (48b). The reason is that unergatives, as such, cannot exist given the theory of bare phrase structure. Unergatives are actually transitives (see Chomsky (1995: 399), following Hale and Keyser (1993)). Assume that this is correct. Then the actual structure of (48b) has a non-phonetic object in complement position.

(52) [_{IP} there [Past [_{VP} a man [jumped OBJECT]]]]

Assume, furthermore, that the null object in (52) must be Case checked, just like any other object. At LF, prior to raising *a man* to the expletive, OBJECT moves to Spec Agro. If English verbs move no higher than Agro at LF, then the presence of this object in Spec Agro at LF freezes the associate in place and prevents it from moving. The relevant structure is (53).

(53) [_{IP} there [Past [_{AgroP} OBJECT [jumped [_{VP} a man [jumped OBJECT]]]]]]

The associate is frozen in place as moving violates minimality. *There* and OBJECT are not in the same minimal domain. Consequently, the associate cannot raise over OBJECT to adjoin to *there*. However, if the associate cannot move, its Case and that of the finite Infl cannot be checked and the derivation crashes. Consider now the acceptability of (48c). We can account for this by generalizing a suggestion that Lasnik (1995) makes for examples like (54).

(54) a. There was a man arrested
 b. *There was arrested a man

He accounts for the contrast in (54) by arguing that the passive participle marking *led*, heads a small clause with a strong D-feature in English. This requires *a man* to raise overtly to check this feature.

(55) [there [Past [be [[a man]_i [-ed [arrest t_i]]]]]]

If we make a similar assumption for the *ing*-feature, then the structure of (48c) in overt syntax is (56a). Note that the associate has raised out of the embedded small clause to the Spec of the *ing*-projection. This allows it to stay outside the reach of the object of the unergative at LF and so raise to *there*, as shown in (56b). I assume that the LF of (48c) is (56b).

(56) a [there [was_i [t_i [[a man] [-ing [[a man] jump OBJ]]]]]]
 b. [[[[a man]+there)] [was_i [t_i [a man] [-ing OBJ [[a man] jump OBJ]]]]]]

In sum, the two gaps identified by Lasnik in the EC paradigm in English can be filled without assuming that *be* and unaccusatives assign partitive Case. This then allows us to retain the assumption that it is Case that drives the LF movement of the associate and to dispense with the assumption that *there* has affixal features that need to be checked.

5.3. The Belletti Data

Before concluding, we must consider one more very influential gap in the EC paradigm from Italian. The problem noted is originally due to Belletti (1988) and it has proven to be very influential. The relevant data have recently been reanalyzed by Lasnik and domesticated to fit in with minimalist assumptions. The Cases concern the contrast in (57).

(57) a. Alcuni student_i sono considerati [t_i intelligenti]
 many students are considered intelligent
 b. *pro sono considerati [alcuni studenti intelligenti]
 expl are considered many students intelligent

Belletti argues that the contrast in (57) poses a problem for the transmission hypothesis. The problem is to explain why it is that one can overtly move to Spec IP as in (57a) but that covert movement to the expletive *pro* is forbidden in (57b). This problem is resolved, Belletti argues, if one assumes that associates are licensed by partitive Case.

Actually, a little more is required. She argues that partitive Case is inherent and cannot be assigned across a small clause boundary. What prevents examples like (57b), then, is that *alcuni studenti*, cannot be partitively Case marked because a small clause intervenes nor can it be exceptionally Case marked as the verb has been passivized.

Lasnik (1995) adopts Belletti's basic analysis but adds touches of his own. First, he rejects the view that partitive Case cannot in general be assigned across a clause since he accepts Stowell's (1981) small clause analysis of ECs. He then provides a parametric technology that can account for the differences between English and Italian partitive Case marking. It is safe to say, that whatever its virtues, the theory of partitive Case does not provide a frictionless account of the contrast in (57). Nonetheless, the contrast is puzzling and raises questions about the transmission thesis.

A possible alternative analysis starts with observing that the contrast in (57) obtains in English as well.

- (58) a. Students are considered intelligent
 b. *There are considered students intelligent
 c. *There are considered to be students intelligent
 d. I consider students (to be) intelligent

The contrast between (58a) and (58b) duplicates the one found in Italian. Note, however, that English, according to Lasnik (1995), in contrast to Italian, allows partitive Case to be assigned across a clause. To account for the unacceptability of (58b), therefore, Lasnik develops an interesting theory of inherent Case marking whose virtues, however, are empirically restricted to Cases such as the one at issue. In short, the account though ingenious is *ad hoc*. Moreover, it doesn't account for the unacceptability of (58c). Here *be* should be able to license the associate and all should be well. However, the sentence is no more acceptable than (58b). This suggests that something other than Case is at stake.

One possibility exploits observations made in Milsark (1974). He observes that ECs do not permit individual level predicates.

- (59) a. There were people available/dancing/burping
 b. *There were people smart/tall/heavy

As is well known, *consider* requires that its embedded propositions involve individual level predication. Contrast (58a,d) with (60).

(60) * I consider students singing/yelling

Note furthermore that (58d) only permits a generic (i.e. non-indefinite) reading to the bare plural *students*. All this suggests that perhaps the unacceptability of (58b,c) is due to the conflicting interpretive requirements of ECs and verbs like *consider*. Let's explore this possibility.

One way of implementing this intuition modifies a proposal in Diesing (1992) which in turn builds on Kratzer (1989). Diesing proposes that individual level predicates have PRO subjects in Spec VP which are controlled by subjects base generated in Spec IP, as shown in (61a). This contrasts with stage level predicates in which the subject is base generated in Spec VP and raised to Spec IP, as shown in (61b).

(61) a. $NP_i \text{ Infl } [_{VP} \text{ PRO}_i \text{ predicate } \dots]$
 b. $NP_i \text{ Infl } [_{VP} t_i \text{ predicate } \dots]$

In effect, Diesing treats the Infl positions of individual level predicates as ϕ -positions. The upshot of this is to prevent the NP in Spec IP from reconstructing into the VP shell at LP. This, in turn, forces a (non-indefinite) generic interpretation onto bare plurals.

In what follows, I follow Diesing (1992) part way. Let's assume that an $[_{SC} NP \text{ predicate }]$ small clause cannot be interpreted as having an individual level predication unless the NP is outside the lexical shell at LF. However, pace Diesing, assume that this is not grammatically implemented via a control relation or via ϕ -marking Infls. This is not a significant departure from Diesing's main idea as she provides little motivation for the technical implementation in (61) except for the observed difference in interpretation between stage and individual level predications. I here adopt her main proposal (i.e. that at LF the subjects of individual level predicates must be outside the lexical small clause) but dissent on the structural implementation in terms of distinguishing raising from control inflections. Instead, let's simply assume that an individual level predication cannot be realized in an LF like (62).

(62) $[_{SC} NP_i \text{ predicate } \dots]$

The proposed prohibition against individual level predication in structures like (62) suffices to accommodate Milsark's observation about the lack of individual level predicates in ECs. If associates are obligatorily re-constructed, as argued for in section 3, the LF phrase marker of an EC is (63).

(63) [(NP_i+there) Infl [_{SC} NP_i predicate ...]]

These assumptions also suffice to account for the data in (57) and (58). Verbs like *consider* must have IP complements if it is correct that individual level predication requires the subject to be outside the lexical small clause at LF. The derivation of a sentence like (58b) proceeds as follows. First, we form the VP small clause *students intelligent*. We then add Infl. Like all Infs, this has a strong D-feature to reflect the EPP requirements of clauses. The numeration and derivation at this point looks like (64).

(64) N={was, considered, there }
[I⁰ [_{SC} students intelligent]]

I has a strong D-feature that must be checked. The options are to merge *there* or raise *students*. The latter option violates procrastinate. Thus, *there* is merged. After *was* and *considered*, are added to the phrase marker, *there* raises again to check the D-feature of the matrix Infl. At LF, *students* adjoins to *there* and checks its Case features and those of the matrix Infl. The expletive is deleted and the copy of *students* in the small clause is retained.

(65) [(students+there_i) Infl be considered [_{SC} t_i students intelligent]]

The phrase marker (65) is grammatical. All relevant features have been checked, the derivation converges and there is no more economical derivation. The problem is interpretive. The matrix verb *consider* semantically requires that the embedded proposition be stage level.¹⁹ To derive a fully acceptable EC, *there* must disappear, i.e. the associate

¹⁹ Note, I am not assuming that this is a selection requirement. Rather, it is a fact about the meaning of *consider* in semantic combination with its propositional complement.

must be reconstructed. The problem is that this yields a structure in which individual level predication cannot be expressed given (62). In short, the interpretive requirements of ECs and *consider* don't mix.

Essentially the same account extends to (58c), with *there* inserted into Spec IP of the embedded infinitival in preference to raising the associate from the small clause.

(66) [([students]+there)_i Infl be considered [t_i be students intelligent]]

These derivations mimic the one in Chomsky (1995: chap. 4) that accounts for (67).

(67) *There seems that a man was in the room

(67) violates economy as *a man* raises to check the D-feature of the embedded clause. It is cheaper to merge *there* to check this feature as this does not violate procrastinate. The same holds for the derivation in (64), (65) and (66). Note, that this argument crucially assumes that PRO is not part of the numeration (pace Diesing (1992)). If it were, *students* would directly merge in the embedded clause and *there* in the matrix IP. With this overt syntax, LF movement of *students*, should yield a grammatical derivation and a perfectly interpretable LF, as shown in (68).

(68) a. [there was considered [_{IP} students Infl [PRO intelligent]]]
 b. [(students+there) was considered [_{IP} students Infl [PRO intelligent]]]

All problems dissipate if *there* is absent from the numeration. Without *there* in the numeration, the only way to converge is to raise *students* to the embedded Infl and then raise it again to the matrix position. This accounts for the acceptability of (57a) and (58a,d). Without the expletive, reconstruction is not required and the derivation permits an LF structure consistent with an individual level predication, i.e. one in which the subject of the small clause is outside the lexical small clause.

(69) a. [students were considered [_{IP} students [Infl (to be) [students intelligent]]]
 b. [students were considered [_{IP} (students) [Infl (to be) [(students) intelligent]]]

In sum, the apparent movement asymmetry analyzed by Belletti/Lasnik in *consider* constructions can be reanalyzed as an interpretive problem exploiting prior insights by Milsark combined with ideas from Kratzer and Diesing on how to relate syntax and interpretation – (62).²⁰ To deliver the goods, I have had to rely on the assumption that ECs obligatorily reconstruct the associate to its overt position after raising it at LF. I have also relied on Chomsky’s proposal that procrastinate is an economy condition that regulates derivations. This apparatus, all of which has independent motivation, suffices to accommodate the examples in (57) and (58) without adverting to partitive Case and its various distinctive properties. Happily, this also leaves the assumption that Case drives movement of the associate in ECs intact.

This section has reanalyzed the data that motivated Lasnik’s reworking of the partitive Case approach to ECs first broached by Belletti. I have argued that the data that Lasnik and Belletti used to argue against the transmission hypothesis is otherwise explicable. This allows us to abandon the assumption that ECs involve partitive Case and the companion assumption that 9 expletives are LF affixes with features that require checking. In fact, if the combination of standard minimalist technology together with Diesing’s proposals plus a dash of reconstruction suffices to derive the full range of data characteristic of ECs.

5. Conclusion

This paper starts from the observation that ECs manifest two apparently conflicting sets of data. The first, due to Chomsky (1986), indicate that the associate adjoins to the expletive at LF. This assumption accounts both for the locality facts reviewed in section 1.²¹ The second are interpretive data that indicate that associates must be interpreted as if in their overt positions. This argues against an analysis in which the

²⁰ Raposo and Uriagereka (1990) consider a further set of cases but these do not involve the theory of partitive Case as the relevant NPs that head the small clauses they consider can be definite.

²¹ Chomsky (1995:chap. 4) argues that this also accounts for the fact that the order of NPs in languages like Icelandic which manifest transitive expletive constructions, the order of NPs is expletive-associate and never the reverse. Chomsky’s account can be duplicated here as the associate adjoins to the expletive at LF.

associate raises to the expletive at LF. I have suggested that this apparent conflict can be reconciled if associates necessarily reconstruct after raising. I have further provided a set of assumptions from which such reconstruction results. The assumptions have independent motivation and have empirical support in data other than ECs.²² They conspire together to implement Chomsky's original take on ECs; *there* must be deleted for ECs to be fully interpretable.

I close with a discussion of one remaining problem. Consider (70).

(70) We expect there to be a man in the room

(70) is an ECM construction. Chomsky (1995) takes *there* to be in Spec IP in overt syntax. But (70) should be unacceptable given this assumption. The problem is to explain how *there* disappears. Observe that in contrast to cases in which *there* resides in the Spec of a finite IP, there is no reason to adjoin the associate to *there* given the present analysis. In fact, so moving violates even the weak version of Greed adopted here. There is no problem moving the associate to Spec Agro of the matrix verb (or to adjoin to its outer Spec) at LF and so check the relevant features. The problem is how to eliminate *there*.

One possibility is to assume that Agro, like Agrs, has a D-feature that needs checking. This D-feature, however, is weak not strong as in EPP contexts. The presence of this D-feature in Agro (or on the accusative Case checking verb in an Agrless theory) attracts *there* at LF. The associate is subsequently adjoined to *there* to check Case and ϕ -features.

(71) [_{we_i} [_{AgroP} ([a man]_j+there_j) [_{Agro}+expect [_{t_i} expect [_{t_j} to be
[[a man]_j in the room]]]]]]]

²² Lasnik (1995b) proposes to reconcile the tension noted here by only moving features at LF. The problem is that he combines this with overt movement of NPs in every other construction. This makes feature movement unique to ECs and so deprives it of independent empirical motivation. The problem is not, in my opinion, to find a technology that resolves the problem, but to propose a theoretical framework in which ECs are not particularly special. The mechanism of reconstruction proposed here has independent motivation; see Chomsky (1993:chap. 3), Hornstein (1995:chap. 7 and 8) and Hornstein (1996).

In other words, the weak D-feature attracts there at LF and then the derivation proceeds exactly as in derivations where a strong D-feature is checked. The intuition embedded in this view is that Case on heads (e.g. T and Vs) comes packaged with D-features. Case and D-features are inseparable.²³ Bundling features together has recently been proposed for agreement and nominative Case. Nominative always comes wrapped up together with agreement.²⁴ The suggestion about D-features and Case is similar.²⁵

One of the most powerful arguments in favor of abstract LF movement comes from considering the locality effects manifest in ECs. The force of the argument, however, has been blunted by the apparently contradictory interpretive data. The aim of this paper has been to outline a set of “minimal” assumptions able to reconcile these conflicting data. To the degree that this analysis has succeeded it provides additional empirical support for and refinement of the core assumptions of the Minimalist Program.

²³ This does not mean that D-features cannot stand alone. All that is required here is that Case cannot be a feature of a head without a D-feature there as well. One might interpret this as proposing that Case is actually a property of D-features, features that nominals have inherently but that Tns and verbs do not.

²⁴ As with D-features and Case, one may find agreement without nominative Case.

²⁵ Lasnik (19995) adopts a suggestion by Koizumi (1993) to check Case overtly. This requires raising objects to Case checking positions in overt syntax. If we assume that overt raising of objects coincides with strong D-features then the proposal in here and the one in the text coincide.

However, in the context of the present account, there is a problem with the general Koizumi-Lasnik proposal. The present analysis relies on the assumption that some Case is only checked at LF, *viz.* the Case of the associate. Lasnik (1995) assumes that *there* carries Case as he assumes that LF movement is driven by the requirement that the affixal features of *there* be checked. The present analysis has argued against this proposal.

There is a further potential problem with the Koizumi-Lasnik thesis. The cost of checking accusative Case in English by overt movement is a richer functional structure above the VP than is standardly assumed. If Case is checked by overtly moving the accusative D/NP, then the verb must also raise to locate itself to the left of the accusative in overt syntax. This movement must be to some functional position below TP given the differences between English and French verb-raising. As always, the postulation of more functional structure than meets the eye must be strongly motivated. I fail to see that it is well motivated in the particular instance at hand. For these reasons, my preference is for the weak D-feature/covert raising approach. However, the second serves current purposes just as well.

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