

Predicate inversion and minimality

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1. Introduction

Lasnik (1992:384) has noted the contrasts in (1), and claims that these are 'mysterious under a [Case] transmission account' of *there* constructions, it being unclear why an overt token of the copula should be necessary to render Case transmission possible in these cases.¹ Nor would a simple statement to the effect that *there* cannot show up in the subject position of a small clause (SC) help one out, since, as Lasnik also notes, an example such as (2), where *there* finds itself in the subject position of the adjectival SC headed by *likely*, is impeccable.

- (1) a We consider [there *(to be) a man in the room]
b I want [there *(to be) someone here at 6:00]
(cf. I want [someone (to be) here at 6:00])
- (2) We consider [there likely [to be a man in the room]]

Lasnik then goes on to argue that the facts in (1) and (2) follow straightforwardly from an analysis according to which the associate NP in *there* expletive constructions receives partitive Case from *be* (or, as in Lasnik's 1993 minimalist reappraisal of his original proposal, the associate NP checks the partitive Case feature of *be*). Since *be* supplies the Case feature against which that of the associate NP can be checked, it follows that *be* is required in all *there* constructions.

In this article I shall show that facts of the sort in (1) and (2) *can* in fact be made to follow from a particular 'Case transmission' account of *there* constructions — the *there* raising analysis propounded in the work of Moro (1993), Hoekstra and Mulder (1990), Zwart (1992) and Den Dikken (1993), among others. I shall approach the matter from the perspective of a set of facts which exhibit the same properties as the *there* expletive constructions discussed by Lasnik, but which are not readily amenable to a partitive Case scenario of the type that Lasnik proposes. The facts in question involve predicate inversion in English copular constructions. I shall present a generalised account couched in the minimalist locality theory (Chomsky 1993), lending support to an analysis of small clauses in terms of a functional projection (to be identified as AgrP). In the next section, I shall discuss the copula data, proceeding to their analysis in section 3. Section 4 then returns to *there* constructions, and section 5 addresses some further issues.

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2. Copular inversion – data

Let us start out from the premise that copular constructions involve a SC in the complement of the copula, which is treated as a raising verb (cf. e.g. Stowell 1981; Heggie 1988; Hoekstra and Mulder 1990; Moro 1993). The surface subject in the regular copular construction in (3a) (where the label ‘SC’ serves initial expository purposes only) thus starts out in the subject position of *be*’s SC complement, and is raised to the matrix subject position in the familiar fashion, as depicted in the structure. By ‘copular inversion’ I refer to the phenomenon illustrated in (3b). Here, instead of the subject of the SC in *be*’s complement, it is the SC predicate which is promoted to subject (on a Hoekstra and Mulder 1990 type analysis of predicate inversion, which will consistently be adopted here).

- (3) a John_i is [_{SC} t_i the best candidate]
 b The best candidate_i is [_{SC} John t_i]

Of particular interest to present concerns is that, once the SCs in (3) are embedded under a verb like *consider*, non-inversion is possible irrespective of the presence or absence of an infinitival copula (cf. 4a), while inversion is allowed only in the presence of an overt copula, as (4b) shows. Why is the inverted variant without *to be* ungrammatical? Evidently, Case-assignment to the inverted NP cannot be the problem, for otherwise the variant with *to be* would be just as unacceptable. Apparently, inverted predicates in predicate nominal constructions are allowed to sit in Case positions (contrary to non-NP predicates; cf. Den Dikken and Næss 1993 for discussion). Exactly why inverted NP predicates differ in this way from non-NP predicates is something that we need not be concerned with here.² What matters now is that the proper generalisation about the examples in (4) appears to be that predicate inversion is impossible within a simple SC, and that a landing-site for inversion must be made available through the addition of structure outside the SC.

- (4) a I consider John (*to be*) the best candidate
 b I consider the best candidate *(*to be*) John

² Presumably, inverted predicate nominals somehow ‘forfeit’ their predicativity, as Heycock (1991), Guéron (1992) and – from a different theoretical perspective – Keizer (1992) also argue. Guéron specifically suggests that the inverted predicate nominal is adjoined to an empty-headed subject DP (a kind of headless relative construction). Her way of giving this idea of surrendering predicativity shape may be compatible with Heggie’s (1988) arguments to the effect that the inverted predicate does preserve a number of predicative properties – these might then address the predicate nominal in its position adjoined to the argumental, empty head of the headless relative. Guéron also presents an account for the fact – with which I shall not be concerned here – that inverted predicates in copular inversion constructions must be construable as quantifying phrases (cf. *The only doctor in town is John* vs. **A doctor is John*).

Preventing inversion within the confines of 'bare' SCs is quite straightforward. If SCs are simply projections of the predicate head, containing no further functional structure (cf. 5a), the fact that no inversion may obtain within them would follow immediately.³ Predicate inversion requires the presence of a Θ' -landing-site into which the inverted predicate can be moved, but if SCs are analysed as in (5a) and feature an unergative predicate head, SC does not feature such a Θ' -landing-site. But even if, as seems likely (cf. further below), SCs contain a projection of a functional head (say, Agr; cf. Chomsky 1993:8), inversion within SC can easily be prevented. Two possibilities should be considered: (i) the subject of SC is base-generated in the specifier position of the functional projection, as in (5b); or (ii) the subject of SC originates internal to the projection of the predicate head, as depicted in (5c). Option (5b) allows us to ban inversion in the same way as in the case of a 'bare XP' analysis of SCs – there is no landing-site for the raised predicate. The second possibility *would* in principle seem to cater for a Θ' -landing-site for the predicate: the specifier position of the functional projection. Notice, however, that by hypothesis (cf. Chomsky 1986) only maximal categories can be moved – X' and segments of multi-segment XPs are ineligible for movement.⁴ If option (5c) is chosen, then, the subject of the raised predicate should vacate the predicate's projection prior to predicate fronting. The obvious position for the SC subject to move to is the Θ' -specifier position of the functional projection dominating the predicate. But then it follows that, even if the subject of SC is base-generated internal to the predicate of SC, there will again be no landing-site for the SC predicate within the bounds of SC, so that hence predicate inversion internal to SC is impossible.

- (5) a $[_{XP/X_{max}} NP_{Subj} [_{X'/XP} Pred]]$
 b $[_{AgrP} NP_{Subj} [_{Agr'} Agr [_{XP} Pred]]]$
 c $[_{AgrP} Spec_{Agr'} Agr [_{XP/X_{max}} NP_{Subj} [_{X'/XP} Pred]]]]$

³ The slash notation in (5a/c) incorporates several specific approaches to the base position of the subject – Stowell's (1981), according to which the subject is a sister to X' ; Manzini's (1983) and Fukui and Speas's (1986) account, which analyses the subject of lexical categories as an adjunct to XP; and Koopman and Sportiche's (1990) approach, which invents a special projection level for the composite of subject and predicate, X^{max} , whose daughters are the subject and XP (the predicate's projection). For our purposes, the differences between these analyses are immaterial.

⁴ And so, presumably, is Koopman and Sportiche's (1990) 'XP' (the non-subject daughter of X^{max} ; cf. fn. 3, above), in view of Huang's (1993) arguments to the effect that (A')-movement of predicates must involve movement of a constituent that contains the trace of the predicate's subject.

The unavailability of a SC-internal landing-site for the inverted predicate would now straightforwardly explain the deviance of (4b) without *to be*, on the assumption that the landing-site of the inverted SC-predicate finds itself within the confines of the matrix verb's complement. This, however, is by no means a necessary or even likely assumption from the perspective of recent developments of the functional structure of sentences — in particular, the idea that objective Case features are checked in Spec-Head agreement configurations internal to a projection of AgrO (Chomsky 1993). Why couldn't the inverted predicate move to the matrix SpecAgrOP in one fell swoop, without being hindered by the (un)availability of an intermediate landing-site internal to the verb's complement? In other words, what is wrong with a derivation of the type in (6) (where 'SC' is a shorthand for any of the representations in 5)?

- (6) *_{[AgrOP NP_{Pred/i} [AgrO' AgrO [VP NP [V_i consider [SC NP_{Subj} t_i]]]]]}

Apparently, movement of the SC-predicate to a position outside the verb's complement is impossible without the presence of an intermediate trace in the verb's complement. This conclusion is also prompted by the facts in (7)–(8), which run completely parallel to those in (4) in spite of the fact that this time the inverted predicate undeniably raises out of the complement of the verb:

- (7) a John is considered (*to be*) the best candidate
 b The best candidate is considered *(*to be*) John
 (8) a John seems (*to be*) the best candidate
 b The best candidate seems *(*to be*) John

The various GB-accounts of predicate inversion (Heggie 1988, Heycock 1991, Moro 1993) have not been able to come up with solutions for the problem posed by examples such as these. The only extant analysis that makes use of GB-machinery but which is embedded in a Tree Adjoining Grammar approach is presented in Frank (1992:102ff.). His analysis reduces the ungrammaticality of the b-examples lacking *to be* to a violation of his ECP (see the original work for details, which space does not allow me to present here). The account that I shall present here, although entirely different in detail, is similar in spirit in that it also relates the ungrammaticality of the b-examples lacking the copula to (a minimalist version of) the ECP — the *minimality* ('shortest movement') condition.

3. Copular inversion — analysis

Consider first of all the structure in (9):

- (9) [_{VP} Spec *seem* [_{AgrP} NP_{Subj} [_{Agr'} Agr NP_{Pred}]]]

where *seem* takes a SC complement, which will henceforth be represented as AgrP (in accordance with Chomsky 1993 and much recent work). The base position of the SC subject – the choice between (5b) and (5c) – is left open here. The presence of a functional head internal to the structure of SCs will turn out to be crucial in what follows.

The structure in (9) contains two NPs that are in principle eligible for movement to the matrix subject position, via SpecVP. Movement of NP_{Subj} (the SC subject) to SpecVP is unproblematic, no intervening potential landing-sites being crossed. Movement of NP_{Pred} to SpecVP, by contrast, raises a problem since the position of the SC subject is crossed in the process. Such crossing is legitimate if and only if the position targeted by movement and the position crossed by movement are *equidistant* from the extraction position of the moved constituent (cf. Chomsky 1993 for details). In the case under current discussion, then, Spec and NP_{Subj} should be equidistant from NP_{Pred}. This, however, is not the case in (9) – there is no minimal domain that contains both Spec and NP_{Subj}. The pertinent minimal domain could exist only if Agr were to be incorporated into *seem*. I shall assume, however, that *seem* (or, more generally, any main verb) cannot incorporate the functional head of its SC complement (cf. also further below in this section). Minimality, then, is responsible for the failure of a derivation built on (9) and involving movement of NP_{Pred} to subject position.

To remedy this minimality violation, we should (i) add a projection immediately outside SC ('XP' in (10a)), (ii) have NP_{Pred} make an intermediate touch-down in the specifier position of this projection, and (iii) have the Agr-head of SC incorporate into the head of the projection outside SC, as is depicted in (10b):

- (10) a [VP Spec *seem* [_{XP} Spec [_{X'} X [_{AgrP} NP_{Subj} [_{Agr'} Agr NP_{Pred}]]]]]
 b [VP NP_{Pred/i} *seem* [_{XP} t_i [_{X'} X+Agr_j [_{AgrP} NP_{Subj} [_{Agr'} t_j t_i]]]]]

Now NP_{Subj} and the first landing-site of the moved predicative NP (SpecXP) are equidistant from the base position of NP_{Pred} – the minimal domain of the chain CH = (Agr_j, t_j) comprises SpecXP and SpecAgrP. Movement of NP_{Pred} in (10b) is hence in conformity with the minimality condition.

It will now be clear that predicate inversion is always going to depend on the presence of some additional projection immediately outside SC whose head the head of SC may incorporate into, and whose specifier position serves as the intermediate landing-site of the moved SC predicate. So not just in (10) but in locative inversion constructions of the type in (11), too, we need a projection immediately outside SC:

- (11) a Down the hill rolled the baby carriage.
 b *[VP PP_i *roll* [_{AgrP} NP_{Subj} [_{Agr'} Agr t_i]]]
 c [VP PP_i *roll* [_{XP} t_i [_{X'} X+Agr_j [_{AgrP} NP_{Subj} [_{Agr'} t_j t_i]]]]]

Two questions come up at this point: (i) what is the projection ‘XP’ that we added in (10) and (11)? and (ii) how does the analysis account for the fact that *be* is obligatory in copular inversions of the type in (4b), (7b) and (8b) but not in (11)?

These two questions are related, and their answer is to be sought in the selectional and aspectual (‘*aktionsart*’) properties of the matrix verbs in the examples. Let us turn first of all to the example in (11), an instance of a resultative construction. I hypothesise that in all resultative constructions, terminative aspect guarantees the presence of a functional projection in the complement of the verb – let us, for concreteness, call it ResP (for Result Phrase), which presumably is a specific instantiation of a more general aspectual projection AspP. This is a way of giving terminative aspect a place in the representation of resultative constructions. The additional projection in the complement of *roll* in (11c), then, will be identified as ResP, and the full structure of (11a) will read as in (12):

$$(12) \quad [_{VP} PP_i \text{ roll } [_{ResP} t_i [_{Res'} Res+Agr_j [_{AgrP} NP_{Subj} [_{Agr'} t_j t_i]]]]]$$

In constructions featuring *seem* or *consider* as the matrix verb, on the other hand, postulating a ResP in the verb’s complement is not an option, since no resultativity is incurred by the complements of these verbs. Verbs like *seem* or *consider* select either a (non-verbal) SC or a sentential complement (CP or TP). Whenever there is a need for additional structure outside the ‘bare’ SC in *seem/consider* constructions, then, a TP will minimally be generated. English T has Tense-features that must be checked by a verb. TP must hence dominate a projection of some verb; it is impossible to just add a TP between *seem* and AgrP in the structure in (9) without at the same time adding a VP whose head can check T’s Tense-features. The semantically most neutral verb to add to the predication is the copula *be*. Applying predicate inversion to a structure like (9) hence necessarily entails the smallest possible enlargement of this structure, which involves the addition of a TP and a projection of the copula *be*, as depicted in (13):

$$(13) \quad [_{VP} Spec \text{ seem } [_{TP} T [_{VP} \text{ be } [_{AgrP} NP_{Subj} [_{Agr'} Agr NP_{Pred}]]]]]]]$$

This structure will now serve as the input to a well-formed derivation of the predicate inversion construction in (8b) with *to be*, which proceeds as follows. The inverted predicate will raise to matrix subject position, Form Chain deploying traces in the specifier positions of intermediate projections. The functional head of SC (Agr) incorporates into *be*, thereby creating a minimal domain that comprises SpecVP and SpecAgrP, and thus rendering predicate raising legitimate.

$$(14) \quad [_{VP} NP_{Pred/i} \text{ seem } [_{TP} t_i T [_{VP} t_i \text{ be}+Agr_j [_{AgrP} NP_{Subj} [_{Agr'} t_j t_i]]]]]]]$$

Notice that in the derivation of the grammatical variants of (4b), (7b) and (8b) the SC subject and the first available landing-site of the inverted predicate are made equidistant from the predicate's extraction position through the incorporation of Agr into *be*, which is apparently possible. The ungrammatical *be*-less alternants of these examples could be structurally well-formed only if Agr incorporated into the matrix verb, which is apparently impossible. What we see, then, is that there is a crucial difference between *be* on the one hand, and main verbs on the other with respect to their ability to incorporate functional (Agr) heads — *be* has the defining property that it can incorporate Agr. The ascription of this property to *be* is not an artifact of the present analysis of the facts in (4b), (7b) and (8b). In Den Dikken (1994a,b) I show that *be* in perfective and possessive constructions is similarly capable of incorporating Agr-heads (and may turn into *have* if the incorporated Agr contains a Case feature). This property now turns out to be shared by copular *be*, which is of course perfectly in line with a uniform approach to all tokens of *be* (cf. Déchaine 1994).

We now explain the obligatory presence of *be* in the examples in (4b), (7b) and (8b). In order to be able to perform predicate inversion in these examples, we need to elaborate the minimal structure in (9) in such a way that an intermediate landing-site for the raised predicate is made available which is equally far removed from the predicate's extraction position as the SC-subject position. Adding a TP to the minimal structure in (9) is the smallest possible structural enlargement that is compatible with the lexical selectional properties of the matrix verbs in these examples. And adding a TP automatically entails adding a projection of the copula *be* to the predication dominated by TP, which ensures (i) that the Tense-features of T are properly checked and (ii) that, after Agr-incorporation into *be*, the minimalist locality theory is complied with.

4. *There* constructions analysed in terms of predicate inversion

Now that we have found an explanation for the facts in (4b), (7b) and (8b), let us return to Lasnik's (1992) examples in (1) and see how they can be accommodated. The empirical parallelism between the two example sets is clear.⁵ Their theoretical similarity may not be immediately evident, though. Lasnik's (1992) approach to (1), in terms of partitive Case assignment, does not straightforwardly carry over to the facts in (4b), (7b) and (8b), since partitive Case is generally held to be assigned only to indefinite NPs. In this section I shall show that given an approach to *there* constructions in terms of *there* raising (along the lines of Moro

⁵ The parallelism is enhanced by their similar behaviour in the domain of *wh*-extraction (cf. Moro 1993; Heycock 1991:180, fn. 25; Hoekstra and Mulder 1990:45), as (i) shows.

(i) a {What/*Which photograph of the president} do you think the cause of the riot was?
b {Who/*Which man} is there in the garden?

1993, Hoekstra and Mulder 1990 and others) *there* is in fact a direct analytical parallel between (1), on the one hand, and (4), (7) and (8), on the other.

Moro and others have argued that *there* in existential and presentational constructions, rather than being a base-inserted expletive, is really a SC predicate which is raised to subject position, as in predicate inversion constructions. The analysis of a simple *there* construction like (15a) thus reads roughly as in (15b):

- (15) a There arrived a strange man
 b [_{IP} *there*_i [_I I [_{VP} arrived [_{SC} a strange man *t*_j]]]]

In view of what was argued in the previous section, however, we know that the structure in (15b) is overly simplistic — we need a projection outside SC (= AgrP) to harbour an intermediate trace of the raised SC predicate (*there*) and to incorporate the SC head (Agr). In the case at hand, since we are dealing with a resultative construction, the projection in question will be ResP, just as in (12). In the non-resultative cases in (1), by contrast, the additional projection will be identified as TP, and a projection of the copula will be resurrected to facilitate Tense-feature checking and compliance with the minimality condition (equidistance). The structure of (1a) then reads as in (16):

- (16) [_{VP} Spec *consider* [_{TP} *there*_i T [_{VP} *t*_i *be*+Agr_j [_{AgrP} NP_{Subj} [_{Agr} *t*_j *t*_i]]]]]]

The example in (2) now of course also immediately follows — we need the TP and the concomitant projection of the copula in the complement of *likely* to render predicate inversion and Tense-feature checking possible; but once the predicate has managed to invert with its subject, it perfectly straightforwardly moves on to the specifier position of the SC projected by *likely*, crossing no specifier positions in the process (cf. 17). Hence there is no need whatsoever for a TP, nor for a token of *be*, in the complement of *consider* in (2).

- (17) [_{VP} Spec *consider* [_{Agr1P} *there*_i [_{Agr} Agr1 *likely* [_{TP} *t*_i T [_{VP} *be*+Agr2_j [_{Agr2P} NP_{Subj} [_{Agr} *t*_j *t*_i]]]]]]]]

Lasnik's (1992) examples in (1) can thus be readily assimilated to the copular inversion cases given a predicate raising approach to *there* constructions.⁶

⁶ Voskuil (1994) has recently put forward an interesting variant of the predicate raising approach to *there* constructions. Voskuil agrees with Chomsky (1991, 1993) and Lasnik (1992) that *there* is a genuine expletive, to be 'replaced' at LF through the adjunction of a meaningful element to it, but differs from the literature on 'expletive replacement' in assuming that in a construction like *There is a man in the room* it is the predicate *in the room* which replaces the expletive *there* rather than the associate NP *a man*. Voskuil's proposal shares with the *there* raising analysis the fact that predicate raising to subject position is a crucial ingredient of the account — raising of *in*

5. Some further issues

In all cases addressed so far, copula ‘insertion’, i.e. the generation of a projection of the copula, was essentially a side-effect of the enlargement of the matrix verb’s propositional complement to TP. *Be* could, however, in principle perform the task of preventing a minimality violation in predicate inversion constructions *on its own*, without the presence of the additional TP. After all, to *be* was ascribed in section 3 the (presumably unique) property of being capable of incorporating the functional head of its SC complement, thereby extending the minimal domain of the latter. We therefore expect to be able to find predicate inversions around ‘plain’, *to*-less *be* in constructions in which the matrix verb selects a verbal SC rather than a *to*-infinitival complement. This prediction is borne out for copular inversion by Heycock’s (1991:96) examples in (18a,b), and for *there* existentials by Safir’s (1993) example in (18c) (cf. Svenonius 1994:Ch. 2, fn. 7). The analysis of the sentences in (18), presented in (19), runs completely parallel to the previous cases of predicate inversion, except for the categorial status of the matrix verb’s complement: TP in (1), AgrP (with a verbal predicate) in (18)/(19).

- (18) a He let his answer_i be [his silence *t_i*]
 b He let his guide_i be [his conscience *t_i*]
 c I have never seen there be so many complaints
 (19) [_{VP} Spec V [_{Agr1P} Pred_i [_{Agr'} Agr1 [_{VP} *t_i* *be*+Agr2_j [_{Agr2P} NP_{Subj} [_{Agr'} *t_j* *t_i*]]]]]]]

Just as *be* can perform the task of preventing a minimality violation in predicate inversion constructions on its own, without the additional TP, the converse situation — the presence of a ‘bare’ TP outside SC enabling predicate inversion — is also attested. Rouveret (1994:21) argues that Welsh verbless absolute predication constructions like (20a) (whose root clause counterpart *mae llyfr ganddo* ‘is book with-him’ includes a form of the copula) feature a projection of ‘null Tense’ (cf. the structure in (21a)), which does not require a VP complement. Interestingly, now, predicate inversion is possible in such absolute constructions, as (20b) shows. On the present analysis of predicate inversion, the derivation of (20b) will involve movement of PP to SpecTP with concomitant incorporation of the Agr-head of the prepositional SC into T, as depicted in (21b).

- (20) a A llyfr ganddo, ...

the room to there at LF is an instance of predicate inversion. All the results obtained in the main text with the aid of the *there* raising analysis are hence preserved under Voskuil’s approach. This cannot be said of Williams’ (1994:134–38) account of *there* expletives, according to which *there* in a sentence like *There is a god* is the subject of *a god*, which is analysed as a predicate nominal. Williams thus takes *there* constructions to be *uninverted* copular constructions. He will then fail to capture the parallelism between (1) and (4b), (7b) and (8b).

- and book with-him
 ‘A book belonging to him, ...’
 b A chanddo lyfr, ...
 and with-him book
 ‘Him having a book, ...’
 (21) a a [_{TP} Spec [_{T'} \emptyset [_{AgRP} *llyfr* [_{AgP} Agr [_{PP} *ganddo*]]]]]
 b a [_{TP} [_{PP} *chanddo*]_i [_{T'} \emptyset +Agr_j [_{AgRP} *llyfr* [_{AgP} t_j t_i]]]]]

The Welsh facts show, then, that, as predicted by the analysis, a ‘bare’, verbless TP will suffice to render predicate inversion possible, so long as the features of T do not require the generation of an additional copular VP.

The crucial thing in all predicate inversion constructions is that an incorporator for the Agr-head of SC be found. It is important to note that just adding a ‘pivot’ (to use Frank’s 1992 term) around which the predicate can invert with its subject is *not* sufficient. This is evident from the examples in (22):

- (22) a John turned out (*to be*) the best candidate
 b The best candidate turned out *(*to be*) John

In Den Dikken (1992) I argue that the particle *out* found in these sentences is an ergative SC head. In (22), *out* takes the nominal predication structure as its complement. The subject position of the particle-headed SC now makes available a landing-site for the inverted predicate of the particle’s complement. If the only thing that is needed in cases like (8b) was an intermediate landing-site for the moved SC predicate, just adding *out* (plus the SC structure associated with it) would suffice in the case of (22). But as it turns out, just adding a particle is *not* sufficient – in addition, we still need a token of the copula, as (22b) shows.

In order to be able to ascertain why *out* does not suffice, consider the structure in (23):

- (23) [_{VP} Spec V [_{AgRP} Spec [_{AgP} Agr1 [_{PP} *out* [_{AgRP} NP_{Subj} [_{AgP} Agr2 NP_{Pred}]]]]]]]

Note that in this structure the head position of the added projection is lexically filled by the particle *out*. Head movement of Agr2 to the head position of the added projection is therefore blocked by hypothesis. And since head movement of Agr2 is blocked, there is no way in which NP_{Subj} and SpecAgRP can be rendered equidistant from the base position of NP_{Pred}. The structure of this non-resultative construction hence needs – in addition to the particle’s projection – a TP and, for by now familiar reasons, the concomitant copular VP as well, as in (24):

- (24) [_{VP} Spec *turn* [_{AgRP} Spec [_{AgP} Agr1 [_{PP} *out* [_{TP} Spec T
 [_{VP} Spec *be*+Agr2_j [_{AgRP} NP_{Subj} [_{AgP} t_j NP_{pred}]]]]]]]]]

This time, Agr can move to *be*, and as a result, NP_{Pred} can invert with NP_{Subj} by moving to SpecVP. This derivation is parallel in all relevant respects to that in (17). The obligatoriness of a token of the copula in (22b) now follows.⁷

It will be obvious that no additional projections outside SC are needed whenever the SC *subject* is moved rather than the SC predicate. But of course nothing prevents a verb like *seem* or *consider* from selecting a TP complement. The construction with *to be* is therefore straightforwardly allowed; but unlike in the case of predicate inversion, it is not forced here.

6. Conclusion

I have argued that the obligatory presence of *to be* in non-resultative predicate inversion constructions of the type in (4b), (7b) and (8b) can be accounted for on the basis of the minimalist locality theory, given an analysis of small clauses as projections of a functional head (Agr), which in the examples in question undergoes domain-extending head-movement to a higher head.⁸ This analysis carries over to Lasnik's (1992) examples in (1) on a *there* raising approach to expletive constructions. I thus generalise over the examples in (1) and the b-examples in (4), (7) and (8), and accurately predict the distribution of non-finite tokens of the copula in all types of predicate inversion constructions. By developing a minimalist account of the distribution of the copula in predicate inversion constructions I have adduced further support for the functional structure of small clauses, and for the predicate raising approach to expletive constructions.

⁷ In resultative particle constructions featuring predicate inversion (such as *On the table were put down some books*, and also double object constructions like *They sent the stockholders out a schedule* on the analysis of Dative Shift proposed in Den Dikken 1992:Ch. 3) a ResP rather than a TP (cf. also (11), above) is generated, hence no token of the copula is necessary.

⁸ Guéron (1992) suggests that the cause of the ill-formedness of sentences like **I consider the best candidate John* is that identificational *be* may not be null because it functions as an operator, which must be identified at LF. Apparently, then, syntactic overtiness is a prerequisite for LF identification, the idea being that operators can be null only if they are strongly bound (Guéron, p.c.); but see Mulder and Den Dikken (1992) for analyses featuring unbound null operators. Guéron's suggestion immediately carries over to identificational copular constructions like *That woman is Betty*, which — like the inverse copular sentences discussed in the main text — resist embedding under verbs like *consider* in the absence of a token of the copula *be*: *I believe that woman *(to be) Betty* (cf. Heggie 1988:150; Heycock 1991:196, fn. 32). Williams (1994:42) points out, however, that sentences like these without *be* do actually have 'a valid but obscure reading' on which the proper name is taken to be the predicate (cf. *I consider the mayor Batman*, where such a construal is easier). This suggests that identificational copular constructions with a proper name in final position which cannot be interpreted as a predicate can only be analysed as *inverse* copular constructions (but cf. Heggie 1988:98). The obligatory realisation of *be* in such constructions then follows from the main text proposal.

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