A SHORT NOTE
ON PARTITIVE CASE CHECKING
AND THE EXPLETIVE THERE

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According to Belletti (1988) and Lasnik (1992), unaccusative verbs like arrive or develop as well as the existential verb be can appear as the main predicate of the clause, in the existential construction with the expletive there:

(1) a. There was/has been a man in that garden.
    b. There were/have been more than five women in that room.

(2) a. There (has) arrived a man at that station.
    b. There (has) developed an argument from my idea.

(3) a. *There was/has been the man in that garden.
    b. *There (has) arrived the man at that station.
    c. *There (has) developed the argument from my idea.

As Lasnik (1992: 389) explicitly states, this means that unaccusative verbs as well as the existential be are “partitive” Case assignors. Nevertheless, there is a somewhat surprising but very interesting asymmetry between the existential construction with an unaccusative verb and the one with the existential be (cf. Safir (1985) and, especially, Ura (1991)):

(4) a. How many men were there in that garden?
    b. How many men do you think that there were in that garden?

(5) a. *How many men did there arrive at that station?
    b. *How many men do you think that there arrived at that station?

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The contrast between (4) and (5) is the main concern of this squib.

Here, it is noteworthy that Lasnik (1992) already noticed another piece of contrast between the existential construction with an unaccusative verb and the one with *be:

(6) There is usually a man here.

(7) a. *There arrives usually a bus (at this time).
   (cf. ?There usually arrives a bus (at this time).)

b. *There develops usually an argument (at this meeting).
   (cf. There usually develops an argument (at this meeting).)

Given that the adverb *usually is a VP-adverb, the fact shown in (6) and (7) indicates that unaccusative verbs remain within VP in overt syntax, while the existential *be moves out of VP, as Lasnik (1992) concludes. Then, it is natural to conjecture that this fact relates somehow to the contrast between (4) and (5). If this is the case, the hypothesis follows that the existence of V-movement in overt syntax makes possible the *wh-extraction of the associate of the expletive *there. In other words, if there is no overt V-movement out of VP, the *wh-extraction of the associate of the expletive *there is impossible.

The following facts reinforce this hypothesis. Lasnik (1992) also points to the fact in (8).

(8) a. There are believed to be (*usually) many animals in this zoo.

b. There seems to be (*usually) a man here.

Compare (8) with (6) above. This fact shows that in an infinitival clause, even the existential *be does not move up out of VP in overt syntax. Then, with the hypothesis, we predict that the associates of the expletive *there cannot be extracted by *wh-movement if the existential construction is embedded as an infinitival clause. This prediction is, indeed, borne out by the ill-formedness of (9).

(9) a. *How many animals, are there believed to be t, in this zoo?

b. *How many persons, do there seem to be t, here?
Therefore, we now conclude that the following generalization holds true: The wh-extraction of the associate of the expletive there is possible only if the verb with a partitive Case moves up out of VP in overt syntax. As the next step, then, we have to consider the nature of this generalization: that is, how and why does this generalization hold true?

When the existential be moves out of VP in overt syntax, it moves onto AgrO, at the lowest.1 Now suppose that the existential be, which possesses a partitive Case, may check the partitive Case of an element at the Spec of AgrO in overt syntax when it incorporates to the AgrO, as illustrated in (10).

(10) \[ \text{partitive Case-checking} \]

This means that the inflected be may or may not have a strong NP-feature. Notice that the partitive Case-checking in overt syntax materializes only if a verb with a partitive Case moves onto AgrO in overt syntax. As discussed in footnote 1, the existential be, if inflected by tense, must move up to T (through AgrO) due to its strong V-feature. This enables it to accomplish the partitive Case-checking at the Spec of AgrO in overt syntax. On the other hand, the unaccusative verbs and the uninflected be, though they have a partitive Case, cannot check any Case in overt syntax because it does not move overtly to AgrO due to its weak V-feature (and, hence, they must not move overtly, due to the Procrastinate Principle (Chomsky (1992))). Unless they move onto AgrO, they cannot accomplish any Case-checking because no Spec-head relation between the checker and the checkee materializes.

To make the idea concrete, let us consider how the partitive Case-checking takes place in the following examples:

(11) a. There is (usually) a man here.
    b. There arrived a train at that station.
    c. There is believed to be a man here.

1 Under the Minimalist theory, I assume that the V-feature of the existential be is strong if it is used as the main predicate of a tensed clause (i.e., when it is inflected by tense). Assuming that the V-feature of the unaccusative verbs and the uninflected be is weak, we can also explain why they do not move overtly. It is by no means strange that a single lexical element differs in its feature strongness/weakness according to its finiteness, given the fact that the presence/absence of overt V movement is affected solely by the (morphological) finiteness of V in many languages.
Whereas in (11a), the inflected existential *be* moves overtly, the unaccusative verb *arrived* and the uninflected existential *be* in (11b, c) do not, as argued above. First consider the latter two cases: the expletive *there* is inserted in the Spec of AgrS in overt syntax to satisfy the Extended Projection Principle (see Chomsky (1992, 1994), Chomsky & Lasnik (1993), and Lasnik (1993) for discussion). Since the partitive Case-checking in those cases takes place at LF because the verbs involved in those examples move covertly onto AgrO, the relevant part of the structure of those examples in overt syntax may be illustrated as in (12).

(12) \[
[A_{grsp} \text{There} \ldots \ [A_{grop}\text{AgrO} [\text{VP } V \text{associate}]]] \ldots
\]
From (12), the LF representation (13) is derived by moving the verb to AgrO and the associate to the Spec of AgrO, where its partitive Case is checked off by the verb merging with the AgrO.

(13) \[
[A_{grsp} \text{There} \ldots \ [A_{grop}\text{associate}_i \text{AgrO-V}_k [\text{VP } t_k t_l]]] \ldots
\]
And, then, the associate, which has had its partitive Case-feature checked off at the Spec of AgrO, moves further up to a position adjoined to the expletive *there* due to the demand of the “LF-affix” nature of the expletive (Chomsky (1992) and Lasnik (1993));\(^2\) thereby, (14) is finally derived:

(14) \[
[A_{grsp} \text{There-associate}_i \ldots \ [A_{grop} t'_i \text{AgrO-V}_k [\text{VP } t_k t_l]]] \ldots
\]
It should be noted here that the ultimate landing site of the associate (i.e., a position adjoined to the expletive *there*) is not an A-position (hence, it is an A-bar position), because it has no feature-mediated relation to any L-head (Chomsky (1992) and Ura (1993)). In contrast, the intermediate trace of the associate left at the Spec of AgrO is an A-position because it has a Case-relation to the verb, an L-head.

In fact, there is decisive evidence in favor of the claim that the position adjoined to the expletive *there* to which the associate moves at LF is an A-bar position, but not an A-position. Consider the examples in (15).

(15) a. Someone\(i\) seems to himself\(i\) \(t'_i\) to be \([\text{AP } t_i \text{ available}]\).
   
   b. *There seems to himself\(i\) \([\text{to be } [\text{AP someone}_i \text{ available}]\].
Given that the Binding Theory is applied at LF (Chomsky (1992)),

\(^2\) Due to the space limitation, I omit discussing the matters concerning the Case-checking property of *there* and its associate and their movements. See Lasnik (1993) and Chomsky (1994) for detailed discussions on those issues.
(15b) would be well-formed just as (15a) if the associate someone in (15b) were moved at LF to an A-position adjoined to the expletive at the Spec of AgrS, or if the expletive were replaced with someone at LF. If the latter were the case, the LF of (15b) would be the same as (15a), whereby we would incorrectly predict that someone, which is supposed to be moved to the Spec of AgrS at LF, could bind the anaphor just as in (15a). If the former case happens, the associate someone, which is now supposed to be attached to the expletive there, can c-command the anaphor, for it is not dominated by the expletive and, hence the first branching node that dominates it is the AgrSP node, which dominates the anaphor. Thus, if the position adjoined to the expletive there, where the associate is moved, were an A-position, the A-binding of the anaphor by the associate at LF could materialize, which leads to the incorrect prediction that (15b) is well-formed. (Incidentally, A-binding, but not A-bar binding, is essential for an anaphor to be licensed by the Binding Theory, whence the ill-formedness of (16) below comes.)

(16) *Whoi did you say to himselfi [that Mary loved ti].

Therefore, the conclusion is that the position adjoined to the expletive there is an A-bar position.

Next, let us consider (11a), repeated below.

(11) a. There is (usually) a man here.

Being inflected by tense, the existential be in (11a) overtly moves up out of VP. The assumption that the inflected be may optionally have a strong NP-feature brings two different LF representations in this case, in accordance with the strongness/weakness of the NP-feature of be. If be has a weak NP-feature, then the checking of the partitive Case of the associate takes place at LF just in the same way as in (11b, c); that is to say, the partitive Case-checking between the verb be and the associate moves up to a position adjoined to the expletive there to satisfy the “LF-affix” nature of there, deriving the LF representation illustrated in (14) above. On the other hand, if the NP-feature of the existential verb in (11a) is strong, something is required to occur at the Spec of AgrO to check off the strong NP-feature in overt syntax. There are two conceivable candidates for this purpose: The overt Case-checking could be accomplished if the associate of the expletive moves up to the Spec of AgrO in overt syntax (and it moves onto the expletive at LF due to the “LF-affix” nature of there); or, if the expletive itself is in-
asserted in the Spec of AgrO in overt syntax for the purpose of checking off the strong NP-feature of the inflected be. (And, then, it moves up to the Spec of AgrS in overt syntax to satisfy the Extended Projection Principle. At LF, the associate of the expletive, which stays in situ in overt syntax, moves onto the expletive, and then, the partitive Case of the associate is checked off by the expletive there, which plays a role in mediating the partitive Case-feature (cf. Jonas & Bobaljik (1993)).) The former derivation and the latter one may be illustrated as in (17) and (18), respectively:

(17)  
\[ \text{[AgrSP There} \ldots \text{[AgrOP associate}_i \text{ AgrO-V}_k \text{ [VP t}_k \text{ t}_i]]} \]  
\text{(overt syntax)}

b.  
\[ \text{[AgrSP There-associate}_i \ldots \text{[AgrOP t}'_i \text{ AgrO-V}_k \text{ [VP t}_k \text{ t}_i]]} \]  
\text{(LF)}

(18)  
\[ \text{[AgrSP There}_x \ldots \text{[AgrOP t}_x \text{ AgrO-V}_k \text{ [VP t}_k \text{ associate}]]} \]  
\text{(overt syntax)}

b.  
\[ \text{[AgrSP There}_x\text{-associate}_i \ldots \text{[AgrOP t}_x \text{ AgrO-V}_k \text{ [VP t}_k \text{ t}_i]]} \]  
\text{(LF)}

Whereas there is no difference between (14) and (17) with respect to LF, there is a very remarkable difference between (14) and (18). The trace left at the Spec of AgrO at LF in (14) and (17) is the one belonging to the chain of the associate of the expletive, while the trace left at the Spec of AgrO in (18) is the one belonging to the chain of the expletive itself. Here, one should notice that, given that the expletive there exists as a legitimate object at LF, the chain of the associate and that of the expletive are totally distinct objects syntactically.

Although the derivations (17) and (18) seem to be equally alternative to each other in the case where the inflected existential verb be has a strong NP-feature, there is a good reason to reject the first option on purely theoretical grounds: in (17), the associate forms its chain in overt syntax by moving to the Spec of AgrO and it expands its chain at LF by moving from the Spec of AgrO to the Spec of AgrS. Intuitively speaking, the associate partially moves in overt syntax and then, it accomplishes the residual movement at LF. This means that two “Form-Chain” operations are involved in terms of the chain of the

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3 See Jonas & Bobaljik (1993) for the idea that the expletive there can check off an NP-feature. Incidentally, Chomsky (1994) argues that the movement of there from its inserted position to a position which is required to be filled by the EPP obeys Greed.
associate in (17). In (18), however, only a single “Form-Chain” operation is necessary in terms of the chain of the associate. Thus, it is not unreasonable to claim that the Economy Principle prefers (18) to (17) in terms of the chain of the associate. We therefore conclude that (18) is the only convergent derivation when the inflected be has a strong NP-feature.

With the mechanisms of the partitive Case-checking outlined above in mind, let us return to the contrast between the well-formed examples in (4) and the ill-formed ones in (5) and (9). First, let us consider how the partitive Case-checking takes place in the ill-formed examples in (5) and (9). As we observed, the verbs involved in these examples stay within VP in overt syntax. Then, the partitive Case-checking takes place in the way illustrated in (14). Since the wh-movement of the associate of the expletive there in overt syntax is also involved in these examples, the LF representation for these examples may be derived in the way delineated in (19):\(^5\)

\[(19) \quad \text{a. } [\text{CP Whi} [\text{AgrSP there } \ldots [\text{AgrOP AgrO [VP V Wh(associate).]]}] \text{ (overt syntax)}
\]
\[\text{b. } [\text{CP Whi} [\text{AgrSP there-Wh(associate)}] \ldots [\text{AgrOP t'} \text{ AgrO-V} \text{[VP } t_k \text{ t}_i]]] \text{ (LF)}
\]

To make the idea concrete, take (5a) for example. Adopting the copy theory of wh-movement (cf. footnote 5), we may derive its LF in the following way:

\[(5) \quad \text{a. } *\text{How many men}_i \text{ did there arrive } t_i \text{ at that station?}
\]

\[(20) \quad \text{a. } [\text{CP How many men}_i \text{ did } [\text{AgrSP there } [\text{AgrOP AgrO [VP arrive how many men(associate).]}] \text{ at that station}]] \text{ (overt syntax)}
\]
\[\text{b. } [\text{CP How many men}_i \text{ did } [\text{AgrSP there-how many men(associate)}] \text{[AgrOP t'} \text{ AgrO-arrive}_k \text{[VP } t_k \text{ t}_i] \text{ at that sta-}
\]

\(^4\) Under the Minimalist theory, the number of steps necessary to form a chain does not matter; rather, a chain is formed by a single operation “Form-Chain” regardless of the number of steps the chain involves (Chomsky (1992), Collins (1994)). But it is obvious that two “Form-Chain” operations are necessary to form a chain if the chain involves a partial movement in overt syntax. For an exemplification of several types of illegitimate partial movement, see Ura (1993) and Collins (1994).

\(^5\) Here I follow Chomsky’s (1992) hypothesis that, when an overt wh-movement takes place, the copy of the wh-phrase is left in its original position. See Chomsky (1992) for theoretical and empirical arguments in favor of this hypothesis.
At LF, the associate how many men first moves up to the Spec of AgrO to have the partitive Case of its chain checked off, and then, it moves further up to a position adjoined to the expletive there. Here, let us assume, following Borer (1984) and Safir (1985), that the location of the variable of a given operator-variable chain is the position where the chain is related to Case. Then, under the Minimalist theory of Case (cf. Chomsky (1992), Chomsky & Lasnik (1993)), we may regard the intermediate trace of the wh-chain left at the Spec of AgrO in (20b) as the location of the variable of the chain. However, this causes a serious problem with regard to variable binding. Recall that a position adjoined to the expletive is an A-bar position, as we argued. Then, the variable of the wh-chain in (20b) is A-bar bound by both the wh-phrase moved to the Spec of CP and its copy moved to a position adjoined to the expletive there. This is a configuration in a violation of the Bijection Principle, which precludes any variable A-bar bound by more than one element (Koopman & Sportiche (1981)). Returning to (19b), which represents the abstract LF of the ill-formed examples in (5) and (9), we therefore conclude that the intermediate trace of the wh-chain left at the Spec of AgrO violates the Bijection Principle, whence the ill-formedness of (5) and (9) comes.

Now let us consider the well-formed examples in (4). We argued that the partitive Case-checking takes place in overt syntax in the way illustrated in (18) if the inflected existential verb be has a strong NP-feature, which is a possible option for the verbs involved in (4). Hence, we may conclude that the LF of the examples in (4) is derived as in the following way:

\[
\begin{align*}
(21) & \quad \text{a. } [\text{CP } Wh_i [\text{AgrSP } There_x \ldots \text{[AgrOP } t_x \text{ AgrO-V}_k \text{[VP } t_k \text{ Wh(associate)}_i]]]) \text{ (overt syntax)} \\
& \quad \text{b. } [\text{CP } Wh_i [\text{AgrSP } There_x\text{-Wh(associate)}_i \ldots \text{[AgrOP } t_x \text{ AgrO-V}_k \text{[VP } t_k t_i]]]) \text{ (LF)}
\end{align*}
\]

Recall that it is the expletive there that accomplishes the partitive Case-

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6 This line of argumentation always gives rise to the situation where every object variable is in the Spec of AgrO, contrary to the standard assumption that it is in the complement of V. As one of the reviewers points out, this situation might yield several technical problems concerning the chain-formation of wh-elements. Here, due to the limitation of space, I leave it to future research to discuss those issues. See Ura (to appear) for some related discussion.
checking at the Spec of AgrO in the case where the inflected be has a strong NP-feature. Hence, the trace left at the Spec of AgrO is not an intermediate trace of the *wh*-chain, but the trace of the expletive. As emphasized above, the chain of the expletive is totally different from that of the *wh*-associate chain in (21b). Accordingly, the trace left at the Spec of AgrO has nothing to do with the *wh*-chain in (21b). Since the location where the *wh*-chain in (21b) is related to Case is the position where the associate copy of the *wh*-phrase is adjoined to the expletive, that adjunct position to the expletive is regarded as the location of the variable of the *wh*-chain in (21b). This position is not A-bar bound by any other element than the *wh*-phrase; accordingly, the Bijection Principle is observed. Therefore, the examples in (4), which involve the inflected be, are well-formed because the partitive Case-checking can take place without any conflict with *wh*-chain (operator-variable chain) formation at LF.

To conclude, when the verb with a partitive Case in the existential construction may not move up out of VP due to its weak V-feature, the associate of the expletive cannot be extracted by *wh*-movement because there occurs a conflict between partitive Case-checking and operator-variable chain formation at LF if it is *wh*-moved; on the other hand, when the verb with a partitive Case moves up out of VP in overt syntax, the associate can be extracted by *wh*-movement because there is no conflict between partitive Case-checking and operator-variable chain formation at LF.

REFERENCES


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