The Case of Unaccusatives

1. The Hypothesis

One property that is commonly taken to be crucial in defining the class of unaccusative verbs is their inability to assign Case. The *unaccusative hypothesis*, as formulated most prominently by Perlmutter (1978) and Burzio (1986), claims that verbs of this class do not assign Case to their selected D-Structure object. As perspicuously stressed by the term referring to the class in Relational Grammar, unaccusative verbs, contrary to transitive verbs, do not assign to their object the characteristic Case of objects, namely, accusative. However, certain languages with a morphologically rich Case system reveal that accusative is not the only Case for which an object NP can be marked. Take, for instance, a transitive verb like *put* in a language like Finnish: depending on the reading associated with it, the object of *put* will be marked either with accusative or with partitive Case:²

- (1) a. Hän pani kiriat pöydälle. he put the books(acc, pl) on the table
 - b. Hän pani kirjoja pöydälle. he put (some) books(part, pl) on the table

As is clear from the glosses, if accusative Case is assigned, the object has a definite reading; if partitive Case is assigned, the object has an indefinite reading, equivalent to the one expressed by a lexical quantifier like *some* in English.³ It appears that there is

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¹ Burzio (1986) calls verbs of this class *ergatives*, a term I will also use.

² The accusative plural form coincides with that of the nominative plural. The Finnish examples are from Renault (1984).

³ Use of partitive Case on singular count nouns implies a special reading in Finnish, the so-called "partial object" reading. If the partial object interpretation is to be avoided, singular indefinites are marked with the zero Case (nominative).

an essential incompatibility between partitive Case and a definite NP. I would like to claim that the Case difference overtly manifested by the morphology in examples like (1) is an option available universally, also in languages where the morphology does not make any distinction. In such cases the only reflex of partitive Case will be in the interpretation.4

We can then ask the following question: Is the Case-assigning capacity of unaccusative verbs suspended only with respect to the assignment of accusative Case or with respect to the assignment of partitive Case as well? I will propose that only the capacity of these verbs to assign accusative Case is suspended, whereas their capacity to assign partitive Case is maintained. This conclusion is again suggested by Finnish sentences like those in (2), which contain typical unaccusative verbs like be and come and whose object is marked with partitive Case:5

- (2) a. on kirioia. Pövdällä on the table is (some) books(part, pl) 'There are some books on the table.'
 - tulee kirjeitä. Helsingistä from Helsinki comes (some) letters(part, pl) 'There come some letters from Helsinki.'6

This proposal has a number of consequences, both empirical and theoretical. In particular, as I will discuss at length in section 2, it has its most direct impact on the account of the phenomenon generally referred to as the Definiteness Effect.

In developing the proposal I will assume (section 3) that no process of nominative Case transmission is ever at work to Case-mark the postverbal object NP of unaccusative verbs (see also Pollock (1983)). Furthermore, I will make a particular assumption concerning the nature of partitive Case. Adopting Chomsky's (1986a) theory of syntactic Case, I will propose that partitive Case is an inherent Case. According to this theory, two kinds of syntactic Cases are distinguished, structural and inherent. An inherent Case

⁴ Ultimately, then, an NP Case-marked partitive will always mean 'some of', 'part of a larger set'. I will assume that this interpretation is generally available for both singular and plural partitive NPs. I will therefore regard the "partial object" reading mentioned in footnote 3 as an idiosyncratic property of Finnish.

⁵ See Burzio (1986) and Stowell (1981), among others, for the idea that be is an unaccusative. I will not, however, assume that existential be is a raising verb taking a small clause complement. I will instead follow Williams's (1984) analysis, according to which existential be is followed by a simple NP. This NP is found in object position, which is θ -marked with an existential θ -role.

⁶ As in the case of ordinary objects, when the object of the unaccusative verb is a singular count noun, it is marked with zero Case as a default Case marking, which avoids the "partial object" interpretation (see

footnote 3):

suomen sanakirja. (i) Pöydällä on on the table is (a) Finnish dictionary

T. Taraldsen (personal communication) has also pointed out instances where morphological partitive Case is selected as the only Case for the object of certain verbs in Finnish, with no "partial" or any other special interpretation implied. Morphological partitive Case can also play the role of a purely "lexical" Case, idiosyncratically chosen by given lexical heads. This does not exhaust the possible uses of partitive Case in Finnish (see, for instance, its use under negation).

is a Case assigned by a lexical head to the NP it governs and to which it assigns a θ -role. An inherent Case is assigned at the level of D-Structure, in conjunction with θ -role assignment; it is then realized at S-Structure. Structural Cases—that is, nominative and accusative—differ from inherent Cases in that they are not assigned in conjunction with θ -role assignment and are both assigned and realized at S-Structure. Because partitive is an inherent Case assigned by verbs, it will typically be assigned to the direct object of both transitive and unaccusative verbs. Given this proposal, the term *unaccusative* (for the relevant verb class) acquires a precise theoretical status: a verb is unaccusative because it lacks the capacity to assign structural accusative Case; no general claim is made to the effect that it should lack Case-assigning capacities altogether. The only difference between transitive and unaccusative verbs, as far as Case properties are concerned, is that with transitive verbs structural accusative Case is also available; in other words, transitives are not unaccusatives.

2. The Definiteness Effect

As noted, the Definiteness Effect (henceforth, DE) represents the empirical domain on which the partitive hypothesis has its most direct impact. The following subsections summarize the properties of the DE (see Milsark (1974), Safir (1982; 1985), Pollock (1983; 1984)).¹⁰

2.1. English and French

Consider a pair like (3a,b), in English:

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

Let us call the NP *a man* in (3b) the *i(nverted)-subject*, using the term descriptively, as in Burzio (1986), to refer to any postverbal NP that can also appear in preverbal subject position, in sentences not involving the expletive *there*. As first noted by Milsark (1974), whereas the preverbal subject of (3a) can be either definite or indefinite, the i-subject of (3b) can only be indefinite. (4b) is not an acceptable sentence, and it contrasts with (4a):

- (4) a. The man is in the room.
 - b. *There is the man in the room.

⁷ The most typical instance of an inherent Case is one where a particular Case is associated with a particular θ-role. See Belletti and Rizzi (1986) for some discussion.

⁸ See the discussion in section 2.3 for an assignment of partitive Case that is structurally less "typical."

⁹ I will assume a version of Burzio's generalization according to which "lack of Case for the object NP" in structures where no external θ-role is assigned (as with unaccusative and passive verbs) should be taken to mean "lack of structural Case."

¹⁰ Also see Reuland (1983), Higginbotham (1985), Szabolcsi (1986).

¹¹ Also see Borer (1986), where the term is used with a particular theoretical sense that is not relevant to my proposal.

The indefiniteness requirement on the i-subject is a fairly strict requirement of the *there* construction. As Milsark (1974) points out, this construction can also occur with a particular set of verbs that he refers to as "inside verbals." An example is given in (5); the DE shows up in these cases too, as also discussed by Safir (1982; 1985):

- (5) a. There arose a storm here.
 - b. *There arose the storm here.

"Inside verbals" include items such as *arise*, *develop*, and *happen*—verbs identified by the unaccusative/ergative hypothesis as a natural class. ¹² From (3)–(5) we can conclude that the DE consists of imposing an indefiniteness requirement on the i-subject of unaccusative verbs. ¹³

Consider now the following pairs in English:

- (6) a. A man talked to John.
 - b. *There talked to John a man.
 - c. Mary ate an apple.
 - d. *There ate an apple Mary.

It is well known that sentences like (6b,d) are impossible in English. English is not a null-subject language; hence, it does not allow for a free process of subject inversion, which leaves the subject position empty. Assuming Burzio's (1986) idea that overt expletives like *there* are only inserted at D-Structure, the impossibility of (6b,d) follows immediately. These sentences are underivable because *there* cannot be inserted in the course of the derivation to fill the vacated subject position. (3b) and (5a) are possible because, given the unaccusative hypothesis, the argument of the verb is generated in the object position at D-Structure and the subject position is nonthematic; hence, *there* can be properly inserted at this level.¹⁴

Consider a French paradigm like (7a-c):

- (7) a. Trois filles sont arrivées. three girls (are) arrived
 - b. Il est arrivé trois filles. there (is) arrived three girls
 - c. *Il est arrivé la fille. there (is) arrived the girl

¹² There seems to be considerable variation among speakers in allowing the *there* construction with verbs other than *be* and *exist*. Although I am aware of this complicating factor, I will adopt Milsark's (1974) idealization, assuming that unaccusatives generally allow the construction. See also Safir (1982).

¹³ Szabolcsi's (1986) list includes a number of transitive verbs whose object is affected by the DE. The DE in these cases can be literally interpreted as a consequence of a process of noun incorporation, as proposed

by Szabolcsi. Also see Pollock (1983).

¹⁴ If, following in essence the spirit of Hale and Keyser (1986), verbs like *break* in their nontransitive (noncausative) use are analyzed as intransitive verbs (rather than as ergatives, as generally assumed) with the Theme argument projected in subject position at D-Structure, lack of the *there* construction with this verb class would be straightforwardly accounted for in the same terms discussed for the ungrammaticality of (6b,d). The possibility of directly projecting the Theme θ-role into subject position rather than into object position when it is the only θ-role in the θ-grid is discussed in Belletti and Rizzi (1986). This possibility is compatible with Baker's (1985) Uniformity of θ-Assignment Hypothesis in the terms alluded to in Belletti and Rizzi (1986).

In French we find pairs like (7a) and (7b) where, as in the English *there* construction, the argument of an unaccusative verb appears as the i-subject ((7b)) and the preverbal subject position is filled with the lexical expletive *il*. The ungrammaticality of (7c) is, again, a manifestation of the DE. Consider now (8), which parallels (6):

- (8) a. Trois filles ont parlé à Pierre. three girls spoke to Pierre
 - b. *II a parlé à Pierre trois filles. there spoke to Pierre three girls
 - Marie a mangé un gâteau.
 Marie ate a cake
 - d. *Il a mangé un gâteau Marie. there ate a cake Marie

The ungrammaticality of the (b) and (d) examples, containing an i-subject and an intransitive or transitive verb, respectively, can be accounted for in terms parallel to those discussed for English. It is due to the interaction among the non-null-subject nature of French, the constraint on the insertion of an overt expletive like *il*, and the unaccusative hypothesis.

We can conclude that the DE, in its core manifestation at least, is a phenomenon concerning the nature of the i-subject of sentences involving a verb of the unaccusative class. This i-subject is in fact the object of V, given the unaccusative hypothesis. Hence, the DE ultimately is a phenomenon concerning the nature of the object of unaccusative verbs. This object must be indefinite.¹⁵

Consider now our hypothesis that unaccusative verbs, although unaccusative, preserve the capacity of inherently assigning partitive Case to their thematic object. Recall also that partitive Case always selects an indefinite meaning for the NP that carries it—a meaning equivalent to that of a lexical quantifier like *some*. From this, a straightforward account is provided for the fact that the DE typically appears in the object position of unaccusative verbs: this follows from the Case properties of these verbs.

This interpretation of the source of the DE directly suggests an explanation for why NPs quantified by universal quantifiers of the *every* type are excluded in DE constructions:

- (9) a. *There is every man in the next room.
 - b. *There arises every terrible storm in that area.

The impossibility of sentences like (9a,b) led Milsark (1977) and Chomsky (1977) to formulate a constraint stating the "incompatibility" of existential clauses with the universal interpretation. We can now understand the special status of these sentences as a direct consequence of the fact that universally quantified NPs are intrinsically incompatible with partitive Case. Given our interpretation of partitive Case as implying a

¹⁵ I consider as "definite" (a) NPs whose Spec is the definite article and (b) proper names. "Indefinite" NPs are all NPs whose Spec is either a quantifier or the indefinite article. This is the distinction referred to in most characterizations of the DE; it will suffice for the purposes of our discussion in most cases.

reading of the NP to which it is associated as "part of a set," we understand that this Case should be incompatible with quantified NPs that intrinsically express generality. 16

Consider French again. It has often been pointed out that the DE also shows up in impersonal passive constructions like (10a,b):

(10) a. Il a été tué un homme.
there has been killed a man
b. *Il a été tué l' homme.
there has been killed the man

This fact is not surprising in the present approach, given that verbs with passive morphology can be considered unaccusative in the same theoretical sense as lexical unaccusative verbs—namely, passive verbs do not have the capacity to assign structural accusative. In accordance with recent theories of passive like those of Roberts (1985) and Baker, Johnson, and Roberts (1987), this can be assumed to be directly due to the presence of the passive morphology. However, I will claim that passive verbs still retain the ability to assign inherent partitive Case, because assignment of an inherent Case is not suspended under passive morphology. Once again, partitive is the only available Case for the thematic object; hence, this object must be an indefinite NP.¹⁷

The general validity of the assumption that assignment of an inherent Case is not suspended under passive morphology is directly shown by a German paradigm like (11). The presence of passive morphology does not affect the capacity of the verb *helfen* 'help' to assign the inherent Case specified in its lexical representation ((11a,e) vs. (11b)), whereas the capacity to assign accusative Case is normally suspended for the verb *lieben*

(i) *There are most of the men in the room.

17 Similar facts are found in Norwegian impersonal passive sentences, as pointed out to me by K. Chris-

tensen. The status of sentences like (i) in English is fairly controversial.

(i) There was killed a man.

Some speakers marginally accept them, others exclude them. I have no particular insight into why this should be so. It might be due to the low productivity of the *there* construction in general. The existence of a well-formed "equivalent" sentence like (ii) might be the functional reason for the more marginal status of (i).

(ii) There was a man killed.

In (ii) the DE is displayed on the object of *be* in the standard way and the following past participle is interpreted as a secondary predicate. Baker (1985, and personal communication) points out the following contrast:

- (iii) a. There can be seen some Democrats in the election.
 - b. *There must be looked for some roses in the garden.

(iiia) is judged significantly better than (iiib). A possible interpretation of this contrast could be that although partitive Case is available in (iiia) to Case-mark the direct object, it is not available in (iiib) because of the "V + P" reanalysis involved here.

¹⁶ NPs that are indefinite and yet impossible in the there construction are also those quantified by most:

'love' ((11c,f) vs. (11d)):

- (11) a. Ihm_{dat} wird geholfen. him(dat) is helped
 - b. *Er_{nom} wird geholfen. he(nom) is helped
 - c. *Ihn_{acc} wird geliebt. him(acc) is loved
 - d. Er_{nom} wird geliebt. he(nom) is loved
 - e. Es wurde ihm_{dat} geholfen. it was him(dat) helped
 - f. *Es wurde ihn_{acc} geliebt. it was him(acc) loved

2.2. Italian

2.2.1. Standard Cases. It is well known that all the sentences in (12) are well-formed in a null-subject language like Italian (pragmatic considerations of appropriateness and intonational patterns aside). In particular, all the sentences involving i-subjects are well-formed, regardless of both the nature of the postverbal NP (definite or indefinite) and the nature of the verb (unaccusative (12b), intransitive (12d), transitive (12f)):

- (12) a. Il ragazzo è arrivato. the boy arrived
 - b. È arrivato il ragazzo. arrived the boy
 - c. Il ragazzo ha parlato (con Piero). the boy spoke (with Piero)
 - d. Ha parlato (con Piero) il ragazzo. spoke (with Piero) the boy
 - e. Il ragazzo ha mangiato un dolce. the boy ate a cake
 - f. Ha mangiato un dolce il ragazzo. ate a cake the boy

If data like these are not further analyzed, the appropriate conclusion seems to be that Italian does not display/the DE. The observation can even be extended so as to claim that null-subject languages, with the associated property of free subject inversion, do not display the DE in general. This is in fact the assumption commonly made.¹⁸

¹⁸ See, for instance, Burzio (1986), Rizzi (1982), Chomsky (1981), although an account of the DE is not the major concern of these works. Safir's (1982; 1985) account of the DE, according to which it results from the existence of a chain relation between the subject position and the postverbal NP, is especially designed to ensure that a different kind of chain obtains in null-subject languages so as to prevent the DE from showing up. The Italian facts to be discussed momentarily were not known when Safir's work was elaborated.

It can be shown, however, that this conclusion is empirically incorrect. A sufficiently refined search of the relevant data reveals that Italian also exhibits the DE with the peculiar properties that we have seen so far: it involves the object position of unaccusative and passive verbs. The null-subject nature of Italian, entailing a free process of subject inversion, simply obscures rather than eliminates the phenomenon.

Consider an abstract structure like (13):

(13) $NP_1 \left[v_P \left[v_P \ V \ NP_2 \left[p_P \ P \ NP_3 \right] \right] \ NP_4 \right]$

The interpretation of the DE assumed here implies that the phenomenon should involve the NP_2 object position, for V = unaccusative or passive, but no other NP position in the sentence, it being a direct consequence of the Case properties of V. Let us now examine more closely how this general prediction is borne out.

That NP₃ is not affected by the DE is directly shown by French impersonal passive sentences like (14a), which minimally contrast with the impossibility of (14b) and with examples like (10b) in general:

- (14) a. Il a été discuté [PP sur [NP3 la question]]. it was discussed on the matter
 - b. *Il a été discuté [NP2 la question]. it was discussed the matter¹⁹

That NP₄ is not affected by the DE either is also interestingly shown by French sentences involving the process of Stylistic Inversion, as exemplified in (15):

- (15) a. Le moment où a téléphoné l' ami de Pierre, j' ai pensé que the moment when telephoned the friend of Pierre I thought that tout était résolu.

 everything was solved
 - b. Il faudrait que parle Jean. it would be necessary that spoke Jean

Stylistic Inversion consists in inverting the subject from the preverbal to the post-verbal position, in sentences introduced by a wh-word in Comp (15a) or containing the subjunctive mood (15b) (Kayne and Pollock (1978), Pollock (1986)). Sentences containing verbs of any class can undergo the process. (Notice, furthermore, the lack of an overt expletive in subject position.) It is commonly assumed (most prominently in work by Pollock) that the operation performed by Stylistic Inversion is equivalent to the operation performed by subject inversion in a language like Italian. Namely, it consists in adjoining the moved subject NP to VP. Hence, the inverted subject of (15a,b) fills the derived

¹⁹ (14a) is discussed by Pollock (1983), Safir (1982), and Travis (1984).

NP₄ position of (13); thus, predictably under the present approach, the NP displays no DE.²⁰

Given these observations, the fact that no DE shows up in Italian sentences like (12d,f) is not surprising. The i-subject in these cases fills the derived NP₄ position. Hence, as in French, no DE is expected in this position. Furthermore, nothing in principle prevents associating (12b) with the same representation, with the i-subject filling the NP₄ position, so that this example also displays no DE. In other words, data like (12a–f) do not provide conclusive evidence concerning the lack of DE in Italian. More relevant are examples of the abstract form (16):

(16) NP₁ [VP V NP₂ PP] for V = unaccusative or passive, NP₂ its direct argument and PP a subcategorized complement of V

Only in these configurations can we test the prediction of our hypothesis because only in these configurations can we be reasonably sure that the relevant postverbal NP is in the NP₂ object position of V. Given our approach, we then expect the DE to affect the NP₂ object of (16). And this is indeed what we find, as shown by the examples in (17) and (18), containing unaccusative verbs and passive verbs, respectively:²¹

- (17) a. All'improvviso è entrato un uomo dalla finestra. suddenly entered a man from the window
 - b. *All'improvviso è entrato l' uomo dalla finestra. suddenly entered the man from the window
 - c. All'improvviso l' uomo è entrato dalla finestra. suddenly the man entered from the window
 - d. Era finalmente arrivato qualche studente a lezione arrived finally some student to the lecture
 - e. *Era finalmente arrivato ogni studente a lezione. arrived finally every student to the lecture
 - f. Ogni studente era finalmente arrivato a lezione. every student finally arrived to the lecture
- (18) a. È stato messo un libro sul tavolo. has been put a book on the table
 - b. *È stato messo il libro sul tavolo.

 has been put the book on the table

²⁰ If sentences involving the process of Heavy NP Shift (HNPS) in English are analyzed in the same way, with a postverbal VP-adjoined (heavy) NP, we could provide the same explanation for the absence of the DE in examples like (ia), minimally contrasting with (ib), first pointed out, and left unexplained, in Safir (1982):

⁽i) a. There hung on the wall the flag of the country that John had fled.

b. *There hung the coat on the wall.

²¹ The existence of contrasts like those in (17) and (18) in Italian has been noted independently by a number of linguists, in particular G. Cinque and A. Calabrese. See also the discussion in Rizzi (1985). Borer (1986) points out DE-type facts for Hebrew, another (essentially) null-subject language.

- c. Il libro è stato messo sul tavolo. the book has been put on the table
- d. È stato trovato qualche articolo di Gianni nel dossier. has been found some article by Gianni in the dossier
- e. *È stato trovato ogni articolo di Gianni nel dossier. has been found every article by Gianni in the dossier
- f. Ogni articolo di Gianni è stato trovato nel dossier every article by Gianni has been found in the dossier

(17a,b) and (17d,e) show typical DE pairs with unaccusative verbs; (17c,f) indicate that no problem arises when the definite subject is found in preverbal subject position. (18a,b) and (18d,e) show similar DE pairs with passive verbs; (18c,f) again indicate the perfect status of the sentences when the definite subject is in subject position. Our account, then, extends naturally to Italian.

If the DE is a property of the object position of the relevant classes of verbs due to their Case properties, we expect it to hold across languages. We also expect its appearance to be unrelated to the null-subject property of a given language, even though it may interact with it in intricate ways.²²

2.2.2. Problematic Cases. A potentially serious problem is posed by sentences like (19a.b):

- (19) a. Verrà Gianni a risolvere la questione. will come Gianni to solve the problem
 - Andrò io ad accompagnare Gianni.
 will go I to accompany Gianni

Burzio (1986) associates such sentences with the representation in (20),

(20) $NP_1 [_{VP} V NP_2 CP]$

where V is an unaccusative verb, NP₂ is its selected argument, and CP is a subcategorized clause. (20) is totally analogous to the previous structure (16), except that V is subcat-

- (i) a. Sono arrivati tutti a lezione. arrived all to the lecture
 - Sono andati tutti a casa propria.
 went all to house their own

where the definite quantifier *tutti* fills the immediate postverbal position of an unaccusative verb, is not problematic. (ia,b) must be analyzed as involving a floated quantifier *tutti*, presumably adjoined to the phrase next to it, anaphoric (Belletti (1982), Kayne (1981)) with a pronominal null subject. See the contrast between (ia,b) and (iia,b), where the postverbal NP is not an anaphoric floated quantifier but a definite NP in object position. The DE is produced, hence the deviance of the sentences:

- (ii) a. ??Sono arrivati tutti gli studenti a lezione.
 arrived all the students to the lecture
 - b. ??Sono andati tutti gli studenti a casa propria.

 went all the students to house their own

²² The possibility of sentences like (ia,b),

egorized for a PP in the latter and for a CP in the former. Thus, if (20) is really the structure of the sentences in (19), then these sentences do represent a serious problem for the present account: a definite NP (Gianni, io) seems to be allowed to fill the object position of an unaccusative verb. However, the problem is only apparent. It can be argued that (20) is not the representation of sentences like (19a,b). In fact, the most natural intonation associated with sentences like (19a,b) is one where a break intervenes between the NP and the CP. This intonation is different from that associated with a sentence like (21), involving the transitive verb convincere 'convince', whose structural representation directly corresponds to (20):

(21) Ho convinto Gianni a partire al più presto. I convinced Gianni to leave soon

We can make the assumption that the difference in intonation has a structural correlate. In particular, I would like to suggest that the crucial difference between (19) and (21) is that in (21) the CP complement fills the VP-internal position illustrated in (20), whereas in (19) it fills a VP-external position. For instance, it can be assumed to be immediately dominated by IP.²³ But once we allow CP to be VP-external, there is no longer any evidence that the postverbal NP is actually in its D-Structure, object position. It may fill a different position, such as the VP-adjoined position of postverbal inverted subjects (that is, the NP₄ position of (13)). Thus, we can assume that sentences like (19) have the structural representation in (22) (details omitted):

(22) $[CP[IP NP [VP[VP[V verrà]]]][NP e_i]][NP Gianni]_i][CP a . . .]]$

In (22) the i-subject has moved from its base position into the VP-adjoined position. However, if we try to impose a flat intonation whose structural correlate would correspond to (20), the DE reappears in the familiar way:

- (23) a. Verrà uno/qualche studente a riparare il lavandino. will come a/some student to fix the sink
 - b. *?Verrà lo/ogni studente a riparare il lavandino. will come the/every student to fix the sink

Of course, no similar contrasts are found in sentences involving a transitive verb: the sentence is well-formed no matter whether the direct object is indefinite or definite:

(24) Ho convinto uno/qualche/lo/ogni studente a riparare il lavandino. I convinced a/some/the/every student to fix the sink

The contrast in (23) comes out much more sharply if extraction is performed out of the complement clause:²⁴

Thanks to L. Rizzi for pointing out to me the potential relevance of extraction facts to this issue.

²³ Following Antinucci and Cinque (1978), the CP complement of (19) can be considered "emargined." (See also Calabrese (1982).) An "emargined" phrase is "old" informationally and intonationally follows the pause that comes at the end of the preceding phrase. This represents the status of the CP complements of the sentences in (19) in their most natural reading.

- (25) a. Il lavandino che verrà uno/qualche studente a riparare . . . the sink that will come a/some student to fix
 - b. *Il lavandino che verrà lo/ogni studente a riparare . . . the sink that will come the/every student to fix

Consider a deviant sentence like (26), where extraction has been performed out of an extraposed clause:

- (26) *Il lavandino che ho convinto Gianni ieri sera a riparare . . . the sink that I convinced Gianni yesterday night to fix
 - (vs.: Ho convinto Gianni ieri sera a riparare il lavandino. I convinced Gianni yesterday night to fix the sink)

The ill-formedness of (26) shows that extraction cannot take place out of an extraposed clause. A direct reason for that can be found in a "Barriers" system (Chomsky (1986b)). If extraposed clauses are immediately dominated by IP, as suggested above.²⁵ they are not governed by any lexical head. Consequently, they cannot be L-marked; hence, their CP counts as a barrier. The IP that immediately dominates CP inherits barrierhood. Hence, extraction out of an extraposed clause crosses two barriers, yielding a Subjacency violation. Consider again the contrast in (25). The ill-formedness of (25b) is due to one of the following two reasons: (a) In order not to violate Subjacency in the way just described, the complement clause is not extraposed. This in turn entails that the object NP also stays in its D-Structure position; hence, the sentence does represent a typical manifestation of the DE. (b) In order not to give rise to a DE violation, the complement clause is extraposed so as to allow the object NP to move out of the object position, into a derived VP-adjoined position; but then extraction out of the extraposed clause yields a Subjacency violation, much as in (26). That the ill-formedness of (25b) is ultimately a consequence of the DE is further confirmed by its contrast with (27), where the transitive verb *convincere* is present and extraction is performed out of the complement clause. In this case the result is always well-formed, independently of the nature. definite or indefinite, of the object NP (much as in (24)):

(27) Il lavandino che ho convinto uno/qualche/lo/ogni studente a riparare . . . the sink that I convinced a/some/the/every student to fix

The reason is that the DE is not manifested in the object position of transitive verbs; hence, there is no need for the complement clause to extrapose, and extraction can be performed from its D-Structure, VP-internal position, a position L-marked by V.

2.3. West Flemish and German

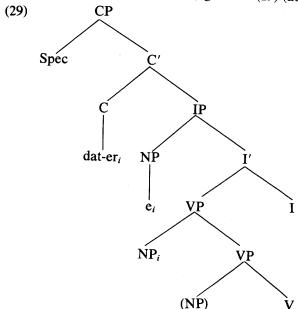
In a paper on the *er* construction in West Flemish, Haegeman (1986) has pointed out that the DE is systematically manifested on the "subject" NP²⁶ of sentences involving this construction. An important property of the *er* construction in West Flemish (henceforth, WF) is its possible appearance in sentences containing verbs belonging to any

²⁵ The argument would not change if one were to decide that extraposed clauses are VP-adjoined.
²⁶ That is, the NP agreeing with the verb. On the structural position filled by this NP, see below.

class: unaccusatives, intransitives, and transitives. Some examples from Haegeman (1986) are reproduced in (28):

- (28) a. dat er niemand gegoan is that there no one gone is
 - b. dat er niemand gewerkt eet that there no one worked has
 - c. dat er niemand eentwa gekocht eet that there no one something bought has²⁷

At first sight, sentences of this kind seem to constitute a problem for the present analysis, which links the appearance of the DE to the object position of unaccusative (and passive) verbs and excludes it from the [NP,IP] subject position. However, once an analysis is provided for sentences like (28a-c), it seems that this hypothesis can be naturally accommodated to account for them. Let us adopt the analysis of these sentences proposed in Haegeman (1986), according to which *er* is a subject clitic; like all subject clitics in WF, it cliticizes onto Comp. The [NP,IP] position is then left empty. Hence, the indefinite "subject" fills a position different from the [NP,IP] position. In (28a) it fills the object position of the unaccusative verb; here it is marked with partitive Case and the DE is manifested in the familiar way. What position does it fill in (28b,c)? Suppose it is VP-adjoined. It then ultimately fills a VP-internal position. This is illustrated in the abstract representation of (28b,c) given in (29) (adapted from Haegeman (1986)):



²⁷ Similar facts hold in Dutch as well, with some further complication, as discussed in Haegeman (1986). See also Platzack (1986) for a discussion of Icelandic data that are amenable to the analysis to be presented for West Flemish and German.

²⁸ We can express this through the theory of adjunction developed in Chomsky (1986b) and say that the NP is not "excluded" from the category VP. Alternatively, we could suggest that the NP fills the [Spec,V'] position. I will not elaborate on this proposal.

Given this representation, the DE of (28b,c) is less surprising than it might have appeared at first glance: the DE here does *not* occur in the [NP,IP] position, outside the VP. Let us now address the question of what Case the VP-adjoined NP is marked with.²⁹ The natural assumption within the system I am proposing is that the only Case available is partitive. In fact, nominative and accusative are not available because the former is already required by the overt expletive *er* and the latter is required by the object of the transitive verb (as in (28c)) and is not available otherwise.³⁰ Hence, the only remaining Case is partitive. The VP-adjoined NP does qualify as a possible receiver of partitive Case. Given its hypothesized inherent nature (see also section 3), partitive Case can only be assigned to an NP whose θ -role is specified in the θ -grid of the verb assigning it. The VP-adjoined NP has this property. It will be marked with partitive Case and the DE will arise, as in the more familiar examples involving the object position.³¹

Facts very similar to those in (28) also hold in German, as pointed out by T. Tappe (personal communication). Some examples are given in (30):

- (30) a. Es liegt ein/*?der Brief auf dem Tisch. there lies a/the letter on the table
 - b. Es hat ein/*?der Mann die Marie geküsst. there has a/the man the(acc) Marie kissed
 - c. Es hat ein/*?der Mann dem Paul die Blumen gegeben. there has a/the man the(dat) Paul the flowers given

These sentences display the verb-second phenomenon, with *es* filling the [Spec,C'] position and V filling the head of Comp, as in the analysis proposed in Chomsky (1986b). Again, in this case it can be argued that the [NP,IP] subject position is empty in this construction and that the "subject" is VP-internal. As in the WF examples, it can be taken to fill the object position in (30a) and the VP-adjoined position in (30b,c). A null expletive, linked to *es* in [Spec,C'], fills the subject position.³² Again, partitive Case is the only available Case for the VP-adjoined, VP-internal NP; hence, the DE is manifested as expected.³³

³⁰ This would differentiate WF from both Italian and French in the Stylistic Inversion construction, since these languages allow nominative either to be directly assigned (Italian) or at least to be realized in the VP-adjoined position (French). See the discussion in section 3.1. This difference would ultimately be traced back to the overt vs. nonovert nature of the expletive in the two cases. An overt expletive retains nominative Case.

³² Although being phonetically null, the expletive in subject position would still retain nominative, like *er* in WF. Its link with *es* would make it count as overt for the relevant Case-assignment procedure.

in wr. its mik with as would make it could as over for the relevant case-assignment procedure.

²⁹ I depart here from the account proposed in Hageman (1986).

³¹ If the NP is base-generated in the VP-adjoined position (or in [Spec, V']) (see, most recently, Sportiche (1986), Manzini (1987)), we can maintain the idea that inherent Case is only a D-Structure Case. Moreover, if overt expletives cannot be inserted in the course of the derivation, as discussed in section 2, then there is no other option for the NP than being base-generated in this VP-internal position, in the relevant cases. I am also assuming that V is able to govern a VP-adjoined NP.

³³ No DE is manifested if something different from es is in the first position. This results from the fact that in this case the "subject" actually fills the [NP,IP] position, where it is marked for nominative Case. Examples similar to the German ones are found in Icelandic as well, with "oblique," so-called quirky subjects:

⁽i) Pað hefur einhverjum þott Ólafur leiðinlegur. there has someone(dat) thought Olaf boring 'Someone found Olaf boring.'

Summarizing, the proposed analysis of the DE as a phenomenon involving, in its "core" manifestation, the object position of unaccusative verbs remains unaffected by the facts discussed in this section. On the other hand, these facts indicate further possible instances of the phenomenon, whose interpretation can be traced back to the general rationale already motivated. The only necessary modification consists in also allowing partitive to be assignable to a position that is not the object position but is still, crucially, VP-internal and thematically associated with the verb. If independent reasons make partitive the only available Case for this position (as I argued is the case in the examples discussed), the DE is manifested in the familiar way.

2.4. Exceptions and Consequences

This section discusses further consequences of the hypothesis developed so far.

- 2.4.1. List Reading and Uniqueness Interpretation. The most widely discussed exception to the DE is provided by examples such as (31), from Milsark (1974):
 - (31) Nobody around here is worth talking to . . . well, there is John the salesman.
- (31) constitutes an exception to the DE because a definite NP is found in the object position of the existential be. However, in order for it to be acceptable, a particular reading must be selected, generally referred to as the list reading. (31) is only acceptable if John is understood as one member of a list. The proposal I would like to make is that the list reading results when a definite NP is marked with partitive Case. Probably the best way to argue for the plausibility of this proposal consists in quoting the following paragraph from Milsark (1974, 209), where the author describes his intuition concerning the list reading:

The most striking thing about the meaning of sentences like [31] is the feeling they have of naming parts of a list. The NP (John) seems to be introduced as an item of a larger list of entities, even if one does not go on naming the rest of them.34

If the list reading is the result of having a definite NP marked with partitive Case, we might then expect a similar reading to be available in the French il construction, given an appropriate context. The following example from Rando and Napoli (1978) bears out this expectation:

Qu'est-ce qui reste de la cité? Il reste seulement la Tour Eiffel. 'What remains of the city? There remains only the Eiffel Tower.'

³⁴ I will assume the same interpretation for similar exceptions to the DE as those discussed in Woiset-

schlaeger (1983) and Rando and Napoli (1978).

⁽Example from Zaenen, Maling, and Thráinsson (1985).) It seems (descriptively) correct to claim that quirky subjects are only licensed in positions where Case can also (independently) be assigned. In the spirit of the account just proposed for WF and German, the DE in (i) can be interpreted as resulting from having a quirky subject licensed by partitive Case, in the VP-internal, VP-adjoined position.

A particular instance of the list reading is provided by what might be called the *uniqueness interpretation*, instantiated by sentences like (33),

(33) È stato rubato il portafoglio a Maria.
has been stolen the wallet to Maria

where it is understood that Maria has only one wallet. Assuming that the set of wallets that normally belong to one person includes one single member, then if this member is mentioned, the whole list is completed. Of course, sentences like (33) are excluded if no uniqueness interpretation is available, as instances of the DE. See (17), (18), and (34), which minimally contrasts with (33):

(34) *È stata rubata la pianta a Maria. has been stolen the plant to Maria

There is no general assumption that people normally own one single plant. Instances of the uniqueness interpretation can also be provided with unaccusative nonpassive verbs:

- (35) In questo pollo manca il sale. in this chicken is missing salt
- (35), which contains the unaccusative verb *mancare* 'to miss', is perfectly appropriate in a situation where the only missing ingredient in the chicken is salt. On the other hand, if someone is putting together a puzzle, (36a) but not (36b) will be well-formed:
 - (36) a. Qui manca un pezzo. here is missing one piece
 - b. *Qui manca il pezzo. here is missing the piece

(36b) is again a case of the DE. It minimally contrasts with (37), where the uniqueness interpretation is again available:

(37) Qui manca l' ultimo pezzo. here is missing the last piece³⁵

3. On Partitive Case Marking

Let us now consider how the hypothesis developed in the preceding sections is put into work once theoretical assumptions are better spelled out.

- (i) a. There is the newspaper on the table.
 - b. *?There is the book on the table.

³⁵ Thanks to T. Tappe for pointing out to me similar facts in German. Under the uniqueness interpretation, the DE disappears in the English existential *there* construction as well:

⁽ia) is acceptable under the reading of the NP the newspaper equivalent to 'today's newspaper'. In unmarked contexts today's newspaper is understood as a unique object. No analogous interpretation can be given to the NP the book; hence the DE in (ib).

3.1. Postverbal Subjects and Nominative Case Marking

If partitive Case is inherently assigned by unaccusative verbs to the NP in object position, which is also the only θ -position in the sentence, how can very simple sentences like the following still be possible in Italian?

(38) È arrivato Gianni. arrived Gianni

In section 2.2.1 I proposed that sentences of this kind are possible with a representation where the definite postverbal NP is not found in object position, as commonly assumed, but rather is VP-adjoined. This essentially assimilates the possibility of (38) to the possibility, in Italian, of sentences like (39), where an intransitive nonergative verb is present and the subject has been inverted:

(39) Ha parlato Gianni. spoke Gianni

However, this interpretation of cases like (38) can only work on the further assumption that assignment of partitive Case is optional. Given the exclusive compatibility of partitive Case with indefinite NPs, without this assumption sentences like (38) would not be derived at all because they would be ruled out at D-Structure. The D-Structure representation for (38) given in (40) cannot be generated unless the assignment of partitive Case is optional:

(40) $[VP[V \ e \ arrivato] [NP,T\theta \ Gianni]]$

Clearly, D-Structure forms of this sort must be allowed if we do not want to give up the core of the unaccusative/ergative hypothesis. Therefore, I will adopt the assumption that partitive Case assignment is an optional process.³⁶ There will then be no problem in associating sentences like (38) and similar ones with the (S-Structure) representation given in (41), where the postverbal, definite NP fills the VP-adjoined position:

(41) $NP_i [v_P[v_P \grave{e} \text{ arrivato } [v_P e]_i][v_P Gianni]]$

Let us now consider how the VP-adjoined NP receives its Case. An important corollary of the unaccusative/ergative hypothesis in the standard formulation given in Burzio (1986) is that the thematic object of an ergative verb can be marked with nominative Case in its D-Structure object position. This result is obtained by assuming that a relation is established between the preverbal subject position, filled by an expletive element, and the postverbal object position, a relation that can be assimilated to a chain. Nominative Case is normally assigned to the subject position, and the chain that links

 $^{^{36}}$ This might be a general property of Case assignment. Possibly an inherent Case can be optional only when it is not associated with a particular θ-role in the θ-grid of the verb, as is partitive Case under the analysis developed here. 37 I will indicate the relation expletive-postverbal NP with superscripts, as in Chomsky (1981).

the preverbal subject with the postverbal object makes nominative Case available to the postverbal NP as well, as an instance of Case transmission:

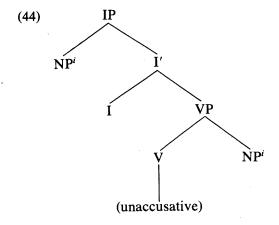
(42)
$$[_{IP}[_{NP} \text{ expl}]^i [_{I'} \text{ I } [_{VP} \text{ V } NP^i]]]$$

This is exactly the same mechanism that is assumed for Case marking of a postverbal inverted subject in sentences containing a nonergative verb, where the postverbal NP fills the VP-adjoined position:

(43)
$$[_{IP}[_{NP} expl]^i [_{I'} I [_{VP}[_{VP} V] NP^i]]]$$
nom

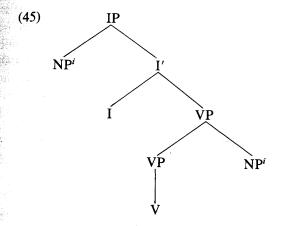
According to this version of the ergative hypothesis, the postverbal NP receives its Case in the same way in both situations, regardless of whether it fills the D-Structure object position, as in ergative structures, or the VP-adjoined position, as in nonergative structures resulting from subject inversion.

In the approach developed here, this cannot be true. The possibility for nominative Case to be accessible, via chain, to the NP in object position illustrated in (42) must be blocked. Otherwise, if nominative Case can be assigned to the object of an unaccusative verb, the whole explanatory capacity of our hypothesis is lost. If partitive is not the only Case option for this position, no DE could be enforced. Thus, if there is no reason to disallow assignment of nominative Case in nonergative structures like (43), there are reasons, internal to the proposed approach, to exclude the same mechanism in ergative structures like (42).³⁸ The conclusion must then be reached that no process of Case transmission in chains should be allowed. Reconsider (42), represented in the tree structure (44):



³⁸ This conclusion is similar to that of Pollock (1983), who also disallows nominative Case assignment via chain in ergative structures.

Here the Case-assigning tensed I does not govern the object NP, because of the presence of the intervening VP barrier.³⁹ Thus, nominative Case cannot be assigned to this position either directly or through Case transmission, which is now excluded in principle. Now consider (43), reproduced in the tree structure (45):



(45) is the output representation of a sentence containing a non-unaccusative verb where the process of subject inversion has taken place (*Ha telefonato Gianni* 'has telephoned Gianni'). In (45), contrary to (44), the Case-assigning I governs not only the preverbal subject position, as is always the case, but also the postverbal NP in the adjoined position. Projections resulting from adjunction such as the higher VP in (45) do not qualify as "barriers" for government of an adjoined category contained in them. ⁴⁰ Thus, nominative Case is accessible to the postverbal adjoined NP.

Summarizing, I will assume that the corollary of the unaccusative/ergative hypothesis that nominative Case can be transmitted via chain to the thematic object of an unaccusative verb in its D-Structure position is not valid. Partitive Case is then the only available Case for this position. On the other hand, the VP-adjoined i-subject in both unaccusative and non-unaccusative structures can be nominative Case-marked.

Chomsky (1986a) proposes that inherent Case marking is a two-part process: Case assignment by a Case-assigning head, and Case realization by the Case-marked NP. The two parts generally coincide in that Case is assigned to an NP that also realizes it in the very same position. However, there exist situations where this coincidence does not hold and where Case is assigned to a certain position and is realized in a different one. This is, for instance, the interpretation proposed by Chomsky (1986a) for processes of inherent genitive Case marking within NP. A crucial constraint regulating processes of

³⁹ The barrier nature of VP derives, in Chomsky's (1986b) system, from the fact that VP is not L-marked. If barrierhood of VP is overridden by V-movement to I, as again proposed in Chomsky (1986b), the impossibility of assigning nominative Case by I in VP can still be straightforwardly derived through the theory of government of another head.

⁴⁰ Only full categories, not segments, can be barriers for government.

inherent Case marking is that both Case assignment and Case realization take place under government by the Case-marking head. This imposes strict limitations on the ability of Case to be realized in a position different from the one where it is also assigned.

Suppose now, as seems natural, that processes of Case marking are always composed of the two parts of Case assignment and Case realization, regardless of whether the Case involved is inherent (e.g. genitive) or structural (e.g. nominative). There is then at least one situation involving structural Case marking where assignment and realization also do not necessarily coincide. This situation is the one provided by subject inversion structures, represented as in (45). We can think that in (45) nominative Case is assigned to the preverbal subject position and is realized on the postverbal inverted subject in the VP-adjoined position; both positions are governed by the Case-marking tensed Infl, as we saw.

If this is how the VP-adjoined inverted subject is marked for nominative Case in Italian, we can simply assume that the same procedure is responsible for the nominative Case marking of the VP-adjoined NP in French Stylistic Inversion structures. There is, however, an important difference between Italian and French for which the theory of Case marking outlined above can give an interesting interpretive clue, if adequately qualified. Let us first consider the facts.

Following the analysis developed in Rizzi (1982), subject extraction always takes place from postverbal position in Italian. Thus, the VP-adjoined position of inverted subjects is a possible extraction site in this language. Sentences like (46) are associated with a representation like (47):

- (46) Quante persone hanno telefonato? how many people have telephoned
- (47) [CP quante persone_j [IP NPⁱ [I' I [VP[VP hanno telefonato] [e]_jⁱ]]]]

Hence, the position of [NP] e of (47) is a possible position for a variable in Italian. The same conclusion cannot be drawn for French. In this language the postverbal VP-adjoined NP cannot undergo wh-extraction. This is illustrated by the impossibility of sentences like (48a,b) (from Pollock (1984; 1986), respectively), which result from wh-extraction in Stylistic Inversion constructions, triggered by subjunctive:

- (48) a. *Combien de linguistes aurais-tu aimé que viennent à ton how many linguists would you have liked that come to your anniversaire?

 birthday
 - b. *Combien de linguistes faudrait-il que viennent à nos how many linguists would it be necessary that come to our réunions?

 meetings

The VP-adjoined position is then not a possible variable position in French. Notice that sentences like (48a,b) minimally contrast with (49a,b) (from Pollock (1986)), which are

derived not from Stylistic Inversion structures but from impersonal il constructions:

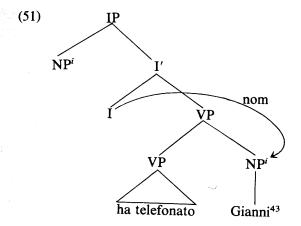
- Combien de linguistes aurais-tu aimé qu'il vienne à ton anniversaire?
 - Combien de linguistes faudrait-il qu'il vienne à nos réunions?

In these sentences the position where the extracted postverbal NP originates is the object position of the ergative verb venir 'come', certainly a possible variable position. In English, too, extraction of the postverbal NP is possible in the existential there construction, where, again, the NP originates in the object position of the ergative be:

(50) How many students were there at the party?⁴¹

Summarizing: wh-extraction from the postverbal VP-adjoined position is possible in Italian but impossible in French (and in English, assuming the discussion in footnote 41). In the first case the VP-adjoined position is a position where a variable is normally admitted; in the second case it is not.

Let us define "possible variable position" as a position where Case is both assigned and realized.⁴² Suppose that we now modify our previous account of nominative Case marking of the VP-adjoined inverted subject in Italian by claiming that this NP is directly Case-marked by the governing I in the VP-adjoined position:



⁴¹ The unacceptability of sentences like (ia,b) (from Safir (1982) and Pollock (1983), respectively)

⁽i) a. *How many men did there walk into the room? b. *How many students did there step into his office?

can be seen as analogous to that of the French examples in (48), if they are assumed to involve application

of HNPS prior to Wh Movement, which would adjoin the NP to VP. That these structures regularly undergo HNPS is suggested by the fact that the order of constituents in (iia) is more natural than that in (iib):

⁽ii) a. There walked into the room a man.

b. There walked a man into the room.

HNPS here would involve an NP that is not heavy, in an intuitive sense. This is reminiscent of the observation in Stowell (1981), drawing from Rochemont (1978), according to which HNPS can freely affect indefinite NPs,

This means that the VP-adjoined NP is assigned Case in the same position where Case is realized. This in turn means that the VP-adjoined position is a possible variable position, by definition.⁴⁴

Next consider French. I would like to propose that in this language nominative Case is assigned to the preverbal subject position (filled by a null expletive element) and realized on the VP-adjoined postverbal NP. In other words, this proposal assumes that I can assign nominative both to the left and to the right in Italian, but only to the left in French. This entails that the VP-adjoined position is not a possible variable position in the latter language. Both the differences and the similarities between the two languages are thus derived with a parametrized version of the mechanism of nominative Case marking of the VP-adjoined NP.

3.2. Partitive Case and Infinitival Sentences

A potential problem arises in the system developed so far. It seems to predict that if an infinitival sentence contains an unaccusative verb, an indefinite lexical "subject" is admitted in this sentence. To this NP partitive Case could be assigned, and consequently nothing should go wrong with respect to the Case Filter in the resulting structures. Clearly this prediction is incorrect. I will now show that this prediction is only apparent and that all the relevant cases that seem to be admitted are in fact excluded on independent grounds.

independently of any "physical" heaviness associated with them (but provided that they function as focus of new information (M. Rochemont, personal communication)):

⁽iii) a. Kevin gave to his mother a book.

b. Brian brought back to America a priceless book.

⁽Examples from Stowell (1981).) If, as I claim, partitive Case can always be assigned to indefinites, these sentences could involve application of HNPS to an NP that is inherently marked with partitive Case (in D-Structure object position). Hence, it does not need to be in a position of structural Case assignment and freely moves to the VP-adjoined position. This might also explain the apparent violation of the adjacency requirement on Case assignment manifested by these examples. If verbs like walk, step in their use involving a directional PP complement can be analyzed as unaccusatives, application of HNPS in cases like (ii) could receive the same interpretation. The residue that is left unexplained is why, in (ii), HNPS should be not only possible but also obligatory, as suggested by the impossibility of (i).

⁴² This distinction can ultimately coincide with the distinction A-position vs. A-position.

⁴³ I am still assuming the existence of the relation with the expletive in subject position, which, I suppose, guarantees the correct verbal agreement and the "transmission" of the subject θ-role to the adjoined NP. I assume the existence of an analogous relation between the expletive subject and the object NP in unaccusative structures (see (44)). In this case the relation only guarantees the verbal agreement, if it is displayed. This is the case in Italian and in the English *there* construction. Lack of agreement in the French *il* construction can indicate either lack of the relation (Pollock (1983)) or existence of the relation but verbal agreement with the feature carrying expletive *il*. If Chomsky's (1986a) hypothesis of LF expletive substitution (see footnote 48) is correct, a chain relation should always be assumed as the formal device that licenses substitution.

⁴⁴ See also Safir (1982), Manzini (1983), and Koopman and Sportiche (1985), where it is also assumed that it is the VP-adjoined position to which the subject θ-role can be directly assigned in null-subject languages. See Sportiche (1986) for a generalization of this idea, and Manzini (1987). The possibility that nominative Case can be directly assigned to the VP-adjoined position must be related to the null-subject property of Italian. I will not elaborate on this idea here. I will assume that the null expletive pro is licensed in these configurations by the fact that the preverbal subject position is a (possible) Case position in tensed clauses, in conjunction with the general null-subject property of Italian.

Consider first impossible sentences like (52a,b), with the associated representations (53a,b):

- (52) a. *Sembra essere arrivati tre ragazzi.

 (it) seems to have arrived three boys
 - b. *Voglio essere arrivati tre ragazzi
 I want to have arrived three boys

(53) a. [NP] pro] sembra [IP[NP] pro]ⁱ essere arrivati [NP] tre ragazzi]ⁱ] part

b. voglio [CP[NP] pro]ⁱ essere arrivati [NP] tre ragazzi]ⁱ]

Even if partitive Case is assigned to the ergative object, these sentences are excluded because, as is clear from (53), an expletive pro is present in the subject position of the infinitival clause, which is not a position where the null element is normally licensed. It seems legitimate to claim that licensing of pro requires, among other things, that it be found in a position that is governed and to which Case can be assigned (see Chomsky (1981), Rizzi (1986)). Neither condition is met in (53b), and the latter condition is not met in (53a). Thus, the unlicensed status of pro is the source of the ungrammaticality of the two sentences in (52). 45

No problem of licensing of pro is posed by sentences like (54a-c), which are still totally ungrammatical:

- (54) a. *Sembra tre ragazzi essere arrivati.

 (it) seems three boys to have arrived
 - b. *Sembrano tre ragazzi essere arrivati. (there) seem three boys to have arrived
 - c. *Voglio tre ragazzi essere arrivati.

 I want three boys to have arrived

To (54a-c) can be associated the following representations:

part

(55) a. [NP] pro] sembra [IP] tre ragazzi]_i essere arrivati [e]_i]

part

b. [NP] pro]^j sembrano [IP] tre ragazzi]^j_i essere arrivati [e]_i]

(i) voglio [CP PRO essere arrivati tre ragazzi]

If PRO is an argument PRO in (i), the sentence violates the θ -Criterion. If PRO is an expletive PRO, the sentence is excluded by the frequently observed lack of anything equivalent to an expletive PRO (*Penso di PRO essere chiaro che questo è uno sbaglio 'I think to be clear that this is a mistake').

⁴⁵ See also Pollock (1983). (52b) could also be associated with a representation like (i):

part

c. voglio [CP[NP tre ragazzi]i essere arrivati [NP e]i]

In (54) the object of the unaccusative verb *arrivare* has moved into the subject position after partitive Case has been assigned to it. Thus, these examples do not seem to pose any particular problem with respect to the Case Filter, as they also do not with respect to the theory of licensing of pro. What, then, rules them out? I propose that the following constraint on movement is responsible:

(56) An A-chain always terminates in a Case position.

If (56) is assumed, the sentences in (54) are directly excluded because they all involve movement to a non-Case position, as is clear from (55). 46 (56) directly derives from the way an A-chain is defined in Chomsky (1986a), according to which the "head" of a chain is always a Case position. In Chomsky's theory this property derives from the Visibility Condition. In the examples in (54) the Visibility Condition would be satisfied at D-Structure, where partitive Case is assigned to the NP, which subsequently moves into subject position. Yet the derivations are ruled out by (56). 47

Thus, the unwanted conclusion that the proposed approach seems to allow for a partitive subject in an infinitival sentence containing an unaccusative verb turns out to be only apparent, and this case can be ruled out on independent grounds. In fact, the analysis predicts that the only well-formed output is given by sentences like (57a), a correct conclusion:

(57) a. Sembrano essere arrivati tre ragazzi. (there) seem to have arrived three boys

part

b. $[NP]_i$ sembrano $[IP]_{NP}$ e]_i essere arrivati $[NP]_i$ tre ragazzi]ⁱ

As made explicit by the representation (57b), a relation is established between the expletive pro subject of the matrix clause and the object of the ergative verb in the infinitival clause. This directly accounts for the verbal agreement on the matrix verb sembrare. In the subject position of the infinitival clause the trace of the raised expletive is found. Thus, this type of sentence does not pose problems, either with respect to licensing of the null element pro or with respect to Case theory.

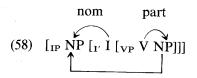
Given the discussion of this section, the proposed system permits derivations of the

⁴⁷ Then, a chain can have two Case positions, both in the head and in the coda. I assume that this possibility gives a well-formed output only if the coda is a position of inherent Case. Notice that in this view the Case Filter is not totally subsumed under the θ-Criterion, through the Visibility Condition (Chomsky (1981), Aoun (1981)).

(1984)).

⁴⁶ The content of (56) is very close to Levin's (1983) Case Visibility Condition. A similar condition is also proposed in Kayne (1985). The prohibition against nominative Case transmission, via chain, within VP eliminates the possibility of marking the subject of the infinitival clause with nominative Case in (55b). For a detailed discussion of this point, see section 3.3. By Case position in (56) I mean a position where Case can be assigned and/or realized (as in the city'is destruction $[e_i]$). (56) should be qualified to allow PRO to head chains.

following form:



An NP marked with partitive Case at D-Structure can subsequently move into (or be linked with) the subject position where nominative Case is assigned. Suppose that we view this as the manifestation of a general ability of inherent Case to "combine" with structural Case. 48 Is this conclusion plausible and empirically justified? In the next sections we will see that it seems to be plausible and justified on the basis of the observation of a paradigm of Finnish, where partitive Case has a morphological realization. We will also briefly consider a phenomenon independent of those dealt with so far that points to the same conclusion: the phenomenon of quirky Case.

3.2.1. Quirky Subjects. Quirky Case is a phenomenon found in Icelandic, as well as in other languages. 49 It is defined by the appearance of oblique NPs in subject position, the position where nominative Case is normally assigned. The following examples from Levin (1981) and Andrews (1982) illustrate this aspect of the phenomenon (D stands for dative; A stands for inherent accusative):

(59) a. Mér(D) kólnar. is getting cold

> Peim(D) batnar/versnar. gets better/worse

c. Snjóa(A) leysir á fjallinu. snow melts on the mountain

Quirky subjects can also appear in infinitival clauses that are complements of Exceptional Case Marking verbs of the believe type, as illustrated by (60):

(60) Hann telur stúlkunni(D) hafa svelgtz á súpunni. believes the girl to have misswallowed on the soup

One interpretation of the facts can be the following: the Case on the subject of (59a-c) and (60) is inherently selected by the verb; however, it also combines with a structural Case. 50 In (59) it combines with the structural nominative assigned by the tensed Infl to

⁴⁸ Chomsky (1986a) suggests that expletives are eliminated at LF; the NP they are coindexed with substitutes for them. If this hypothesis and the approach taken here are both correct, the possibility shown by (58) would be widespread at LF.

⁴⁹ See Belletti and Rizzi (1986) for a discussion of possible instances of quirky subjects in Italian.

⁵⁰ There are sentences containing quirky subjects where nominative Case also shows up on another NP in the sentence. This is, for instance, what happens in Italian in the cases mentioned in footnote 49. This might suggest that the combination inherent + structural Case (or, more generally, inherent + another Case; see footnote 33) is not a necessary condition for quirky Case and should just be considered a possible option. Alternatively, some special device might be at work to make nominative Case available to another NP in the sentence besides the quirky subject. See Den Besten (1982). This would make the combination inherent + structural Case closer to a necessary condition.

the subject position; in (60) it combines with the structural accusative, assigned by the believe-verb to the subject of the embedded infinitival. Although this is certainly not all that needs to be said about quirky Case (see the references cited for an adequate discussion of the phenomenon), it might constitute a first approximation to an understanding of one of its crucial properties. If this is true, then quirky Case manifests the possibility of combining inherent and structural Case.

3.2.2. Partitive Subjects. Quirky subjects and partitive subjects are conceptually assimilated within the system developed here. Can the combination inherent + structural Case be "overtly" manifested with partitive subjects as well, as it is with quirky subjects?

If we limit our empirical investigation to a language like Italian, the required evidence is impossible to construct, there being no "overt" morphological realization of partitive Case in that language. But if we go back, once again, to a language like Finnish, the "overt" indication becomes available. Partitive subjects are normally excluded in Finnish in sentences whose verb is not an unaccusative:

(61) *Miehiä on tavannut Pekan kadulla.

men_{part,pl} aux_{3sg} met Pekka_{gen} in the street

'Some men met Peter in the street.' (Renault (1984, 37))

This is easily accounted for if partitive Case is viewed as a Case (inherently) assigned by verbs: the subject position cannot qualify for the assignment of partitive Case. Only nominative Case can be assigned to the subject position, in tensed clauses. However, a partitive subject is possible in sentences containing an unaccusative verb:

(62) Vieraita tulee. guests_{part,pl} come_{3sg} (Renault (1984, 39))

Sentences like (62) can be interpreted as the overt manifestation of the ability of inherent partitive Case to combine with structural nominative Case at S-Structure. A natural analysis of (62) is one where the partitive preverbal NP in subject position has moved there from the postverbal position where it is generated at D-Structure and where it is marked with partitive Case. (62) can then be associated with an S-Structure representation like (63):

(63) $[IP[NP_i \text{ vieraita}]_{part/nom} [I' \text{ } I \text{ } [VP \text{ tulee} \text{ } [NP \text{ } e_i]_{part}]]]^{51}$

Notice that both in the Finnish example (62) and in the Icelandic instances of quirky Case in (59) the inherently Case-marked subject does not trigger any verbal agreement

⁵¹ Given the theory of Case realization adopted in section 3.1, one might wonder how movement of the inherently Case-marked NP outside the VP (that is, outside the domain of its Case marker (V)) does not violate the government requirement on Case realization. One might propose, following in its essentials the suggestion of an LI reviewer, that if nominative is also assigned to the moved NP (as in quirky Case constructions), the government requirement on Case realization is fulfilled by the governing Case-marking Infl. The split here between "Case-assigning governor" (V) and "Case-realizing governor" (Infl) could be exactly the peculiarity of the quirky Case phenomenon, as discussed in the text. The same analysis would extend to German examples like (11e) where the dative appears to be in subject position.

on the verb, which carries the unmarked features of third person singular. It seems that only "purely" nominative subjects are able to trigger agreement. 52 Whatever the exact formulation of this idea should eventually be, once again quirky subjects and partitive subjects behave exactly alike.

3.3. Partitive Case as Inherent Case

The theory developed in this article is capable of making an interesting class of predictions, the general schema of which is as follows. Consider a configuration like (64),

(64) $NP_1 V [_{\alpha} NP_2 XP]$

where V is a potential assigner of partitive Case, XP is some maximal projection that is a potential assigner of an external θ -role to NP₂, and α is an infinitival IP clause or a small clause of the category X^n , in Stowell's (1981) sense. The theory predicts that NP₂ will not be able to be marked with partitive Case, because of the inherent nature of this Case, which is always assigned in conjunction with θ -role assignment. It follows that it will never be possible for this Case to be assigned to NPs that are not θ -marked by the Case-marking verb. This prediction is borne out in a number of instances.

Let us first consider the most interesting one. Suppose that V in (64) is the raising verb sembrare 'seem'. As shown by the choice of essere 'to be' as the aspectual auxiliary (as opposed to avere 'to have') in Italian, sembrare is a verb belonging to the ergative class:

- (65) a. Gianni_i è/*ha sembrato [$_{SC}$ e_i intelligente]. Gianni is/has seemed intelligent
 - b. Gianni, è/*ha sembrato [$_{1P}$ e, capire la situazione]. Gianni is/has seemed to understand the situation

Suppose that raising verbs do in fact belong to the ergative class in general, across languages. Thus, according to our general hypothesis, raising verbs should qualify as potential assigners of partitive Case. Assuming the inherent, θ -related nature of partitive Case, we then predict that the subject of the clausal (or small clause) complement of a raising verb will not be able to be marked with partitive Case. Sentences such as (66a,b) should be unacceptable, as they indeed are:

- (66) a. *Sembra/*Sembrano [IP molte persone aver parlato con Gianni]. (it) seems/(there) seem many people to have talked to Gianni
 - b. *Sembra/*Sembrano [sc molti studenti intelligenti].
 (it) seems/(there) seem many students intelligent

⁵² See Levin (1981). The situation is more complicated. In fact, there are cases where the verb agrees with an accusative object. See for instance the absolute participial construction of Italian, studied in Belletti (1981). One could then speculate that nominative and accusative NPs have some special status with respect to the possibility of triggering agreement. Possibly, only nominative and accusative NPs are really NPs, whereas inherently Case-marked NPs are not. They might always be PPs (where P can be "abstract" in some cases). If verbal agreement requires mutual c-command/government between NP and Infl/V, then lack of agreement with an NP embedded in a PP is expected.

(66a,b) are totally impossible, both when the raising verb does not agree with the embedded subject and when it does agree, thus indicating that agreement does not influence the acceptability of such sentences. The interpretation of partitive Case as inherent suggests a direct explanation for these facts: assignment of partitive Case by the verb sembrare cannot take place because inherent partitive cannot be assigned to NPs that are not θ -marked by the Case-marking verb. Consequently, the sentences in (66) all involve a violation of the Case Filter.

Previous theories have not given a satisfactory account of the unacceptability of sentences like (66a,b) (in particular in the version with agreement). These approaches generally make the assumption discussed in section 3.1: in (tensed) sentences with a postverbal subject NP, nominative Case is assigned to this NP, which is in relation with the preverbal (nominative) expletive in subject position; no essential difference in the mechanism of Case transmission is recognized in cases where the NP fills the object position of an unaccusative verb or is VP-adjoined.⁵³ But once a mechanism of this kind is allowed for simple sentences, it remains mysterious why, unless special stipulations are made, it should not also be allowed in complex examples like the raising ones, thus generating the ill-formed (66a,b) (with agreement). Given that the present account does not admit that nominative Case is transmitted VP-internally, as discussed in section 3.1, under this approach (66a,b) are directly ruled out; partitive Case does not become available because of its inherent nature, as just discussed.⁵⁴

As mentioned above, the kind of prediction made with respect to impossible cases like (66) is but one instance of a wider class. Another manifestation of it is provided by instances of (64), where α is a small clause complement of a verb of the *considerare* 'consider' type. Take familiar examples such as those in (67):

- (67) a. Ho sempre considerato [SC Gianni intelligente]. I have always considered Gianni intelligent
 - b. L'_i ho sempre considerato [$_{SC}$ e_i intelligente]. him_{cl} I have always considered intelligent 'I always considered him intelligent.'

The small clause analysis proposed in Stowell (1981) and Chomsky (1981) assumes that the complement of verbs like *considerare* is of a semiclausal nature, where the AP headed by the adjective *intelligente* in (67) assigns an external θ -role to the NP Gianni. In this theory it is further assumed that the subject of the small clause is assigned Case directly by the matrix verb as an instance of Exceptional Case Marking (ECM).

⁵³ See Burzio (1986), Rizzi (1982), Chomsky (1981; 1982), for instance.

Here the NP is normally marked with nominative Case in subject position.

⁵⁴ As expected, if the indefinite subject is raised into the matrix subject position, the sentences in (66) become perfectly acceptable (modulo agreement), as shown in (i):

⁽i) a. Molte persone sembrano aver parlato con Gianni. many people seem to have talked to Gianni

b. Molti studenti sembrano intelligenti. many students seem intelligent

Let us assume this analysis. As (67b) shows, the subject of the small clause can cliticize onto the matrix verb in Italian. The clitic here is the accusative form of the pronominal clitic paradigm, the same form found with direct object clitics (as in Lo/la/li/le conosco 'I him/her/them_{cl} know'). Consider now the following additional fact. In Italian a bare (plural) NP manifests partitive Case.⁵⁵ This is explicitly suggested by the fact that if the bare NP is to be realized as a clitic, it appears as the partitive clitic ne and not as an accusative clitic. This is shown by the following examples:

- (68) a. Oggi non ho scritto lettere. today not I have written letters 'Today I didn't write letters.'
 - b. Lettere, oggi non *ne* ho scritte. letters today not of-them_{cl} I have written 'Letters, I didn't write any of them today.'
 - c. *Lettere, oggi non le ho scritte. letters today not them_{cl} I have written ('Letters, I didn't write them today.')

(68b) is an example of what Cinque (1982) calls a clitic left-dislocated (CLLD) structure, that is, a structure where a clitic matching a dislocated phrase in all relevant features is present in the sentence following it. As (68b) shows, when the dislocated phrase is a bare NP, the matching clitic in the following sentence is the partitive clitic ne. The ungrammaticality of (68c) in turn shows that ne is the only matching clitic: use of the accusative clitic gives rise to ungrammaticality.

Interestingly, a bare NP cannot be the subject of the small clause complement of a considerare-type verb:

- (69) a. *Consideravo [SC studenti intelligenti]. considered students intelligent
 - b. *Ritenevo [SC bambini divertenti]. considered children amusing⁵⁶

- (i) a. *Sembra/*Sembrano studenti aver discusso il problema. (it) seems/(there) seem students to have discussed the problem
 - b. *Sembra/*Sembrano studenti intelligenti.
 - (it) seems/(there) seem students intelligent

It should be noted that, as pointed out to me by L. Burzio, bare NPs are possible as i-subjects of ergative verbs, but not as i-subjects of nonergative verbs:

- (ii) a. Alla manifestazione interverranno estremisti. to the demonstration will participate extremists
 - b. *Alla manifestazione parleranno estremisti. to the demonstration will speak extremists

This contrast follows directly within the approach developed here.

⁵⁵ The same holds in Spanish, possibly more productively than in Italian. See Torrego (1984), Lois (1986).
Fredictably, sentences like (ia,b), analogous to those of paradigm (66), are completely impossible as well:

Examples like (69a,b) contrast with cases like (67a). As we would expect, the subject of the small clause cannot be expressed by the partitive clitic *ne*, either:

- (70) a. *Studenti, ne consideravo [— intelligenti]. students of-them I considered intelligent
 - b. *Bambini, ne ritenevo [— divertenti]. children of-them I considered amusing

(70a,b) are completely impossible and contrast with examples like (67b). Both (69a,b) and (70a,b) contrast with the well-formed (71a-d), where a definite NP is the subject of the small clause (71a,b) and the accusative form of the pronominal clitic is taken (71c,d):

- (71) a. Consideravo [gli studenti intelligenti]. considered the students intelligent
 - b. Ritenevo [i bambini divertenti]. considered the children amusing
 - c. Li consideravo [— intelligenti]. them considered intelligent
 - d. Li ritenevo [— divertenti]. them considered amusing

The contrast between (69) and (70), on the one hand, and (71), on the other, is exactly as expected. In order for (69), (70) to be derived, the verb *considerare* should be able to mark the subject of the embedded small clause with partitive Case. Given the inherent nature of partitive Case, this assignment is impossible because the subject of the small clause is θ -marked not by the verb *considerare* but by the adjective phrase.⁵⁷

Consider furthermore the following paradigms:

(72) *Sono considerati [alcuni studenti intelligenti]. are considered some students intelligent

⁵⁷ English examples that correspond word for word with (69) are well-formed, as the glosses and the following example make clear:

(i) I consider [students intelligent].

The reason is that bare NPs in English do not necessarily have the partitive reading; they can also express generics. Thus, we can naturally assume that (generic) *students* in (i) is marked not with partitive Case but rather with structural accusative; hence the acceptability of the sentence.

If the verb is passivized in examples like (69), raising of the bare NP does not save the structure (contrary

to (66)):

(ii) *?Studenti sono considerati intelligenti. students are considered intelligent

This is not a peculiarity of these structures, however. In general, bare NPs are excluded from subject position in Italian:

(iii) *?Studenti verranno a lezione. students will come to the lecture

As discussed in Torrego (1984) (for Spanish), bare NPs must always appear adjacent to the verb. They act like "incorporated nouns," in Baker's (1985) sense. This excludes the subject position as a possible position for bare nouns and also gives a principled description of the different status of (iii) and examples like (62), under the assumption that no incorporation takes place in those cases.

(73) Alcuni studenti sono considerati [— intelligenti]. some students are considered intelligent

In (73) the NP alcuni studenti receives nominative Case; but there is no Case for it in (72).

The impossibility of (69a,b) also contrasts with the well-formedness of examples like the following, where the subject of the small clause is an indefinite NP:

- (74) a. Consideravo [alcuni studenti intelligenti]. considered some students intelligent
 - b. Ritenevo [alcuni bambini divertenti]. considered some children amusing

The well-formedness of these examples is expected. In fact, under the proposed account an indefinite NP with a Q Specifier *can* but *need not* be marked with partitive Case; only a bare plural NP must. Hence, in (74) the indefinite subject of the small clause is marked with structural accusative, much as in examples like (71a,b), where the subject is a definite NP. From this, the well-formedness of examples of this kind immediately results.⁵⁸

4. Conclusion

In this article I have investigated the consequences of the proposal that verbs of the unaccusative/ergative class inherently assign partitive Case. I suggested that unaccusatives share this property with transitive verbs, where assignment of accusative Case can be seen to alternate with assignment of partitive Case, the option depending on the nature (definite or indefinite) of the object NP involved.

The idea that unaccusatives are inherent Case assigners provides a straightforward reason why the Definiteness Effect should exist in many—and, I suggested, in (presumably) all—languages. The realization of this phenomenon depends on the different properties of the languages involved, but, interestingly, its core manifestation is always with unaccusative verbs.

The very idea that partitive Case is an inherent Case in turn has provided a direct explanation for some apparently idiosyncratic aspects of its distribution. I essentially proposed that partitive Case can never be assigned under Exceptional Case Marking

Here partitive ne is selected by the indefinite quantifier, as can be seen in French in NPs quantified by quantifiers like beaucoup (beaucoup de livres) and in similar NPs in Russian (Pesetsky (1982)). In (i) ne is extracted from the accusative Case-marked subject of the small clause.

⁵⁸ The well-formedness of (i) is also not surprising:

 ⁽i) a. Ne consideravo [[alcuni —] intelligenti].
 of-them I considered some intelligent
 'I considered some of them intelligent.'

b. Ne ritenevo [[alcuni —] divertenti].
 of-them I considered some amusing
 'I considered some of them amusing.'

because it is an inherent Case. From this, the absence of partitive subjects of clausal or small clausal complements follows directly.

In developing the proposal, it was necessary to readjust a number of current assumptions concerning, in particular, issues such as the possibility/impossibility of nominative Case transmission to postverbal subjects, reasons for the absence of lexical subjects in infinitivals, and constraints on the possibility (or impossibility) of having more than one Case per chain.

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