ITALIAN SYNTAX
A Government-Binding Approach

D. REIDEL PUBLISHING COMPANY
A MEMBER OF THE KLUWER ACADEMIC PUBLISHERS GROUP
DORDRECHT / BOSTON / LANCaster / TOKYO
THE SYNTAX OF INVERSION

2.0 INTRODUCTION

In this chapter, we will attempt to provide a characterization of inversion, namely of the set of constructions with i-subjects, comparing Italian with some other languages. Our first step will be to assume, following a well established line of research, that inversion in Italian is closely related to another property of this language: the pro-drop, or null-subject (henceforth NS) property. Namely, we assume that the existence of the type in (1a), is strictly related to the existence of (1b).

(1) a. Ha parlato Giovanni.
   has spoken Giovanni

    b. Ha parlato.
       (he) has spoken

This assumption is supported by typological evidence: most Romance languages are like Italian in having both (1a) and (1b), while French, English and other languages lack both. Furthermore, it is supported by the following considerations: since Italian allows 'null' subject pronouns as in (1b) in general, it is natural to expect that it also allows 'null' non-argument subjects corresponding to French il and English there, an assumption under which we can regard Italian as analogous to English and French, in the manner illustrated by (2), where a is a null NP.

(2) a. There have arrived three girls.

    b. Il est arrivé trois filles.
       it (is) arrived three girls

    c. a sono arrivate tre ragazze.
       (they) are (have) arrived three girls

If the parallelism between Italian and English-French of (2) is real, then the existence of (1a) does depend on the NS property of Italian, the property that makes (1b) possible. We will assume that all cases in (2) are indeed to receive parallel analyses. We put aside for the moment the well known differences between the three languages in question: the difference in productivity, the constructions with il and there each being possible only with a restricted class of verbs, while Italian inversion is possible with any verb; the difference with respect to verb agreement, the
verb agreeing apparently with the i-subject in both the English and the Italian examples in (2), though not in the French example; and the difference with respect to the so-called "definiteness restriction", which appears to hold in English and French, as in "There has arrived John, I have arrived Jean", though not in Italian, as in (1a).

Once we have made the assumption that inversion is related to null subjects, the next logical step will be to provide a characterization of the NS property. This we will do in 2.1, returning in 2.2 to inversion and the relation between the non-argument subject and the i-subject. In 2.3 we will point to an analogy — in Italian — between the latter relation and the one holding between a subject and an emphatic pronoun. Some not well understood limitations on inversion will be addressed in 2.4. In the last two sections (2.6, 2.7) we will discuss inversion in French and in English, preceding this (2.5) by a discussion of inversion in the Piedmontese dialect, which appears to have a dual inversion strategy, combining the strategy of Italian with one closely resembling that of French.

2.1 NULL SUBJECTS AND CLITICIZATION

The characterization of the NS property which we will adopt is the one provided in Rizzi (1982b, IV). With Rizzi, we will follow Taraldsen (1978) in assuming that null subjects are analogous to cliticized objects, and specifically that the inflectional morpheme of the verb can function as a subject clitic. We thus assume a parallelism between the two cases in (3).

(3) a. Giovanni la vede [e]
   Giovanni sees her.

b. [e] vede [e] Maria
   He sees Maria.

This view aims to capture on the one hand analogies in distribution between null subjects and cliticization, and on the other the correlation between the NS property and richness of inflection (Italian contrasting with French in having a richer inflectional system).

As we saw in 10.3, within the GB framework it is supposed that the inflectional element of tensed verbs generally assigns nominative Case to a subject under government. The inflectional element (INFEL) will govern the subject position, since at syntactic levels of representation it is taken to occur as in (4), moving onto the verb after S-structure, in the phonology.

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While INFEL thus governs the subject position for purposes of Case assignment, it is also supposed that, in English, the relation of INFEL to the subject does not satisfy the more restrictive notion PROPER GOVERNMENT required by the ECP. This accounts for well-known subject-object asymmetries like (5) (6).

(5) a. The girl that, you know [that John likes t],
   "The girl that, you know [that t likes John]."

b. "The man that, you know [what t bought t]."
   "The man that, you know [what t bought]."

The cases in (5) illustrate the so-called "that-trace" phenomenon, and the cases in (6) a phenomenon that seems closely related. Together, (5) and (6) point to the general impossibility of Wh-extracting the subject over a filled complementizer. We will refer to this (following Rizzi) as "COMP-trace" effect (or phenomenon). Within the GB framework, such phenomena fall under the ECP. Thus (5b) and (6b) are ruled out because the subject position is not properly governed, while the object position in (5a), (6a) is (by the verb!) We will abstract away from the fact, irrelevant here, that both (6a), b denial Wh-island (subcategorization) violations. Wh-extraction of the subject will be possible (in English) when the COMP position is not filled, such as when that is deleted in (5b), since this will allow the intermediate trace in COMP (not shown in (5b)) to properly govern the subject position, satisfying the ECP (cf. Note 4). Analogously, who will properly govern in (6a).

It has been known, since it was noted in Perlmutter (1971), that NS languages do not manifest the COMP-trace effect, so that Italian sentences apparently identical to (5b), (6b) are grammatical (Italian also does not observe Wh-island conditions. Cf. Rizzi (1978b)). While only partly related to the rest of our discussion, this third difference between NS and non-NS languages (beside null subjects and free inversion) plays a major role in Rizzi's theory, which we are adopting, and in much of the literature on the subject. It therefore seems appropriate to address it briefly.

As Rizzi points out, the apparent immunity of NS languages to the COMP-trace effect could follow directly from the assumption that in those languages INFEL not only governs, but properly governs the subject.
position, an assumption which seems required in any case by the well-formedness of (3b), given the ECP. Under this view, cases analogous to (5b) would be well-formed, the ECP being satisfied just as in (3b). However, Rizzi has shown — conclusively, I think — that the immunity of Italian to the COMP-trace effect is only apparent, and that in Italian examples superficially identical to (5b), (6b) it is not the subject which is Wh-extracted, but rather (in our terms) the I-subject. Wh-extraction thus leaves a trace in post verbal position, where it is properly governed by the verb, on a par with traces of objects. From this point of view the third difference between NS and non-NS languages is a direct reflex of the first, i.e. null subjects, as one might have thought, but rather of the second, i.e. free inversion. The Italian equivalent of *Who do you think that came is thus grammatical only because Italian has *Came John. This represents an important reinterpretation of the cluster of properties of NS languages, previous attempts having invariably related both free inversion and lack of COMP-trace effect directly to null subjects.

Under Rizzi’s reinterpretation, the impossibility of Wh-extracting the subject over a filled complementizer holds quite generally, for NS and non-NS languages. But languages will differ in the strategies they use to overcome this prohibition. In languages like Italian, which have a fully productive inversion strategy, inversion will suffice, while other languages will need additional devices. (Notice that inversion in English also bypasses the prohibition in question. Compare *How many people do you think that were in the room and How many people do you think that there were in the room). Thus English has deletion of that in cases like (5b), and French has a rule changing que to qui in similar configurations. (For discussion and further references see Chomsky and Lasnik (1977), Pesetsky (1979), Kayne (1980a)).

Granting that only I-subjects (not subjects) can be extracted over a complementizer in Italian, the question at this point — as Rizzi points out — is how to allow an ec in subject position in cases of null subjects, as in (7a), while disallowing it in cases of extraction, as in (7b).

(7) a. [e] parla
He speaks.

b. *Chi credi [che [e] parla]
Who do you think that speaks?

Government versus proper government by INFL will not distinguish the two cases in (7). What will distinguish them, in our initial assumption that in cases like (7a) INFL has a pronominal character, like a clitic; (7b) will then be ruled out on a par with (8).

It is reasonable, even at a pre-theoretical level, to assume that an object cannot be interpreted in conjunction with both a clitic and a Wh-phrase (aside perhaps for some cases of clitic doubling, cf. Note 10). Specifically, we will assume that an ec related to a clitic is an anaphor (falling under principle A of the Binding Theory, see II:A.3 below), while an ec related to a Wh-phrase must be a variable. Example (8) is thus excluded, and so is (7b).

We therefore assume that INFL in NS languages has the option of being either just like INFL in English (non-pronominal and not a proper governor), or just like a clitic, namely pronominal. In this latter case (and only in this case) it will be a proper governor. The first possibility will account for the cases in which the subject is not null. The second possibility will be responsible for the NS phenomena, i.e. for null subjects, whence free inversion, whence the apparent lack of COMP-trace effect. Availability of the second possibility represents the NS (or pro-drop) parameter.

A characterization of the NS parameter partly similar to Rizzi’s, which shares Rizzi’s reinterpretation of the distribution of COMP-trace phenomena, has been given by Chomsky in LGB, following in part Jaeggli (1980). Chomsky also assumes that the empty position of NS sentences is related to the inflectional element of the verb, but he assumes that such a position is not an instance of [e], as in Rizzi’s theory, but an instance of PRO, the element that enters into Control. Under Chomsky’s formulation, the plus value of the NS parameter consists of the possibility for INFL (in (4)) not to govern the subject position at all, an idea which is implemented by assuming that in NS languages INFL can either move to the verb in the phonology, as in English, or in the syntax, thus leaving the subject position un governed at S-structure. Under the second option, the element PRO will be allowed in subject position, and in fact required, since [e] will be ruled out by the ECP, and lexical NPs and variables will fail to receive Case.

The parallelism between NS and cleticization is preserved in Chomsky’s discussion, which assumes, following Jaeggli (1980), that null objects related to cleticis are also instances of PRO. Within our account however, there will be no motivation for assuming PRO in the case of cleticis, an assumption that leads to the undesirable conclusion that cleticis must ‘absorb’ government by the verb (in addition to Case). Rather, we argue that null objects related to cleticis are quite analogous to traces (though they do not arise from movement), transmitting a Θ-rule to their antecedents. Since we assume the analogy between NS
and citationization and since we assume [r] not PRO for the case of
citationization, it follows that we must adopt Rizzi’s, not Chomsky’s
formulation.15

We note that within a framework in which null elements are intrin-
sically defined there would be a certain argument in favor of the PRO
hypothesis. Consider cases combining NS and NP-movement, like (9).

(9) \[
\text{[r]} \text{ sono stato invitato [r]}
\]
(I) have been invited.

Within the framework in question, the \(\theta\)-criterion would force us to
assume that the D-structure direct object in (9) is not [r] but PRO, since
this is the only null element that can receive a \(\theta\)-role, and therefore that
the S-structure subject is PRO. However, the argument disappears in the
framework of LGB, Chapter 6, which we are adopting. In this framework
[r] and PRO do not differ in content, but only in the contexts where they
can occur at S-structure (governed versus ungoverned ones). The D-
structure object in (9) would now be PRO, if by PRO we identify the
null element that has an independent \(\theta\)-role, but could become [r] linked
with inflection once it is moved into subject position, since the two are
not distinct in content.

While we thus assume that INFL is analogous to clitics (an assumption
supported also by the fact that in certain Italian dialects there are real
subject clitics functioning as inflection; cf. 2.5 below), comparison be-
tween (9) and the corresponding case involving subject clitic SI in (10),
will require further discussion.

(10) \[
\text{[r]} \text{ si \ è stato invitato [r]}
\]
SI has been invited.

In 1.6 above, we assumed that in cases like (10), SI is in object position
in D-structure, later undergoing NP-movement, and finally eliciting
from subject position. This analysis was required by our assumption that
clitics are arguments, and as such must, by virtue of the projection princi-
ple and the \(\theta\)-criterion, be associated with a \(\theta\)-role at all levels. The ques-
tion now is whether such considerations relative to subject clitic SI carry
over to the inflectional element INFL, which we are also taking to be a
subject clitic. We note that, if they did, we would be led to the rather
strange conclusion that INFL too must be baso-generated in object posi-
tion in (9), in order to receive a \(\theta\)-role, undergoing NP-movement in the
course of the derivation. This would conflict with our previous assump-
tion that the structural position of INFL at all syntactic levels is the one
indicated in (4) (i.e. the one in [\(\lambda [\text{NP INFL V}]]\)). However, there is rea-
son to believe that the considerations in question do not carry over to
INFL.

Note that we are independently assuming that INFL in Italian is ambigu-
ously either a clitic, as in (11a), or just like INFL in English, as in
(11b).

(11) a. \[
\text{[r] ved \- s} \text{ Maria}
\]
\(\text{He sees Maria.}\)

b. \[
\text{Giovanni ved \- s} \text{ Maria}
\]
\(\text{Giovanni sees Maria.}\)

But we must assume further that this ambiguity of INFL, i.e. the possi-
ble being of either plus or minus pronounal, holds not only across
different sentences, as in (11), but also within the same sentence, across
different derivational levels. Consider (12), where (b) derives from (a) via
rightward NP-movement.

(12) a. \[
\text{Giovanni telefon \- a} \text{ Giovanni telephon \- es}
\]
\(\text{Giovanni telephones.}\)

b. \[
\text{[r] telefon \- a Giovanni}
\]
Clearly, in the D-structure (12a), INFL cannot be pronounal, since it
has no ec to be associated with. Yet it must be pronounal (a non-
argument pronounal in this case) in S-structure (12b), where it is
associated with the ec. This assumption that the pronounal status of
INFL need not be determined till late in the derivation will now suffice
to account for (9) (\(\text{[r]} \text{ sono stato invitato [r]}\)) under our general
assumptions. In this case, INFL will be non-pronounal in D-structure
(as in the English \(\text{[r] have been invited [l]}\)). There will therefore be no
requirement that it be associated with an ec. The ec in object position
will be assigned a \(\theta\)-role in D-structure as we discussed above (in this
respect it will be PRO), and then moved into subject position. Once
object \(\theta\)-role is thus associated with the subject position (as in \(\text{I have
been invited [l]}\)), INFL will necessarily become pronounal (an argu-
ment pronounal in this case), so as to be associated with the subject
position and the \(\theta\)-role which is transmitted to that position by the
object. Therefore, although sometimes a clitic, the element INFL is thus
effectively exempted from the requirement that it be associated with a
\(\theta\)-role at all levels.
While our view of SI therefore does not carry over to INFL, we may still ask whether our view of INFL could carry over to SI. If SI could function just like INFL, then in (10) it would not need to be generated in object position at all, contrary to our analysis of 1.6, and just like INFL. The question in essence is whether it would be appropriate to analyze SI as a special inflectional element. The answer to this seems to be no. The motivation that led us to assume ambiguity with respect to pronominal or nonpronominal status for INFL is lacking in the case of SI. In particular, there is no alternation like (11) in the case of SI. Thus, while we have *[e] si vede Maria 'I see Maria,' possibly parallel to (11a), we do not have *La gente si vede Maria 'People SI-see Maria' or anything of the sort, parallel to (11b). We must therefore assume that SI is unambiguously pronominal, and that our conclusions of 1.6 above stand.\(^{11}\) There are two other respects in which the inflectional element differs from subject clitic SI. The first difference is that, unlike SI, INFL does not allow object preposing, as in (13).

(13) a. Maria, si vede spesso l. Maria SI sees often

b. Maria, vede spesso l. Maria (he) sees often

The ungrammaticality of (13b) follows straightforwardly from the \(\theta\)-criterion and from the fact that there is only one INFL. Assuming that the verb must always obligatorily agree with the subject (when the latter has person features, cf. 1.7), INFL in (13b) must be non-pronominal, since it must agree with Maria which however has object \(\theta\)-role. Thus, there remains no element analogous to SI of (13a) to bear subject \(\theta\)-role. Notice that in (13a), although we assume SI to be related to the subject position (cf. 1.6.2), there is no question of conflict of verb agreement (between Maria and SI), since we have argued that, being impersonal, SI does not induce any verb agreement at all — and that it does not induce third person singular agreement. (cf. 1.7.) In this respect we predict (correctly) that O.P. should be possible with a subject clitic only if this is also impersonal, i.e. if it leaves the verb free to agree with some other NP.

The second difference between INFL as a clitic and SI is that only the latter induces auxiliary essere (E) as in (14).

(14) a. [e] sì d mangiato bene SI has eaten well

b. [e] h e mangiato bene

(f) have eaten well

Recall that a relation between the subject position and a clitic is one of the cases that trigger the rule of E-assignment (cf. 1.7.) Yet in the case of INFL, we find auxiliary avere, as in (14b).

A plausible account of this apparent discrepancy in our theory can be given by regarding E-assignment/pp agreement on the one hand, and verb agreement on the other as analogous but complementary systems. That is to say, both as systems through which certain relations between constituents are given morphological manifestation, and yet as systems whose domains do not overlap. Then, since the relation between the subject and INFL is part of the verb agreement system, we will expect that it should not induce auxiliary E. But we will then also expect that a subject clitic should induce E just in case it does not also induce verb agreement. And this seems to be true as SI does not induce verb agreement (cf. 1.7.)

In this section we have provided a characterization of the null subject property of Italian, adopting the theory of Rizzi (1982b, IV), which appears quite compatible with the rest of our discussion. Under this characterization, the inflectional element of the verb binds the \(\epsilon\) in subject position in the same manner as an object clitic binds an \(\epsilon\) in object position.\(^{14}\) The inflectional element in Italian thus alternates between being a pronominal, in which case it will properly govern the subject position, and not a pronominal, in which case it will govern the subject position, assigning nominative Case to it, but not properly governing it. We assume that when INFL is a pronominal it is sometimes an argument (as in (3b), (11a)), and sometimes a non-argument (as in (12b)) just like other pronouns such as French il or English it.

2.2 Null Subjects and Free Inversion

We will argue that, in inversion sentences, a certain relation holds between the non-argument in subject position and the \(\iota\)-subject, as in (15), where the relation is expressed by coindexing.

(15) There, have arrived [three men]

We will also argue that an analogous relation holds between the non-argument in subject position and the sentence in cases like (16).

(16) It, seems [that John is here]

Existence of such a relation in cases like (15), (16) is supported by a number of considerations. First there is the distribution of these pleonastic elements. There is only found when there is an NP in post verbal position, and correspondingly pleonastic it is only found when there is an S.\(^{15}\) This follows if there must in fact be coindexed with an NP, and it with an S, but it would be an accident if the latter elements did not bear any rela-
tion to the post verbal argument. Another piece of evidence is plural verb agreement in (15): if the relation in question exists, we can assume that in (15) the subject transmits plural features to the subject position, and we thus avoid duplication of verb agreement mechanisms. We can also naturally assume that in (15) there transmits Case to the subject (or forms a chain with it. See below.)

A rather ingenious argument for coindexation in both there and it cases, which we will attempt to reproduce succinctly, is given in LGB, 3.2.3, on the basis of observations of D. Sportiche and T. Stowell. Chomsky points out the quasi-grammaticality of cases like (17a, b) despite the fact that in these cases the relation between antecedent and anaphor seems even less local than in fully ungrammatical cases like (17c).

(17) a. They, expected [that [pictures of each other] would be on sale]
   b. They think [it is a pity [that [pictures of each other] are hanging on the wall]]
   c. *They, expect [that each other will come]

Chomsky proposes to account for these facts in a way in which we may summarize as in (18).

(18) a. An anaphoric relation is possible only if there is no accessible SUBJECT different from the antecedent. Where SUBJECT is either a subject or INFL. 17
   b. There is a general condition "[i, j, a]...[i]" disallowing coindexation between a category and one of its constituents.

The generalization in (18a) is implied by the binding theory under a further elaboration that Chomsky proposes. The claim in (18b) appears to have independent justification (see LGB for details). Under (18), (17c) will be correctly ruled out as there is an accessible SUBJECT, namely the INFL relative to the tensed complement, intervening to rule out the anaphoric relation. In contrast, (17a) will be allowed since the same INFL is not accessible, by virtue of (18b). In particular, since it is assumed that INFL is always coindexed with the subject, and thus with pictures of each other in (17a), further coindexation between INFL and each other would violate (18b). This makes INFL not accessible in the relevant sense, and thus leaves each other free to be coindexed with an NP outside the clause. Turning now to (17b), here each other will be free to have an antecedent outside S, for precisely the same reasons as those discussed in connection with (17a). But in order to have an antecedent outside S, as well, it must be the case that neither the element it, nor INFL relative to S, (INFLi) are accessible. This in fact follows from coindexation between it and S, which is what we are trying to prove: the element it is the subject of S, and it is thus coindexed with INFL; S is coindexed with it and thus with INFL, as well; since each other is a constituent of S, its coindexation with either it or INFL, would violate (18b). Thus neither it nor INFLi are accessible SUBJECTS, and each other can have the more remote antecedent they.

As Chomsky notes, it would not be possible to claim that pleonastic it is not an accessible SUBJECT in general, since it must be in (19), where it does disallow a more remote antecedent.

(19) *They, think it bothered each other, [that...]

The case in (19) is as expected under (18), since each other is here outside the clause coindexed with it, and (18b) will thus play no role.

Parallel evidence for coindexation in the case of there is provided by examples like (20) (from LGB).

(20) They, think there are some letters for each other, at the post office.

Again, each other will be allowed (by (18b)) to have the remote antecedent they, since it is contained within a phrase coindexed with the intervening subject there.

Implicit evidence for coindexation between it, there and the post verbal argument is also provided by the discussion in LGB, Chapter 6. As we mentioned in 10.3, in this chapter Chomsky attempts to reduce the Case Filter to the θ-criterion, by appealing to the notion of chain. For example, in John was invited i, the chain (John, i) has one Case, assigned to the subject position, and one θ-role, assigned to the object position. Given such one-to-one correspondence between Case and θ-roles, one can advance the hypothesis that Case assignment is always a prerequisite for θ-role assignment (except for the case of PRO however, which does not require Case, cf. Note 8, 10.1) 19 But pleonastic elements like it and there would falsify this hypothesis unless they formed chains with post verbal arguments. That is, taken in isolation, pleonastics have Case, as can be shown since they do not occur in general as subjects of infinitives, but have no θ-role, since they are non-arguments. It is only if they are taken in conjunction with a post verbal argument that the association between Case and θ-roles holds. A chain formed by the pleonastic and an argument will have one Case assigned to the pleonastic, and one θ-role fulfilled by the argument.

On the basis of the several arguments we have given, we thus conclude that elements like there and it are coindexed with post verbal phrases, NPs or Sa.

We will now claim that, for the aspects we just discussed, Italian is analogous to English, namely that in Italian too one finds non-argument
subjects coindexed with a post verbal NP or S. Before turning to Italian however, we consider the fact that there are two different types of cases in which the configuration ‘there... that S’ is found. In one, exemplified by (21a) (and presumably (16)), the clause has object \( \theta \)-role, and in the other, exemplified by (21b), the clause has subject \( \theta \)-role.

(21) a. It was expected [that John would leave]  
b. It bothers me [that John left]

That the clause in (21a) bears object \( \theta \)-role is obvious from the parallelism with Someone expected [that John would leave], where it clearly does. That the clause in (21b) bears subject \( \theta \)-role is obvious from the fact that, while the active verb bother, assigns subject \( \theta \)-role in general as in Bill bothers me, it does not itself fulfill that \( \theta \)-role. Thus, if we replace the element it with an element that will necessarily fulfill the \( \theta \)-role, the example will be ungrammatical unless we eliminate the clause: Bill bothers me (*that John left). In (21b) it must thus transmit subject \( \theta \)-role to the clause, which — incidentally — is further evidence for coindexation.

If we take D-structure — as usual — to be a pure representation of \( \theta \)-structure (or of “thetically relevant grammatical functions”, in Chomsky’s terms), with all the arguments in the position in which they are assigned \( \theta \)-role, it will follow that the clause is base-generated in its position in (21a), but moved from subject position in (21b).20,31 Both constructions in (21) are generally labelled “extraposition”. Given the preceding discussion, this may not seem too appropriate for referring to the type in (21a). But we can use the term in a manner parallel to our use of inversion, namely to identify a certain configuration descriptively, while remaining neutral on the derivational history.

Given the two types of extraposition we have characterized, the parallelism we are assuming between extraposition and inversion (i.e. between (15) and (16)) will lead us to expect that, at least in principle, there should be two types of inversion as well. Existence of these two types in Italian is in fact precisely what we argued for in chapter 1. The two types are exemplified in (22):

(22) a. [\( \theta \)] Giovanni arriv- \( \varepsilon \) Giovanni  
Giovanni arrives.

b. [\( \theta \)] telefon- \( \varepsilon \) Giovanni  
Giovanni telephones

As we argued, we take the i-subject in (22b) to be derived by movement, but the one in (22a) to be base-generated. Then, while the coindexation of (22b) may be due to movement, that of (22a) must be due to some other procedure. But the existence of such a procedure is now established independently of our discussion of Italian, by extraposition cases like (21a). We thus assume the same coindexation relation between a non-agreement subject and a post-verbal argument, NP or S, whether the latter has undergone movement, as in (21b), (22b), or not, as in (21a), (22a). We put aside for the moment the question of whether English also has both types of inversion. Pursuing the analysis of Italian inversion, we assume that in both examples of (22) the null subject falls under the characterization of 2.1 above. The \( \varepsilon \) is thus properly governed by INFL under the pronominal option for INFL. In these cases INFL will be a non-agreement pronominal element, like *stand there.

We may note that the two types of both extraposition and inversion emphasize the relevance of the notion of chain. Thus, while the argument has subject \( \theta \)-role in one case ((22b), (21b)), and object \( \theta \)-role in the other ((22a), (21a)) the two cases appropriately fall together in terms of chains, since there is exactly one chain, with one argument and one \( \theta \)-role, in both cases.

Continuing to extend to Italian the analyses we outlined for English, we will assume that, as in English, the relation between subject and i-subject is responsible for transmitting Case to the i-subject, as well as transmitting the features of the i-subject to the subject position.22 We then correctly expect that the impossibility of lexical subjects with infinitivals, illustrated by (23a) should carry over to i-subjects, as in (23b).

(23) a. *La speranza [di Giovanni arrivare] è svenuta  
the hope (of) Giovanni to arrive is vanished

b. *La speranza [di Giovanni arrivare] è svenuta  
the hope (of) Giovanni is vanished

Both (23a, b) will be ruled out by lack of Case on the NP Giovanni (or the chain containing it), analogously to corresponding English cases, cf. *The hope some men to arrive... *The hope there to arrive some men... On the assumption that not only Italian inversion, but Italian extraposition, too, is analogous to its English counterpart, we will predict the ungrammaticality of the infinitival version of (24a) in (24b).

(24) a. Mi è capitato di nuovo [di vedere Maria]  
(it) to-me is happened again of to see Maria

It happened to me again to see Maria.

b. *La probabilità di capitarmi di nuovo [di vedere]  
the probability of (it) to happen-to-me again of to see Maria

Maria è scarsa

Maria is scarce
Notice that the ungrammaticality of (24b) and the parallelism with its English counterparts, cf. the gloss or, for example, "It to seem that John is incompetent would be embarrassing, provides a fairly strong argument for the existence of the subject position in these cases. For cases of inversion, one could have tried to argue that the inflectional element simply assigns nominative Case to the right rather than to the left, and correspondingly agrees with a post-verbal rather than a pre-verbal NP. The parallel ungrammaticality of (23a, b) might thus have been accounted for under this view, without invoking the presence of a subject position. But a similar approach to extrapolation cases would fail to account for (24b). In fact there is little reason to believe that the sentential complement in (24b), or that 5s in general, require Case. The ungrammaticality of (24b) will thus only follow if we assume the existence of a subject analogous to English It.

Notice that the account of (24b) we are thus providing assumes that the subject of the infinitival cannot be PRO: since chains headed by PRO never require Case, (24b) ought to be grammatical if PRO was allowed. But that PRO cannot occur in such cases is established independently of Italian: "To seem/To happen that S would be embarrassing. What must be assumed is that PRO cannot be a non-argument, quite generally. As far as I can see, at the present stage of understanding, this condition must be stipulated.

Returning to inversion and to the relation between subject and i-subject, we note that, in Italian, evidence for such a relation is also provided by the system of auxiliary assignment and past participle (pp) agreement of 1.7 above. Consider the identity in auxiliary and pp agreement in (25a, b), under the analyses we are now assuming.

(25) a. Maria è arrivata

Maria has arrived

b. [e] è arrivata Maria

is arrived (fem.) Maria

Under the formulation of 1.7 above, in (25a) both essere (E) and pp agreement are determined by the relation between the subject and the direct object. In particular the pp will agree with the element that serves as the antecedent in the relation (i.e. Maria). It must then be the case that an analogous relation between the subject and the direct object exists in (25b), just as we are assuming. Specifically, a binding relation must be involved, given our formulation of 1.7. We will return to the exact status of these relations with respect to the binding theory. As in (25a), the pp will agree with the element coindexed with the direct object, namely the subject. Since the subject bears the traits transmitted by the i-subject, pp agreement is as expected. Notice that we do not assume that the pp agrees directly with Maria in (25b), and we thus predict that, under inversion, verb agreement and pp agreement will always go together. This is correct, as shown for example by French, which lacks both verb agreement and pp agreement in corresponding cases, as in (2b) (Il est arrivé trois filler). Cf. also Note 60.

Having thus considered auxiliary and pp agreement in one subscape of inversion, involving ergative verbs like arrivare, we must consider the other subscape, involving non-ergative verbs. This is illustrated by (26).

(26) a. Maria ha telefonato

Maria has telephoned

b. [e vvi] ha telefonato Maria

has telephoned Maria

Under our discussion of 1.7, the lack of both E and pp agreement in (26a) is due to the lack of any relation involving either the subject or the direct object. The identical results in (26b) will follow from our definition of direct object as "an NP in an A-position governed by the verb" (cf. (86), (87), ch. 1). Since the i-subject in (26b) is adjoined to VP, it is not in an A-position, and it is thus not a direct object under the definition. Its relation with the subject will therefore not trigger either E or pp agreement. The system of E assignment/pp agreement thus appears to be sensitive only to relations between elements which are especially "close" to the verb.

Notice that in 2.1 above, in adopting Rizzi's theory of NPs, we have committed ourselves to the view that all i-subjects can undergo Wh-movement, which in turn implies - given the ECP - that all i-subjects must be governed. Thus, the i-subject in (26b) must be governed like an object, and yet it must be distinguishable from a direct object for E assignment and pp agreement. These two constraints force us in effect to conclude that rightward moved i-subjects are adjoined to VP, just as we have been assuming; in order to be governed by the verb, such i-subjects must be within VP, but in order to be distinguished from direct objects at S-structure, where E assignment/pp agreement applies, they must only be adjoined to VP. They will then be governed under the 'extended' notion of c-command (cf. (12) in I.0.3 and discussion). The difference with respect to auxiliary assignment that we find between the two subsaces of inversion is reproduced within cases of extrapolation, as in (27).
THE SYNTAX OF INVERSION

The syntactic analysis of inversion in Italian is complex and involves several structural and functional considerations. In this section, we explore the role of inversion in the construction of sentences that involve statements of fact or opinions.

The construction in (27a) follows a straightforward extension of the formalism of 1.7 from the assumption that in (27a) the clause has object-theta role, i.e., it is the analogue to the direct object NP of (25b), while in (27b) it has subject-theta role and is thus analogous to the VP-adjunction subject of (26b). The distribution of auxiliaries thus confirms the similarity between inversion and extraposition and provides evidence for the existence of the subject position in both cases.

We can now address the questions which were left open in chapter 1. One question concerned the essential synonymy of inverted and non-inverted forms. This synonymy follows rather obviously from the fact that inverted/non-inverted pairs have identical theta-structures, i.e., originate from one D-structure. Thus (25b) is in its D-structure configuration while (25a) derives from the same structure via leftward NP-movement, and (26a) represents the D-structure configuration while (26b) is derived from it. Another question concerned the fact that the verb appears to agree with a post verbal NP if and only if the latter NP receives nominative Case (cf. discussion in 1.2 above). This will follow from the fact that both agreement traits and nominative Case are transmitted by the same relation. If that relation exists, both properties obtain; if it does not exist, neither property obtains. It is useful in this connection to consider each of the variants of the SI-construction, as in (25).

(28) i. a. [e] si leggerà volentieri [alcuni articoli]
   SI will read (pl.) willingly a few articles
   b. [e] li si leggeranno volentieri [e]
      them SI will read (pl.) willingly

In (29a), the verb does not agree with alcuni articoli, and the latter is not nominative. This is directly established by (ib), where the phrase pronominizes as accusative il. The variant in (i) is therefore a normal transitive construction, with clitic SI as a subject. In (ii) the phrase alcuni articoli has been moved into subject position, where it triggers verb agreement, and where we assume it receives nominative Case. As we expect, (iii) has the NS counterpart (ib). Derivation of (iii) is parallel to that of (iia), with [e] replacing alcuni articoli. Because of the [e] in subject position linked to object-theta role, verb inflection (INFLEX) must take the nominative option to fulfill the theta-role. In (ib) INFLEX is thus the nominative counterpart to accusative clitic il of (ib). In (iia) the subject-object relation is established not by movement as in (iia), but in the same way as in Arriva Maria, etc. INFLEX is also pronominal here, as in (iii), but non-agreement pronominal in this case (like is, there). The relation indicated in (iia) will cause transmission of the direct object (i-subject) features, resulting in verb agreement, and transmission of nominative Case to alcuni articoli, which therefore fails to pronominalize as accusative il in (ib). Still in connection with the SI-construction, consider now the paradigm in (29), and the parallelism between (29b, c), which will further confirm our analysis.

(29a) [e] ci si [molte cose inutili] a Natule to-themselves SI buy many useless things at Christmas
   We buy ourselves many useless things at Christmas.
   b. [Molte cose inutili] ci si comprano t a Natule many useless things to-themselves SI buy at Christmas
   c. [e] ci si [molte cose inutili] a Natule to-themselves SI buy many useless things at Christmas

In (29a), a reflexive clitic confersential with SI is possible, but in (29b) it is not. We can rather naturally account for this by assuming that only the subject position, and not SI itself, can be the antecedent for a reflexive clitic. Thus, in (29a) the reflexive can be conferrential with SI because the subject position is (solely) related to SI. But in (29b) the subject position is occupied by the phrase molte cose inutili, so that the reflexive can no
longer be related to SI. Given verb agreement, (29c) is the 'inverted' counterpart of (29b) (same relation as between (28a) and (28b)). Our analysis can rather naturally account for (29c), in terms of the subject position being occupied by the agreement features of the phrase *molte cose inutili*. In contrast, if inversion consisted of the possibility for nominative Case assignment and verb agreement to operate with respect to a post-verbal position directly, this should cause no interference with the relation between subject position and a reflexive clitic, and there would then be no reason at all why (29c) should be ungrammatical.\(^{17}\)

In this section we have claimed, based on the discussion in LGB, that English pleonastic subjects *there, it* are coindexed with a post-verbal argument. We have further claimed that, once we abstract away from the fact that Italian allows null subjects, Italian is just like English, so that in Italian, too, we have coindexing between a non-argument subject and a post-verbal argument, NP or S. In support of our claim, we noted the impossibility of both inversion and extraposition occurring in infinitivals, which — especially in the case of extraposition — would not be predicted if the coindexing relation did not exist. We noted that the latter relation is in fact detected by the system of E assignment and pp agreement of 1.7. We further noted a similarity between the O.P. variant of the SI-construction and its ‘inverted’ counterpart which can only be accounted for if the non-preposed object is linked with the subject position as we assume. The conclusion that the post-verbal argument is related to the subject position implies that the subject position exists, from which it is natural to deduce that in NS sentences in general the subject position exists, as in Rizzi’s theory.

If our discussion is at all correct, then inversion in Italian is not a non-configurational aspect of that language. That is, Italian inversion does not consist of the option to have the subject position to the right of the verb rather than to the left. If the subject position were indeed on the right of the verb, inversion would be dissociated from the possibility of having null subjects.

### 2.3 Inversion Relations and Emphatic Pronouns

In this section we will consider the exact nature of the relation between a non-argument subject and a post-verbal argument. We will claim that such a relation is in important respects analogous to anaphoric relations, and that the binding theory must be modified in order to capture this fact. We will then consider the syntax of Italian ‘emphatic’ pronouns, which appears to have certain points in common with that of inversion.

As both Chomsky in LGB and Rizzi (1982, IV) note, the unqualified view that there is coindexing between the subject and the post-verbal NP in (30a, b) is problematic with respect to the binding theory of (31).

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(30) a. There, arrived [three men]

b. [e] arriva [Giovanni]

arrives [he]

(31) a. (A) An anaphor is bound in its governing category

(B) A pronoun is free in its governing category

(C) An R-expression is free

b. α is bound by β if and only if α is c-commanded by β and coindexed with β. ‘Free’ equals ‘not bound’.

The post verbal arguments in (30) are bound within their governing category (i.e. their S), given the coindexing, in violation of (B) and (C) of (31a).\(^{18}\) Both Chomsky and Rizzi suggest that the coindexing of (30) is irrelevant to (31), though they do so in different ways. Chomsky supposes that a special type of indexing is involved, one which does not fall under the definition of ‘bound’ in (31b). Specifically, that co-superscripting rather than co-subscripting is involved, and that (31b) must read “co-subscripted”, rather than “coindexed”. Rizzi, on the other hand, suggests that the qualification that α is not be ‘θ-dependent’ on β must be added to (31b), and he assumes that i-subjects always receive θ-role from the subject position, thus being ‘θ-dependent’ on the subject. Ignoring the fact that the latter assumption could not be made within our discussion since we assume that i-subjects of ergative verbs appear in a θ-marked position and are therefore assigned θ-role directly, under Rizzi’s proposal the coindexing of (30) would not qualify as binding in (31b) (much as in Chomsky’s system). The conditions in (31a) would then be irrelevant.

The problem with this kind of solution, which removes inversion entirely from the scope of (31), is that it fails to express the fact that inversion relations are subject to precise locality conditions, as we will now try to show.\(^{21}\)

It is well known that there construction gives rise to Raising/Control contrasts like (32).

(32) a. There seemed to be several people at the meeting

b. *There tried to be several people at the meeting

The French il-construction is quite analogous in this respect, as in (33).

(33) a. Il semblait venir beaucoup de monde

*It seemed to come many people

b. *Il voulait venir beaucoup de monde

*It wanted to come many people
At a superficial glance, the corresponding contrasts in Italian seem to be much weaker, as in (34).

(34) a. *Sembrava intervenire Giovanni
   b. **Sperava di intervenire Giovanni

Sembrava [di intervenire Giovanni]

However, under special conditions the contrast appears very vividly in Italian too, as in (35), (36).

(35) a. Seembravano intervenire molti
   b. Speravano di intervenire molti

Speravano [di intervenire molti]

(36) a. Seembrava intervenire Giovanni [a risolvere il problema]
   b. Sperava di intervenire Giovanni [a risolvere il problema]

Sperava [di intervenire Giovanni [a risolvere il problema]]

The reason for the difference between (34b) and (35b), (36b) is that in the latter cases the i-subject is necessarily within the infinitival complement which contains the ergative verb intervenire, and is actually the direct object of intervenire. Recall how Ne-CI as in (35), and occurrence before a sentential complement as in (36) were two of the criteria given above (see 1.3, 1.8) to determine whether the i-subject was in direct object position (rather than adjoined to VP). Thus in (35) and (36) the matrix subject and the i-subject are effectively separated by a clause boundary, as for example in (37a) below. But in (34) the i-subject could simply be derived via rightward movement from matrix subject position (i.e. from Giovanni sembrava [di intervenire] with adjunction to the matrix VP, so that no clause boundary would intervene, as in (37b).

(37) a. di intervenire Giovanni
   b. di intervenire Giovanni [...]

We will return to the fact that while the additional measures of (35), (36) are required to bring out the contrast in Italian, nothing is required in the case of English or French (see 2.6, 2.7 below).

At a certain descriptive level, we could then say that inversion appears bounded with Control verbs (let us say clause-bounded) but unbounded with Raising verbs. One can in fact have inversion over any number of

Raising verbs, without significant changes in the results (cf. There seemed to be likely to be a riot, etc.).

The apparent unboudnedness with Raising verbs has a rather obvious explanation. It is clearly due to the fact that the non-argument subject undergoes Raising, so that the analysis of, for example, (36a) is as (38).

(38) [Seembrava [di intervenire Giovanni, ...]]

Thus there is good reason to believe that there is, not a direct connection here between the subject and the i-subject in the embedded clause, but rather a two-step connection, each step having a character of locality. Before turning to Control verbs, we note that configurations like (38) support our view that the verb never agrees directly with a post-verbal NP. In fact in such cases the NP in question could be arbitrarily far away from the verb (given an arbitrarily long sequence of Raising verbs). Direct verb agreement would thus imply, rather implausibly, that the verb agreement rule is subject to no locality conditions at all. Under our assumption that the trace of the i-subject is transmitted to the subject position via the chain that links the two, nothing has to be added for (38).

Beside cases involving Raising verbs, in Italian there are actually other cases in which inversion seems to have an unbounded character. Consider (39).

(39) a. Lui sperava di intervenire a risolvere il problema
   b. Sperava di intervenire lui a risolvere il problema

Sperava [di intervenire lui a risolvere il problema]

The grammatical case in (39b), which is the inverted counterpart to (39a) by our descriptive criteria, seems to differ from the ungrammatical case in (36b), only in that the pronoun lui replaces the R-expression Giovanni. To give a descriptive characterization of the facts, we would thus have to say that inversion is bounded, except when the i-subject is a pronominal. But we will see below that even this second curious exception is only apparent, so that the bounded character of inversion is in fact quite general.

Let us then consider the typical violation of such boundedness, as in (40), in the analysis we assume.

(40) [Sperava [di intervenire Giovanni, ...]]

The question now is: Is (40) ruled out by independent principles, and is the bounded character of inversion thus merely a reflex of those principles, or do we have to assume specific locality conditions on the relation
diagrammed in (40)? For cases like (40), independent principles, such as the \( \theta \)-criterion, seem to suffice. In fact, the complement verb intervenere assigns a \( \theta \)-role to its object — here Giovanni — but no \( \theta \)-role to its subject which must therefore be interpreted as a non-argument, i.e. differently than PRO. Main verb sperare on the other hand does assign a \( \theta \)-role to its subject. The latter will thus be interpreted as an argument, i.e. as a null subject analogous to he, and the sentence could thus only have the interpretation ‘He hoped that Giovanni would intervene’ (not ‘Giovanni hoped to intervene’). But (40) is ungrammatical under such an interpretation as well, since even aside from the unresolved status of the embedded subject, the NP Giovanni has no Case.¹⁰

However, while the \( \theta \)-criterion may thus be sufficient for (40), it will not be for other cases. Consider in particular the parallelism between (41) and (42), involving the SI-construction.

(41) a. *[s]i sindacati si speravano [di] convincere \( t \) a fare ulteriori
the Unions SI hoped (pl.) to convince to make further
concession

b. I sindacati si vorrebbero [convincere \( t \) a fare
the Unions SI would want (pl.) to convince to make
ulteriori concession

(42) a. *[s]i speravano [di] convincere i sindacati a fare
SI hoped (pl.) to convince the Unions to make
ulteriori concession

b. *[s]i vorrebbero [convincere i sindacati a fare
SI would want (pl.) to convince the Unions to make
ulteriori concession

The contrasts in (41), (42) are due to the restructuring process (cf Rizzi (1978a) and ch. 5 below) applying in the (b), but not in the (a) cases. Since sperare is not a restructuring verb, the phrase within brackets in (41a) is sentential, and O.P. as in (41a) is thus ruled out by locality conditions on NP-trace relations (principle (A) of (31a)). But in (41b), where solleva is a restructuring verb, the infinitival complement has been reanalyzed, so that the relevant locality conditions are no longer violated. The

exact nature of the restructuring process need not concern us here. What is relevant is to note that inversion in (42) behaves exactly like NP-movement in (41).

Unlike (40) above and other cases, (42a) can be ruled out only by invoking locality conditions on the inversion relation. This is for two reasons. First, no problem arises with respect to the \( \theta \)-criterion. Both the subject and the object positions involved have exactly the same status as their counterparts in the simple case Si convincero i sindacati a . . .

‘Si convinced (pl.) the Unions to . . .’ or for that matter in (42b). Secondly, we cannot claim that in (42a) (and (41a)) SI can no longer be a controller for the embedded subject PRO on the grounds that the subject position is not related to (and, in (41a), occupied by) the object, as illustrated in (43):

(43) NP si speravano [di] PRO . . .

In fact, a relevantly analogous configuration is otherwise possible, as in (44).¹¹

(44) [Certo cose] si, dicono spesso \( t \) senza [PRO] pensare
certain things SI say often without thinking

We often say certain things without thinking

Notice further that it would be both false and irrelevant to claim that (42a) is derived from (41a) via rightward NP-movement and is therefore ungrammatical for the same reason that (41a) is. False, because in (42a), b) the i-subject occurs in its D-structure position, preceding the sentential complement a fare . . . (Recall that the order i-subject, S-complement is a diagnostic for base-generation of the i-subject). Irrelevant, because the question would remain as to why (42a) should be impossible when there is no movement at all, as in Arrive Maria, etc.

We thus have several reasons at this point to assume that the inversion relation is analogous to the relation between an NP and its trace. One reason is that, just like NP-trace relations, inversion relations trigger the system of E-assignment/pp agreement of 1.7, as we saw in 2.2. A second reason is that both NP-trace and inversion relations must fall under a common notion of ‘chain’, if Case-theory and \( \theta \)-theory are to be unified along the lines of LGB, 6, as we discussed in 2.2. A third reason is that, as we just saw, the two appear subject to analogous locality conditions.²⁸

Let us then return to our initial problem, posed by (45) with respect to the binding theory in (46).

(45) a. There, arrived [three men]

b. [s] arriva [Giovanni]

arrives [Giovanni]

he
(46) a. (A) An anaphor is bound in its governing category
    (B) A pronominal is free in its governing category
    (C) An R-expression is free.

b. a is bound by $\beta$ if and only if $a$ is c-commanded by and coindexed with $\beta$. 'Free' equals 'not bound'.

It is intuitively clear that the binding theory is a mechanism regulating coreference. As such, it prescribes that, of two coreferential NPs one of which c-commands the other, the one which is c-commanded will never be an R-expression, but will be either an anaphor or a pronominal, depending on its 'distance' from the one which c-commands it. We may schematically represent this as in (47).

(47) \[ \text{anaphor} \rightarrow \text{pronounal} \]

\[ \text{NP}_1 \rightarrow \text{NP}_2 \]

The demarcation line between anaphors and pronominals in (47) is determined by the governing category for $\text{NP}_1$, for example by the clause boundary in John, said to himself [that he would leave]. We thus have a class of expressions which have local antecedents: anaphors; a second class which have remote antecedents: pronouns; and a third class which have no antecedents at all: R-expressions.

If we take (46) as saying something about coreference, it is clear why R-expressions are required to never have antecedents (on a path of c-command, which is what seems to be relevant). It is because they independently refer, unlike anaphors and pronouns. But if the purpose of (46) is that of regulating coreference, we have no reason to expect that the same formal principles should hold in cases like (45), where the antecedent ($\text{NP}_1$ of (47)) is not an argument, and hence is not referential. Both Chomsky and Rizzi implement the assumption that (46) should not apply to (45), by reconsidering (46b). Under their reconsideration, the cases in (45) do not fall within the definition 'bound' of (46b), and (46a) is thus irrelevant. We will pursue the alternative, which consists of leaving (46b) as is, and reconsidering (46a) instead.

Let us assume that 'free' of (B), (C) in (46a) means 'argument free'. Under this assumption, (45) will not violate (46a) since the i-subjects in (45) are only non-argument bound within their governing category. Assuming naturally that the same qualification ought to be extended to (A), i.e. that 'bound' in (A) should be interpreted as 'argument bound', we will predict the ungrammaticality of cases like (48).

(48) *There, arrived [each other]

The anaphor in (48) is in fact not argument bound (only non-argument bound). As both Chomsky and Rizzi note, non-arguments like there, which are not proper antecedents in cases like (48), are however proper antecedents in cases like (49), with respect to their own traces.

(49) There, seemed [t, to arrive three men]

This suggests that the proposed qualification 'argument' (bound/free) in (46) only holds for arguments, i.e. for elements that bear $\theta$-roles, not for traces, which do not. We will assume that this is correct. Principle (A) will thus read as in (50), and (B), (C) will have analogous expansions.

(50) a. An argument anaphor is argument bound in its governing category.

b. A non-argument anaphor is bound in its governing category.

Principle (50a) will thus rule out (45), while (50b) will allow (49).

We must now ensure that locality conditions hold on the relations in (45). We will assume the following:

(51) An argument bound by a non-argument, is bound in its governing category.

The advantage of this approach is that the relations in (45) are now binding relations, so that both the system of E assignment/p agreement of 1.7 and the definition of 'chain' can refer simply to binding relations rather than to two types of relations. We also note that while Chomsky's and Rizzi's solutions, locality conditions on inversion (which they do not provide) would necessarily remain unrelated to the conditions in (46a), while this is not true in our case. In fact, although (51) is a separate condition, the similarity with (46a) raises the possibility - which we will not pursue here - that the former could be collapsed with the latter. Note in particular that the effect of (51) is exactly complementary to that of (B) and (C). That is, while pronominals and R-expressions must be free within their governing category with respect to arguments, they must be bound within their governing category with respect to non-arguments, suggesting that the binding theory actually reverses itself when the antecedent changes from argument to non-argument.

We now turn to the class of exceptions noted above, i.e. to (52).

(52) [e] sperava [di intervenire lui, a risolvere il problema] hoped to intervene he to solve the problem

If (52) were a case of inversion in the theoretical - not just the descriptive - sense, namely if the pronoun lui was non-argument bound by the matrix subject, this case would violate the locality condition in (51). However, there is good reason to believe that (52) is not a case of inversion in the theoretical sense.
We note first that such pronouns as lui in (52) occur in cases where there is no inversion, as in (55).

(53) Giovanni interviene lui.

In (53), lui is understood as coreferential with the subject Giovanni, analogously to himself in the English translation. This means that, though formally a pronoun, lui of (53) is not a 'pronominal' in the sense of (B) of the binding theory (46a). Rather, such emphatic pronouns (henceforth 'ep's) must be regarded as anaphors. (We will argue for this below.) If (53) thus suggests that (52) need not be a case of inversion, (54) suggests that in fact it cannot.

(54) Persuase Maria [PRO a intervente lui]

(h) persuaded Maria to intervene [he]

a risolvere il problema

he

to solve the problem

He persuaded Maria to intervene himself to solve the problem.

If (52) were a case of inversion, there would be no reason why masculine pronoun lui should not occur in (54), just as it does in (52). This contrast between (52) and (54) indicates that the pronoun in these cases is related not to the matrix subject, but rather to the embedded subject PRO, controlled in (54) by Maria, whence feminine lei. The possibility for ep's to be related to PRO is also established by (55), in which the ep has no other possible antecedent.

(55) [PRO andarcì non sarebbe un grave errore to go there we would make a serious mistake.

To go there ourselves would be a serious mistake.

The exceptionality of (52) will then disappear under the analysis in (56), once lui is interpreted as an ep.

(56) [a] sperava [di PRO, intervenire lui, . . .]

He hoped to intervene himself.

In (56) the matrix null subject will be an argument (analogous to he) and the pronoun in the complement will be an ep related to PRO. There will, therefore, be no direct relation between the matrix subject and the pronoun.

Although the occurrence of an ep, which we may refer to as 'subject' doubling', and inversion are different phenomena as we have just argued, there are (in Italian) some striking similarities between the two, which we will discuss in the remainder of this section.

First, the constrast in (57) relative to i-subjects, appears duplicated in the case of ep's as in (58).

(57) a. ?Sp parava Giovanni [di risolvere il problema]

persuased Giovanni to solve the problem

b. Interven da Giovanni [a risolvere il problema]

will intervene Giovanni to solve the problem

(58) a. (7) Giovanni sperava lui [di risolvere il problema]

Giovanni hoped he to solve the problem

Giovanni hoped himself to solve the problem.

b. Giovanni interverrà lui [a risolvere il problema]

Giovanni will intervene he to solve the problem

Giovanni will intervene himself to solve the problem.

In 1.8 above we argued that the i-subject in (57b) can unproblematically occur before the complement only because it is base-generated in that position, and that the contrast in (57) is therefore due to the fact that unlike intervenere, sperare is not an ergative verb. The parallelism of (57) and (58) will now suggest that the ep in (58b) is in the same position as the i-subject of (57b), namely in trace position (the same would hold in (52), and for lei in (54)). Examples (57b) and (58b) would thus be equally possible because Giovanni and lui occupy a base-generated position, while (57a) and (58a) would both be problematic because with non-ergative sperare there is no such position, so that both the i-subject and the ep would have to be interpolated in some fashion.

That the i-subject and the ep make use of the same position here (that of direct object of the matrix verb), is confirmed by the fact that when such a position seems no longer available for the i-subject, as in (59c) contrasting with both (59a) and (59b), the ep is also barred, as in (60b) contrasting with (60a).

(59) a. Viene Giovanni [a prendere]

comes Giovanni to fetch it

b. Giovanni lo viene [a prendere]

Giovanni it comes to fetch

Giovanni comes to fetch it.

c. *Lo viene Giovanni [a prendere]

it comes Giovanni to fetch
CHAPTER 2

(60) a. Giovanni viene lui [a prendere]
    Giovanni comes he to fetch-it

Giovanni comes himself to fetch it.

b. *Giovanni lo viene lui [a prendere]
    Giovanni it comes he to fetch

In (59), (60), venire is an ergative verb, like intervenire of (57), (58), whence the grammaticality of (59a), (60a). In addition however, venire can trigger the restructuring process. One of the indicators that restructuring has occurred is the citation of embedded objects to the matrix verb; (59b,c) and (60b) must therefore be cases of restructuring. What (59c) then indicates is that the NP position which separates the main verb from the complement in the absence of restructuring as in (59a) is no longer there once restructuring occurs. In chapter 5 below, we will consider how the restructuring process produces this effect. Here, it is sufficient to note that it does. But, given the parallelism between (60b) and (59c) we must conclude that the ep in (60a) does indeed occupy the same position as the i-subject in (59a), i.e. that lui in (60a) is in trace position.

While we thus have reason to assume that ep's can occur in trace position, it is clear that they do not occur only in trace position. In fact they are found not only with ergative verbs or passives, but also with other forms, as in Giovanni ha telefonato lui ‘Giovanni has telephoned himself’, etc. It may then seem reasonable to assume that when ep's are not in trace position, they are adjoined to VP, so that the parallelism with i-subjects becomes rather general. Occurrence in non VP final position, as in Giovanni esaminerà lui il caso ‘Giovanni will examine himself the case’ could then be accounted for by the same rule (discussed in 1.8), which we assume produces a similar order with i-subjects, as in Esaminerà Giovanni il caso ‘Will examine Giovanni the case’. (As suggested in Note 37 we may assume that ep's can be permuted with other constituents slightly more freely than i-subjects).

But the formal similarity between inversion and doubling goes beyond the range of positions in which i-subjects and ep's can occur. We must assume in fact that a binding relation exists between the subject and the ep, just as it exists between the subject and the i-subject. This assumption is implicit in our conclusion that ep's sometimes occur in trace position, and is confirmed by cases like the following, which do not involve a trace position.

(61) Giovanni volleva [che Maria telefonasse]

Giovanni wanted that Maria should phone

[lei] [a Piero]

[Giovanni himself] [Piero]

b. Giovanni viene lui

Giovanni comes he

The null subject in (62) is interpreted as a non-argument pronoun. Since the subject Giovanni transmits agreement traits to the subject position, the latter is in effect a third person pronoun, just like lui of (62b). The two cases in (62) are thus virtually symmetrical. The only respect in which the symmetry breaks down is in that the pronounal of (62a) is a clitic (as we saw in 2.2, 2.3 above), whereas the one in (62b) is not. We may ask whether this difference is accidental. The answer is no. Thus, lui of (62b) could not be a clitic, precisely because it is an ‘emphatic’ pronoun. As such, it carries emphatic stress, and lack of stress is one of the conditions that characterise cliticization. Cf. Ho invitato LUI/LO ho invitato ‘I invited HIM’, where capital letters indicate stress.

On the other hand, the pronounal of (62a) must be a clitic. We note in fact that non-arguments will never carry emphatic or contrastive stress, presumably because they are semantically empty. (Cf. ‘it seemed that John was incompetent, but IT never seemed that he was dishonest’. Given the relation between stress and cliticization just noted, we then naturally expect that, in a language that has subject clitics, non-argument subjects will always be clitics. Thus, aside from a predictable difference, the two cases in (62) are exactly symmetrical.

The symmetry in (62) becomes identity of surface forms if we replace Giovanni in (62a) with a pronoun, as in (63a), and Giovanni in (62b) with the pronounal of NS sentences, as in (63b).

(63) a. [ei] viene lui
    comes he
b. [i] viene lui

He comes himself

A sentence like Viene lui is thus ambiguously a case of inversion or of doubling. But the identity of the two cases in (63) goes in fact beyond the surface. In both cases we have a binding relation between the subject position related to a clitic pronounal (INFL) and a non clitic pronominal in post verbal position. The only difference between the two cases will concern which element bears the θ-role. In (63a) the i-subject lui bears the θ-role, whereas in (63b) the null subject does.39

The ambiguity between inversion and doubling of cases like (63) disappears in infinitivals however, which allow doubling as we have seen, and as in (64a), while not allowing inversion, as we saw in 2.2, and as in (64b).

(64a) [PRO andareci nel] sarebbe un errore
to go-there we would be a mistake

To go there ourselves would be a mistake.

b. *[i] andareci Giovanni sarebbe un errore
to go-there Giovanni would be a mistake

In (64a) we have a chain with one θ-role and one argument, namely PRO. We are independently assuming that quite generally there are no Case requirements for PRO. We further assume that there are no Case requirements for ep’s. In the framework of LGB, 6, in which Case requirements are a reflex of θ-role assignment, this follows naturally from the fact that ep’s have no θ-role, that is, they are non-arguments. Example (64a) will thus be well formed. (The fact that ep’s are formally nominative (i.e. identical to nominative argument pronouns), forces us to assume that nominative is the unmarked form in Italian.) In (64b), as in (64a), we have a chain with one θ-role and one argument. However in this case the argument is not PRO but the phrase Giovanni, with respect to which Case requirements hold. Consequently (64b) is ungrammatical and (64a) unambiguously a case of doubling.

In this section we have thus argued that there are locality conditions holding on relations between a non argument subject, and a post verbal argument. We have further argued that such conditions are best characterized by an appropriate extension of the binding theory. This allows us to regard inversion and reexposition relations as binding relations, like NP-trace relations. To the extent that they appear to exist, the locality conditions discussed provide further evidence for our claim of 2.2 above that the relations themselves exist.

We have also considered the case of emphatic pronouns in Italian, relevant to account for the apparent existence of a class of unbounded cases of inversion. We noted that the two strategies of inversion and doubling, which bear some analogy at the descriptive level in that both allow the presence of a NP with subject traits in post verbal position, appear to be in certain respects analogous at the formal level as well. In particular this is so with respect to the structural positions used, the relation linking the subject position and the post verbal NP, and the use of a non argument pronounal. Doubling becomes in fact superficially indistinct from inversion when it occurs with a null subject.

2.4 Residual Questions

In this section we discuss certain cases with respect to which the theory of inversion we have proposed seems to be deficient.

One such case is exemplified in (65a,b), in which an i-subject occurs within a PP.40

(65a) *[i] furono parlate [de [e] vacanze]]
were talked about the vacations

b. *[i] si parlarono spesso [de [e] vacanze]]
SI talk41 often about the vacations

Nothing in our discussion so far rules out such a case. The relation in (65) is legitimate from the point of view of the locality conditions we are assuming (i.e. (51)), and it therefore ought to be possible both for nominative Case to be transmitted to the post verbal NP, and for agreement traits to be transmitted to the subject position. Also, it seems unlikely that (65) could be ruled out in terms of Case conflict arising from both transmission of nominative Case from the subject position and assignment of (obliteque) Case by the preposition.

In fact other cases which are in this respect analogous, such as (66), are grammatical.

(66a) *[i] se ne1 leggeranno volentieri [alcuni [e]]
SI of-them will read (pl) willingly a few

We will eagerly read a few of them.

b. *[i] re1 furono fatti leggere [alcuni [e]]
of-them were made to read a few

A few of them were made to be read.

According to our discussion of Ne-Cl in 1.4 above, the phrase alcuni [e] in (66a, b) must be in its D-structure position, and is therefore the direct object of leggere in both (66a, b). In terms of our discussion of the SI-
construction, the verb in (66a) can assign accusative. The direct object here is therefore in a context of accusative Case assignment, and yet it is nominative (cf. the discussion of (28) above, and Note 25). The same is true in the ‘causative’ construction in (66b), where, while the matrix verb fare has passive morphotaxis and is therefore not a Case assigner (as we discuss in 3.1), the embedded verb leggere can assign Case (we discuss the causative construction in chapter 4 below). While (66b) is perhaps a little odd, it is not at all comparable to either of (65). We must therefore assume that Case assignment is obligatory not intrinsically, but only in so far as NPs must receive Case. Under this assumption, accusative assignment in (66a,b) will freely fail, and the i-subject will correctly be assigned nominative (recall that we are assuming on the basis of the discussion in 2.2, that a post verbal NP will transmit agreement traits only if it is nominative).

In 2.3 above, we stressed the similarity in the distribution of inversion and NP-trace relations. Note that the similarity continues to hold with respect to (65), given (67).

(67a) *Le vacanze furono parlate [di t]

the vacations were talked about

b. *Le vacanze si parlano spesso [di t]

the vacations it is talked about

Presuming that the parallelism between (65) and (67) is not fortuitous, one may wonder whether any of the existing theories of preposition ‘stranding’, which would account for (67), might be extended to cover (65).46 However, in contrast to the parallel status of (65)–(67), (68a, b) exemplify a configuration in which an NP-trace relation is possible, while an inversion relation is not, a fact again not predicted by our theory.47

(68a) a. Giovanni sembra [li conoscere la strada]

Giovanni seemed [to know the way]

b. *[li] sembra [Giovanni conoscere la strada]

seemed Giovanni to know the way

Despite this breakdown in parallelism, there seems to be no reason to dissociate the locality conditions on inversion from the binding theory. In fact the ungrammaticality of (68b) is duplicated in the case of ep’s, for which it is fairly clear that the binding theory is involved, as in (69).

(69) *Giovanni sembra [li conoscere la strada]

Giovanni seemed he to know the way

Recall that we have argued that ep’s can generally occur in trace position. From this point of view, the ep of (69) should then be unproblematic. Some other consideration would thus have to be appealed to in order to exclude this example, and we may plausibly expect that this will rule out (68b) as well. Notice that while both (69) and (68b) are unaccounted for, they represent yet another respect in which the distributions of inversion and of doubling are analogous.

There is one possibility that comes to mind, to exclude uniformly all the ungrammatical cases we just reviewed, which I will now briefly consider, even though it turns out to be incompatible with the rest of our discussion. This consists of supposing contrary to what has been assumed in the previous sections, that both i-subjects and ep’s must be assigned nominative Case under government by a verb, tensed or infinitival. Under this proposal, the cases in (65) would be ruled out because the intervening PP boundary blocks government by the verb, preventing the NP le vacanze from being assigned nominative Case. Example (65) would thus in effect be excluded quite analogously to (67) if we adopted the account of preposition stranding of Kayne (1981b). Kayne argues — on the basis of a proposed elaboration of the ECP — that in languages that do not allow preposition stranding, cases like (67) are excluded because the ce fails to be governed by the verb, whereas in languages that do allow preposition stranding, verb and preposition are ‘analyzed’ (as in Hornstein and Weinberg (1981)), so that government by the verb will in fact obtain.

For the cases in (68b) and (69) one could assume that the notion of government which is relevant for nominative assignment is a particularly restrictive notion, such that government here is blocked by intervening clause boundaries even though these are not maximal projections. Thus, Giovanni in (68b) and li in (69) would fail to receive Case. This idea would not be too implausible since, within our discussion notions of government more restrictive than the one entering into the ECP are independently required to account for the lack of Exceptional Case Marking in Italian (see 4.1.3), and for the lack of assignment of auxiliary essere with some Raising verbs (see 2.5.2). That Case assignment is involved may seem to be supported in part by the fact that ‘small clauses’ (sc’s), which — unlike Sc’s, as we assume — generally allow Case assignment across their boundaries as shown by (70), yield slightly different results in the configurations of (68b) and (69), as (71) shows.

(70a) Ritengo [che Giovanni ammala]o

I believe [that Giovanni is sick]
III. While independent Case assignment to both subject and i-subject would thus be postulated, Case transmission by coindexing would still have to be allowed, for cases like (73a) contrast with (73b) (cf. 1.6.2).

(73) a. [Chegli articoli] risultano [t1 essersi già letti t1] those articles turn out St-to be ('have') already read

Those articles turn out to have already been read.

b. *Sarebbe bello [PRO, essersi invitati t1]

(6) would be nice St-to be ('have') invited

... to have been invited.

As we discussed in 1.6.2 above, we assume that (73a) is grammatical because St is related to the subject position within its clause, which is in a chain bearing nominative Case, whereas there is no corresponding nominative Case in (73b). But given that Case transmission across clause boundaries is thus possible in (73a) (as well as in other cases involving subject clitic c to be discussed below), nothing seems to prevent it in (68b), (69), in which Giovanni, lui should therefore have Case regardless of whether the preceding verb can assign it.

This kind of solution thus seems essentially incompatible with the assumption that Case is a property of chains or of indices: an assumption which we will continue to adopt, both because of conceptual advantages (it allows us to deduce the Case fiber from the θ-criterion), and because of empirical advantages (it allows us to give an account of (73) and other cases.) We will thus leave the problems of (65), (68b), (69) (and (71b, c)) unsolved, simply keeping in mind their existence.

2.5 Piedmontese Ye

2.5.0 Introduction

In the preceding sections we provided a theoretical characterization of inversion in Italian. We claimed that i-subjects are linked to a non-argument in subject position and that the relation between the i-subject and the non-argument falls under locality conditions parallel to those which hold of antecedent-anaphor relations. We began our discussion by regarding inversion in Italian as essentially analogous to inversion in French and English, once we make allowance for the existence of empty subjects in Italian. In doing so we put aside a number of well-known differences. It is to those differences that we now turn, especially to the difference in the productivity of inversion. In this section we consider null subjects and inversion in the Piedmontese dialect (in the variety spoken
in the Turin area), one of Italy’s many regional languages. Piedmontese is of particular interest since it provides an almost perfect link between Italian and French, as we will see. The discussion of Piedmontese also provides a natural basis for dealing with Italian pleonastic subject of ‘there’, which we thus also consider in this section.

2.5.1 Inflectional Clitics

Like Italian, Piedmontese is a NS language, as (75) below will illustrate. It differs from Italian in having a series of overt subject clitics. These are given in (74), along with the corresponding non-clitic nominative pronoun (with which they can cooccur, as we see directly).45

(74) Subject Pronouns

<table>
<thead>
<tr>
<th></th>
<th>Non-clitic</th>
<th>Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg. 1</td>
<td>mi</td>
<td>e</td>
</tr>
<tr>
<td>2</td>
<td>tu</td>
<td>t</td>
</tr>
<tr>
<td>3</td>
<td>chied/chila</td>
<td>a</td>
</tr>
<tr>
<td>Pl. 1</td>
<td>null (autri)</td>
<td>e</td>
</tr>
<tr>
<td>2</td>
<td>vui autri</td>
<td>(e)</td>
</tr>
<tr>
<td>3</td>
<td>lur</td>
<td>a</td>
</tr>
</tbody>
</table>

In tensed sentences, these clitics always occur, regardless of whether or not the subject position is filled, as in (75), where ‘CL’ in the glosses is a clitic in (74).

(75) a. Giaunin [Chiel] a mangia

Giaunin [he] CL eats

b. A [mangia] voi

A [he] CL wants to eat

Furthermore, such clitics occur only in tensed sentences, never in infinitives, as in (76).

(76) Giaunin a voi [mangia] CL wants to eat

This distribution follows if we regard these elements as part of a tensed inflection, namely as forming a discontinuous inflection with verb-inflection proper.46 If this analysis is correct, it will lend further plausibility to our assumption that the inflectional element in Italian has clitic properties. However, since Piedmontese allows 'Clitic Doubling', namely coexistence of a clitic and a non-clitic phrase related to it (with dative objects), one might suggest that (75a) should be regarded as a case of Clitic Doubling. Under this view, the alternation in (75) would be analogous to the one in (77).

(77) a. E y1 parlava [a Giaunin]

(1) CL to-him spoke to Giaunin

I spoke to Giaunin.

b. E y1 parlava [e]

(1) CL to-him spoke

I spoke to him.

The conclusion that the clitics of (74) are inflectional elements may thus not seem required: they would simply be the subject counterparts to object clitics, allowing doubling, like the latter. The alternation in (75) would thus follow, and the absence of these elements in infinitivals, as in (76) could be handled by supposing that subject clitics require nominative Case. However, further considerations support the analysis of these elements as part of inflection over the alternative, as we will show.

Corresponding to Italian impersonal SI and pleonastic ‘there’ respectively, Piedmontese has the two subject clitics se (henceforth ‘SE’) and ye. In the presence of either SE or ye, the relevant element in (74) still appears, as in (78).47

(78) a. A se [mangia] bin

CL SE eats well

We eat well.

b. A ye era tanta gent

CL there was much people

There were many people.

This is expected if a of (78) is part of inflection, since there is no reason, under our assumptions, why verb inflection should disappear in the presence of subject clitics like SE, ye. But it is unexpected if a in (78) is truly analogous to the dative clitic in (77), since Clitic Doubling never involves coexistence of two clitics, only of a clitic and a non-clitic phrase.48 Also, under Raising, subject clitics like ye of (78b), (79a) remain stranded in the infinitival, as in (79b), whereas clitics like a never do, as in (80).

(79) a. [e] a y1 è tanta gent

CL there is much people

There are many people.
CHAPTER 2

b. [a] a pùtria [i, cexy, tanta gent]  
   CL could be-there much people  
   There could be many people.

(80) a. Gianomin a mangua  
     Gianomin CL eats

b. Gianomin, a pùtria [i, mangu]  
     Gianomin CL could eat

Again, this follows if a in (80) is part of the tensed inflection, but not if it is a subject clitic unrelated to inflection. We will thus assume that the clitics of (74) are indeed part of inflection, and will refer to them as "infi-

cctional clitics". We now turn to inversion.

2.5.2 Inversion

Piedmontese has two inversion strategies. One is exemplified in (81) and is quite analogous to the Italian strategy. The other is exemplified in (82) and involves the use of the pleonastic clitic ye.

(81) a. i client a telefunu  
     the clients CL telephone

b. A telefunu i client  
     CL telephone the clients

(82) a. i client a rivu  
     the clients CL arrive

b. A y rivu i client  
     CL there arrives the clients

Beside differing with respect to the presence of ye, (81b) and (82b) also differ with respect to verb agreement: plural in (81b), singular in (82b). For the analysis of (81b) we assume complete analogy with correspond-

ing Italian cases, regarding clitics like a now as part of INFL. For the analysis of (82b), we assume that ye is the clitic analogue to English there. Like the latter, ye can also be a locative pronoun. That ye of (82b) is related to the subject, can be easily shown. It is clear that it is not a locative here since, unlike the locative in (83a), ye of (82b) can cooccur with a locative expression, as in (83b).

(83) a. * A y purtauva sempre i cit  
     (he) CL there took always the kids
     al Valentin
     to the Valentin (a public park)

b. A y rivu tanti  
   CL there of-them arrives many
   There arrives many of them

Also, ye of (82b) cannot appear if the subject position is occupied as in (82a), so that ye of (84) will necessarily have a locative reading.

(84) I client a y rivu  
     the clients CL there arrive
     The clients arrive there.

We therefore take the analysis of (82b) to be essentially as in (85), where the relation between ye and the subject position is analogous to the one we have with the subject clitic SI of 1.6 above. We will return to the difference in agreement between (82b) and (81b).

(85) [t] a y rivu [i, i client]  
     CL there arrives the clients

We now consider the distribution of the two inversion strategies. It is clear that the two types of inversion in (81b), (82b) correspond exactly in their distribution to the two types of inversion we claimed exist in Italian since, aside from some apparent exceptions to which we return, inversion with ye as in (82b) appears possible with all and only the verbs which we would analyze as ergative on the basis of independent criteria. The relevant criteria are the same as those we employed for Italian, in particular, alternation with a transitive form, as in (86) (on euphonic I, see Note 47), cliticization of ne as in (87) (see Note 47 on ao), and auxiliary selection, as in (88) (cf. also the auxiliary alternation in (86)). With respect to both the syntax of ne and auxiliary selection, Piedmontese is indeed just like Italian.48

(86) a. A lan chersiu titti i presi  
     (they) CL have increased all the prices

b. A le chersiu titti i presi  
     CL is increased-there all the prices
     There has increased all the prices

(87) a. A y na rivu tanti  
     CL there of-them arrives many
     There arrives many of them

b. *A na telefunu tanti  
     CL of-them telephone many
(88) a. I client a sun rivà
    the clients CL are (bare) arrived

b. I client a lìn telefonà
    the clients CL have telephoned

The class of apparent exceptions alluded to above is represented by ergative verbs that take the clitic se, equivalent to Italian si of 1.5 above. With these verbs, ye does not appear, as in (89).

(89) A lé rumpiùse due finestre
    CL is broken-themselves two windows
    Two windows have broken.

Regarding this fact, we note first that in cases like (89), just as in cases in which ye appears, and unlike those involving non-ergative verbs, there is lack of verb agreement, and second that there is reason to think that ye is actually deleted in the presence of some clitics (not all, given (87a)), as (89) illustrates. Notice the lack of verb agreement in (90c).

(90) a. A lé rivaye due regai
    CL is arrived-there two presents
    There has arrived two presents

b. *A lé rivanye due regai
    CL is arrived-to-me-there two presents

c. A lé rivane due regai
    CL is arrived-to-me two presents
    (There) has arrived to me two presents

It is thus rather natural to assume that in cases like (89), (90c), ye is present underlyingly and is later deleted in the presence of se, me, let us say by a phonological rule. This will account for lack of verb agreement in such cases, and our generalization on the distribution of ye will hold in full.

Piedmontese thus strongly supports our view of Chapter 1 that in Italian there are two different types of inversion, related to the two different classes of verbs (ergatives and non-ergatives), a view under which the superficial uniformity one observes in Italian is somewhat fortuitous.

Let us now consider what exactly determines the distribution of ye. The most natural assumption, and the one we will adopt, is that pleonastic ye is only available for insertion in D-structure. If ye cliticized by movement, this assumption would suffice to exclude it with non-ergative verbs since, in D-structure, the subject position of a non-ergative verb will contain an argument, and ye could thus not be inserted. However, we must assume that ye is introduced as a clitic, to account for its failure to undergo Raising in cases like (90b), a consideration to which we will return in connection with Italian cl. Some further assumption will then be required to rule out the coexistence of a full subject NP and ye in D-structures like (91a), which would give rise to the ungrammatical S-structure (91b).

(91) a. *I client a ye telefonà
    the clients CL there telephone

b. *I [ye] a Ye
    telefonà
    I client

CL there
    telephones
    the clients

We can naturally rule out D-structures like (91a) by postulating that ye, which is a subject clitic, must be related to an empty category, and not to a full NP. This condition is required independently, though at S-structure, by the ungrammaticality of (92b) (which corresponds to the impossible interpretation of ye as a pleonastic in (84)) derived from the well-formed (92a).

(92) a. [ye] a Ye
    riva i client
    the clients CL there arrive in the store

b. *I client a Ye
    riva ti tè
    the clients CL there arrive in the store

The extension to D-structure of the condition required by (92b) is a rather natural one. Recall that, as we discussed in 1.4, we assume that if a clitic is base-generated, it must be related to its ec at all levels, thus also in D-structure. This conclusion was required by the projection principle for those clitics which we take to be arguments (i.e. those which correspond to hin, etc.). What is required for ye is that this conclusion be generalized to all clitics, even those that are not arguments. Such a generalization seems reasonable, and we will assume it is true. Thus, while the projection principle gives us (93) with the parenthesized portion included, we will assume (95) holds even with that portion omitted.

(93) A base-generated (argument) clitic must be associated with the relevant ec at all levels.

The condition in (94), required for (92b), will thus hold at all levels as a result of (93). This will rule out the D-structure (91a).

(94) *NP [ye]... where NP is not an ec.

Occurrence of ye is thus limited to ergative verbs by postulating that it can only be inserted in D-structure and that once inserted it behaves as a
subject clitic, requiring an *e* in subject position. Although insertion of *ye* is thus possible with ergative verbs, we assume (of course that it is not necessary, to account for cases in which NP-movement applies (like (82a)).

2.5.3 Italian ci

Italian ci has a more limited distribution than its Piedmontese counterpart *ye*, but its syntactic behavior is otherwise quite analogous.

We have noted that Piedmontese *ye* selects ergative verbs. We now note that it also occurs with 'be' of existential and locational sentences as in (95a) (also as in (79) above). This is the domain in which ci is also possible, as in (95b).

\(95a\) A y é tanti client nel negosi

\(Cl. \text{there is} \text{ many clients in the store} \)

There are many clients in the store.

b. Ci sono molti clienti nel negozio

\(\text{there are } \text{ many clients in the store} \)

(We will return to the difference with respect to verb agreement between (95a) and (95b) Occurrence of *ye* with 'be' suggests that the latter verb is relevancy analogous to ergative verbs, which means that the i-subjects of (95) are base-generated in post verbal position. If this is correct, it would then be perfectly natural to suppose that the cases in (96) are derived via leftward NP-movement from the same base forms, as the analyses indicate.\)

\(96a\) Tanti clienti *a sun* t nel negozio

\(\text{Many clients are in the store.} \)

\(96b\) Molti clienti *son* t nel negozio

\(\text{Many clients are in the store.} \)

This would in effect reverse the traditional view of the corresponding English cases (cf., in particular, Milsark (1974), (1977)) under which the forms of (96) are basic and those of (95) are derived via rightward movement. There are good reasons to believe that this reinterpretation, first proposed on independent grounds in Stowell (1978), is correct. One reason is precisely the occurrence of 'be' with Piedmontese *ye*, which we just noted.

Another reason is that there are cases of *ciye* which would have no source under a rightward movement derivation, such as for example (97a), given the ungrammaticality of (97b) (It is quite clear that (97a) represents the same construction as (93); a number of relevant facts will appear in the ensuing discussion.\)

\(97a\) Ci vogliono altri soldi.

\(\text{It takes more money.} \)

b. *Altri soldi* vogliono.

\(\text{other moneys want} \)

Yet another reason is represented by Ne-Ci as in (98a, b). Ne-Ci is also possible in (97a), as shown in (98c).

\(98a\) A y na ié tanti nel negozio.

\(\text{There are many of them in the store.} \)

b. Ce ne sono molti nel negozio.

\(\text{there are } \text{ many in the store} \)

There are many of them in the store.

c. Ce ne vogliono altri.

\(\text{there are } \text{ others} \)

It takes more of them.

Recall that under our analysis of 1.4, Ne-Ci is only possible if the quantified phrase is base-generated in post verbal position, as with ergative verbs. The evidence for an ergative analysis of 'be' is, we find, rather strong, and we will review it more systematically in 2.7 below. Under such an analysis, appearance of *ye* as in (95a) is expected.

We will take Italian ci to be subject to exactly the same syntactic constraints we proposed for *ye*, in particular insertion only at D-structure, as in (95b). In addition however, we must presume that ci is subject to a lexical constraint allowing its occurrence only with 'be' (and some idioms, like the one in (97a)).

While our proposal that *ye*ci can only be inserted at D-structure thus accounts for the fact that inversion with these elements is not possible with non-ergative verbs, we must note that a stronger condition seems to hold, in particular that if a verb allows *ye*ci, then inversion without the latter elements is not possible, or is at least awkward, as in (99), (100).

\(99a\) Tanti curidur a sun rivù.

\(\text{Many racers have arrived.} \)

b. A le rivìe tanti curidur.

\(\text{CL is arrived-there many racers} \)

'There has arrived many racers.'

c. *A sun rivù tanti curidur.

\(\text{CL are } \text{ arrived many racers} \)

(Piedmontese)
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(103) a. [e] sì, costruisce molte case in questa città
   Si builds many houses in this city
   (Italian)

  b. [c] ci è del pane sul tavolo
   there is some bread on the table
   (Italian)

It is clear however that the possibility of having an ec in subject position here is determined by the NS property of Italian, since there appears to be no such possibility in French, which we will maintain is not a NS language. Thus, while we assume that French se-moyen (henceforth SE) corresponds to Italian SI, and that French y of the Il y a-construction corresponds to Italian ci, French cases like (104) would be ungrammatical with an empty subject position, as in "Il se construit... "Y a...

(104)a. Il se construit beaucoup d'immobiliers dans cette ville (French)
   it SE builds many buildings in this city

b. Il y a du pain sur la table (French)
   it there has (of) some bread on the table

Recalling that we characterized the NS property as the possibility for inflection to perform as a subject clitic, two hypotheses come to mind to account for (103) versus (104):

I. The NS property is as we defined it: the ec in (103) is allowed because it is related to inflection (INFL), as in other NS sentences. Under this view, there are then two subject clitics in (103), SI/ci and INFL.

II. The NS property must be redefined to allow an ec in subject position when this is related not only to INFL, but also to other subject clitics, like those of (103). (French lacks this property.)

There are several considerations leading to the conclusion that I, not II is true. The first consideration has to do with the already noted fact that in the presence of clitics like SI/ci, inflection — in particular the inflectional clitics of Piedmontese — does not disappear, as in (78) above: A s mangia bir 'CL SE eats well.' If II were true, one might expect that the inflectional clitic would disappear, since it would be unnecessary. A second consideration relates to the fact that there is 'pro drop' only pre verbally, not post verbally, as in (102) versus (106) (analogous facts hold in Piedmontese).

(105) a. Io sono alla festa.
   I am at the party
   (Italian)

b. Sono alla festa.
   (I am at the party
   (Italian)
CHAPTER 2

(106) a. Ci sono io alla festa. (Italian)
there am I at the party

b. *Ci sono alla festa. (Italian)
there am (I) at the party

If SI/ci in (103) could satisfy well-formedness requirements on the empty subject, then perhaps inflection (which as we have just said does not disappear) would be free to be related to the post verbal nominative in (106b), exactly as it is related to the pre verbal nominative in (103b). Thus, II does not at least not obviously account for (106b), but II does: under the latter, since there is only one INF, there can be only one empty position.59

A third consideration has to do with the stranding of these clitics under Raising as in (107) (analogous to the Piedmontese case in (79)).

(107) a. [e] pareva [ti esser ci del pane sul tavolo] seemed to be-there some bread on the table
There seemed to be some bread on the table.

b. [e] parevano [ti volere · altri soldi] seemed (pl.) to want-there other moneys
It seemed to take more money.

We note that, in this configuration, French differs from Italian not with respect to the embedded subject, which is contiguous to ci, but with respect to the matrix subject, which is contiguous to the tensed inflection, as in (108).

(108) [e] semblait [ti y avoir du pain sur la table] it seemed there to have ('be') some bread on the table
There seemed to be some bread on the table.

This shows that I, not II, must be correct: if II were true, and if (103) were grammatical because SI/ci can 'properly govern' the ec (or whatever the right local condition is), we would not expect (107) to be equally grammatical since the relevant configurational relation between SI/ci and the subject of the tensed verb — say, proper government — is certainly lost in (107). However, if I is true and if tensed inflection is thus what is relevant to the occurrence of the ec in (103), then the grammaticality of (107) is expected since, in the latter, tensed inflection — unlike ec — is indeed on the main verb.

We must therefore conclude that I is correct, and thus that there are two pronouns related to the subject position in (103): SI/ci and INF.

This is hardly surprising since we must in any case make a similar assumption for French, where we find both subject clitic SE/y and non-argument subject il, as in (104) above. Thus INF in (103) and (107) (like the inflectional clitic of (79) above) will be the clitic analogue to French non-argument il.57

Cases like (107) provide us with the opportunity to draw a few other conclusions regarding the syntax of ci/ye. It is clear that, under Raising, pleoastic ci/ye not only can be stranded as in (79b), (107), but in fact must, as illustrated by *Ci pureva essere del pane sul tavolo in contrast with (107a). Apparent exceptions like Ci dovrebbe essere del pane sul tavolo 'There should be some bread on the table' are irrelevant here since we will see that the higher position of ci in these cases is due not to Raising, but to the process of Cletic Climbing characteristic of restructurings verbs like dovevo (see ch. 5). Pleoastic ci and ye thus differ from the other subject clitic SI (Piedmontese SE is like SI) which, as we saw, can undergo Raising. This difference is accounted for by our assumption that ci and ye are base generated in clitic position, whereas for SI we assumed cliticization by movement. Since ci and ye are never in NP position, NP-movement will never affect them.

Notice however that, while we thus predict that Raising of ci/ye should not be possible, nothing we have said so far rules out insertion of ci/ye directly on the matrix verb in cases like (107). The phrase del pane/ri soldi would perhaps have to move first to embedded subject position, and then back to post verbal position if there were no other way to establish the appropriate coindexing with that position, but none of the conditions we have so far proposed would be violated.58 What seems to be required to rule out generation of ci in the matrix is that not only the relation between ci and the ec, but also the inversion relation of ci be established at D-structure under appropriate locality conditions. These conditions would then be violated, for example, in [e] ci, pureva [le] essere NP, . . . . We will assume that this is correct, returning in 2.7.2 below to discuss other facts that support it, and to consider its exact theoretical status.

As with other cases of inversion discussed in 2.3, in (standard) Italian cases like (107), the main verb obligatorily agrees with an i-subject which is actually within a sentential complement. Thus we find plural agreement in (107b), and Pureva 'Pareva esserlo . . . seemed (1st sg) seemed (3rd sg) to be-there' I . . . . This shows that Raising here is obligatory. If it were not, the matrix subject ought to be interpretable as a non-argument related to the clause, like it of It seems that . . . , and third person singular agreement ought to be possible. The obligatory nature of Raising in these cases, and analogously in the cases discussed in 2.3 (eg. (38)) follows from Case theory. It is only if Raising applies that the chain containing the i-subject is extended to a Case-marking position. The ci-construction is in fact impossible in non-Raising infinitives, like the other cases of inversion discussed above (cf. (23)), and as in (109) (analogous facts hold, of course, for Piedmontese ye).59
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(109) *La probabilità
di esserci Giovanni
di volerci le chiavi

The probability
there to be Giovanni
it to take the keys

Notice that in infinitivals, instances of the ci-construction involving a pronominal i-subject like (110a) contrast with superficially similar cases like (110b).

(110) a. *Non esserci non all'inaugurazione sarebbe un
not to be-there we at the inauguration would be a
errore.
mistake
b. *Non andare non sarebbe un errore.
not to go-there we would be a mistake

Note to go there ourselves would be a mistake.

As we pointed out in 2.3, the grammaticality of (110b) is predicted under the analysis of noi as an emphatic pronoun, that is, as a non-argument. The argument here is the PRO subject of the infinitival, which does not require Case. But in (110a) the analysis of noi as an ep is impossible, while ci of (110a) is a locative, the one in (110a) is necessarily a pleonastic subject, given the presence of an overt locative phrase. Because of ci, the null subject of the infinitival in (110a) can therefore not be interpreted as an argument (cf. Note 57). The argument must then be not; hence Case is required and ungrammaticality results, just as in (109).

2.5.4 Verb Agreement

We will conclude this section with some considerations on verb agreement and the ‘definiteness’ restriction. We have seen that the various inversion constructions of the languages we are dealing with exhibit differences in verb agreement. The case of Piedmontese will suggest that these differences are at least in part predictable from the nature of the non-argument subject involved.

Like Italian, Piedmontese has systematic verb agreement with the i-subject when the empty subject is related only to inection (cf. (81b)). However, things are different when ye is present. With ye, there is no verb agreement when the i-subject is third person (cf. (82b)), but agreement is required when the i-subject is first or second person (singular or plural), as for example in (111).

(111) a. E seve rivaye vui autri.
There have arrived you-pl.

(Piedmontese)

b. *A ke rivaye vui autri.
There has arrived you-pl.

(Piedmontese)

The facts of Piedmontese are actually duplicated by Italian at a sub-standard level. Thus, at that level, verb agreement can fail with ci as in (112a), but not in the absence of ci, as in (112b).60

(112) a. Cera molti clienti nel negozio.
There were many clients in the store

(Substandard Italian)

b. *Arriva
Telefona
i clienti

arrives
telephones
the clients

But again, agreement cannot fail, even with ci, for first and second person i-subjects, as in (113).

(113) a. *C'èvavi voi nel negozio.
There were you-pl in the store

(Piedmontese)

b. *C'èvavi voi nel negozio.
There were you-pl in the store

(Piedmontese)

Since agreement can fail in English too (especially in spoken English) as in 'There's many people, it would seem that for those constructions that employ pleonastic there or its equivalents, the differences separating Piedmontese, Italian and English are indeed minimal. Once we put aside the difference between first-second and third person of Piedmontese and Italian, not verifiable in English because of the definiteness restriction (see below), we can regard standard Italian as identical to standard English, while substandard Italian is identical to spoken English and Piedmontese.

Thus, while language specific idiosyncrasies must play some role, so as to distinguish standard Italian from Piedmontese over otherwise identical constructions (cf. (95)), the qualitative differences across the two types of inversion suggest that a major role is played by the non-argument subject. We may assume that the presence of lexical material such as there and its equivalents interferes with the transmission of agreement to the subject position, which is automatic and necessary in simple NS cases of inversion. For first and second person i-subjects, we must assume that somehow they 'transmit agreement traits more strongly', though we have no explanation for this. For elements like it and its French counterpart il, which never allow transmission of agreement (as noted in Note 22, cf. It is / il / are my friends, etc.) we may assume that they do not simply interfere in the manner of there, but that — unlike there — they have third person singular agreement properties of their own (like argument like if) which trigger normal subject-verb agreement.
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Turning now to the definiteness restriction, it is known from the literature that both the there-construction of English and the il-construction of French are ungrammatical with i-subjects like the dog, my dog, John, he, etc. As some of our examples have shown, this is not true of any case of inversion in Italian or Piedmontese. However some form of restriction along the lines of the one holding in English and French appears to hold for the constructions with ci and ye, though apparently not for the other inversion strategy.

Thus, quantifier phrases like 'everyone', which are impossible in English and French, appear to be impossible with ci/e too, as in (114), though they are not in (115).

(114) a. *A i lè rivaie tütì.
   'There has arrived everyone'

   (Piedmontese)

b. *Cerano tutti nel negozio.
   'There was everyone in the store'

   (Italian)

(115) a. A lan telefùnì tütì.
   'All the telephones all'

   (Piedmontese)

b. Sono arrivati tutti.
   'Have arrived all'

   (Italian)

It would thus seem that with respect to the definiteness restriction also, the lexical versus non-lexical nature of the non-argument subject plays a role, but we have no specific proposal to make regarding this. (For discussion of the definiteness restriction see the references of Note 2.)

2.5.5 Conclusion

In this section we have seen that Piedmontese has two different inversion strategies, one for ergative verbs, the other for non-ergative verbs. Both strategies rely on the NS property of Piedmontese, but in different ways. The strategy relative to non-ergative verbs requires the NS property because no element is inserted with respect to the subject position. The other strategy requires it because, although the element ye is inserted, the latter is a clitic and does not therefore properly govern the subject position, so that the governing property of INFL must again be anfaced to.

We thus predict that if a language had an element like Piedmontese ye that was not a clitic, then only one of the two strategies would rely on the NS property. Our predictions can in fact be sharpened further. Recalling how we suggested in 2.3 above that the non-argument subjects of inversion and extrapolation are clitics in Italian because they never carry stress, we propose a general principle to the effect that a non-argument subject will be a clitic whenever it can. In a NS language it always can. But not so in a non-NS language, since clitics do not govern the subject position.

If we then consider a hypothetical language which differs minimally from Piedmontese in being a non-NS language, this language will have an element analogous to ye which is not a clitic. It will then have inversion with ergative verbs since the NS property will no longer be involved, but will lack inversion altogether with non-ergative verbs. In the next section we argue that French is exactly such a hypothetical language.

2.6 French

2.6.1 Subject Pronouns

We will begin by claiming that French is a non-NS language. This claim is superficially challenged by the fact that French subject pronouns je, tu, il/elle/on-argument il, nous, vous, ils/elles exhibit some of the properties of clitics. This fact is discussed in Kayne (1975, pp. 83–86). Kayne notes that these pronouns behave like object clitics in that: (i) they cannot be separated from the verb by intervening material, as in "Il, souvent, mange du fromage 'He often eats cheese', (ii) they cannot be modified, as in "Il de deux partiront bientôt 'The two of them will leave soon'; (iii) they cannot be conjugated, as in "Il et Jean partiront bientôt 'He and Jean will leave soon'; (iv) they cannot be contrastively stressed, as in "Il, partira le premier 'He will leave first'; (v) they behave differently from other subject NPs with respect to certain phonological rules.

Nevertheless we will assume, unlike Kayne (1975), but in agreement with Kayne (1982) that the subject pronouns of French are not clitics at syntactic levels, and that the correct way to account for (i)–(v) above is to regard them as 'phonological clitics', i.e. clitics with respect to aspects of the phonology only, perhaps by assuming that they cliticize in the phonology.

There are several arguments against an analysis of French subject pronouns as (syntactic) clitics. Note first that they cannot be inflectional clitics, like those of Piedmontese, since they do not cooccur with a subject NP as in *Jean il mange du fromage 'Jean he eats cheese'. But they must also not be real (i.e. non-inflectional) subject clitics since they cooccur with subject clitics like SE and y as in Il se construit . . . . . . y a . . . . . . of (104) above and (116a), (117a) here below. If Il is in subject position, then there is a precise reason for its occurrence in these cases: to fill that position. But if it is a clitic, then there is no reason: why should there be two clitics? Secondly these pronouns undergo Raising, just like other subject NPs, and unlike subject clitics SE, y, which remain stranded, as is illustrated by (116) and (117).

(116) a. Il se construit beaucoup d'immeubles.
   SE builds many buildings
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Kayne and Pollack (1978) state that we will not deal with the latter type of inversion, generally referred to as "Stylistic Inversion" (see Kayne and Pollack 1978), a characterization of which falls outside the scope of our discussion. We will only consider inversion not specific to Wh-movement contexts, namely \textit{il} inversion (including the \textit{il} a construction). Inversion discriminates between certain verbs and others, as in (119).

(119) a. \textit{Il est arrivé trois amis.}
    \textit{it ('has') arrived three friends}

b. ??\textit{Il a téléphoné trois amis.}
    \textit{it has telephoned three friends}

The contrast in (119) recalls some of the other familiar ones, especially once we note that \textit{il} inversion quite generally allows clarification of \textit{en}, which we assume is just like Italian and Piedmontese \textit{ne} (i.e. it is derived from base-generated, direct object positions only).

(120) \textit{Il en est arrivé trois}
    \textit{it of them is ('has') arrived three}

Indeed (119) suggests that our expectation of 2.55 is fulfilled, that as we move to a non-NS language we may find inversion with ergative verbs only. This is in fact our claim. Specifically, we are claiming that, like Piedmontese \textit{ne}, French \textit{il} is only available for insertion in D-structure, from which it should follow that \textit{il} inversion is possible with all and only those constructions that allow an empty subject in D-structure. Thus it is possible with ergative verbs and impossible with non-ergative verbs. (The claim that the inversion construction is base-generated has been independently made by Hertzog, 1979, 1982.)

Our claim will be supported by two arguments. One argument is more strictly empirical by reviewing the verbs which can appear in \textit{il} inversion, we will see that there are independent reasons to assume that they are ergative. The other argument is more conceptual: it derives from the fact that \textit{il} inversion has uniform distribution over certain syntactically well defined domains. This suggests that the bifurcation of (119) is indeed along syntactic, not lexical, lines. (This argument is of the same kind as the ones we presented in chapter 1, in connection with the distributions of \textit{ne} and of auxiliary en.) Let us begin with the first, empirical argument.

If we assumed, as may seem reasonable, that the two auxiliaries of French, \textit{être} 'be' and \textit{avoir} 'have' (henceforth "E" and "A", respectively), reflect exactly the same system of auxiliary assignment we postulated for Italian, then we would expect \textit{il} inversion to be possible with all and only the verbs that take auxiliary E. One half of this expectation seems to be
fulfilled unproblematically, it seems to be the case, as noted for example in Obenauer (1976), that verbs that take E, like *arrivée de* (119), allow it-inversion rather generally. The other half of the expectation is not entirely fulfilled, however, since there are cases of it-inversion with verbs that take A, like those in (121) (also due to Obenauer (1976)).

(121) a. Il a manqué trois élèves.
   *it has been missing three pupils* (A)

   b. Il a disparu plus de sept cents sacchettes.
   *it has disappeared more than seven hundred lollipops* (A)

   c. Il a surgi d'autres correspondances.
   *it has arisen some other correspondences* (A)

We note that with the majority of such cases, the corresponding verbs in Italian take auxiliary E (as is true of *mancare, sparire, sorgere* 'be missing, disappear, arise', the verbs of (121)). There are two ways to account for the difference in auxiliary with this class of verbs: (i) French has a different class of ergative verbs (the verbs in (121) are ergative in Italian, but not in French). (ii) French has a somewhat different system of auxiliary assignment. Although (i) and (ii) are not logically incompatible, we clearly want to assume that only one of them is true, not both, to keep theoretical differences between Italian and French to a minimum. If (ii) rather than (i) was true, cases like (121) would pose no problem for our hypothesis since such verbs would in fact be ergative (and we would also account for the fact that these cases too allow en, as in *Il en a manqué trois* 'It has been missing three of them').

There is independent reason to believe that (ii) is indeed true: there is at least one case in which we are most likely to be dealing with the exact same syntactic configuration, and in which French has auxiliary A, while Italian has E. This is the passive construction, as in (122).

(122) a. Jean a été invité.
   *Jean has been invited* (French)

   b. Giovanni è stato invitato.
   *Giovanni is ('has') been invited* (Italian)

Given (122), (ii) must be true, and we thus proceed to assume that (i) is false, and that French has the same class of ergative verbs as Italian.

To account for auxiliary A in (121), we would have to say that in the configuration in (123), which is the one relevant to ergative verbs both under inversion and not (cf. 1.7, 2.2), lexical factors are allowed to play a role in French, though not in Italian.

(123) *NP V NP*

---

Due to such lexical factors, E will be assigned to *arrivée de* (119), but not to the verbs of (121), while in Italian all of the corresponding verbs will be assigned E. Let us put aside for the moment auxiliary assignment in (122), to which we return in 2.7.

It is clear that auxiliary assignment in French is in any event only partly lexical, since there are, as in Italian, syntactic regularities: always A with transitive verbs, and always E with so-called reflexive constructions as in (124).

(124) a. Il s’est vendu beaucoup de livres.
   *it SE is ('has') sold many books* (French)

   b. Jean s’est regardé.
   *Jean himself is watched* (French)

   c. Jean has watched himself.

Notice that although we have so far assumed that auxiliary assignment in Italian is entirely predictable from the syntactic configuration, this is not quite true. Italian also has an area of idiosyncrasy, like French. This is represented by Raising configurations like those in (125).

(125) a. Maria *ha potuto il risolvere il problema* (Italian)
   *Maria has been able to solve the problem* (A)

   b. Maria, è sembrata [il risolvere il problema] (Italian)

   *Maria is ('has') seemed to solve the problem* (E)

In our discussion in 1.7 we distinguished two cases in which E was assigned, (126a) and (126b) below. But it now appears that we must consider three, thus also (126c), interpreting the latter as distinct from (126b).

(126) a. *NP of-V

   b. *NP V NP

   c. *NP V [NP...]*

French never allows E in the configuration (126c), as shown by the contrast between (125) and (127).

(127) a. Marie *a pu résoudre le problème* (French)
   *Marie has been able to solve the problem* (A)

   b. Marie a semblé résoudre le problème
   *Marie has seemed to solve the problem* (French)
However, French always requires E in the configuration (126a). This is shown by (124) (we assume that as with SI (cf.1.6) SE holds a relation with the subject position). What emerges is therefore a general picture in which the Italian system has (126a) and (126b) as the core cases, and (126c) as the periphery, while French has (126a) as the core case, (126b) as the periphery, and (126c) outside the system altogether, as in (128)41

(128) Assignment of Auxiliary Essere/Etre

<table>
<thead>
<tr>
<th>a. NP el-V</th>
<th>Italian</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>core</td>
<td>core</td>
</tr>
<tr>
<td>b. NP V NP</td>
<td>core</td>
<td>periphery</td>
</tr>
<tr>
<td>c. NP V [s NP . . . ]</td>
<td>periphery</td>
<td></td>
</tr>
</tbody>
</table>

Recalling how we defined relations that trigger E assignment as relations between the subject and an element contiguous to the verb (cf. (86), ch. 1), we note that the three cases of (128) are ordered precisely according to the degree of proximity of the relevant element to the verb since clitics form one morphological unit with the verb, the clitic of (128a) is plainly ‘closer’ to the verb than the direct object of (128b), and the latter is in a reasonable sense closer to the verb than the subject of the complement in (128c), given the intervening clause boundary. It thus appears that the rule of E assignment is parameterized with respect to the degree of contiguity it requires, with not only Italian and French differing in the value of the parameter, but also with each language having a stronger and a weaker version of the rule depending on the degree of contiguity.

From the point of view of our formalism of 1.7 and of our definition of element contiguous to the verb as "either a clitic or an NP in an A-position governed by the verb" (87), ch. 1), it would seem that what is parameterized is the notion of government that enters into the system. At least two different notions seem to be needed, to appropriately distinguishing the governed NP in (128b) from the one in (128c), both internally to each language, and across languages. We may refer to them as STRONG GOVERNMENT, obtaining in (128b), and WEAK GOVERNMENT, obtaining in (128c). Perhaps the relation between the verb and the clitic in (128a) could also be captured in terms of government a third and the strongest notion (call it SUPERGOVERNMENT).

Recall, too, from 1.7 that in Italian the relation of (128b) triggers not only E assignment, but pp agreement as well, since a ‘direct object’ (defined as “an NP in an A-position governed by the verb”) is involved. This is true of (128a) as well, but only in the sense that if the relation triggers E it will trigger pp agreement, and vice-versa (compare feminine sem-

beaut of (125b) versus masculine potuto of (125a)). The same is true of (125b) for French: pp agreement is found with all and only the ergative verbs that take E (as with arriver, etc., never with marquer, etc.). The generalization is therefore that, although in a periphery configuration E assignment can either succeed or fail, pp agreement must either succeed or fail with it. We take this to mean that although E assignment and pp agreement are two different rules, as we argued on the grounds that pp agreement is not predictable in general from the auxiliary, there being no pp agreement in (128a), they are nevertheless part of a closely integrated system. This fact is important for some of our later discussion.

While either auxiliary can thus be assigned in the periphery, it appears that even in the periphery there are important subregularities. In particular, a principle seems to be operative to the effect that if a verb, in its various modes of complementation, ever falls into the core of the system, then the auxiliary assigned in the core is maintained in the periphery. This explains in particular the difference between the two verbs of (125). Simboreal, unlike potere, occurs not only with Raising, but also as in (129).

(129) [g] sarebbe sembrato [s] che Maria (Italian)

would be ('have') seemed that Maria

would solve the problem.

The case in (129) is a core case. Indeed it falls under (128b), once we simply generalize the latter to S components. (This generalization was already implied by our discussion in 2.2 above.) Simboreal therefore must take E in (129) and then appears to maintain it in the periphery case (125b).

But the corresponding French case in (127b) is outside the periphery. Therefore it is in effect a core case for the assignment of A. The configuration of (129), corresponding to (128b) is a periphery case for French, but since French semble takes A in a core case, as in (127b), we expect it to maintain it in cases like (129). This is correct (cf. If il a semblé que . . . It has seemed that . . .) This principle also allows us to correctly predict that all French ergative verbs that have transitive alternants in the manner of (130) and (131), ought to take A. They do – another important subregularity.

(130) a. Jean a pu le bateau.

Jean has sunk the boat.

b. Le bateau a pu t

the boat has sunk

(A)

(A)
in *Ils* has sunk two boats. (With the *se* causative, the overt indication is *se*, and no ambiguity can arise.)

Other apparently problematic cases are represented by isolated instances of *il*-inversion with verbs that cannot reasonably be characterized as ergative, which have appeared in the literature, such as (134) (from Grimshaw (1980)).

(134) Il mange beaucoup de linguistes dans ce restaurant.
*it eats many linguists in this restaurant*

Verbs like *manger* are in fact not ergative by any of the criteria that our discussion provides or suggests. A few instances of *il*-inversion involving transitive verbs, like (135) (from Kayne (1979)), are also attested.

(135) Il prend corps dans ce pays une grande espérance.
*it is taking shape in this country a great hope*

We have nothing to say about these cases beyond noting that they are rare (speakers differ on the acceptability of (134)). We will thus assume that our hypothesis provides an acceptable approximation to the empirical facts.

We now turn to the second argument that we promised for our analysis of *il*, noting that *il*-inversion is distributed quite uniformly over some syntactic domains: systematically impossible — with very few exceptions like (135) — with transitive verbs, systematically possible with passive and *se*-moyen (SE) constructions, as in (136).

(136) a. Il a été construit beaucoup d'immeubles dans cette ville.
*it has been built many buildings in this city*

b. Il se construit beaucoup d'immeubles dans cette ville.
*it SE builds many buildings in this city*

Since the class of verbs that appear in sentences like (136) is exactly the class of transitive verbs (on the distribution of SE, see below), *il*-inversion is either systematically possible or systematically impossible over the same class of verbs, depending on the syntactic configuration. This clearly stresses the syntactic, non-lexical, character of the factors that determine its distribution. Also, the facts of (136) support our claim that *il*-inversion is base-generated, since the cases in (136) are exactly those in which we are independent grounds for believing that are base-generated in that configuration. (The grounds for this are independent not only of this discussion of *il*-inversion, but even of the ergative hypothesis.) Thus, as is standard within the literature (cf. Note 32, ch. 1), we take cases like (137) to be derived from the same base forms as (136), via NP-movement.
(137) a. [Beaucoup d'immeubles] ont été construits dans cette ville, many buildings have been built in this city.  

b. [Beaucoup d'immeubles] se construisent dans cette ville. many buildings SE build ("are built") in this city.  

The existence of the D-structures in question is clearly not incidental to the fact that it can appear as in (136); if we take 'be' adjective constructions, which differ minimally from passives like (136a) precisely in that they do not have that D-structure, we find that they cannot appear with it. In fact there are minimal pairs like (138).

(138) a. Il a été achevé plusieurs constructions cette année. it has been finished many buildings this year.  

b. **Il a été inachevé plusieurs constructions cette année.**

It has been unfinished many buildings this year.

The contrast in (138) is, in this context, the exact counterpart to the one we noted for Italian in 1.3, relative to Ne-CI (cf. (29), ch. 1). Of course, elaboration of en is analogously possible in (138a): II EN a été achevé plusieurs... it has been finished several of them...

Note however that, in order for our claim to be true that both examples of (136) represent D-structure configurations, and that if it is inserted in D-structure, it must be the case that French SE, unlike Italian SI, is base-generated inElite position. We believe that this is the case. This conclusion is independently required by the systematic failure of SE to undergo Raising, as in (116b) above, and (139).

(139) a. Il semble se construire beaucoup d'immeubles. it seems SE to build many buildings

b. **Il se semble construire beaucoup d'immeubles.** it SE seems to build many buildings

We will return to this difference between Italian and French.

We conclude that, in French, the non-argument subject of inversion, il, can only be inserted in D-structure, like Piedmontese ye. Because of this, idi-inversion is only possible with ergative verbs, passive and se-moyen constructions. The impossibility of inversion in other cases and thus the more limited scope of French inversion compared with inversion in Italian and Piedmontese, is due to the non-NS character of French. Since NFL cannot properly govern the subject position, in French, insertion is always required, but no element is available for insertion after NP-movement.

Notice that we find no deeper reason why insertion of il or ye should be constrained to D-structure. However, since it is a fact that the distribution of these elements is restricted, any theory is bound to have some condition on their occurrence: the condition we are assuming is maximally simple, and empirically adequate.

We can now account for the Raising-Control contrast of (33) above: Il semblait-voilait venir beaucoup de monde 'It seemed/wanted to come many people!' while il is Raised into matrix subject position with semblait, with the Control verb voulait it cannot be Raised and it can also never be inserted since such verbs require an argument subject in D-structure. Il-inversion will thus be impossible with Control ("Equi") verbs altogether. This is not true of Italian inversion, as we noted in 2.3. We saw in fact that in Italian, inversion with Control verbs was impossible only if the i-subject was within the complement, but possible (though perhaps marginal) otherwise, as in (34) above: Sembrava/Sperava di intervenire Giovanni 'seemed/hoped to intervene Giovanni'. This follows from the fact that in Italian no insertion into subject position is required, which is to say it follows from the NS property of Italian.44

2.6.3. Se-moyen

In this subsection, we will argue that, like the more limited distribution of French inversion compared with Italian inversion, the more limited distribution of se-moyen (SE) compared with that of Italian SI, is also predictable from the NS property.

As is well known (cf. for example Rizzi (1976b)), SE differs from SI in that it essentially only occurs with transitive verbs, either in (136b), or as in (137b), or replaced as (140a), (140b) respectively.

(140) a. Il se construit beaucoup d'immeubles... (French) it SE builds many buildings

b. [Beaucoup d'immeubles] se construit... (French) many buildings SE build

Many buildings are built...

While the cases of (140) can be duplicated in Italian, as we know from 1.6 (cf. Si costruiscono molte cas... SI build many houses...), Molte case si costruiscono... 'Many houses SI build ("are built")... none of the Italian cases in (141) can be duplicated in French.

(141) a. [e] mangia bene qui SI eats well here (Italian)

We eat well here.

b. [e] è appena arrivato SI is just arrived (Italian)

We have just arrived.
c. [t e] si stati invitati. SI is invited
We have been invited

This divergence is of interest because of course we assume that SE and SI are fundamentally the same element. This assumption rests on obvious morphological, semantic and syntactic similarities. Note in particular how SE fails to appear in infinitivals, in either one of the variants of (140), just like SI, as shown in (142).

(142) a. *La possibilité [de se construire des immeubles] est
the possibility of SE to build any buildings
is limited.
(French) limited
b. *Beaucoup de livres s'achètent sans [se lire]
many books SE buy without SE reading
Many books are bought without being read.

This contrasts with the possibility for all se's (reflexive, inherent reflexive, ergative) to appear in infinitivals, as in (143).

(143) a. Il serait agréable [de se voir plus
It would be pleasant to see each other more
souvent] often.
(French)
b. Jean a passé la nuit sans [se endormir]
Jean has spent the night without falling asleep.
(French)
c. Le verre est tombé sans [se causer]
The glass has fallen without breaking.
(French)

The contrast between (142) and (143) is identical to the one noted for Italian in 1.6. Within our theory, such contrasts are due to the fact that SI, SE require that Case be assigned to the subject position, unlike SI, se.

Let us then consider how the French counterparts to (141) can be excluded. Under the assumption, which we have already made, that SE is base-generated in clitic position, (141b,c) are excluded directly. In fact these are exactly the cases which we claimed required a movement analysis of SE. What about (141a)? It would seem that by simply inserting il into the empty subject in D-structure it ought to be possible to derive the French counterpart of (141a), (144).

(144) *Il se mange bien ici.
it SE eats well here

However there is reason to believe that, at least in languages like French, Italian and English, non-argument subjects must always be linked with an S or NP argument, as il is in (140a). This assumption is required by the fact (to which we will return) that these languages do not have passives with intransitive verbs, i.e. the so-called 'imperceptual' passives, like 'It is moved by everyone.' French has some imperceptual passives, such as Il a vu le monde il will be talked about you by everybody (from Kayne (1975)), but there are also some corresponding cases of SE: Il se réjouit de drôles de choses il SE thinks about funny things around here (from Kayne (1975, p. 397, Note 64)). It therefore seems reasonable to assume that cases like (144) ought to be ruled out only to the extent that imperceptual passives are. We suppose therefore that what accounts for the contrast between (144) and (140a) is the fact that in (144) there is no post verbal argument to which il could be related.

Yet the problem of (144) is not entirely solved: In 2.5.3, we concluded that in Italian cases like (141a) (Si mangia bene qui) INFL plays the role of a non-argument pronominal, just like French il. Since, in Italian, imperceptual passives are at least as unproductive as in French, we must assume for Italian too that non-argument subjects are linked to arguments, from which it follows that the Italian equivalent of il in (141a) must be linked to argument SI (cf. Note 57). But why is the same not sufficient for il in (144)?

A plausible solution to this problem is provided by recent work of M. R. Manzini (1982), suggesting that the difference between French and Italian here is a reflex of the definiteness restriction. Since it is an independent fact that French il only occurs with 'definite' arguments, unlike the corresponding non-argument subject of Italian, we may assume that SE/SI is definite in the relevant sense, whence the difference between (144) and (141a). The analogue to (141a) will thus be ruled out differently from the analogous to (141b,c). But this seems correct since, while the prohibition excluding (141a) in French is sometimes relaxed, as in Kayne's example Il se réjouit à de drôles de choses ici, the one excluding (141b,c) is not.

The above discussion has accounted for the differing distributions of SI/SE by appealing to two differences between Italian and French: the definiteness restriction, and the fact that SE is base-generated as a clitic, unlike SI. Although we have no precise understanding of the definiteness restriction, we have suggested in 2.5.6 that it is related to the presence of lexical elements like there, il (and c'e), as it never appears with null subjects related only to INFL. If this is correct, then one of the two differences simply derives from the NS property.

Let us consider the second difference and see whether it too can be derived. As we argued in 1.6, cases of the type [t, e] si ... ti ... like
those in (141b, c) are possible because SI criticizes by movement, so that it can undergo NP-movement before it criticizes. But suppose SE criticizes by movement, like SI. Could corresponding French cases, which would be of the type 'il se... ', be derived? Not if it can only be inserted in D-structure as we claim, since NP-movement of SE would be blocked. Thus, while criticism by movement of Italian SI gives rise to sentences that could not exist otherwise, criticism by movement of French SE would not. On the contrary, criticism by movement of SE would exclude all sentences of the type 'il se... ' which are possible under a base-generation analysis, like (140a) above. Thus, if we simply postulated that the choice between the two possible analyses of these elements is determined by a principle that aims at maximum productivity, which is not unreasonable, it would automatically follow from the NS property holding in Italian but not in French that Italian SI should be analyzed as moved, while French SE is analyzed as base-generated. Assuming that something along these lines is correct, then the different distributions of SI/SE will now be entirely predictable, like the difference in the productivity of inversion, from the different status of the two languages with respect to the NS property.

Notice that our discussion of SE confirms the analysis of SI as a case of criticism by movement: if SI were base-generated like SE, it would remain a mystery why French and Italian should have such different configurations of data.

2.7. ENGLISH THERE

2.7.0 Introduction

In this section we consider inversion in English, namely constructions with pleonastic there. We will distinguish two subcases: there with be, and there with other verbs: the so-called 'presentational' sentences. We will try to account for a number of differences between inversion in English and inversion in the other languages we have considered. In the case of inversion with 'be' in particular, we will maintain that virtually all the observable differences are reducible to the fact that the Romance counterparts to there are clitics.

Given our previous discussion, one might expect that, like you and French il, English there may also be restricted to insertion in D-structure. We will argue that this is true, or at least a strong tendency. We will begin by arguing that this view is tenable when there occurs with be.

2.7.1 'Be' as a Raising Verb

Consider the two forms in (145).

(145) a. There is a man on the roof.

b. A man is on the roof.

If we accept the idea, convincingly argued for in Milnark (1974), that pairs like (145) originate from a common D-structure, there will be two ways of expressing this idea. One is to assume that (145a) is representative of the D-structure configuration, the other that (145b) is. Under the first possibility, derivation of (145a,b) will be as in (146), where both (b,c) are derived from (a).

(146) a. [\( x \) is a man] on the roof →

b. There is [a man] on the roof

c. [\( x \) is a man] on the roof

Under the second possibility, (145a) is derived from (145b) via rightward movement of [\( x \) a man] and insertion of there. Early analyses, including Milnark's, assumed that the second possibility was true. As far as we can make out, this assumption rests on two considerations:

I. A base form like (146a) would be implausible since the existence of complements, or even phrases, corresponding to some of the material that can follow be: our X of (147), is not independently attested.

(147) There was [\( x \) a man arrested]

II. A syntactic rule permitting the subject and be in linear order has the right properties since it appears to operate quite mechanically with respect to any instance of be, whether topical, progressive, or passive, as (147) illustrates.

However, Stowell (1978) has shown that both I and II are crucially flawed. In particular, with respect to II, it is not true that rightward movement would treat all instances of be alike, since — as Milnark himself notes — it must fail with 'semi-modal' be, as in A man is to leave at noon → "There is a man to leave at noon. With respect to I, complements such as X of (147) are indeed attested. In particular by the cases in (148).

(148) a. We had

We needed

\[ x \] the car painted green

b. We

like want

[\( x \) the hens locked up]

in the barn

[\( x \) the hens pecking at dirt]
The existence of such phrases as X of (147) is attested, not only in cases like (148) noted by Stowell (which are somewhat peculiar to English), but rather massively by complements of verbs like believe, consider and by 'reduced' relatives, if we give up the idea, which was common in earlier literature, that there is a process of be deletion, specifically, if we do not regard cases like (149b), (150b) as derived from the corresponding (a) cases by deletion of the portions in boldface.

(149) a. I consider him to have been accepted in the program
   b. I consider him accepted in the program

(150) a. A student who has been accepted in the program has arrived
   b. A student accepted in the program has arrived

There are good arguments in the literature to the effect that there is no process of (Wh-)be deletion. In this work, we will simply take that conclusion for granted, noting in passing how some arguments arise specifically from the material we will be discussing. For more extensive discussion of (Wh-)be deletion, see in particular Williams (1975), Burzio (1981, 3.3). Rather than (Wh-)be deletion, we will postulate the existence, alongside of tensed and infinitival clauses, of a third type of clause, which, following Williams (1975), we refer to as a SMALL CLAUSES. The complement in (149b) will then be a small clause (sc). The alternation of (149a, b) will now be due to the fact that different types of clauses freely alternate as complements of a verb, in the unmarked case, as for relatives like the one in (150b), the most natural assumption is that they have a PRO subject controlled by the head of the relative, as in (151), so that they too will be small clauses. We will refer to these as SMALL CLAUSE RELATIVES.

(151) A student, [PRO, accepted . . . ]

Relativization in (150b) therefore does not involve Wh-movement as in (150a), but Control.

The complement in (147) (X) will thus be a sc, and so will those in (148). The four possibilities of (147) are indeed found with sc's in general as in (152), although present participles do not occur freely with complements of believe, consider, for reasons which remain unclear.28

(152) a. [believe, consider] [accepted in the program]
   [applying to the program]
   [providing him to be here]
   [on the committee]

b. A student, [PRO, accepted in the program]
   [applying to the program]
   [providing him to be here]
   [on the committee]

A sc will thus have a subject, and a predicate ranging over past participle, present participle, adjective, PP.

On the one hand there will therefore be no argument against the derivation in (146). On the other there will be good arguments for it. In particular — as Stowell notes — the impossibility of *There is a man to leave at noon, no longer requires a special stipulation to the effect that rightward NP-movement must fail with semi-modal *be (the 'Semi-Modal Restriction' of Milstein (1974)). The independent assumption that semi-modal *be is a modal, and as such does not take sc complements, will suffice. Also, leftward movement as in (146c) is far preferable to the rightward movement of the alternative. Note in particular that within our framework we would expect rightward movement to place the s-subject into a VP final position (cf. 1.8), which is clearly not the case here (cf. (147)). Following Stowell (1975), we will thus analyze he as a raising verb taking a sc complement.31 We will then slightly revise our analysis of Italian and Piedmontese locational constructions to include the sc boundary, so that for example Italian on the pane sul tavolo 'There is some bread on the table':

Notice that the fact that the subject of passives is the 'semantic' object of the verb, will follow much as in the traditional analysis of passives, since we assume that when the predicate of the se is a past participle, NP-movement occurs internal to the se as in (153a), while no analogous movement occurs with present participles, as in (153b).

(153) a. [e] was [John, invited, t] → John was invited.
   b. [e] was [John walking] → John was walking.

We assume, specifically, that past participles fail to assign a θ-role to their subject the same property which we had been attributing to the passive morphology as a whole. Therefore John in (153a) could only be linked with object θ-role. For present participles, we assume that they maintain the same properties of θ-role assignment as the corresponding verb, so that John in (153b) will have subject θ-role. Analogously for complements of believe, consider, as in I consider [John, invited t, to the party].

The same considerations will hold for sc relatives, so that we will have the two different cases in (154).

(154) a. A student [PRO, accepted t, in the program]
   b. A student [PRO, applying to the program]

Our analysis of sc relatives will thus predict correctly that the relativized element will always be the subject of the corresponding verb with present participles, as in (154b), while with past participles it will never be the subject, as (155a) shows. Rather, with past participles, it will be either the
consider the Raising analysis, the one given in those examples. The relation in (156) is a periphery case for Italian (cf. (128c), assuming that sc boundaries are just like S boundaries for E assignment); therefore we expect E to be possible in (156). But if we also consider the principle we discussed in 2.6.2, we can actually predict that E should be not only possible, but necessary here. The reason is that 'be' also occurs in existentials (in Italian; French uses 'have' of Il y a . . .) like (158), which are core cases for Italian, since no clause boundary is involved (cf. (128b)).

(158) [s'è stato un terremoto] (Italian)

While E is thus assigned in (156b), A is assigned in (156a), since the configuration is outside of the system for French (cf. (128c)). The distribution of pp agreement in (156) follows in the same way as that of E.

In (157), the relations involving the matrix subject are identical to those in (156). Auxiliary and agreement on the main verb are thus correctly predicted; as in (156). As for the relation internal to the complement, the latter will give rise to a core case for Italian, and a periphery case for French. No auxiliary will appear here, since there is no auxiliary in sc's, but pp agreement will. The agreement of (157b) is thus predicted to be necessary, the one in (157a) to be possible.97

Let us now consider the traditional analysis of 'be'. The latter would fall in particular with respect to (156b) and (157a), given in that analysis in (159).

(159) a. Maria è stata al mare (Italian)

Marie has been invited (fem.) at the sea (E; ag't)

b. Maria a été invitée à la mer (French)

Marie a été invité à la mer (A; no ag't; ag't)

The distribution of auxiliaries and agreements in (156), (157) follows straightforwardly from our discussion of 2.6.2, but crucially only under the Raising analysis of 'be', not under the traditional analysis. Let us first
b. [c] c'era [del pane sul tavolo] (Italian)
there was some bread on the table

D. The latter configuration is impossible however with any other type of inversion, as suggested in (167) (and as we have seen in (99), (100) above).

(167) a. *Il étais [du pain sur la table]
it was some bread on the table (French)

(167) b. *[c] éra [del pane sul tavolo]
was some bread on the table (Italian)

Concerning A-D above, one may suppose that, over such frequently used constructions, the different distributions we have just noted, merely reflect language specific idiosyncrasies. However, we will suggest that there are more principled reasons for the differences. With regard to point A, if 'be' is a Raising verb, then ci, ye are presumably excluded from some like (162) and the same factors that exclude them from other Raising structures. In 2.5.3 above, we claimed that with ci the inversion relation must be established at D-structure, subject to locality conditions. Under this view, (162) will be ruled out because the inversion relation of its D-structure (168) is 'non-local'.

(168) [c] ci furono [c] costruire [molte case]
there were built many houses (Italian)

A D-structure condition ruling out the relation of (168) is thus empirically supported by the ungrammaticality of cases like (162) involving 'be' and by the non appearance of ci on Raising verbs in general, discussed in 2.5.3, but we may ask what the theoretical status of such a condition is. Our idea is that all relations involving base-generated clitics must exist at D-structure. This would follow from the projection principle for a core number of cases, namely for clitic-ec relations, in the manner we discussed in 1.4. However, our claim is that this reflex of the projection principle is in effect generalized to an operative principle that deals with all relations involving base-generated clitics in the same fashion. This would also explain (by replacing (93) above) the fact noted in 2.5.3 that pleonastic ci must be linked with a non-argument subject even at D-structure, and the fact noted just above, that reflexive si cannot occur with a derived subject. The latter follows because si must have an antecedent even at D-structure. If relations that involve clitics must obtain at D-structure, it is natural to assume that they will have to obey locality conditions, even at D-structure, and we will then consider what these conditions are. In Part II, where we return to these issues, we will claim that it is the usual binding conditions that apply at D-structure. Example

(168) is then ruled out by the binding principle we proposed for inversion: (51) above.70

The same considerations ruling out (162), namely the ill-formedness of D-structures like (168), will rule out the cases in (165) as well. The cases in (164) will be allowed in contrast with (162) and (165) because the non-argument subjects il and the ec of Italian are Raising, so that there will be no violation of locality conditions here. Notice that there will never be an analogous possibility of Raising applying in ci/y cases, since ci/y is inserted directly as a clitic and not in NP position.

The impossibility of (162) will contrast with the possibility of superficially similar cases in which an adjective rather than a passive participle is involved, like (169).72

(169) Cerano [morte case disabilità]
there were many houses uninhabited

The grammaticality of (169'), like that of (166), will be due to the fact that the S-structure subject of the ci is in that position at all levels, so that locality conditions on the inversion relation will never be violated.

We have so far covered A and C above. We now consider D before turning to B. As we discussed in 2.5.3, the ungrammaticality of (167b) seemingly forces us to assume that inversion possibilities are hierarchically ranked and that inversion with ci is higher in the hierarchy; (167b) will thus be impossible because (166b) is possible. Similar considerations for French will rule out (167a) given (166).73 We are thus left with B and the cases in (163).

It would seem reasonable to suppose that the impossibility of (163) is related to that of (167). Let us then suggest that in the context (170), where NP is lexical, ci/y is required not only if it is possible as we assumed in the preceding paragraph, but even if it is not.

(170) ___ be NP...

The configuration of (170) will then be ruled out altogether in the case of passives since, though ci/y is required, the latter cannot be successfully inserted, for the reasons we discussed. We may regard the condition requiring insertion of ci/y in (170) as universal over the languages in question, thus affecting English there as well, although English has no alternative inversion strategy. We may then further assume that in (standard, contemporary) English the relevant conditional is strengthened to a biconditional, i.e. that not only will (170) require there, but that there (when it occurs with he) will require the context in (170) as well. This will rule out *There were built several houses, parallel to (164) and contrasting with (161a) (There were several houses built).
Although a few things have been left vague at the formal level, we take this discussion to provide some explanation for the distribution of the various inversion strategies with 'be'. In essence, our thesis is that the distribution reflects, not so much a difference between English and the Romance languages under discussion, but rather a difference between the type of inversion with there/e/he/ye and all other types. As for the differences between there and ci/y/he, these appear predictable from the fact that ci, y, ye are clitics. This will itself be predictable on the basis of the principle mentioned in 2.3 and 2.5.5 above, which we may regard as universal, a principle prescribing that non-argument subjects (which cannot receive stress) will be clitics whenever they can. Thus, English there cannot be a clitic, since English has no clitics, while Italian and Piedmontese will have clitics ci/ye since these languages do have clitics and furthermore since in these languages INFL can properly govern the subject position. French will have clitic y because it too has clitics and because, although INFL is not a proper governor in this language, it has another non-argument subject (beside y) which is not a clitic and which can thus fill the subject position, namely il. Our principle predicts in fact that in a non-NS language that has clitics, like French, any non-argument subject can be a clitic, so long as there is one which is not, like il.

We now note that some of the configurations possible with 'be', such as the one in (171a) (relevantly analogous to (16b)), are not possible with other verbs, as shown in (171b).

(171) a. There are many people sick
b. *There seem many people sick

Be and seem do not differ if instead of there insertion, NP-movement occurs, as in (172).

(172) a. Many people, are [t; sick]
    b. Many people, seem [t; sick]

The ungrammaticality of (171b) is unlikely to be related to the occurrence of there (although ci/y/ye give the same results). More likely, it is related to the ungrammaticality of the cases in (173), noted in 2.4 above.

(173) a. ??seem [Giovanni ammalato]
    seemed Giovanni sick
b. ??Giovanni seem [lei ammalato]
    Giovanni seemed he sick

Since we lack a precise understanding of (173), we will not be in a position to account for the contrast in (171). It may seem reasonable to suggest however that the grammaticality of (171a) and analogous cases is related to the fact that be also occurs in existentials (as in There is a Santa Claus), whereas seem does not.

We now turn to instances of there with verbs other than be, that is, presentational there.

2.7.3 Presentational there

English there is not restricted to 'be' like Italian ci, yet its distribution is clearly more limited than that of Piedmontese ye or French il. There are two ways in which we may attempt to account for this difference. One is to assume that, while there can be inserted with all ergative verbs, English has a different, more restricted class of ergative verbs than the Romance languages we have discussed. The other is to assume that, while English has the same class of ergative verbs, additional constraints account for the limited distribution of there.

Now note that the existence of 'semantic' restrictions — limiting occurrence of there roughly to verbs of appearance — is independently established, by minimal pairs like (174) (from Kayne (1979)).

(174) There has just appeared another book by Smith.

It is in fact very unlikely that appear and disappear of (174) could differ with respect to whether they are ergative or not. We thus assume that the rather limited productivity of presentational there is due to semantic factors, which we will not attempt to define precisely, referring for this to relevant literature, in particular to Milsark (1974), Stowell (1978), Kayne (1979), Guérin (1980). If we assume no other difference between there and yeïl, we will predict there to be possible only with ergative verbs, though not with all of them. This prediction is fulfilled in some respects, but not in others. We first consider the respects in which it is.

The majority of verbs with which there can appear most naturally, such as those in (175), are indeed verbs that we would independently assume are ergative.

(175) arise, emerge, develop, ensue, begin, exist, occur, arrive, follow

The verbs in (175) will in fact be ergative under our assumption that English has roughly the same class of ergative verbs as Italian, since the Italian equivalents sorgere, emergere, svilupparsi, succedere, cominciare, esistere, accadere, arrivare, seguire are all ergative, taking auxiliary E (on cominciare, seguire 'begin, follow' see below).
The correctness of the hypothesis that *there* occurs only with verbs whose Italian counterparts take auxiliary *E,* is suggested by the fact that it solves some problems noted in Milsark (1974). Consider the contrast between (176) and (177).

(176) a. A rainstorm followed.
    b. *There* followed a rainstorm.

(177) a. A taxi cab followed.
    b. *There* followed a taxi cab.

The two different meanings of *follow* pointed out by Milsark, i.e. *follow* after and move in the same direction as, but behind, are also found with its Italian counterpart *seguire,* but are associated with different auxiliaries, as in (178).

(178) a. Alle belle giornate *era seguito* un temporale.
    (Italian) to the nice day was *followed* a storm
    (E) A rainstorm had followed after the nice day.

b. L’auto si *era mossa* ed il tassi *aveva* seguito.
    (Italian) the auto itself was *moved* and the taxi had *followed* (A)

The auto had moved and the taxi cab had followed.

This suggests that the verb of (176) is ergative, whereas the one of (177) is intransitive. The contrast between (176b) and (177b), a rather curious fact in the context of Milsark’s discussion, is thus accounted for by our hypothesis. A similar case noted by Milsark is represented by the contrast between start and begin in (179), (180).

(179) a. The riot began.
    b. *There* began a riot.

(180) a. The riot started.
    b. *There* started a riot.

In Italian we find only one verb corresponding to both start and begin, but again one featuring two different auxiliaries, as in (181).

(181) a. Gli operai *avevano appena cominciato* (i lavori) (Italian)
    the workers had *just started* (the works) (A)

b. I lavori erano *appena cominciati.*
    (Italian) the works *were (had) just begun* (E)

The contrast between (179b) and (180b) would then follow if we assumed that only begin is ergative, like cominciare of (181b).24

(182) a. *(?)* There spilled large amounts of wine over the floor.
    b. *(?)* There assembled a large number of people in the square.
    c. *(?)* There circulated many crazy ideas at the conference.
    d. *(?)* There rolled a big boulder into the lake.

In so far as the aspects of the distribution of *there* just noted can be accounted for along the lines discussed, they provide evidence for the existence of a class of ergative verbs in English. We may note a few further reasons for assuming that English has such a class of verbs. One reason is theoretical. As we noted in 1.3 above, within our theoretical framework, such a class is expected, in English as well as in Italian. A few other reasons of a more empirical nature are discussed in Buzzato (1981). These concern in particular *er* affixation, as in (183), and the distribution of *explicative* objects, as in (184).

(183) a. killer, walker, *arriver*

(184) a. He walked [the hell out of those shoes]
    b. *They* arrive [the hell out of those bus terminals]

A most natural assumption regarding *er* affixation is that it requires that the verb assign subject *θ*-role. Nominals in *er* in fact specifically refer to that *θ*-role, i.e. a *killer* is one who kills (not one who is killed). The contrast in (185) will then follow from the assumption that *arrive* does not assign subject *θ*-role, i.e. is ergative, unlike kill and walk.25 As for the contrast in (184) it will follow from the same assumption in conjunction with the descriptive generalization introduced in 1.8 above that verbs have one direct object at most. In (184a) there are two: the trace of *they* and the phrase within brackets. (We will see how this descriptive generalization follows from Case theory.) Notice that both *er* affixation and explicative objects are impossible with the verbs of (175), as well as with those of (182) at least in their ergative use. Thus *developer* cannot refer to the idea of *A brilliant idea developed,* *beginner* cannot be the *beginning* of (179); and *while follower* can perhaps refer to the taxi cab in (177), it can never refer to the rainstorm of (176).

Turning now to the respects in which our prediction is not fulfilled, we note that cases involving non ergative verbs also exist, as in (185), from Milsark (1974).
(185) a. There walked into the bedroom a unicorn.
b. There ambled into the room a frog.

However, Milsark distinguishes cases like (185) from cases involving the verbs in (175). He notes that with verbs like walk the i-subject (our terminology) occurs in VP final position, (cf. (185)), whereas with the verbs of (175) it occurs VP internally, adjacent to V, as for example in (186) (also from Milsark).

(186) There arose many trivial objections during the meeting.

The V-adjacent/VP final distinction noted by Milsark, which has no explanation within his discussion, seems to me to follow rather closely an ergative/non-ergative distinction made on independent bases, and is then exactly what we would expect if there constructions could be derived not only by inserting there in D-structure, but also by insertion after rightward movement of the subject. The difference in linear order between, say, (185) and (186) would then simply be the counterpart to analogous differences we noted for Italian in 1.8 above.

Cases like (185) therefore do not challenge the existence of ergative verbs in English. If Milsark is right they in fact confirm it. What they challenge is the assumption that insertion of there is limited to D-structure. At this point we thus have to choose between relinquishing the latter assumption and losing those explanations which it provides, or maintaining it and regarding cases like (185) as somewhat outside of the core system. The second alternative would also be suggested by the fact that, at least for many speakers, such cases are on a lower scale of acceptability. It seems clearly preferable.

We have argued in this section that the cases in which there occurs most productively, namely those involving be, are clearly cases of base-generation. A raising analysis of main verb be is in fact supported by a number of convincing and quite independent arguments. Internal to English we have Stowell’s arguments and the explanation for the Semi-Modal Restriction. Within Romance we have the distribution of Piedmontese ye, the possibilities for Ne-Ci, the distribution of reflexive se, the distributions of auxiliaries and pp agreement in Italian and French. Internal to French we have Couquaux’ discussion of En-Avant to which we made reference.

Furthermore, we have seen how some superficial differences between three and its Romance counterparts ci, yi, ye are predictable from the fact that the latter are clitics, a difference which is itself reasonably well predicted by independent considerations.

Finally, we have considered occurrences of there with other verbs and noted that while some evidence indicates that there selects ergative verbs, just as ye and il do, the occurrence of there with some non-ergative verbs seems to falsify this view. We suggested that a way to avoid the paradox is to assume that instances of there with non-ergative verbs fall on a lower scale of grammaticality.

Our discussion leaves a residue of idiosyncratic differences among the various elements that correspond to there, represented by the fact that while Piedmontese ye is not constrained by any extrasyntactic factors, Italian ci and French y are lexically constrained to occurring with ‘be’ (realized as avoir in French), and English there is semantically constrained to presentational contexts, or verbs of appearance.

2.8 CONCLUSION

In the first part of this chapter, we characterized both inversion and extraposition as consisting of a relation between a non-argument subject and a post verbal argument NP or S. We argued that the latter relation is subject to locality conditions analogous to those holding for NP-trace relations, and attempted to capture such conditions under an extension of the binding theory.

If our claim is true that this characterisation is to apply equally well to Italian and to English or French, then it must be the case that Italian employs empty subject positions in the way that English and French employ overt pleonastic subjects like there and il, so that the type of inversion one finds in Italian is strictly contingent on the Null Subject property. On the one hand, such a claim was supported by the fact that the relevant evidence cuts across the two types of languages. In particular we noted that evidence for coindexation between subject and post verbal argument arises both in English and in Italian. On the other hand, the claim seemed challenged by the more limited distribution of inversion in English, French than in Italian.

Since in chapter 1 we had argued for the existence of two types of inversion in Italian (a conclusion corroborated by the existence, even in English, of two kinds of extraposition), a natural way to address the more limited productivity of inversion in French and English is to ask whether these languages may not simply lack one of the two types. In essence, this is the question we considered in the second part of the chapter.

What has emerged is that this is indeed true, and that inversion by rightward movement is — to a very good approximation — missing in these languages. We have attributed this fact to a constraint limiting insertion of pleonastics like il and there to D-structure. NS languages like Italian will always allow inversion since they allow null subjects, and thus do not require insertion, though they may allow it. The view that it is insertion versus non-insertion of a pleonastic element that plays the major role in limiting the productivity of the construction is confirmed by the fact that, if we look only at inversion with insertion of a pleonastic ele-
ment, then the differences among the languages become of a smaller order, and indeed no longer follow the distinction between NS and non-NS languages. Thus inversion with ye in Piedmontese (a NS language) has approximately the same distribution as inversion with il in French (a non-NS language) and Italian ci has even a more limited distribution than its English equivalent there.

If this account is correct and if in fact the complete productivity of inversion in Italian is itself a reflex of the NS property, then our earlier assumption that Italian inversion shares essential properties with inversion in English and French, is not only no longer challenged, but is in fact supported, since it is precisely the latter assumption that allows us to predict the difference in distribution.

While we assume that, with respect to inversion, insertion of plenographic elements is constrained to D-structure as we said, we must mention that no analogous restriction appears to exist with respect to extraposition (see, however, Note 65). Thus, for example, English it is not limited to the base-generated type of extraposition. We have no formal proposal to account for this difference, but we may informally relate it to the rather general tendency to place heavier phrases last. Since sentences are generally heavier than NPs, we may suppose that the lack of extraposition by rightward movement would run counter to the latter tendency to a greater extent than the absence of the corresponding type of inversion would.

**Notes**

1 Given cases like (7b) and others that will come up in this chapter, the definition of s-subject that was given in 1.1 above (p. 22), was *'The NP in a form . . . VP . . . NP1 . . . such that the verb VP agrees with NP1 and such that there is a near-synonymy from NP1 VP . . .' will have to be slightly modified. In particular we will have to assume that the portion of the definition which refers to verb agreement holds only sometimes. We will continue to make reference to verb agreement in connection with s-subjects where this is applicable, as we did above.

2 For discussion of the definiteness restriction, see Milin (1974), Swindell (1979), Kayne (1979), Gristen (1940), as well as Smith (1980).

3 On the distributional analogies between clitic and null subjects, note that languages that have null subjects also have ditransitive null subjects and ditransitive correspondence to lack of contrasive stress; syntactic constructions that require ditransitivity for objects correspondingly require null subjects. An illustration of this is the strategy to form reflexive clauses by suffixed pronouns, discussed in Rizzi (1978b). Under the latter strategy it is null subjects and object clitics that can function as reflexive pronouns.

4 On the condition between the NS property and richness of inflection, cf. Note 46 below.

5 The class of proper governors, which contains the lexical categories (N, A, V, P), excludes INFL, as we mentioned in 1.0.3. However, it must include elements as CDEP which are treated with the co, to account for the phenomena we discuss shortly below in this text. For further details, see LGH 4.4 (cf. also Notes 6, 9).

6 Rizzi comes to the conclusion by noting that Italian is just like French (and English) in not allowing wide scope interpretation of quantifiers in subject position, as in (8) compared with the French counterpart (9).

7 a. *Je n'ai pas exigé que personne soit arrêté.
   I have NOT required that ANYBODY be arrested.

8 a. *en te avec il est possible que la plupart des gens ne se soient pas plaints
   1 do not require that ANYBODY be arrested.

   Both cases in (j) are grammatical under a reading in which the quantifier is in the scope of the negation (i.e. under the 'subject' reading), although for the Italian case there is one grammatical reading, for reasons which Rizzi discusses. The corresponding cases involving objects are (near) grammatical, as in (i).

9 a. *le n'ai pas exigé qu'il délivre personne.
   I have NOT required that they arrest ANYBODY.

   b. Non pretendendo arrestarono nessuno.

   I do not require that they arrest ANYBODY.

   Assuming, as seems plausible, that the subject/object asymmetry of (j), (i) must be accounted for in the same manner as the one in (j), (k), by postulating a rule that moves the quantifier to the highest S in LF, thus nullifying Wh-movement, it must be the case that Italian also disallows extraction from subject position; hence the hypothesis that Wh-movement never occurs from subject position. Rizzi's hypothesis can be tested directly in cases like (ii), where the inverted and the non-inverted forms differ by more than the position of the 'subject', as Rizzi discusses.

   (8) a. Ne arrivano molti
   How many of them do you think will arrive?

   b. Molti arrivano
   Many (of them) arrive

   *Quant'anni che tre anni?
   How many of them do you think will arrive?

   The fact that only the inverted form (like) has a Wh-moved counterpart confirms Rizzi's hypothesis (on ne and the null pronominal phrase of (ii) see 1.2, 1.4 above, Note 23, ch. 1, and Bellucci and Rizzi (1981)).


   Cases like (8) (and analogously cases involving null subjects like (7b)) become possible where either can function as reflexive pronouns (cf. Note 3), e.g. as Chi esce che abba spesa la voce che Giovanni usa? 'Who do you think has spent the money that Giovanni uses?' It is easy to show that in these cases there is no movement, and the pronoun functions as a quantifier.

   However, it appears that not only movement of the subject over an adjacent complementizer as in (7b) is impossible, but even movement into such a position. Compare the ungrammaticality of *[Quant']anni? How many of them arrived?* with (iii) of Note
5. Italian thus appears to me an even stronger prohibition than English, as Rizzi notes. Two possibilities come to mind to account for this fact, not accounted for in the text (i). Somehow, in Italian an en in subject position must always be interpreted as related to INFL (i.e., as a pronominal, never as a variable). (ii) Proper government of the subject by an element in COMP (cf. Note 4) is a marked option, taken only by those languages that do not have an alternative such as a productive inversion strategy. Italian would thus differ from English not only in not allowing proper government from COMP under short-deletion, but in not allowing proper government from COMP altogether. Of these possibilities Rizzi assumes (ii), but it seems to us that (i) might be more principled.

Under the pronominal option, INFL will be a proper governor just like a noun (cf. Note 4).

Government absorption, unlike Case absorption, seems suspicious because, whereas Case can reasonably be regarded as a feature, which can thus be absorbed, government is a certain type of configurational relation, which we expect to change only when the configuration changes. The conceptual difficulties associated with government absorption are paralleled by empirical difficulties. Consider for example (i).

(i) a. Giovanni le ha riparato [i]
   Giovanni it makes repair
   Giovanni has it repaired.

b. Giovanni gli [i] butta l’acqua [adduced][ii]
   Giovanni to-him throws the water upon
   Giovanni throws water on him.

There is reason to believe that in the causative construction of (ii) both verbs govern the scrambled object. It would thus be possible for a clitic could absorb government from both. Analogously in (iib) it seems most plausible that the clitic could absorb government from the verb, but government by the proposition would remain, will incorrectly barring PRO.

As empirical evidence for the governed status of the object position, Kangni cites Spanish cases like (i) involving Wh-movement in so called “Clitic Doubling” constructions.

(ii) a. [A quien le ves?]
   to whom-her (you) saw
   Who did you see?

If clitic le made the object position ungoverned, then indeed (i) would be excluded by the ECP. However, the status of sentences like (ii) seems to be tied to dialect specific factors rather than to the ECP. For example, Beere (1981) reports that in certain dialects of Spanish such sentences are acceptable.

But there are stronger reasons for rejecting the PRO hypothesis, acknowledged in Chomsky’s (1981c). One is the difference in syntactic/semantic properties between established instances of PRO and NSs while PRO is only defined in interpretation when it is controlled, as in Mary keeps [PRO to go], and is otherwise ‘abstract’, as in [PRO or leave] would be rude, a NS is always definite and never controlled. This difference can be accommodated under the PRO hypothesis, but not very naturally. Another reason for rejecting the hypothesis relates to the cases of inversion in Spanish discussed in Torres (1964), which provide rather convincing evidence for government of NSs, a conclusion also suggested by the class of Italian genitive constructions of Rizzi (1962, III, IV).


12 The point of the text seems to me to stand in spite of cooccurrence of SI with first person plural in Tuscan dialects (cf. Note 47, ch. 1.) as in Natali’s ‘we are done’.

As Bellenti (1982) notes, the view that SI is an instance of INFL is supported by the fact (discussed in 1.7) that SI does not induce verb agreement, i.e., one could suppose that with SI the verb is not inflected since SI itself is the inflection. However, this interpretation seems to me challenged by the fact that in Italian dialects in which INFIL has overtly the form of a clitic, such a clitic does appear with SI, as in the Piedmontese example (ii).

(i) a. A stai mangi bir.
   stite SI east well
   We eat well.

If SI was INFL, one might expect third person singular clitic si of (i) not to appear. For further discussion, see 2.5.1.

13 While INFIL can bind the subject position because it commands it, as in (ii), the same is not true of subject clitics like SI. For the latter, we assume as discussed in Note 45, chapter 1, that the binding relation is essentially reversed, the subject position binding the clitic. We will be more explicit on these matters in 2.5.2 below, where we enter the discussion to the other subject clitic ci (cf. Note 57). In this respect the two relations in (i) actually differ, so that, as an alternative to the solution proposed in the text, one might consider accounting for the difference in auxiliary by sharpening up the formulation of the E assignment rule.

14 Actually there are a few cases in which non-argument is occurring in conjunction with NPs as in It is John, It is time as go. As for weather, we assume with LGB. 6 that the latter is a ‘spatial’ argument, therefore not a non-argument. The (near) argument status of weather verb subjects is stressed (somewhat theory internally) by the fact that in Italian these verbs take either auxiliary. Under our proposals, the possibility for auxiliary E corresponds to a possibility for the verb to be ergative, and thus have a D-structure direct object. But by the projection principle, direct objects – unlike subjects – cannot fail to have a theta role, from which we infer that the NP associated with a weather verb has some theta-role, i.e., it is a non-argument.

15 Milner (1974) has noted a certain peculiarity in this kind of agreement, illustrated in (ii).

(i) a. [A chi monta a gorilla] [what] was there in the cage.
   b. [A chi monta a gorilla] [what] was there in the cage.

The contrast between (i) and (ii) argues against the view that there constructions the verb agrees directly with the subject. However, we have no explanation for the effect in (ii). This effect is also found with Italian constructions employing phonemic subject as ‘there’ though not with other instances of inversion in Italian.

In Chomsky’s discussion INFIL contains the feature [ tense] as well as the argument element AGR. It is actually the latter element rather than INFIL, which is referred to in Chomsky’s version of (18). Our discussion slightly simplifies Chomsky’s by not distinguishing AGR from INFIL.

16 There is some conceptual analogy between such a discussion of cases like (17b) (and 20 below) and the discussion of ‘reconstruction in LF’ which we will present in 3.3 below, in the sense that one can view the grammaticality of, for example (17a) in terms of reconstruction of SI into the position occupied by non-argument it. One thus wonders whether phenomena exemplified by (17b) (and 20) and reconstructions phenomena may in fact not be of one kind. But we will not pursue this question here.
11 The view that Case is necessary for θ-roles assignment goes under the name of the "unanimity movement" and was first advanced by Y. Acero.
28 We must note however that the requirement that all arguments must be in a θ-position at D-structure is relaxed for tense-generated clitics.
21 Notice that the hypothesis that the clause is moved rightward even in cases like (21a) (from That John would have left was expected) is untenable (even aside from the unnecessary complexity of having movement first to the left and then to the right since, as is noted in Williams (1980), some such clauses would then fail to have a source, cf. It was foretold that I'll. "That I'll was foretold," analogously with It seems that I'll. "That I'll seems.
23 In the case of Italian we must assume that person, number, and gender features are transmitted. Person and number features are required by verb agreement, e.g. Siamo arrivi-
22 at 'Have arrived.' Number and gender features are required by part participle agreement (which we assume is with the subject position). In English only transmission of number features is attested, since there only occurs with third person i-subjects, and since English has no past participle agreement.

We will see in 2.5.4 below that while the general case of inversion in Italian differs somewhat from these-constructions with respect to verb agreement, there is essentially no difference between English and Italian if we consider constructions that involve the equivalent of English there, namely where there exist, between English and Italian, direct parallels predictable from the constituency of the non-argument subject. This gives us reason to believe that contrasts like (i) are also parallelable along the same lines.

(i) a. It is not [ ]
   b. Some is, am I

We may in fact assume that it is a general property of non-argument subjects like that they do not allow transmission of features. Compare French it, which never does.) Agreement will thus occur in (b) because Italian does not require an element like that, presumably a reflex of the NS property.

27 Notice that if the discussion in Rizzi (1982b, PV) is correct, in Italian inflectional inflec-
26 tion can also be a proper governor, like tense inflection (Rizzi points to a class of indivi-
25 duals that have some of the properties of NS sentences). If this is true, then (230) will be ruled out not only by Case marking and not also by the ECP, since the subject position
24 will be governed.

The auxiliary is therefore diagnostic for subject versus object θ-role of sentential argu-
23 ments. Another diagnostic is provided by the observation of Radford (1977) that com-
22 plementizer all only occurs with complements (i.e. So) that have object θ-role (cf. (27)).

The correctness of Radford's observation is emphasized by the contrast between poss-
21 ives like Mio the possibile of postoggeri 'It was forbidden to me to park' and superficially similar sentential cases like Eva possibile Mio postoggeri 'Parking was forbidden.' The same facts do not seem to hold however in French, which allows Il est facile de chanter 'Singing is easy'.

26 Cases like (24ab), i.e. 'It is leggero were volentieri, are actually reported as uncon-
25 for, rather than as totally impossible, by some descriptive grammars (cf. in particular Lepody and Lepody (1977, p. 218). Within our proposal, such marginal possibility, constru-
24 ting with the notion of impossibility of, for example, LAintervenir 'Then will arrive' is to be related to the fact that the transitive verb leggere in (24ab) can assign accusative whereas ergative verbs like arriver cannot (as we will discuss in 4.2 below). Notice in fact that our discussion in the text does not make clear what exactly would exclude (24ab), it assumes only implicitly that non-accusative NPs cannot enter into a chain with the subject position.

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The account of failure of pronominization of subjuncts which we are providing here thus differs from the one given in Kayne (1979). Kayne assumes that French cases like (i) are ruled out by the definiteness restriction.

(i) *Si l'arrivera, il est arriver.

For us, (i) is ruled out by the hypothesis that clitics like le are exclusively accusative. The superiority of our account is established by the fact that a 'definiteness' account of (i) fails to carry over to Italian cases, in which the definiteness restriction is inoperative.

26 In this respect clitic reflexes differ from non-clitic ones and from other elements like PRO, which can still take SI for an antecedent even after Object Preposing: Quece case si dice sempre di se stessi. [These things SI always say about themselves] (for an exam-
25 ple with FRO see sec (4.2) in 2.3 below). Cf. also Note 42, chapter 1.

Also, the exclusion of non third person objects in both of (b) and (c) below, which we noted in 1.6, is likely to be better captured under our analysis of inversion than under the alternative we are dismissing. (Only under our analysis are (b), (c) structurally parallel.)

(i) a. Si invito voi.
   b. *Voi si inviti, voi (pl). Si invitano (2nd pl)
   c. *Si invitano voi.
   Si invitano (2nd pl) voi (pl)

The same considerations and the whole discussion carry over to the assumption that there is coindexation between the subject and INFL (cf. discussion of (17a) above). That is, for example John arrived such coindexation would violate C of (21a), since John, an R-expression, ought to be free in its.

In the following discussion we will deal only with inversion, which provides the relevant evidence, not with extraposition. But we will assume, as seems natural, that the conclusions regarding locality conditions hold for extraposition as well.

27 Actually, (40) is ruled out by more subtle assumptions than those discussed in the text, in particular by the assumption that clitics cannot interfere. If they could, there would be one chain transmitting embedded object 3-F to the embedded subject, which would thus be PRO, and another transmitting matrix subject θ-role to the embedded object Gio-
26 vento, and (40) would be well-formed with respect to the 6-association. To the extent that our discussion provides instances of intersecting chains (cf. 1.6), the θ-association account of (40) may be weakened, strengthening the need for the locality conditions we discuss below.

The relevance of SI as an antecedent for PRO in (44) is emphasized by the fact that corresponding passive cases like (i) are ungrammatical.

(ii) *Queste cose sono state senza prezzo.

The difference is that there are cases of Object Preposing, like (ii), discussed in Ber relax (1983, 6.6), in which Control by SI is not entirely felicitous.

(iii) *Holoper, a, datermonan slogan, [it PRO], voler, chieder trofare [bidetto], 'the worker's SI deferred' (40) to want at close down the plant.

Yet even such cases contrast with (42a), so that the point of the text remains. The rea-
26 sons for the difference between (ii) and (44) are not entirely clear but are at least in part
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due to the fact that the animate phrase GI (ii) of (i) unlike the inanimate Cenre (case of (ii)), is also a potential antecedent for PRO.

32 Recall, also, that the conditioning of inversion (and exoposition) must play a role with respect to the binding theory to allow remote antecedents in cases like (i) discussed in 2.2 above.

(i) They, think they, are [some letters for each other.]

Rather than the simpler version of (31), the formulation of the binding theory which is relevant here is the one that incorporates the notion 'accessible subject' in the manner of (1b) above (cf. the formulation of LGB, p. 220). As discussed in 2.2, Chomsky argues that there in (i) is not an accessible subject for each other because it is coindexed with a phrase containing the latter. But if such coindexation and the relation there-NP, in (i) was not a binding relation, one would lack reason why it should be relevant to the binding conditions. Note in particular that the independent motivation for the condition *' [ε ... силь ... of (16c) above comes from cases like (i), where binding relations would be involved (cf. LGB, p. 212).

(ii) [* the friends of each other's parents]

33 Notice that whereas the non-argument status of there is established by its intrinsic context (i.e. by the fact that subject there is never an argument), the non-argument status of the null subject in (45b) is determined only contextually, and in particular by the fact that the latter does not bear a trace. This is true of other cases, for example of English it, which is intrinsically ambiguous as to whether or not it is an argument, and is thus unambiguous only contextually.

34 Within Chomsky's proposals (48) would be ruled out by the assumption that each other is θ-dependent on there, so that the relation between the two would not count for the binding theory and each other would be free in violation of (A) of (31). Under Chomsky's account, (48) would be ruled out in a rather analogous fashion if co-subscripting is involved, but some additional assumption would be required to avoid permitting the two elements in (48) to also be co-subscripted.

35 This may seem to give rise to a paradox with respect to cases like (i).

(i) a. *There, seem [I to arrive each other.]
   b. They, seem [I to like each other.

If traces are non-arguments, then both (ii) should not be ruled out on a par with (48). Notice however that some distinction is required independently of our discussion: It is a fact that (i) we cannot determine locally whether each other has the proper antecedent, but must know what the antecedent of the trace is. A natural way to capture this is to assume that the antecedent in (i) is not the trace itself, but rather the chain containing it. But then the chains in (5) is in effect an argument, while the one in (ii) is not, and the contrast in (i) will correctly follow from this. One may then expect that the same considerations applying to NP-trace chains may apply to inversion (and exoposition) chains. This expectation is fulfilled for example by (ii).

(ii) [I to arrive each other.]
   [There, seem [I to arrive each other.]

Giovanni also has bought himself a car.

As we discussed earlier, reflexive requires an argument antecedent at all levels. We must conclude therefore that the chain is what counts in (ii). Incidentally, some of the above considerations may shed light on the fact that, while NP-trace relations allow VP coordination as in (ii), inversion (and exoposition) relations do not, as in (ii).

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(iii) a. John, [NP was arrested] and [NP was later released]
   "There, [NP arrived three more] and [NP will arrive three weeks later."

If we assume, as seems reasonable, that in (iiib) there stems chains with both three men and three women, and if we regard chains as non-distinct from their members (along the lines suggested above), then in effect the two post verbal NPs in (iiib) command each other, since there, which is a member of a chain containing either command each other. Since the two NPs in question are coindexed, and since they command each other under the 'chain' notion, (C) of (31a) is violated. Notice that if this or any account of (iiib) in terms of the binding theory is correct, then it must be the case that the coindexing of inversion is indeed relevant for the binding theory as we are claiming in the text.

36 Formally, what is thus suggested is that each principle of the binding theory should be parameterized as in (i), where a range over plus and minus.

(ii) (A) A sing is an argument it bounds in its governing category (B) A pronoun or a a is an argument in its governing category (C) An R-expression is an argument in its governing category

While (i) seems rather straightforward, it is inadequate as it stands, and would have to be complemented in two ways to express the fact that references to "argument" must be dropped from (A) when the antecedent is a trace, as we discussed in the text (cf. (49c)); and to express the fact that (B), (C) for the minus value of α (corresponding the inversion case) may apply only if a non-argument antecedent is in fact present.

37 In the case of ep's, contrasts are somewhat weaker and, in general, there is a higher degree of freedom in the position in which ep's can occur than there is with subjects. We may plausibly attribute this to the fact that ep's are less 'lazy' and are thus more susceptible to being moved by late ordering rules, say by the role of Complement Shift of 1.8 above. However, to the extent that contrasts like the one in (58) are noticeable, passives predictably pattern analogously to ergative verbs, while pre-subject constructions do not, as shown in (i).

(i) (A) Giovanni is mandato lui [a risolvere il problema] Giovanni was sent to solve the problem Giovanni was sent himself to solve the problem

b. *(Giovanni es mandate lui [a risolvere il problema] Giovanni was happy to solve the problem

38 English ep's like himself etc. will differ from Italian ones in that they are anaphoric not only functionally, but also intrinsically.

Note that if the anaphoric rather than pronominal status of Italian ep's is indeed due to their being non-arguments as supposed in the text, then one might consider the fact that with such elements the binding theory seems to reverse as we pass from arguments to non-arguments. That is, while argument luis is subject to (B) of (49), non-argument luis is subject to its converse, namely (A). This recalls in part the reversal we noted with respect to the non-argument subjects of (45) above (cf. Note 36). At the present time however, we see no enlightening way to relate the two phenomena.

39 There is no intensional difference between the doubling and the inversion interpretations of, for example, Enei lui. Every such sentence is thus perfectly ambiguous. The ambiguity may only be theoretical however since speakers seem to have no intuition that such cases are ambiguous. This is not surprising given the essential formal identity of the analyses.

40 We will not be concerned here with the still ungrammatical but much better variant *"In vacanza after vacation* (it) was thought about the vacations" (with no verb agreement
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On the other hand, the assumption that (95) and (96) have common D-structures may seem to be challenged by the fact that the corresponding French uses exhibit two different verbs, as in (ii).

(iii) a. Il y a du pain sur la table.

b. Le pain est sur la table.

There is some bread on the table.

However, this is not particularly problematic, as we show in 2.7.2 below.

114. Idioms such as (97) are quite analogous to English "It was on the glass." In both cases we have a verb which is normally transitive, but passive in the idiom. As we expect, select takes necessary extra in contrast to source, which takes inanimate English defer in the choice of phonetic element. This difference may in some sense be predictable from the fact that English above, unlike Italian cui in constrained to prepositional constructions, as we see in 2.7.2. Notice that we must assume that cui is obligatory with source here, because for the lack of (97b) this is quite natural given that the expression is an idiom. Analogously, with English defer, we rule out "More money aside, etc.

115. Note that the lack than complete ungrammaticality of (103a), (102a) would indicate that extraction from subject position is nowhere impossible, only to the extent that these cases are better than the inverted forms without overt pronouns in (97c), (103c), (103d). But the differences, if any, is too narrow to draw any conclusion.

116. Note also that the ungrammaticality of (101a), (102a) remains even when 'thief movement is involved, as in (97f) "One sees a smile but what is the envelop?" This too agrees with Rizzi's findings. Cf. Note 8.

117. Cases like (106b) may also argue against any rule of 'nominal passive drop' that one may propose to account for NS sentences.

118. Stating of SI is more problematic, as we noted in Note 45, ch. 1.

119. This conclusion requires a number of minor readjustments to our previous discussion.

In Note 45, chapter 1, and in Note 14 above, we assumed that the en in subject position needs the dative. We have now seen that the en is itself bound by INF or. Thus, in effect it is the dative INF-en (which is the dative equivalent to French d) that binds the dative. Relations between a non-subject subject and a subject dative are therefore essentially analogous to inversion relations.

Consider now new cases like (i), examined in Note 45, chapter 1.

(i) [1] si la invitai [x]

SI was invited

The correct interpretation of such cases seems to me to be that the dative represents by INF, and the en in subject position, which does not have argument status (as French d), binds SI, whereas the same chain extended to SI, which does have argument status since SI is an argument, will bind the object position.

A slight reinterpretation will also be required for the cases in (58) shown repeated here below.

(ii) a. [2] si leggerà [volonti [articolo]]

SI will read (x) willingly a few articles

b. [2] si leggeranno [volonti [articolo]]

SI will read (x) willingly a few articles

In our previous discussion we assumed that only in (8b) there is a non-subject subject due to the pronominal option for INF. We assumed that such non-subject sub-
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There appears to be one exception to the generalization captured by (128a) for French, represented by the if-ya construction in (i).

(i) II y a eu du pain sur la table

In (i) we assume a link between subject ictive and the subject position. This ought to trigger ictive by (128b). One is led to speculate that this exceptionality of (i) and the fact that French uses have’s as a main verb in these cases is related, but we will not pursue this matter.

Partial confirmation for this view is provided by the fact that English It proved that the problem was unsolvable, under the reading It turned out that... is also odd. This case is similar because it too is potentially ambiguous, between the above reading and It, i.e., that in the case, particular fact, proved that... However, Italian Affidandosi due mani non... two ships’ they sank two ships’ ought also to be reasonably analogous, but it is entirely perfect, though ambiguous.

We may expect that it should be analogously confused to base-generated cases of extraposition. This seems true, given (ii) (cf. the Italian cases in (27) above).

(ii) a. Si m’est arrivé de recevoir Marie

b. Che m’encuragia de recevoir Marie

It had happened to me to see again Marie

It would bother me to see again Marie

However, the fact that if is possible with ‘be’ adjectival cases like (ii) is surprising because we assume in these cases the argument has subject, not object ictive.

(iii) If est facile [de changer]

It is easy to sing.

Recall that if is never possible with ‘be’ adjectival cases when the argument is an NP, as in (138b), a fact which is predicted precisely by the assumption that, with adjectives, the argument has subject ictive (note 13, ch. 1). We are therefore faced with a puzzling difference between ictive and NP complements. We return to this in Note 73 below.

We note that, within a theory in which null elements were semantically defined, the test discussion would actually provide an argument against the PRO analysis of null subjects of LGB (cf. 2.1 above). This is because cases like Ha telefonato il tuo amico has telephoned your friend would require insertion of PRO late in the derivation, after NP-movement. But our account of the absence of such cases in French is based specifically on the idea that this kind of test is not possible, and that no insertion is required in Italian. The argument disappears, however, if we assume that null elements are conventionally defined, as in LGB; 6. Under this, a null element can simply become ‘become’ PRO in the course of the derivation if the contextual conditions obtain, so that no insertion would be required for the above case.

Under the base-generation analysis, the link between SE and the subject position will be the same as with SI. It will simply by a base-generated link, as with all base-generated ictives. The existence of such a link is established, for all variants of the construction with SE, and independently of our discussion in 1.6, by the fact that this construction systematically selects auxiliary li, and must therefore be a case in (128a) above. We thus assume that SE is transmitted from the subject position. (The assumption that SE is ictive is supported among other things by the fact that it requires Case in (142).)

Under these assumptions, cases like (140a) imply that our view is correct that it is only inserted in D-structure, rather than the conceivable alternative that it is only inserted in non-positions.
72 On the assumption that γ as like English, there can only be related to an NP, not to an S, and if \( \epsilon \) is impossible because it should be inserted, as argued in the text, then we would expect \( \epsilon \) to be possible. This would actually enable us to account for the type \( \hat{B} \) and \( \hat{D} \) (e.g. English, this is easy to sing) which we were unable to account for in Note 63, by regarding the latter as derived from \( \hat{B} \) and \( \hat{D} \) via extraposition of the S.

In English, some existentials with verbs like seem are found however, as in There seems little reason to doubt it.

From this point of view, the alternation John started the car/The car started is spurious, not a genuine transitive/ergative alternation. Some analogously spurious cases must be assumed for Italian, given for example (b), pointed out to me by L. Stiiz.

(iii) a. Li malo ha grano in macina.
   the mill has turned the millstone

b. La macina ha grano.
   the millstone has turned

73 Unlike the case in German, there is no reason to suggest that English in this respect is different from Italian. English is at least a case where the distinction in question does not seem to hold.

74 Note that while the inversion relations of (168), repeated in (i), is ill-formed, the clitic-er relations of (ii) must be well-formed.

(i) *li [c1] ci furono [c2] contrasto [molto caso]

(ii) a. [c1] ci furono [c2] invitato [molto caso]

Many of them were invited.

b. Maria, [c1] li [c2] presentata [c3]

Maria was introduced to him.

c. Maria, ne [c1] affezionato [c2]

Maria was fascinated by it.

We will return to clitic-er relations in S structures, which are problematic independent of our discussion in this section (cf. 11.0.2).

Notice that our account of both (162) and (165) relies on the assumption that inversion relations cannot be established iteratively, since if they could, the D-structure for (162) (165) could be as in (ii), where there is no violation of locality conditions.

(i) *[c1] in [c2] contrasto [c3] contrasto [molto caso]

75 Cases like (169) do not necessarily require this particular analysis. In fact the adjective here could be internal to NP, as in [Molto caso disabitato]_non in vendita 'Many houses uninhabited (uninhabited houses) are for sale', perhaps as a 'relative'. In this case, (169) would be an extrinsic sentence (of the There is a S class type). However, other cases, like (ia), do require a more analysis of the material that follows be', given the impossibility for (ib).

(i) a. C'era [Giovanni inamorato] there was Giovanni in love

b. *[Giovanni inamorato] mi ha scritto

Giovanni in love has written to me

A relevant minimal pair would then be (ia) versus *C'era Giovanni arrestato 'There was Giovanni arrested.'