Chapter 4
Subject Inversion at the Interpretive Interface

Introduction
In the previous chapter a syntactic account of subject inversion was offered which develops the hypothesis that the availability of the verb-subject word order is indirectly constrained by the Extended Projection Principle (EPP). In the syntactic framework adopted throughout this study (Chomsky 1995), different word orders are the result of a movement operation which is triggered by the necessity of checking morphological features. In this perspective, the EPP is reinterpreted as the checking of a specific feature (a D-feature) of the INFL node against the same feature on some other element. This view is important for the analysis presented here since it opens up the possibility of extending the class of possible EPP-checkers to all elements bearing the required D-feature. On the assumption that not only subject DPs, but other (nominal) elements as well are endowed with a D-feature, we suggested that the subject can occur postverbally (i.e. in its ‘inverted’ position) whenever an alternative strategy for satisfaction of the EPP is available. In chapter 3 two of such alternatives for satisfaction of the EPP were examined: one was raising of a covert argument LOC, the other was raising of the D-feature of the empty $D^0$ of an indefinite DP.

Yet, this account cannot cover all the empirical facts. As discussed in chapter 2, there remain some problematic cases that, prima facie, defy a syntactic explanation and rather seem to involve notions and principles belonging to the domains of semantics and pragmatics. So, for example, the strong or weak interpretation of an indefinite subject seems to correlate with the syntactic position the indefinite occupies with respect to the verb. On the other hand, the distribution of definite subjects seems to be determined by the interaction of the familiarity degree of the DP with the focus structure of the clause.

These interpretive phenomena are not isolated to Italian, but are possibly present in all languages, be it to a different degree or in a different form. The strong/weak interpretations of indefinites and their correlation with
syntactic structure have been observed in Dutch (Kerstens 1975, de Hoop 1992, a.o.) and in German (Diesing 1992). In a similar fashion, the distribution of definite DPs seems to be affected by focus. Although the procedure to encode focus in grammar may differ in each language, the interaction of discourse properties with focus structure (and, possibly, with syntactic structure) has been observed for Catalan (Vallduví 1990), for Spanish (Zubizarreta 1994), and for English (Ward & Birner 1995) as well.

The main concern of the present chapter is that of offering an account of these interpretive facts in a way that fits the minimalist framework. The phenomena under consideration may seem to elude a syntactic account and require new machinery of semantic and pragmatic notions. It is indisputable that certain factors are just intrinsic properties of the semantics of DPs and that the interpretation of a clause is partly determined by considerations of a pragmatic nature at the interface with the system of use. However, I will show that we do not need to enrich the system in order to deal with interpretive facts like the ones discussed here since some of the phenomena observed appear to derive naturally from the theoretical assumptions made in chapter 3.

This chapter aims at providing an account of two main phenomena: the weak/strong distinction of indefinite subjects and the effect of focus and familiarity on the distribution of definite subjects.

1 The Strong/Weak Distinction of Indefinites
There are certain constructions that allow an indefinite DP to occur in two different positions, roughly, a VP-internal and a VP-external position, without affecting the grammaticality of the clause. It has been observed that each position seems to correlate with a particular interpretation of the indefinite. Normally, the VP-internal indefinite gets a weak reading, whereas the VP-external indefinite tends to prefer a strong reading. The term strong refers indistinctly to the specific, or the partitive or the generic reading of indefinites. Similarly, the term weak refers to the existential/presentational reading (see Milsark 1974, 1977). These constructions are present in different languages. Here we give an example from Dutch:

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1 The term indefinite here refers to weak determiners in general, i.e. indefinite articles, numerals, and determiners like some, and many.
1  a  Loek heeft gisteren een partij gewonnen.
   *Loek won yesterday a game*

   b  Loek heeft een partij gisteren gewonnen.
   *Loek won a game yesterday*

The indefinite object in (1a) is interpreted existentially, whereas the indefinite in (1b) gets a specific interpretation.

The minimal pair in (1) can be seen as a structural disambiguation of the indefinite DP. This observation has led some linguists, notably, Diesing (1990), to argue for a strict correlation between syntactic position and the weak/strong interpretation.² Diesing’s specific claim is that the link between syntactic structure and logical representation is mediated by a mapping algorithm that directly translates syntactic structure into semantic interpretation. The success of this proposal is probably due to the apparent transparency of the relationship between syntax and semantics. Yet, the empirical and conceptual adequacy of Diesing’s theory has been questioned by de Hoop (1992), Reinhart (1995), and Ruys (1996).

Facts like in (1) show up in Italian as well. In certain contexts, the subject can occur either preverbally (VP-external) or postverbally (VP-internal), as is illustrated in (2):

2  a  E’ arrivato un linguista.
   *there arrived a linguist*

   b  Un linguista è arrivato.
   *one (of the) linguist(s) arrived*

Like in (1), the VP-external subject is interpreted as strong, whereas the VP-internal one is interpreted as weak.

Our examination of the interpretive properties of indefinite subjects in Italian has revealed the existence of a weak/strong distinction pattern analogous to that found in Dutch, German, etc. In other words, in Italian too,

² It must be pointed out that Diesing’s definition of the terms *strong* vs. *weak* is different from de Hoop’s (1992). Following Milsark (1977), Diesing assumes that there are two types of indefinites: those with quantificational force of their own that behave like real quantifiers, and those that are just variables that have to be bound by a covert existential operator (existential closure). We will return to this point more extensively below.
there might be a correlation between the preverbal subject position and the strong reading of the indefinite, and between the postverbal subject position and the weak reading of the indefinite. Yet, this approach, though appealing, is not the correct one.

The discussion in the next pages will be organized as follows. I will first introduce Diesing’s analysis and show that it cannot account for the interpretive data found in Italian. Verbs allowing inversion (i.e., two different positions for the subject) do not present such a strict correlation between structure and interpretation as predicted by Diesing. More interestingly, even, unexpected data from indefinite subjects of verbs that do not allow inversion (with the wide focus reading) provide convincing evidence against Diesing’s basic insight that the interpretation of an indefinite DP should be transparently linked with its syntactic position. Our conclusion will thus be that the strong/weak interpretation of indefinite subjects in Italian is not determined by the syntactic position in which they show up. This conclusion will appear to be perfectly in line with arguments presented in Reinhart (1995) and in Ruys (1996).

Yet, the interpretive differences which are present in Italian inversion and non-inversion verb constructions do call for an explanation. The account I will propose is based on the hypothesis that the strong/weak interpretation of an indefinite is determined by its internal structure and that the apparent correlation between position and interpretation is just the indirect result of the interaction of the internal structural properties of a DP with general principles and conditions governing the syntax of the clause.

1.1 The Generalization in Italian

The analysis of indefinites presented in chapter 2 makes a distinction between inversion and non-inversion verbs. As we should know well, by now,

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3 Recall from chapter 1 that I distinguish between inversion and non-inversion verbs, according to whether subject inversion with a wide focus interpretation is allowed or not. Recall also that this subdivision cuts across the traditional classification of transitives, unergatives and unaccusatives.

4 Recall that the inversion vs. non-inversion verb distinction is relative to a wide focus interpretation of the clause. As repeatedly observed in this study, this distinction is blurred in contexts with a narrow focus interpretation of the subject.
subjects of inversion verbs can show up in two different positions, i.e. preverbally and postverbally. Therefore, it is in this type of contexts that the interpretation of an indefinite subject may correlate with a specific syntactic position. On the other hand, subjects of non-inversion verbs always occur preverbally. If the interpretation of an indefinite subject is indeed determined by the position in which this element occurs, we may expect that the absence of a certain position implies the absence of the reading associated with that position. As we shall see, the distinction between inversion and non-inversion verbs will shed more light on these complex facts. We recapitulate the main conclusions of chapter 2.

The availability of two subject positions in inversion verb contexts seems to correlate with two possible interpretations of the indefinite subject: the preverbal subject position is associated with a strong (partitive) interpretation, the postverbal position with a weak interpretation.\(^5\) This is true for the indefinite subjects in the examples below:

\[
\begin{align*}
3 \quad \text{a} & \quad \text{Due linguisti sono arrivati.} \\
& \quad \text{two linguists arrived} \\
& \quad \text{‘two of the linguists arrived’} \\
& \quad \text{b} & \quad \text{Sono arrivati due linguisti.} \\
& \quad \text{arrived two linguists} \\
& \quad \text{‘there arrived two linguists’}
\end{align*}
\]

The preverbal indefinite in (3a) must be interpreted as a concealed partitive. The indefinite in postverbal position in (3b), instead, can only have an existential reading. How strong is this correlation? (4) shows that an existentially interpreted indefinite is infelicitous in preverbal subject position:

\[
\begin{align*}
4 & \quad \text{#Un uomo è arrivato.} \\
& \quad \text{a man arrived} \\
& \quad \text{‘there arrived a man’}
\end{align*}
\]

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\(^5\) In de Hoop (1992) the term *strong* subsumes the partitive, the referential and the generic interpretations of the indefinite. Yet, the data examined in chapter 2 showed that, possibly, only partitivity plays a role in Italian.
However, an overt partitive DP occurring in postverbal position does give a good result:

5  Sono arrivati due dei linguisti.
   arrived two of the linguists

The felicity of (5) is a clear counterexample to Diesing’s hypothesis about the correlation existing between position and interpretation. A closer examination of a large corpus of data lead us to the conclusion that the true generalization about the interpretation of indefinite subjects in Italian must be expressed in the following terms:

6  Interpretation of indefinites in inversion verb contexts:
   indefinite subjects with the weak interpretation cannot show up in preverbal position;
   indefinite subjects with the strong interpretation cannot show up in postverbal position.6

Subjects of non-inversion verbs can only occur in the standard preverbal subject position (with a wide focus reading, of course). Contrary to expectation, the unavailability of the postverbal subject position does not imply the loss of the weak reading for the indefinite subject. The data show that in this case the indefinite subject in preverbal position gets an interpretation which is ambiguous between the strong and the weak reading (see chapter 2 for more details). The generalization for indefinite subjects of non-inversion verbs can thus be formulated as follows:

7  Interpretation of indefinites in non-inversion verb contexts:
   indefinite subjects can get both the strong and the weak reading.

Generalizations (6) and (7) present a precise description of the possible interpretive properties of indefinite subjects in Italian. The choice of distinguishing between two different classes of predicates may seem to weaken the possibility of a general account of the phenomenon. However,

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6  However, recall we observed that overt partitive subjects are perfectly fine in both positions.
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this distinction finds its empirical motivation in the interpretive differences observed which cannot be reduced to a single pattern. In addition, the facts under discussion will fit the assumed syntactic architecture in a quite natural way.

Notice, that (6) and (7) represent a serious problem for Diesing’s analysis, as mapping should take place in overt syntax in the case of inversion verb contexts and at LF (by means of lowering) in the case of non-inversion verb contexts. Diesing could argue that this is exactly the pattern found in individual level and stage level predicates, respectively. This explanation, however, cannot be accepted as the stage/level distinction is present in both inversion and non-inversion verb types.

The generalizations presented above must now be translated into formal terms. The strong/weak distinction of indefinites should not be explained by introducing new notions or new mechanical devices. We will take the computational system as our point of departure and we will explore to which extent its principles and properties can account for the facts observed. In other words, our first step is an attempt to find out what role syntax can play in determining the interpretation of an indefinite DP. However, before moving on to possible explanations of (6) and (7), let us consider the strong/weak distinction in more general terms.

1.2 The Strong/Weak Distinction across Languages

The quantificational/existential ambiguity of indefinite DPs and its possible correlation with syntactic structure was first observed by Milsark (1974, 1977). Milsark pointed out that bare plurals and mass nouns are ambiguous between a generic and a presentational reading, depending on the syntactic
environment in which they show up.\textsuperscript{7} Milsark gave the following examples\textsuperscript{8}:

8  
   a  Unicorns like popcorn. 
   b  Unicorns came crashing out of the woods and surrounded us. 
   c  There are unicorns in every wood. 

The meaning of the proposition in (8a) seems to be true for all unicorns of the world. The indefinite is thus interpreted universally (i.e. it gets a strong reading). However, the same bare plural in (8b) and in (8c) appears to allow only a non-universal (existential) interpretation.

Carlson (1977) came to similar conclusions. He discovered that the nature of the predicate involved in the clause may affect the interpretation of the indefinite subject. Consider the following examples:

9  
  Firemen are available. 

The indefinite subject in (9) gets two different interpretations. It can be interpreted universally (strong/generic reading) with the meaning that being available is one of the properties of firemen in general. And it can be interpreted non-universally (existential reading) indicating, for instance, that there is a group of firemen who are available in the present circumstances. Carlson observes that the ambiguous interpretation of indefinite subjects emerges only when the predicate corresponds to temporary states or transitory activities, hence the term \textit{stage-level} predicates. When the predicate refers to

\textsuperscript{7} Milsark showed that a similar ambiguity is present in contexts with weak determiners as well: 

\begin{itemize}
  \item[i] \textit{Sm} salesmen walked in. 
  \item[ii] Some salesmen walked in. 
\end{itemize}

The determiner \textit{sm/some} is interpreted as presentational in (i) and as partitive in (ii).

\textsuperscript{8} I propose these examples in order to illustrate the point. However, it must be pointed out that in Italian (and, more generally, in Romance) bare plurals are distributionally quite more constrained than in English, in that they can virtually never be assigned a generic reading and can be interpreted existentially only in position properly governed by the verb (see Longobardi 1994).
permanent states or properties, i.e. when it is an *individual-level* predicate, the indefinite subject is necessarily interpreted as strong.

Kerstens (1975) and others have observed that the strong/weak interpretation of an indefinite object in Dutch varies according to the position in which the DP occurs as the result of scrambling. The relevant examples are given in (10):

\[
\begin{align*}
10 \quad a & \quad \text{dat Frans een partij vaak wint} \\
& \quad that \ Frans \ a \ game \ often \ wins \\
& \quad \text{b dat Frans vaak een partij wint} \\
& \quad that \ Frans \ often \ a \ game \ wins
\end{align*}
\]

The object in (10a) occupies a position outside VP, as the result of a scrambling operation.\(^9\) The indefinite must here be interpreted as strong, i.e. it is a specific game that Frans often wins.\(^10\) The situation in (10b) is different. The indefinite gets here an ambiguous interpretation which appears to correspond to the two possible syntactic structures that this sentence can have. The adverbial may be adjoined to a node higher than VP in which case the actual position of the object could be either internal or external to the VP. In the first case the object is still in situ, from which its existential interpretation follows. In the second case, the object has (vacuously) scrambled outside the VP, thus making only the strong reading available.

Diesing (1992:34) reports a similar phenomenon in German and claims that in this language the interpretive differences are structurally disambiguated in overt syntax. The facts she discusses involve bare plural subjects. Consider (11):

\[
\begin{align*}
11 \quad a & \quad \text{weil [IP Kinder ja doch [VP auf der Strasse spielen]]} \\
& \quad since \ children \ indeed \ normally \ play \ on \ the \ street \\
& \quad \text{b weil [IP ja doch [VP Kinder auf der Strasse spielen]]} \\
& \quad since \ indeed \ there \ are \ children \ playing \ in \ the \ street
\end{align*}
\]

\(^9\) Crucially, on the assumption that scrambling is the result of a movement operation. These considerations do not hold for a base-generated approach to scrambling (see Neeleman 1994).

\(^{10}\) The generic reading is available as well: often, when there is a game, Frans wins it.
The examples in (11) show that bare plural subjects in German can occur in two different positions: Spec of IP and Spec of VP. Additional evidence for the existence of two subject positions is provided by extraction facts in was-für split and split-topic constructions. Diesing further observes that the two different positions correspond to two different interpretations for the bare plural subject. The bare plural subject in (11a) has a generic (strong) reading: playing in the street is a general property of children. On the other hand, the bare plural subject in (11b) has an existential reading, meaning something like ‘there are children playing in the street’.

Summarizing, there are well-known examples in the literature that seem to point towards a correlation of some sort between syntactic structure and the weak/strong interpretation of indefinite DPs. In the next section we will examine a possible formalization of these facts.

1.3 Diesing’s Hypothesis

Before we proceed, a few considerations are in order on the course this analysis will take. The aim of this study is that of pursuing a general account of the phenomenon of subject inversion along the guidelines of Chomsky’s (1995) Minimalist program. Our preference will thus go to an analysis that does not need to assume any sort of extra machinery.

The interpretive data presented above seem to suggest that syntactic structure is somehow involved in the determination of the semantic interpretation of indefinites. Therefore, the discussion here will centre around the determination of the role of syntax in affecting the semantic interpretation of indefinite subjects. Precisely this question is the starting point of Diesing’s (1992) analysis.

Diesing’s account is based on the assumption that indefinites are ambiguous between a weak reading, as cardinality predicates, and a strong reading, as quantifiers (see Milsark 1974, 1977). Crucially, these interpretive properties of a DP are stored in the lexicon and, according to Diesing, must be encoded in syntax. In the case of subjects, a strong indefinite must be projected in Spec of IP. A weak indefinite must instead occur in Spec of VP.

As an empirical motivation for this analysis, Diesing adduces data from German and English concerning the distribution and interpretation of bare plural subjects. The German data were presented in (11) above. German
shows a straightforward correlation between syntactic position and semantic interpretation. However, in English (non-there-sentences contexts) subjects are allowed to show up only in a VP-external position, i.e. in Spec of IP. As discussed above, the interpretation of the bare plural subject is then ambiguous between a generic and an existential reading. The relevant examples are repeated below:

\[
\begin{align*}
12 & \quad \text{a} \quad \text{Firemen are friendly.} \\
& \quad \text{b} \quad \text{Firemen are available.}
\end{align*}
\]

(12a) contains an individual-level predicate, which only allows the strong reading. In this case the correlation between position and interpretation of the indefinite is straightforward. (12b) contains instead a stage-level predicate, which allows both the strong and the weak reading. Since, in English, subjects almost never occur VP-internally, the weak reading should be excluded. Yet, as observed by Milsark (1974, 1977) and Carlson (1977), the indefinite subject in (12b) also has an existential reading.

In order to save her analysis, Diesing must assume that, in English, the projection of semantic information is not as straightforward as it is in German, but is mediated by a lowering rule at LF. We will return to the details of this solution in a moment.

At the interface the interpretive properties carried by syntactic structure are mapped into a semantic representation. How does this mapping take place? Diesing advocates the view that the relationship between syntactic structure and semantic representation is a straightforward one. She assumes the existence of an algorithm that splits the syntactic tree into two parts, roughly, one part including all material inside the VP projection, the other including all material outside it, as is illustrated in (13):
At the interface with the interpretive component, the various pieces of syntactic material are mapped into a quantificational representation, consisting of an operator, one (or more) restrictive clause(s), and a nuclear scope (see Heim 1982). The mapping proceeds along the following guidelines (see Diesing 1992:10):

14 Mapping Hypothesis (MH)
   Material from VP is mapped into the nuclear scope.
   Material from IP is mapped into a restrictive clause.

In Kamp (1981) and Heim (1982), assumed (only partly, as we will see) in Diesing's analysis, the interpretation of an indefinite is strictly dependent on its position in the logical representation. The idea is that indefinites are variables that have to be bound. When the indefinite occurs in the restrictive clause, it is bound by an operator of some sort (i.e. by an adverbial, a quantifier, etc.). When the indefinite occurs instead in the nuclear scope, the variable must be bound by an existential operator (the so-called existential closure of the variable). Diesing argues that in the first case we get the strong interpretation of the indefinite, in the second its existential reading. It then follows that a VP-internal indefinite is mapped into the nuclear scope of the logical representation and is therefore interpreted as existential. On the
other hand, a VP-external indefinite is mapped into the restrictive clause and thus gets a strong interpretation.

In Diesing’s analysis, the Kamp/Heim view of indefinites as variables that have to be bound is combined with Milsark’s (1977) observation that weak determiners are ambiguous between a strong/quantificational reading and a weak/existential reading. We thus obtain the following classification: strong DPs are either DPs headed by a strong determiner or indefinite DPs with the indefinite determiner receiving the same semantic and, presumably, syntactic analysis as strong determiners. In both cases, they have quantificational force of their own and must undergo a raising operation (QR) (if not already outside the VP) that brings them outside the VP, so that they can be mapped into the restrictive clause. On the other hand, indefinites with a weak interpretation are variables that have to be bound inside the VP by a covert existential operator. According to (14), they are then mapped in the nuclear scope. Crucially, in Diesing’s analysis, the presuppositional reading she claims is a characteristic of DPs in VP-external position, is provided by the material mapped into the restrictive clause. In other words, the restrictive clause defines the set that the quantifier (i.e. the strong determiner or the weak determiner with a strong reading) quantifies over and this set is assumed to contain objects whose existence is presupposed, or objects that are familiar to the speaker/hearer.

Let us turn again to (13). Diesing claims that the mapping algorithm is a universal procedure and, from her comparison of German and English, we understand that parametric variation emerges at LF, where languages may differ in allowing lowering and/or raising operations. This conclusion, if correct, is quite problematic. Let us briefly consider the case of reconstruction with English weak indefinites.

We know that, for independent reasons, English subjects must show up in Spec of IP, i.e. VP-externally (with the exception of *there*-constructions). On the other hand, English indefinite subjects have an ambiguous interpretation. However, the Mapping Hypothesis predicts that indefinites with a weak interpretation must be mapped into the nuclear scope, where they undergo existential closure. To save the MH, Diesing must thus propose that weak indefinites lower at LF into the VP-internal subject position, Spec of VP. Obviously, this reconstruction rule must apply before mapping takes place, so that the weak subject can be correctly mapped in the nuclear scope.
This analysis may raise some reservations. First, the assumption of lowering is incompatible with the minimalist perspective of this study (see also Delfitto & D’Hulst 1994). In addition, as pointed out by Reinhart (1995), Diesing’s analysis hints at the possibility of establishing parametric variation at the level of Logical Form which does not square easily with current thinking.

In the next section we will test Diesing’s analysis against the Italian facts discussed in chapter 2 and summarized above. The evaluation of the empirical and conceptual adequacy of the Mapping Hypothesis sets off and elaborates on some critical comments by de Hoop (1992), Reinhart (1995) and Ruys (1996).

2. An Evaluation of the Mapping Hypothesis
In what follows I will maintain the distinction between inversion vs. non-inversion verbs in Italian. The choice of distinguishing predicates according to their properties in inversion contexts has a strong empirical motivation in Italian. But, most importantly, it has the advantage of rendering the underlying syntactic mechanisms more transparent. In section 3 we will see that exactly this apparent dichotomy will enable us to give a unified explanation of the syntactic/semantic correlation analyzed in this chapter.

2.1 The Strong/Weak Distinction with Inversion Verbs
Subjects of inversion verbs can show up in preverbal and in postverbal position. I will assume that the preverbal position corresponds with the Spec of IP. As for the postverbal position, it involves a VP-internal node, although we cannot tell for sure whether this has to be identified with the Spec of VP (in unergative inversion contexts) or with the direct object position (the base position of unaccusative subjects).

The distribution and interpretation of indefinite subjects in inversion verb contexts is repeated in (15) and illustrated in (16):
Inversion verbs with indefinite subjects:
preverbal subject \(\rightarrow\) partitive/#existential
postverbal subject \(\rightarrow\) existential/#partitive

Inversion verbs with overt partitive subjects:
preverbal subject \(\rightarrow\) partitive
postverbal subject \(\rightarrow\) partitive

16 a Due linguisti sono arrivati. \(\text{partitive/#existential}\)
   two (of the) linguists arrived
b Sono arrivati due linguisti. \(\text{existential/#partitive}\)
   arrived two linguists
c Due dei linguisti sono arrivati. \(\text{partitive/#existential}\)
   two of the linguists arrived
d Sono arrivati due dei linguisti. \(\text{partitive/#existential}\)
   arrived two of the linguists

Can Diesing’s Mapping Hypothesis account for these data?

Consider (16a). The preverbal subject is VP-external, hence, the MH predicts that the DP due linguisti ends up in the restrictive clause of the logical representation, where it gets a strong interpretation. This prediction is correct, as the partitive reading of (16a) is one of the possible interpretations that fall under the label quantificational (see Milsark 1977). (16a) also shows that the preverbal (hence, VP-external) subject position can only host indefinites with a strong reading and that the existential interpretation is not available. We draw the same conclusion from (16c). So far, Italian preverbal indefinites seem to match the pattern predicted by the MH. From (16a) and (16c) we deduce that in Italian tree-splitting must take place in overt syntax. If the mapping were at LF, (16a) should be acceptable with the existential reading, on the assumption that, like in English, the weak indefinite could lower at LF and be mapped into the nuclear scope anyway. This option, however, does not seem to be present in inversion verb contexts in Italian, and indefinites are directly mapped into their correspondent logical structure without mediation of any reconstruction rule.

Let us turn now to the postverbal indefinites. Both the numeral determiner in (16b) and the overt partitive in (16d) appear to give felicitous
results. The former is interpreted as weak/existential, whereas the latter clearly gets a strong (partitive) reading. The availability of the weak reading in a VP-internal position is predicted by the MH, as the indefinite is mapped directly in the nuclear scope, where it is bound by an existential operator. However, the felicity of (16d) is a serious problem for Diesing’s approach, at least if the mapping algorithm is assumed to apply to overt structure in Italian, no reconstruction rule can rearrange the distribution of the indefinite DPs inside and outside the VP-projection. Hence, VP-internal material, like the overt partitive in (16d) is necessarily mapped into the nuclear scope. But if this were the case, (16d) should be infelicitous, since an overt partitive is not compatible with the weak/existential interpretation which is imposed on the indefinite by the operation of existential closure. The perfect acceptability of (16d) shows that this cannot be the correct analysis.

Suppose tree-splitting takes place at LF and that, by analogy with English, there is a special rule that places the indefinite into that part of the syntactic tree that corresponds with its interpretation. More concretely, the partitive indefinite in (16d) should raise to Spec of IP in covert syntax, so that it could be mapped into the restrictive clause and be interpreted as strong, as required. Although such a raising rule could possibly work for (16d), it fails to explain why the overt partitive does not directly raise in overt syntax, as it does in (16c). In addition, if the mapping procedure applies covertly (i.e. at LF), we would expect sentences like (16a) to be ambiguous between a strong and a weak interpretation, depending on whether the indefinite undergoes covert LF-operations (such as lowering). This, however, is certainly not the case. As was stated before, the true generalization is that in inversion verb contexts weak/existential indefinites are not allowed to occur in preverbal subject position. Apart from these empirical shortcomings, Diesing’s proposal appears to be problematic from our current theoretical point of view as well. The proposed rule of lowering at LF in incompatible with the minimalist assumptions we want to follow here. To this, it should be added that the assumption of a lowering rule cannot account for all the empirical facts either. For instance, (16d) requires raising, not lowering. We would thus expect that languages not only vary in the choice of overt or

11 Recall that weak determiners in postverbal position can never be interpreted as concealed partitives (see chapter 2). We will return to this point in section 3.3 of this chapter.
covert movement, but also in the type of movement, i.e. either lowering or raising. It seems quite inevitable, then, that the setting of all these parameters would render the MH just a vacuous mechanism.

The argumentation against Diesing’s MH I have just presented is centred around the occurrence of overt partitives in postverbal subject position. Yet, it could be argued that overt partitives are not *indefinites* in the strict sense of the word, since the complement of the indefinite determiner is always a definite. Diesing does not explain how overt partitives should be treated in her framework, although she acknowledges that partitivity would require a closer analysis. However, the MH seems to hold for definites and, more generally, for strong determiners as well. Diesing adopts Milsark’s (1977) classification of determiners in terms of weak and strong. Strong determiners, including the definite article and quantifiers like *every*, *all*, and *most* are always quantificational (strong). On the other hand, weak determiners are ambiguous between a weak and a strong reading. For both the strong determiners and the weak determiners with a strong reading Diesing assumes that they undergo QR and adjoin to IP, forming a tripartite structure. Recall that the restrictive clause defines the set that the quantifier quantifies over. Material mapped into the restrictive clause thus provides the presupposition that is associated with strong DPs.

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12 Actually, Ruys (1996) points out that strong quantifiers in object position provide much stronger evidence against Diesing’s analysis. Contrary to Diesing’s predictions, strong objects are perfectly fine in a VP-internal position.

13 Diesing (1992:60, n.6) reports one of de Hoop’s (1990) examples, in which an overt partitive occurs in an *er*-sentence, i.e. VP-internally:

i Er zitten twee van de drie katten in de tuin.

there sit two of the three cats in the garden

Diesing does not seem to take this counterexample very seriously and suggests that existentials in Dutch may show a different pattern depending on whether the relevant clause undergoes verb second or not. However, this account is empirically incorrect as the same judgements hold for the embedded clause (ii), which I checked with native speakers:

ii dat er twee van de drie katten in de tuin zitten

that there two of the three cats in the garden sit

Surprisingly, Diesing gives this sentence as ‘*?’.

14 Here the discussion focusses the structural properties of subject DPs. Below we will see that the distribution of subjects in Italian can be affected by contextual information as well.
Turning to (16d), Diesing could claim that partitives are ambiguous as well, depending on whether their indefinite determiners are interpreted as weak or strong. Needless to say, the distinction between weak partitive and strong partitive is so subtle that it cannot be used as the basis of a serious theoretical account. In any event, Diesing should still assume that the definite complement of the weak partitive raises at LF, in order to be mapped into the restrictive clause, as the definite \(\text{is}\) the presupposition of the whole DP, independently of the weak or strong interpretation attributed to the indefinite determiner. Apart from the fact that it is not clear how the operation of quantifier raising works in Diesing’s framework (see, for critical comments Delfitto & D’Hulst 1994, Ruys 1996), the assumption of a movement operation just for strong partitives would render the MH void of explanatory content. We thus conclude that the Mapping Hypothesis is empirically inadequate, or at least would deserve a non-trivial extension to account for the set of data discussed so far.

2.2 The Strong/Weak Distinction with Non-Inversion Verbs
We turn now to indefinite subjects in non-inversion verb contexts. The generalization proposed in chapter 2 is repeated below:

17 Indefinite subjects with non-inversion verbs:
preverbal subject \(\rightarrow\) partitive or existential
postverbal subject \(\rightarrow\) not available with wide focus\(^{15}\)

These findings are illustrated by the following examples with transitive and intransitive verbs, respectively:

18 a Molti turisti hanno visitato la cattedrale. \(\text{exist./part.}\)
\(\text{many tourists visited the cathedral}\)
\(\text{‘many of the tourists visited the cathedral’}\)
b Molte donne sono invecchiate precocemente. \(\text{exist./part.}\)
\(\text{many women got prematurely older}\)

\(^{15}\) As discussed in the first two chapters, non-inversion verbs allow inversion only with a narrow focus reading of the subject. However, in this case the DP is ambiguous between the weak/strong reading.
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many of the women got prematurely older’

Tremila dipendenti hanno scioperato.  exist./part.

three thousand employees went on strike

‘three thousands of the employees went on strike’

The data in (18), by themselves, do not represent a problem for the MH. In fact, they show exactly the same pattern as indefinite subjects in English. So, the subjects in (18) move, for independent reasons, to the preverbal position where they get an ambiguous interpretation. Then, like in English, reconstruction at LF would lower the weak indefinites back into the VP-internal base position, so that the weak interpretation can be obtained by existential closure of the VP. In other words, (18) could be explained in Diesing’s terms on the condition that the mapping algorithm applies at LF.

Recapitulating so far, on the one hand indefinite subjects in non-inversion verb contexts seem to follow the pattern predicted by Diesing’s MH, on the assumption that tree-splitting is covert in Italian. On the other, we have seen that in inversion verb contexts the picture is completely different, in that the subject cannot be reconstructed VP-internally, judging from the unavailability of the existential reading. Tree-splitting at LF leaves unexplained the absence of ambiguity in preverbal subject position. But tree-splitting in overt syntax does not help either, as the postverbal subject position can host both a strong and a weak reading.

The possible solution of relativizing the MH to the type of predicates involved in the clause cannot work for Italian. Recall from section 1.1 that we cannot reduce the inversion/non-inversion verbs dichotomy to the stage level/individual level predicates distinction. But, apart from this, there are additional complications of an empirical nature. As extensively discussed in chapter 1, the distribution of subject inversion in Italian is not homogeneous across the three main verb classes. In other words, it is true that unaccusative verbs are more likely to occur with a postverbal subject than transitive and unergative verbs. However, it is also true that this distinction is not rigid. We saw examples of unaccusatives that are unacceptable with subject inversion. And we also found instances of unergative and even transitive verbs that are perfectly happy with a postverbal subject.

Finally, let us turn to a last set of data which, in my opinion, convincingly show that the MH is not adequate for a correct account of the
interpretive properties of indefinite subjects in Italian. In chapter 2, the examination of the behaviour of indefinite subjects in non-inversion verb contexts revealed the following unexpected facts:

19  
   a  Che cosa è successo?  
      *what happened*  
   b  Ha pianto un bambino.  
      *cried a child*  
   c  E’ svenuto un uomo.  
      *fainted a man*

The two answers contain non-inversion unergative and unaccusative verbs, respectively. What is unexpected is the fact that the two sentences are perfectly felicitous answers to a wide focus question.\(^{16}\) Of the generalizations holding for the Italian facts, (17) was the only one that, so far, was compatible with an analysis in Diesing’s terms. However, (17) must now be adjusted in order to include these facts as well. I propose a formulation like in (20):

20  
   Indefinite subjects with non-inversion verbs:  
   strong and weak indefinites must occur in preverbal subject position where they are ambiguous. When the determiner is the indefinite article, the subject can show up both in preverbal and postverbal position, correlating with a strong and a weak interpretation respectively.

\(^{16}\) In chapter 2 I showed that only DPs containing the indefinite article seem to be felicitous in postverbal subject position.

\(^{17}\) Notice that, besides a postverbal subject, these constructions allow a preverbal subject as well:

   i  Un bambino ha pianto.  
      *a child cried*  
   ii  Un uomo è svenuto.  
      *a man fainted*

As observed in chapter 2, the preverbal indefinite then tends to be interpreted as strong/partitive (i.e. the strong/weak ambiguity seems to disappear).
Generalization (17) was still compatible with the MH. (17) represents the English pattern. However, this is no longer the case with generalization (20), as in this case, the algorithm would need to distinguish between the indefinite article, which requires an overt mapping (like indefinite subjects of inversion verbs), and all the other weak determiners which can only show up in preverbal subject position and which would thus require lowering at LF.

At this point we can evaluate the MH on the grounds of concrete empirical evidence from Italian. The intricate distributional and interpretive pattern of indefinite subjects in Italian cannot be captured by an account like the one suggested for German and English by Diesing (1992). In addition, the data we have examined show little evidence for Diesing’s central claim that the relationship between syntactic structure and the tripartite quantificational structures which are assumed to encode the existential and the presuppositional readings is a direct one. Structure and meaning seem at times to coincide. Yet, this apparent correlation cannot be the only explanation of the behaviour of indefinite subjects.

3. A Possible Explanation for the Italian Facts
The appeal of Diesing’s claim about the existence of a strict correlation between syntactic structure and semantic interpretation (via the familiar tripartite structures) is perhaps due to the elegance of a transparent relationship between syntax and semantics. Yet, this transparency has a conceptual cost as Diesing’s claim that we need two types of indefinites (the strong/quantificational type and the weak/cardinal type) implies a redundancy at the lexical level which is not very elegant. In addition, generics represent a problem for this analysis. Weak indefinite DPs (the non-quantificational, variable type) are devoid of quantificational force and the particular interpretation they get seems to depend on their structural position. Diesing assumes that generics are strong. This means that generics have quantificational force of their own so that they have to raise. Yet, in the logical representation, generics are claimed to be bound by a covert generic operator $Gen$, whereby generics turn out to behave like the unselectively bound variables of indefinites with a weak interpretation.

As discussed by Ruys (1996), the position of an indefinite DP with respect to other constituents can indeed affect the meaning of the clause.
This, however, does not imply that the meaning of an indefinite DP depends on its *absolute* position. For instance, Ruys shows that some of the strong/weak interpretive differences observed in Dutch scrambling constructions can be best explained as the effect of scrambling on relative scope relations based on c-command. Consider (21):

21  

21 a  ... dat Jan waarschijnlijk een meisje heeft gekust  

   *that Jan probably a girl has kissed*

21 b  ... dat Jan een meisje waarschijnlijk heeft gekust  

   *that Jan a girl probably has kissed*

Ruys argues that it is not the semantics of the indefinite *een meisje* ‘a girl’ that changes according to its scrambled or unscrambled position. It is rather the meaning of the whole structure which is affected by the different scope relations between the indefinite and the adverb *waarschijnlijk* ‘probably’.

In a similar vein, Reinhart (1995) argues that certain interpretive differences should be analyzed as the effect of scrambling on the focus structure of the clause. Reinhart shows that, in Dutch, scrambling is applied every time the direct object is not compatible with a focus reading. There can be various reasons for blocking focus on the direct object. The clearest one, however, is the case of anaphoric destressing of a definite object. Consider (22):

22  

22 a  Hoe gaat het met de review van Jan’s boek?  

   *how goes it with the review of Jan’s book*

22 b  Ik heb het boek eindelijk gelezen.  

   *I have the book finally read*

22 c  #Ik heb eindelijk het boek gelezen.  

   *I have finally the boek read*

The direct object in (22b) is scrambled outside the VP and gets a strong interpretation. This strong reading, however, is not determined by its ‘scrambled’ VP-external position. The strong interpretation derives from the fact that this DP is anaphoric to its antecedent in (22a). Since anaphoric elements are not compatible with a focus reading, they undergo scrambling,
and this arguably explains the correlation between VP-external DPs and the strong reading.

Let us now turn to Italian. My analysis will be quite different from Diesing’s line of reasoning. Following Reinhart (1995) and Ruys (1996), I will maintain that the interpretation of the indefinite DPs in Italian is not determined by the absolute position in which they show up, but by the interaction of different factors of a syntactic or interpretive nature. More precisely, and in agreement with the previous chapters, I will maintain that the distribution of arguments is primarily determined by syntax. The output of the computational system is then evaluated against pragmatic considerations and needs at the interface with the system of use.

3.1 The Syntax of Indefinites

Before turning to the discussion of a possible analysis of the interpretive differences we have observed on the previous pages, I would like to introduce some assumptions concerning the internal structure of indefinite DPs. The approach I want to develop is based on the hypothesis that the existential and the partitive reading of the indefinite subject is reflected by the internal structure of the relevant DP. This hypothesis was already formulated in chapter 2 and is repeated below:

\begin{equation}
23 \text{ Hypothesis.} \\
\text{The internal structure of existential indefinites differs from the internal structure of partitive indefinites. Concealed partitives have the same structure as overt partitives.}
\end{equation}

Given (23), the partitive reading and the existential reading of the indefinite DP correspond with the internal structures illustrated in (24) and (25), respectively:

\begin{equation}
24 \text{ a } \text{ Due studenti} \text{ existential} \\
\text{two students}
\end{equation}
at the interface with the system of use.

3.1 The Syntax of Indefinites

in chapter 2 and is repeated below:

23 Hypothesis.
The internal structure of existential indefinites differs from the internal structure of partitive indefinites. Concealed partitives have the same structure as overt partitives.

Given (0), the partitive reading and the existential reading of the indefinite DP correspond with the internal structures illustrated in (0) and (0), respectively:

24 a Due studenti existential
two students

25 a Due (degli) studenti partitive
two (of the) students
partitive structure. In (25), representing the structure of a concealed partitive, the PP is filled by an empty category. This structure reflects the intuition that the indefinite *due studenti* implies the existence of a superset of students which has already been given in the discourse. The indefinite *due studenti* denotes a partition of this superset. As we will see below, the identification of the content of the empty PP is governed by conditions of an interpretive nature like those holding in contexts of anaphora resolution.

My analysis will address the following questions which are distilled from generalizations (15) and (20):

a) why is the preverbal subject position forbidden for existential indefinites in inversion verb contexts?

b) why is it instead available for indefinite subjects of non-inversion verbs?

c) why can and must the reading of indefinites as concealed partitives occur in preverbal subject position?

Questions (a) and (b) will be discussed in section 3.1. Question (c), however, requires additional theoretical assumptions, and will therefore be discussed not until the second part of this chapter.

3.2 Existential Indefinites

In inversion verb contexts, indefinites with the weak/existential interpretation can never show up in preverbal subject position. This is illustrated in (26):

26 a) Un pacco è arrivato.
*a parcel arrived
‘one of the parcels arrived’

b) E’ arrivato un pacco.
arrived a parcel
#‘arrived one of the parcels’

c) Due studenti hanno telefonato.
*two students called
‘two of the students called’

d) Hanno telefonato due studenti.
*have called two students
#‘have called two of the students’
As a matter of fact, (26) raises two questions: a) what blocks the existential interpretation of the indefinite in preverbal subject position? and b) why is the strong interpretation available? The account I will propose for (a) and (b) is based on the hypothesis proposed above that existential indefinites have a different internal structure than partitive indefinites (concealed partitives). However, in this section I will concentrate on existential indefinites. The discussion of partitive indefinites is postponed till section 4.1.3, in the second part of this chapter.

I would like to suggest that the fact that the existential interpretation of the indefinites in (26a) and (26c) is not available indicates that these subjects have an internal structure as in (25), i.e. the structure of a concealed partitive. From this correlation we draw a first conclusion: indefinites with the structure in (24) cannot show up in preverbal position, while indefinites with the structure in (25) can. How can we account for this peculiar pattern?

The explanation of this puzzle has a syntactic and an interpretive aspect. The syntactic aspect will be discussed directly. The interpretive aspect involves the notion of focus, which requires the introduction of some theoretical assumptions and which will thus be discussed in the second part of this chapter.

Turning to the data, what blocks the occurrence of an existential indefinite in the preverbal subject position of constructions like (26)? The answer is strictly related to the syntax of these verbs (inversion verbs): the occurrence of the subject in preverbal position is blocked by economy. In chapter 3 it was argued that the crucial distinction between inversion and non-inversion type verbs reduces to the presence vs. absence of a covert clitic LOC. LOC fulfills an essential role, not only in the explanation of the distribution of inverted subjects in general, but also in the account of the interpretive differences that emerge with definite and indefinite DPs.

Both the verb *arrivare* and the verb *telefonare* in (26) select a LOC. LOC carries a D-feature but no other overt material. As such, it turns out to be the optimal candidate to check the strong D-feature of INFL. Satisfaction of the EPP by raising of LOC is thus a cheaper operation than movement of the subject to Spec of IP. It then follows that subjects of inversion verbs have to remain in situ as their movement would be a violation of economy.

Thus the impossibility of having a weak indefinite in preverbal subject position in (26a) and (26c) just has a syntactic explanation: subject raising
violates economy (and this is the reason for my marking these sentences with ‘*’). The optimal choice is represented by (26b) and (26d), where the EPP is satisfied by the covert LOC and the subject remains in situ.

We turn now to question (b) of section 3.1. Given the account we have just proposed for the distribution of existential indefinites in inversion-verb contexts, the availability of the weak reading for the preverbal indefinite subjects of non-inversion verbs is predictable. I repeat some relevant examples of these data below:

27  a  Molti turisti hanno visitato la cattedrale.  exist./part.
    many tourists visited the cathedral
    ‘many of the tourists visited the cathedral’
    b  Molte donne sono invecchiate precocemente.  exist./part.
    many women got prematurely older
    ‘many of the women got prematurely older’

The explanation for the existential interpretation of (27) naturally follows from the theoretical assumptions we made for the facts in (26). The verbs in (27) do not select LOC (see chapter 3 for details). Hence, the subject must raise in order to satisfy the EPP.

Crucially, this analysis shows that the distribution of the existential interpretation of the indefinite subject does not correlate with a particular syntactic position, but is the result of the interaction of the internal structure of the DP with general principles of the computational system.

Finally, the examination of the distribution of existential indefinite subjects would not be complete without an explanation of the following apparent counterexample, which was already observed in the previous chapters. As we have just seen, the preverbal subject position of non-inversion verbs can host both the weak and the strong reading (and the postverbal position is just not available with the wide focus reading). Yet, when the noun is introduced by the indefinite article, and, crucially, only in this case, does the distribution and interpretation of indefinites appear to pattern like in inversion verb contexts, i.e. the preverbal subject tends to prefer the strong reading and the postverbal subject the weak reading (see n. 13). The relevant data are repeated in (28):
In chapter 3 I showed how the occurrence of the indefinite in postverbal position is explained by the interaction of the internal structure of the existential indefinite DP and general syntactic principles like the EPP. Therefore the wellformedness of (28a) has a syntactic explanation based on considerations of economy. Yet, the wellformedness of (28b) still calls for an explanation.

In this section I have provided a possible account of the fact that existential indefinites in Italian show a strong preference for the postverbal subject position.\textsuperscript{18} What has still to be explained is why concealed partitive subjects can and must occur in preverbal position (see question (c) section 3.1). Since an adequate account of these facts requires the introduction of some assumptions concerning the notion of focus and its interaction with the syntactic and the interpretive systems, I will discuss these issues in the second part of this chapter.

Let me now summarize the main conclusions of the discussion so far. In this section we examined the conditions that determine the distribution of existential subjects in Italian. The questions we wanted to explain were:

\begin{enumerate}
\item why is the preverbal subject position forbidden for existential indefinites in inversion verb contexts?
\item why is it instead available for indefinite subjects of non-inversion verbs?
\end{enumerate}

The explanation I proposed is essentially syntactic. On the assumption that the internal structure of existential indefinites differs from that of concealed partitives, I argued that the distributional patterns we observed are the result of considerations of economy. More specifically, subjects can occur in preverbal position only if there is no cheaper strategy for satisfaction of the EPP (see chapter 3 for details).

\textsuperscript{18} As a matter of fact, indefinite subjects must show up in postverbal position, except for non-inversion verb contexts with an indefinite subject other than the indefinite determiner \textit{un/uno/una} ‘a’.
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However, from this perspective, the wellformedness of the SV(O) word order in inversion verb contexts is unexpected. In addition, this word order appears to correlate with the partitive interpretation of the indefinite. The following sections will provide an explanation for these puzzling facts.

4. The Effects of Focus on the Distribution of Subjects
The account of the distribution of Italian subjects proposed in chapter 3 and successfully adopted in the first part of this chapter may be undermined by the following two classes of facts: a) subjects of inversion verbs must sometimes occur in preverbal position (think of the concealed partitives in the previous sections) and b) subjects of non-inversion verbs must sometimes occur in postverbal position (the narrow focus reading of the subject). These problematic cases seem to defy a minimalist account where movement is determined by the need for morphological feature checking. So, it may be reasonable to ascribe the factors responsible for the strange behaviour of (a) and (b) to different components of language or of language use, external to the core of the computational system. This could be the most elegant and safest option, but, perhaps, not the most interesting.

In what follows, I will rather take up the challenge of showing that the phenomena in (a) and (b) do involve principles and properties of a pragmatic/interpretive nature, but that these principles and properties interact with syntax in an interesting way. More precisely, I will adopt Reinhart’s (1995, 1996) theoretical framework and I will show that the interaction between the computational system and non-syntactic conditions at the interface is governed by considerations of economy. The facts referred to by (a) and (b) will be discussed in section 4.1 and 4.2, respectively.

4.1 Obligatory Preverbal Subjects: Anaphoric Definites
The major claim of this study is that subject inversion is strictly related to the availability of an alternative checker for the strong D-feature of INFL. The choice between the two options, however, is determined by an evaluation of the costs of each operation. In other words, if the EPP can be satisfied by an element different from the subject, it must obligatorily be so. In this case,
raising of the subject would be a violation of economy. Given this analysis, the following facts appear to be quite problematic:

29  a  L’editore ha spedito una dozzina di libri.
    *the editor sent a dozen of books*

    

b  #Sono arrivati i libri.
    *arrived the books*

c  I libri sono arrivati.
    *the books arrived*

Arrivare ‘arrive’ is an inversion verb, hence, the subject should always occur in postverbal position. Then, why is (29b) infelicitous? And why is (29c) not a violation of economy?¹⁹

As discussed in chapter 2, the strange facts in (29) are determined by two main factors: the Uniqueness condition and the Focus condition. Uniqueness states that definites must satisfy certain presuppositions (in terms of cardinality requirements, that is, Uniqueness or Exhaustiveness). As for what I called the focus condition, it states that the element carrying focus must contain (hearer-) new information.

In (29) Exhaustiveness is satisfied only if the definite *i libri* ‘the books’ refers to the set of books introduced into the domain of interpretation by (29a). However, in (29b) the definite occupies the position in which (neutral) focus is assigned in Italian. Since the definite clearly is not new, its occurrence in focus position is a violation of the focus condition.

The infelicity of (29b) thus has an interpretive source. However, the wellformedness of (29c) seems to suggest that such interpretive conditions can undo the results of syntactic operations and rearrange the word order of the elements in the clause according to the intended purpose of use.

¹⁹ Notice that the definite or indefinite status of the subject does not seem to play a role in this case. The same results are obtained in the following clauses with indefinite subjects:

i  L’editore ha spedito una dozzina di libri.
    *the editor sent a dozen of books*

    

#Sono già arrivati due libri.
    *arrived already two books*

Due libri sono già arrivati.
    *two books already arrived*
Although it is true that the word order in (29c) is justified by interpretive needs, I will show that there is still more syntax involved in (29) than one may suspect.

4.1.1 Anaphoric Destressing

At this point, a note of clarification is necessary on the use I will make of notions like focus, stress, and familiarity. Recall from chapter 3 that I assume that focus is the indirect result of the distribution of sentence stress in the clause (see Cinque 1993, Zubizarreta 1994, Reinhart 1995, 1996). Stress is a property assigned at PF. At the interface with the system of use stress has the function of signalling a potential focus option. As we will see in the next section, stress also plays an important role in anaphora resolution, as a means of indicating the relative distance between an anaphor and its antecedent. Hence, the apparent interaction between focus and the old/new status of a discourse entity (familiarity) is just the reflection of the fact that both notions are mediated by stress.

The facts observed in (29) can be described by means of the following generalization:

30 Generalization:
Familiar material cannot stay in focus.

Note that this generalization expresses the content of the focus condition of chapter 2. The definite i libri has already been given in the discourse, hence it cannot stay in the position in which new entities are introduced by means of focus. At an intuitive level (30) is quite obvious. Yet, how can this type of information affect the focus structure of the clause?

Some of the solutions that have been proposed for the encoding of familiarity in grammar capitalize on the anaphoric relation between the discourse old entity and its antecedent (for the special case of definite descriptions, see Heim 1982). However, this boils down to a prohibition against anaphoric constituents showing up in focus, which is little else than a reformulation of (30), descriptively adequate but with little explanatory power.

Williams’ (1995) proposal, too, revolves around the anaphoric properties of the constructions involved. His claim, in a nutshell, is that
anaphoric DPs cannot be stressed. Yet, the analysis he suggests is based on a much stronger claim: focus/presupposition structures (i.e. the distribution of familiar and non-familiar material) are anaphoric structures and, as such, they share the same rules that are responsible for the identification and interpretation of normal (intrinsic) anaphora.20

According to Williams, focus/presupposition structures must be seen as the result of destressing certain material in the clause. Notice that this observation is crucial, since it establishes a link between stress and familiarity. It then follows that (30) should be reformulated as in (31):

31 Generalization:
   Familiar material cannot be stressed.

Williams shows that the conditions that determine whether destressing can take place or not appear to be exactly the same conditions that hold in anaphoric contexts. From this the conclusion follows that destressing must be anaphoric. As a consequence, we expect focus structures to have the same fixed number of constructional patterns that are available in anaphoric contexts.

The advantage of Williams’ analysis over other anaphora-based accounts of (30) is that it makes clear predictions about the possible distributional patterns of focus and destressed material in the clause. More importantly, however, this is the only analysis that predicts the existence of a special focus pattern, the contrastive focus pattern, as one of the logical combinatorial possibilities of the constructional properties of anaphoric contexts. We will return to the issue of contrastive focus in section 4.4.

4.1.2 Anaphoric Destressing and Syntax

Let us return to the distribution of definite subjects in the Italian examples in (29), repeated below:

\[ \text{John [gave Fred an apple]} \text{ and } [0_{\text{y}} \text{ Bill an orange}] \]

He shows that the conditions that determine whether the verbal head can remain empty or not appear to follow exactly the same pattern as anaphoric dependencies.

---

20 Pronouns etc. are intrinsic anaphora. Yet, anaphoric dependencies of non-inherently-anaphoric material can arise in specific contexts as well. As discussed by Williams, this phenomenon is particularly clear in ellipsis constructions, as illustrated below:

\[ \text{i John [gave Fred an apple] and [0_{\text{y}} Bill an orange]} \]

He shows that the conditions that determine whether the verbal head can remain empty or not appear to follow exactly the same pattern as anaphoric dependencies.
32 a L’editore ha spedito una dozzina di libri.
   *the editor sent a dozen of books*

b #Sono arrivati i libri.\(^{21}\)
   *arrived the books*

c I libri sono arrivati.
   *the books arrived*

(32b) is infelicitous because a familiar DP occupies a position in which focus is assigned. (32b) violates (31). Consider now the alternative (32c). Here the definite subject, the anaphoric element, does not occupy the focus position, so that (31) does not apply and the sentence is fine.

The facts in (32) raise a number of questions concerning the level at which generalization (31) may hold and the nature of the operation that derives the alternative (32c). Where does anaphoric destressing apply? Do we have to conclude from (32) that anaphoric destressing in Italian affects the word order of the clause? And if this is the correct generalization, how is this alternative derivation obtained? Notice that the latter question may involve additional complications. If the operation responsible for (32c) belongs to the computational system, it must be triggered by the necessity of checking some morphological feature. On the other hand, if this operation is not triggered by core properties of the system, its application represents a marked move which has to be justified in some way.

The solution I will propose for these facts is based on Reinhart’s (1995, 1996) work on the relationship between focus and economy. Although Reinhart’s study deals with data from English and Dutch, her basic insights will shed new light on the Italian facts as well.

Reinhart argues that anaphoric destressing must necessarily be viewed as a condition at the interface with the system of use. At this level anaphora resolution takes place and each anaphoric element must be identified by a suitable antecedent. Hereby, stress appears to have the important function of signalling the accessibility (i.e. the distance) of the antecedent with respect to

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\(^{21}\) That the infelicity of (32b) is only determined by focus is supported by the following type of constructions. (i) is perfectly fine in an out-of-the-blue context.

\begin{itemize}
  \item i Sono arrivati i libri che avevo ordinato.
      *arrived the books I had ordered*
\end{itemize}

In other words, the subject in (i) contains new information. Uniqueness is vacuously satisfied as the DP is a complete definite description.
the relevant anaphor. On the other hand, since the focus set of a clause is
determined on the basis of main sentence stress (see chapter 3 for
discussion), the link observed by Williams between focus and anaphoric
destressing is derived as well.

Languages appear to vary in the way anaphoric destressing is
implemented. In English destressing is a purely phonological mechanism that
shifts the stress from the focussed constituent (the most embedded) to the
next constituent higher up. This case is illustrated below (bold face indicates
stress):

\[\begin{align*}
33 & \quad a \quad & \text{I met the girl.} \\
& \quad b \quad & \text{I met her.}
\end{align*}\]

(33a) shows that the direct object is normally marked with focus, as it
occupies the most embedded position in the clause. However, when the
object is a pronoun like in (33b), anaphoric destressing must apply and the
stress shifts to the verb.

Dutch has phonological destressing as is exemplified in (34):

\[\begin{align*}
34 & \quad a \quad & \text{Ik heb Chomsky ontmoet.} \\
& \quad & \text{I have Chomsky met} \\
& \quad b \quad & \text{Ik heb hem ontmoet.} \\
& \quad & \text{I have him met}\textsuperscript{22}
\end{align*}\]

Yet, as pointed out by Reinhart, in certain cases this language appears to
exploit an alternative strategy, as is illustrated in (35):

\[\begin{align*}
35 & \quad a \quad & \text{Ik heb gisteren Chomsky ontmoet.} \\
& \quad & \text{I have yesterday Chomsky met} \\
& \quad b \quad & \text{Ik heb hem gisteren ontmoet.} \\
& \quad & \text{I have him yesterday met} \\
& \quad c \quad & \#\text{Ik heb gisteren hem ontmoet.}
\end{align*}\]

\textsuperscript{22} The different position of the object in Dutch and in English is due the fact that
Dutch is a left-branching language, while English is a right-branching one. Recall
that in Cinque's (1993) system, the Nuclear Stress Rule applies blindly and
parametric variation is determined by the direction of recursion of the actual
language.
(35b) is a typical instance of scrambling, with the direct object showing up to the left of the temporal adverbial. Reinhart observes that if the clause contains an adverbial, anaphoric destressing does not make use of a stress-shifting operation, like in (35c), but it exploits the availability of a different (scrambled) word order, like in (35b).

The explanation of this phenomenon elegantly fits a minimalist view of grammar enriched by two crucial assumptions: a) that economy is always sensitive to meaning and b) that economy conditions apply at the interface. Anaphoric destressing is a marked operation since it modifies the stress pattern created by the nuclear stress rule (assigning neutral sentence stress). As such, its application is a violation of economy. However, when there is no other means of obtaining the desired interpretation, stress shift is a perfectly licit operation. On the other hand, (35b) represents the case in which anaphoric destressing is achieved by means of a cheaper alternative, since the scrambled word order is available anyway (see Neeleman 1994). As is illustrated in (35c), application of the stress shifting rule violates economy and gives an infelicitous derivation.

Reinhart’s account of anaphoric destressing in Dutch may provide a plausible explanation for the facts observed in the Italian examples in (32). More specifically, I would like to suggest that anaphoric destressing in Italian does not need to use a marked phonological rule, because the same result can be obtained by choosing an alternative word order (linked to a certain syntactic derivation). However, in Italian this alternative word order is not independently available (as it is the case of scrambling for Dutch), but must be derived by a more costly operation.

Consider again the relevant Italian cases with bold face indicating stress:

36  a  L’editore ha spedito una dozzina di libri.

*the editor sent a dozen of books*

b  #Sono arrivati i libri.

*have arrived the books*

c  #Sono **arrivati** i libri.

*have arrived the books*
Given the context (36a), (36b) is infelicitous: an anaphoric element cannot be stressed, hence anaphoric destressing must take place. In (36c) a phonological procedure of anaphoric destressing has applied (like in the English cases), by which the stress has been removed from the most embedded element and shifted to the next constituent higher up. In fact, this structure is likely to correspond with a derivation where the subject has been right-dislocated to an adjoined position (cf. Antinucci & Cinque 1977). The alternative option is (36d), where anaphoric destressing is obtained by means of a different word order. The resulting sentence is perfectly fine.

These facts seem to show that anaphoric destressing in Italian is not phonological but relies instead on a syntactic operation, where the term ‘syntactic’ still has to be made more precise. In any event, the syntactic alternative to phonological destressing must satisfy conditions of interface economy.

However, the wellformedness of (36d) seems to be a problem for the syntactic analysis I proposed in this study. Since *arrivare* in (36) is an inversion verb, subject raising should be excluded by considerations of economy. So, how is (36d) derived? I will argue that the SV word order of (36d) is derived by application of a more costly operation, i.e. by subject raising. This idea requires some clarifications. In (36d) LOC raises in order to check the strong D-feature of INFL. However, the subject raises as well (and Case and phi-features are thus checked overtly in this case). The ‘trigger’ for this latter operation is anaphoric destressing. Why should this operation not count as an economy violation then? The choice of a more costly derivation, is here justified by interface economy. According to Reinhart (1995,1996) the use of a more costly operation is allowed if it is the only way to satisfy an interpretive need. For Dutch it was argued that anaphoric destressing does not require the application of a marked phonological rule as this language independently associates the same numeration to derivations corresponding to different word orders (Neeleman’s 1994 analysis of scrambling as base generated).

In Italian anaphoric destressing can either be obtained by application of a phonological rule of stress shift, or by the choice of a more costly
derivation. Put in terms of global economy, the derivation corresponding with
defocusing of the subject, being associated with a distinct interpretation,
becomes accessible for the computational system (even though it is less
economical in strict computational terms).

Recapitulating; we can now state that anaphoric destressing is the
‘trigger’ for the occurrence of the subject in preverbal position in inversion
verb contexts in Italian. Considerations of economy at the interface determine
the use of a more costly operation. Subjects of verbs that do not allow
inversion, obviously, do not occur in postverbal position (i.e. in the position
where sentence stress is assigned), hence anaphoric destressing is not
necessary in these contexts.

4.1.3 Other Related Interpretive Facts
The analysis we have just proposed for obligatory preverbal definites
provides an explanation for the third question in section 3.1: why can and
must the reading of indefinites as concealed partitives occur in preverbal
subject position? The relevant examples are repeated in (37):

37  a  Due libri sono arrivati.  partitive/#existential
two books arrived

  b  Sono arrivati due libri.  #partitive/existential
    arrived two books

The answer I will provide is based on the hypothesis that indefinites with a
partitive reading have a partitive internal structure. This, prima facie,
gratuitous assumption has the advantage of rendering certain interpretive
effects more transparent. More specifically, it provides an explicit account of
the fact that concealed partitives appear to behave like anaphoric definites.

(38b) illustrates the internal structure of the concealed partitive in
(38a):

38  a  due libri (dei libri)
two books (of the books)

  b  [DP due [NP libri [PP e]]]
Licensing and Interpretation of Inverted Subjects

As is shown by the glosses, the empty PP complement is assumed to contain a definite DP, representing the superset. Crucially, this superset must have already been introduced given in the discourse. The overt or covert realization of the PP thus appears to be the result of conditions on the familiarity degree of the relevant DP.

As pointed out in chapter 2, recent studies on discourse theory have provided an explicit description of the effects of familiarity for anaphora resolution. In particular, it has been claimed by Ariel (1990) that the choice of the most suitable linguistic marker for a given discourse entity is determined by a number of factors among which the degree of accessibility of the antecedent. Along these lines, the choice of a covert PP referring to the superset reflects the fact that the antecedent of the PP is highly accessible. Interestingly, this account is supported by the distribution of overt partitives. Consider (39):

39   a  Che cosa è successo?
     *what happened*

   b  Sono arrivati due dei miei studenti.
     *arrived two of my students*

   c  #Sono arrivati due studenti.
     *arrived two students*

Given the out-of-the-blue context (39a), the PP complement referring to the superset of my friends must be overtly realized as it is introduced into the present conversation for the first time. As is shown by (39c), the covert partitive reading is not available in this context.

Another advantage of this account of concealed partitives is that the presence of a definite DP in the PP complement of the partitive may permit us to ascribe certain distributional properties of the whole DP to its anaphoric character. As we saw above, conditions on anaphora resolution can indeed trigger the selection of the derivation in which the subject moves to the preverbal position in accordance with certain interpretive needs at the interface. Therefore, it is plausible to expect that the occurrence of the concealed partitive in preverbal subject position may just be determined by
the rule of anaphoric destressing which rules out stressed definites that cannot inherently satisfy the Uniqueness/Exhaustiveness requirement.\(^{23}\)

### 4.1.4 Summary

The obligatory occurrence in preverbal position imposed on the subjects when they are assigned an anaphoric interpretation appears to be ‘triggered’ by an interpretive constraint: anaphoric destressing. However, the mechanisms that are used to satisfy this constraint appear to be subject to considerations of economy like those holding for operations inside the computational system. By adopting Reinhart’s (1995, 1996) notion of interface economy we showed that potential counterexamples to the syntactic approach proposed in this study may be the natural consequence of the minimalist framework.

In the second part of this chapter we will concentrate on the opposite situation i.e. on those cases in which the subject must occupy the postverbal position.

### 4.2 Obligatory Postverbal Subjects

Since chapter 1 I have been stressing the fact that the claims about the distribution of subject inversion in Italian pertain only to wide focus contexts. For these cases I showed that the occurrence of postverbal subjects is the indirect consequence of the presence of a covert argument LOC that can satisfy the EPP and permit the subject to remain in its base position. Obviously, verbs that do not select LOC can satisfy the EPP only by subject raising, so that inversion is not available. This analysis appears to be empirically adequate as long as we keep to wide focus contexts. However, the picture is made more complex by contexts requiring a narrow focus reading of the subject, like in (40) and (41):

40 a Chi ha scritto questo libro?  
who wrote this book

---

\(^{23}\) Recall that anaphoric destressing applies in order to prevent stressing of a familiar constituent. As we just saw, there are all kind of reasons to assume that a concealed partitive is familiar. Then its occurrence in postverbal position would violate anaphoric destressing.
(40b) and (41b) show that the SV(O) word order is not felicitous and that the V(OS) order has to be chosen instead. However, the V(OS) order of (40c) and (41c) appears to be problematic for the analysis of inversion advocated in this study. The verbs in (40) and (41) are non-inversion verbs, hence satisfaction of the EPP requires obligatory subject raising. So, the question arises why these sentences are not a violation of the EPP.

Let us proceed step by step. How is the EPP satisfied in (40c) and (41c)? Given the fact that non-inversion verbs do not select LOC, the only possible way of checking the strong D-feature of INFL is by subject raising. It then follows that (40c) and (41c) have been derived from the SV(O) word order.

Let us turn now to the focus properties of these clauses. Why are (40b) and (41b) infelicitous? The questions (40a) and (41a) require an answer with the narrow focus reading of the subject. However, this focus option is not included in the neutral focus set (derived by Cinque’s nuclear stress rule). Determination of the focus set of a sentence proceeds in the following way: every syntactic cycle containing the word with the main accent is interpreted as a possible focus option.\(^{24}\) Consider (42), which illustrates the focus set of (40b):

\[
42 \quad [_{f} \text{Dante} \ [_{f} \text{ha scritto} \ [_{f} \text{questo libro}]]]
\]

\(^{24}\) We assumed that main sentence stress is assigned at PF by Cinque’s (1993) nuclear stress rule. This rule applies cyclically to syntactic structures after all morphological checking operations have taken place.
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Focus set:  
[F questo libro]  
[F ha scritto questo libro]  
[F Dante ha scritto questo libro]

The focus options in (42) are felicitous answers to the following questions:

43  a  Che cosa ha scritto Dante?  
*what did Dante write*  
  b  (Dante ha scritto) questo libro.\(^{25}\)  
*he wrote this book*

44  a  Che cosa ha fatto Dante?  
*what did Dante do*  
  b  (Dante) ha scritto questo libro.  
*he wrote this book*

45  a  Che cosa è successo?  
*what happened*  
  b  Dante ha scritto questo libro.  
*Dante wrote this book*

However, none of the options in (42) is a felicitous answer to (40a) since none of them provides the narrow focus reading of the subject. Yet, as we saw, Italian does have an adequate answer to (40a), namely a clause with the subject in postverbal position, like in (40c).

It is clear that these facts are potentially problematic for the analysis proposed here. So far I have argued that subject inversion is primarily the result of syntactic factors and I have defended the thesis that interpretive properties as such cannot serve as a trigger for movement.\(^{26}\) However, the

\(^{25}\) The parenthesized constituents can be omitted.

\(^{26}\) This may sound as a contradiction, as I have just proposed that the occurrence of anaphoric subjects in preverbal subject position is motivated by interpretive needs. However, my point here is that assuming global economy at the interface is different from stipulating the existence of interpretive features such as ‘familiarity’ that jeopardize the autonomy of syntax.
wellformedness of (40c) and (41c) seems to suggest that an interpretive requirement can indeed overrule the results of syntactic processes.

This discrepancy between the objectives of the computational system and those of the pragmatic system is not an isolated phenomenon and it seems to motivate the inevitable assumption that some sort of additional stylistic rule needs to be postulated.

4.2.1 Narrow Focus in English and Dutch
Most notably, Reinhart (1995, 1996) acknowledges the existence of problematic focus options that do not seem to be the result of the standard procedure for the determination of the (neutral) focus set. As an illustration of the problem, she gives the following examples:

46  
   a  My neighbour is building a desk.  
   b  Focus set:  
       [F a desk]  
       [F is building a desk]  
       [F my neighbour is building a desk]  

(46a) is a felicitous answer to (47a), (47b) and (47c), but not to (47d) (the constituent in bold face carries main stress):

47  
   a  What’s this noise?  
       [F my neighbour is building a desk]  
   b  What’s your neighbour doing?  
       my neighbour [F is building a desk]  
   c  What’s your neighbour building?  
       my neighbour is building [F a desk]  
   d  Who is building a desk?  
       #my neighbour is building [F a desk]  

(47d) requires an answer with a narrow focus reading of the subject. However, this focus option is not contained in the focus set (46b). Notice that (47d) shows the same narrow focus pattern as the Italian sentence (40b).

Reinhart elaborates on Cinque’s (1993) observation that neutral focus, as the result of the Nuclear Stress Rule, may be altered in order to comply with a pragmatic need. She thus assumes the existence of a marked operation
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of stress strengthening that adds stress to a constituent that was not assigned main stress by Cinque’s rule. In English, this rule has the effect of relocating the main stress, as is illustrated in (48):

48  a  Who is building a desk?
   b  My neighbour is building a desk.

The assumption of a marked rule for stress relocation may appear to be a weakening of the thesis we have defended so far. These facts are likely to go beyond the limits of syntax. However, just like in the case of anaphoric destressing, the application of operations triggered by some discourse need is evaluated in terms of interface economy: the marked rule of stress strengthening may apply just in case there is no other cheaper alternative available that can derive the desired interpretation.

As observed by Reinhart, the necessity of rearranging the distribution of stress in order to derive the missing focus option is present in Dutch as well. Yet, the availability of scrambling in this language, seems to have the same function as the marked stress shift rule. Consider (49), discussed by Reinhart:

49  a  #Ik heb gisteren het boek gelezen, en niet verscheurd.
    I have yesterday the book read and not torn-up
   b  Ik heb het boek gisteren gelezen, en niet verscheurd.
    I have the book yesterday read, and not torn-up

In Dutch, the direct object is marked with neutral stress as this is the most embedded element in the clause. It follows that the focus set does not contain the option with the verb in narrow focus. This is precisely the focus reading required in (49). In order to obtain it, the marked rule of stress strengthening could apply, as it was the case in the English example in (48). However, Dutch seems to show the preference for an alternative strategy, i.e. the choice of the scrambled word order which is independently available. In (49b) the object precedes the adverbial and it is the verb that occupies the most embedded position and gets main stress. So, like in the case of anaphoric destressing discussed above, Reinhart argues that the choice of an unmarked alternative like scrambling in Dutch is the consequence of interface economy
considerations. Discourse needs may thus trigger certain operations. Yet, the choice between a marked or an unmarked strategy appears to be constrained by a general principle of grammar.

Let us turn to the Italian facts repeated below:

50  a  Chi ha scritto questo libro?
    *who wrote this book*

    b  Ha scritto questo libro Dante.
    *wrote this book Dante*

51  a  Chi si è stufato?
    *who got fed up*

    b  Si è stufata Beatrice.
    *got fed up Beatrice*

(50b) and (51b) are the most natural answers to narrow focus questions like (50a) and (51a), respectively. By analogy with English and Dutch, we could assume that (50b) and (51b) are derived by application of a marked rule. But then the question becomes: what is the nature of this rule?

We have just seen that English derives a missing focus option by adding extra prominence to a constituent that does not bear neutral stress. Stress strengthening exists in Italian as well:

52  a  Chi ha scritto questo libro?
    *who wrote this book*

    b  ?Dante, ha scritto questo libro.
    *Dante wrote this book*

    c  ?E’ Dante che ha scritto questo libro.
    *it is Dante who wrote this book*

I have marked (52b) and (52c) with a ‘?’ as these sentences are the not the most appropriate answers to (52a). (52b) and (52c) sound more appropriate in a contrastive context in which the possible alternatives are introduced by the question:
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53  a  Ha scritto Beatrice questo libro?
    *did Beatrice write this book*

    b  E’ Beatrice che ha scritto questo libro?
    *is Beatrice who wrote this book*

    c  Chi ha scritto questo libro, Dante o Beatrice?
    *who wrote this book Dante o Beatrice*

The questions in (53), be it in different ways, introduce a finite set of alternatives. In this case, the answers in (52) are perfectly appropriate and naturally allow a negative conjunct like in (54):

54  a  **Dante**, ha scritto questo libro, non Beatrice.
    *Dante wrote this book not Beatrice*

    b  E’ Dante che ha scritto questo libro, non Beatrice.
    *it is Dante who wrote this book not Beatrice*

These contexts, however, have a clearly contrastive flavour which is not implied by a question like (52a). Recall from chapter 1 that, following the line of Vallduví (1990) and Lambrecht (1994) among others, I distinguish between informational focus and contrastive focus. As was explained in chapter 3, the focus set determined by Cinque’s nuclear stress rule only contains neutral focus options. The narrow focus reading of a constituent is just one of these neutral options and the fact that in each focus set only one constituent can bear narrow focus is solely the consequence of the mechanical nature of Cinque’s rule. We will return to this issue in the next section, where I will be more explicit about my view of contrastiveness.

In sum, I will maintain that (50a) and (51a) are questions that require a (non-contrastive) narrow focus answer. Since this focus option is not contained in the (neutral) focus set of the two clauses, we must conclude that (50b) and (51b) are derived by means of an additional operation that modifies the neutral focus pattern. This operation, however, is not a phonological rule of stress strengthening, but rather seems to involve a rearrangement of the word order of the clause.
4.2.2 The Limits of Syntax

Above we saw that, when scrambling is available, the missing focus option is derived by exploiting the derivation with the alternative word order, as this is cheaper than stress strengthening. Italian may thus pattern like Dutch and opt for a syntactic solution instead of a marked phonological rule. This line of reasoning may be plausible as it is in conformity with economy at the interface. So, the narrow focus reading of the subject could be obtained by using the VOS counterpart of (55a): (55b).

\[
\begin{align*}
55 & \quad a \quad \text{Dante ha scritto questo libro}  \\
& \quad \text{Dante wrote this book}  \\
& \quad b \quad \text{Ha scritto questo libro Dante.}  \\
& \quad \text{wrote this book Dante}
\end{align*}
\]

However, as we know, (55b) is not generated by the computational system. Whereas inversion verbs can derive all focus options by using either the VS derivation or the SV derivation, non-inversion verbs just have one option: the one with the subject in preverbal position. There is no immediately plausible morphological feature requiring checking that could justify rightward movement of the subject. Notice that this is corroborated by the fact that (55b) cannot have a wide focus reading. The only possible interpretation is one with narrow focus on the subject.\(^{27}\) \(^{28}\) We thus conclude that (55b) cannot be the result of an operation belonging to the computational system. In other words, it seems that with these facts we have reached the limits of syntax. So far we have tried to show that the domain of syntactic operations is much broader than what is standardly assumed. The minimalist approach we have adopted showed that the facts that were normally assumed to belong to the interpretive/pragmatic component of language should rather be analyzed as the result of syntactic conditions in the first place. Sentences like (55b), however, seem to defy an analysis based on syntactic conditions.

---

\(^{27}\) In other words, the focus on the postverbal subject does not project. This is perfectly in agreement with the properties Reinhart (1995, 1996) claims to be typical of the narrow focus interpretation (see also Zubizarreta 1994).

\(^{28}\) On the other hand, inversion verbs can have a wide focus interpretation with both the SV and the VS word order (cf. chapter 1).
Yet, it is an acknowledged fact that certain phenomena in language go beyond the limits of syntax. Chomsky writes:

"In early transformational grammar, a distinction was sometimes made between ‘stylistic’ rules and others. Increasingly, the distinction seems to be quite real: the core computational properties we have been considering differ markedly in character from many other operations of the language faculty, and it may be a mistake to try to integrate them within the same framework of principles." (Chomsky 1995:324)

So, we could ascribe the derivation of the narrow focus reading of the subject in (55b) to a stylistic rule that rearranges the word order of the clause in such a way that the subject ends up postverbally. Yet, such an account is little more than a restatement of the problem. Even on the assumption that the trigger for this operation may be an interpretive one, why is it so crucial that the subject occurs in postverbal position? And once it sits there, how does it get the narrow focus interpretation?

Although it seems inevitable that (55b) can only be the result of a stylistic operation, it may be worthwhile to try to formulate it in more precise terms. The next section must thus be seen as an attempt in this direction. I will present and elaborate on Zubizarreta’s (1994) proposal to account for certain focus patterns in terms of prosodic movement.

4.2.3 Narrow Focus in Italian

Let us examine the structure of (55b) in more detail. The basic assumption is that (55b) is derived from the SVO structure in (56):

56    Dante ha scritto questo libro.

*Dante wrote this book*

(55b) must then be derived from (56) by means of a movement operation. The available options are basically two: either the subject undergoes rightward movement and adjoins to the right of VP or IP, or the verb and the direct object (either together or apart from each other) move leftward. The first option, the one assuming rightward movement of the subject, is not compatible with the theoretical frameworks currently assumed (Kayne 1994, Chomsky 1995). On the other hand, since the rule involved does not belong to the core of the computational system, it may have properties that are quite
different from those of normal syntactic rules. From this perspective, movement to the right may be an admissible explanation. \(^{29}\)

Zubizarreta’s (1994) discusses a similar problem in Spanish, another language exhibiting subject inversion. Her point of departure is the observation that the focus structures of the three Spanish sentences below differ in an important respect:

57  a  Juan trajo el vino.  
     Juan brought the wine

   b  Trajo Juan el vino.  
      brought Juan the wine

   c  Trajo el vino Juan.  
      brought the wine Juan

Zubizarreta’s argumentation is quite clear. Given that Spanish can optionally have SVO or VSO word order (Torrego 1989, Zubizarreta 1991), we expect that both word orders will be associated with the wide focus interpretation (as they both undergo the Nuclear Stress Rule). All other focus interpretations will thus be derived by means of a marked operation. So, while (57a) can have a (neutral) wide focus interpretation, the narrow focus reading (given in bold face) of the subjects in (57b) and (57c) can only be derived by application of a special rule.

Following Cinque (1993), Zubizarreta assumes that the neutral focus pattern (the one in (57a)) is determined by the Nuclear Stress Rule assigning stress to a clause. Then, by definition, the constituent in focus is the one bearing main stress, as focus and stress are assumed to represent two different aspects of the same notion.

By contrast, the narrow focus interpretation of the subject in (57b) and (57c) can only be derived by marked operations that modify the neutral focus pattern in order to derive the required narrow focus option. Zubizarreta accounts for the former case by assuming a phonological strategy of deaccenting the direct object and shifting the stress to the left-adjacent constituent, i.e. the subject, like the phonological rule discussed by Reinhart

\(^{29}\) As a matter of fact, Chomsky (1995) leaves this possibility open. By contrast, in Kayne’s antisymmetry framework, every form of rightward movement is strictly banned.
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(1995, 1996). Conversely, in the case of (57c), the desired focus interpretation must be derived by a movement operation (which possibly goes together with some stress-assignment rule).

Zubizarreta’s solution is an attempt to translate the syntactic, phonological and interpretive properties of the phenomenon in terms of one unified, formalized account. The word order in (57c) is the result of an instance of \textit{p(rosodic)-movement} motivated by an interpretive/prosodic condition: focus and stress must fall on the same constituent. Since this operation is prosodically driven, it has overt word order effects. The trigger for p-movement is thus focus, which is encoded in grammar as a feature [+F]. [+F] must match the word carrying main prominence.

In order to satisfy this condition, the material marked as [-F] must be removed, so that the constituent carrying [+F] ends up in clause-final position (the most embedded position) where it is assigned stress by Cinque’s algorithm.

P-movement has a number of properties that distinguish it from movement driven by morphological feature-checking. So, for instance, it does not obey the principle of greed. In (57c) the object must be removed from the most embedded position (the focus position) in order to make it possible for the subject to get main stress. Further, p-movement also appears to involve phrases other than DPs and it creates new binding relations. These last two properties are illustrated in the examples below, taken from Zubizarreta (1994). In (58b) it is a PP that undergoes p-movement across the subject while in (59b) p-movement of the direct object makes available the interpretation of the pronoun as a variable bound by the quantifier.

58 a Habló el sindicato contra el gobierno.
\textit{spoke the union against the government}

b Habló [PP contra el gobierno] \textit{i} el \textit{sindicato} \textit{t}.
spoke against the government the union

59 a *El primer día de escuela acompanará su \textit{i} madre a cada \textit{nino} \textit{i}.
\textit{the first day of school will accompany his mother each child}
Could Zubizarreta’s analysis hold for Italian as well? Spanish provides empirical evidence for the existence of a prosodically triggered operation by what has been analyzed as object scrambling (see Ordoñez 1993). In Italian, however, there is no convincing evidence for object raising (see chapter 3). In addition to this, Zubizarreta assumes a VSO underlying word order for Spanish, so that p-movement reduces in fact to removal of the object. In Italian, by contrast, the basic word order is SVO (the VSO order is not possible). Hence, in order to get the subject in clause-final position not only the object has to raise, but the verb as well.

There is a construction in English that shows the same characteristics as the Italian narrow focus sentences: heavy NP-shift (HNPS) (or more generally, Focus NP-Shift, cf. Rochemont 1978). Like in Italian, HNPS only allows narrow focus on the clause-final constituent and no binding effects seem to arise. In addition, English is comparable to Italian as both languages are assumed to have a SVO base word order and no object scrambling.

Zubizarreta argues that HNPS is an instance of p-movement. As proposed by Larson (1988), HNPS-constructions should be seen as a case of V’-reanalysis followed by V-raising, as is illustrated in (60), from Larson (1988):

60  I [gave to John], everything he demanded 

The matrix V and the dative PP under V’ reanalyze to form a complex V which then raises and adjoins to the higher V-node (the light verb) deriving the required word order. If we assume that this operation is triggered by the feature [+F] on the heavy NP, then V’-reanalysis and raising of the complex V to a higher functional projection (to the p-position, in Zubizarreta’s terms) could be language-specific variants of p-movement.

Given the similarities between English and Italian, we may assume that the two languages adopt the same type of p-movement, i.e. V’-reanalysis and V-raising. In the case of our example, repeated below, the internal argument
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*questo libro* should form a complex predicate with the matrix V *ha scritto* and then raise and adjoin to a particular functional position higher up.

61  

\[
[\text{Ha scritto questo libro}], \text{ Dante } t_i \\
\text{wrote this book Dante}
\]

A closely related problem involves focus assignment to the clause-final constituent (in Italian, the postverbal subject). According to Zubizarreta, p-movement applies in order to have the [+F] marked constituent occupying the most embedded position.\(^{30}\) Then Cinque’s nuclear stress rule applies and the most embedded constituent gets main stress, thus matching its [+F] feature. However, if stress is assigned by Cinque’s rule, not only the narrow focus option should follow, but also a wide focus reading of the whole clause, as, by definition, focus is identified by the constituent containing the word with main prominence. In Italian this prediction is empirically incorrect.\(^{31}\) As extensively discussed above, (61) cannot be a felicitous answer to an out-of-the-blue question.

Finally, a consideration on conceptual adequacy. Zubizarreta chooses to encode focus in grammar by means of a feature [+F], marking the constituent designated to be interpreted as focus. In Chomsky’s (1995) framework, features are stored in the lexicon and they are projected in syntax with the relevant category to which they belong. Now, focus is an interpretive notion that, by definition, is dependent on the context of interpretation. Therefore, it seems counterintuitive to me to assume that constituents enter syntax with a previously determined focus value.

To sum up. Zubizarreta’s p-movement as a possible marked mechanism for the derivation of a missing focus option may be empirically adequate for the Spanish facts. However, this solution appears to be problematic for a correct account of the Italian narrow focus options.

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\(^{30}\) It is reasonable to assume that even a VP-adjoined position will do, on the assumption that the VP-internal material has left the VP and that traces are not visible for Cinque’s nuclear stress rule.

\(^{31}\) And I expect the same judgment for Spanish and English, as Zubizarreeta claims that one of the peculiarity of p-movement is precisely the fact that it involves narrow focus only.
What then is the solution for the Italian narrow focus constructions? Elaborating on Zubizarreta’s basic insights, we may suggest that the narrow focus reading of the subject is derived by a marked rule consisting of two parts: a syntactic operation adjoining the subject to the right of the VP (i.e. dislocation to the right, as in Rochemont (1986) plus a phonological operation that assigns stress to the dislocated subject so that, at the interface, it can be interpreted as narrow focus.32

The status of this phonological rule is not completely clear, though. Stress may be assigned by Cinque’s Nuclear Stress Rule. The wide focus reading of this V(O)S clause would then be blocked by economy.33 However, in order for the NSR to have the required effect, the right dislocated position in which the subject is placed must be the most embedded position of the clause. This appears to be the case in sentences with intransitive verbs, as we assumed that the verb raises overtly and that traces do not count for the NSR. However, this appears to be a problem in sentences with transitive verbs. Since we assumed that Italian does not have object shift, the direct object ends up occupying the most embedded position.

Alternatively, the phonological rule may be a special operation that assigns stress to the constituent that has to be interpreted as focus. However, this analysis has the disadvantage of not being able to account for the fact that in Italian not one (like in English), but two operations are needed.

4.2.4 Conclusions
We conclude that the derivation of the narrow focus reading of subjects of non-inversion verbs must be obtained by the application of a marked rule, consisting of a stylistic operation adjoining the subject to the right of the VP and of a phonological rule assigning stress. The trigger for the application of this marked rule is the interpretive need, at the interface, of deriving a missing focus option. As argued by Reinhart (1995, 1996), interface economy allows the use of a marked operation if this is the only way to obtain an interpretation that otherwise would be unavailable.

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32 Perhaps, we can even dispense with the assumption of a special focus feature.

33 Recall that the wide focus interpretation of this clause is already derived by application of the NSR to the SVO order, which is less costly than the VOS order.
4.3 Contrastive Focus

Finally, we conclude this chapter with a few considerations on some peculiar focus facts. The following examples appear to be problematic for an analysis based on anaphoricity:

62  a  E alla fine chi è arrivato, **il poeta** o la ragazza?

*and at the end who arrived the poet or the girl*

b  E’ arrivato **il poeta**.

*arrived the poet*

c  **Il poeta** è arrivato.

*the poet arrived*

The definite description in (62b) satisfies Uniqueness by referring to its antecedent which is contained in (62a). The definite DP is thus anaphoric. According to the discussion so far, anaphoric definites are not compatible with stress, hence their occurrence in postverbal subject position should be blocked by the rule of anaphoric destressing. However, the sentences in (62) show exactly the reverse pattern: a felicitous continuation of the conversation requires the subject to show up in postverbal position. This example clearly challenges the generalization stating that anaphoric definites cannot occur with focus.

Sentences of this type are normally analyzed as instances of *contrastive focus*, which is considered to be distinct from informational focus. For instance, Vallduví (1993) observes that the function of contrastive focus is that of providing a sort of metalinguistic correction, thus not that of marking the assertion of the utterance, like in the case of information focus. Therefore he concludes that contrastive focus must rather be considered an epiphenomenon.

Lambrecht (1994) analyzes in great detail the notion of contrastiveness and the possible accounts that have been proposed for it in the literature. Interestingly, he points out that one of the difficulties in giving a precise definition of contrastiveness derives from the fact that the contrastive reading appears to be dependent on a series of linguistic and extra-linguistic factors, such as the number of possible alternatives available, the intonation, the structure of the clause, or the intended meaning of the speaker. He also
observes that the impression of contrastiveness may be due to the somewhat unusual syntactic and pragmatic configuration of the relevant clause. Anything unusual can be perceived as contrasting with a more usual alternative. Lambrecht illustrates this point with an example from Spanish:

63 Quien hizo el queque, tu o tu mamá?
   who baked the cake you or your mother
   Lo hize YO.
   I did

This type of focus does not necessarily imply contrast, i.e. a limited set of potential (focus) candidates. The answer in (63) shows exactly the same prosodic and syntactic properties as the following answer to a question with narrow (informational) focus on the subject:

64 Quien hizo el queque?
   who baked the cake
   Lo hize YO.
   I did

This appears to be the case in Italian as well. The distinction between narrow focus and contrastive focus seems to be determined by the interpretive context.

65 Chi ha fatto il dolce, Franco o Francesco?
   who baked the cake Franco or Francesco
   Lo ha fatto FRANCO.
   it-baked Franco

66 Chi ha fatto il dolce?
   who baked the cake
   Lo ha fatto FRANCO.
   it-baked Franco
Lambrecht’s conclusion is thus that "... contrastiveness, unlike focus, is not a category of grammar but the result of the general cognitive processes referred to as ‘conversational implicatures’.".

In line with Vallduví (1990) and Lambrecht (1994) I will thus consider contrastive focus as an epiphenomenon. However, even as an epiphenomenon, contrastive focus appears to violate the condition on anaphoric destressing at the interface. We might thus wonder whether this marked pattern could be derived in an independent way.

Williams‘ analysis may provide an interesting solution to this problem. Williams acknowledges that examples of the type in (62) violate the principle that requires anaphoric destressing whenever possible. Yet, he observes that focus on an anaphor gives the sentence a very specialized ‘metalinguistic’ use, it can only be used when previous discourse provides an appropriate antecedent, one with the same focus. As an illustration he gives the following example:

67 a Mary likes the short policeman, but the uncooperative prisoner likes the TALL policeman.
    b No, the COOPERATIVE prisoner likes the TALL policeman.

The peculiar property of this clause is that the second focus is embedded inside the first, i.e. the second focus is contained in the presupposition of the first one.

Williams accounts for these facts in a fashion which is very close to Chomsky’s (1995) and Reinhart’s (1995) considerations of economy in syntax and which captures Lambrecht’s observations on the nature of contrastive stress. In his discussion of the Generalized Blocking Principle, Williams argues that if two (grammatical) forms have the same meaning, only one is allowed by the Blocking Principle (this is reminiscent of Reinhart’s thoughts on economy). Hence, it follows that if two forms are different, then their meaning must be different too.

Back to the Italian example in (62), repeated in (68):

68 a E alla fine chi è arrivato, il poeta o la ragazza?

*and at the end who arrived the poet or the girl*
The assertion in (68b) is not who arrived, but which element of the set of possible arrivers arrived. This new dimension of novelty conveyed by the definite DP could justify the fact that an anaphoric element is marked with focus. We can thus conclude that Williams’ account of focus/presupposition structures in terms of anaphoric destressing correctly predicts the existence of a marked focus pattern which is licensed by meaning-sensitive conditions of economy.