Subjects and Clause Structure

Anna Cardinaletti
University of Venice

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1. INTRODUCTION

One of the topics which has most inspired comparative syntactic research is the
difference between null subject languages (NSLs) such as Italian and non-null-
subject languages (non-NSLs) such as English: The former can have silent subjects,
technically called "null subjects" or "pro-drop phenomenon", the latter cannot (see
Rizzi (1993, this volume)).

In this paper, we will concentrate on how this difference affects the syntax of
subjects in the two types of languages. In particular, we will see that on the one
hand, differences across the two types of languages are minimal, while on the other
hand, the language-internal system of subjects is much richer than might appear at
first sight.

One component of this richness is that in many languages, subjects can occur
either preverbally, or postverbally:¹

(1) a. {Gianni} è arrivato {Gianni}
    b. {pro} è arrivato {pro}
        Gianni / [he] is arrived Gianni / [he]

This has immediately prompted three questions:

i) what are the structural positions of preverbal and postverbal subjects, as in (1a)?
ii) where does a null subject occur, in preverbal or postverbal position, or in both (cf.
    (1b))? ¹

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¹ In (1) and throughout, different occurrences of curly brackets inside one and the same example
indicate alternative choices.

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iii) if the preverbal specAgrS is the "nominative" position, how does the postverbal subject receive Case?

Here, we will mainly concentrate on preverbal subjects, which are often taken to be extensively different in NSLs and non-NSLs (for postverbal subjects, see fn. 2). The main differences postulated are:

Preverbal subjects as in (1a) have been taken to occur in a position different from that of non-NSL subjects, i.e., in a sentence-peripheral A' position (see Benincà and Cinque 1985, Contreras 1991, Moro 1993, Barbosa 1994, Dobrovie-Sorin 1994, among others). They are also often claimed to be left-dislocated, which implies that a null subject is present in every sentence of a NSL language.

Further, pro has been claimed to occur either preverbally (see Burzio 1986, Rizzi 1987), or postverbally (see Adams 1987, Bonet 1990, Contreras 1991, Solà 1992), or in either position, depending on the type of sentence (see Roberts 1993).

This has led to the postulation of another difference between subject-systems: Sometimes, nominative Case can be assigned either to the preverbal or to the postverbal position, while in other systems, only the preverbal position can receive nominative Case (see Rizzi 1990, Contreras 1991, Koopman and Sportiche 1991, Roberts 1993).

Such proposals have enriched the theory of grammar in a rather significant way. But the picture of grammar which arises is undesirable on both theoretical and empirical grounds.

Given that our ultimate goal is to address the poverty of stimulus paradox (see Hornstein and Lightfoot 1981, Chomsky 1986), it is methodologically sound to try to focalize on the similarities between languages rather than to maximize the differences. Furthermore, these proposals reflect older views on language variation, which was thought to arise everywhere in the grammar: in clause structure, in the mode of application of principles, whether a principle applies or not, etc. In the minimalist program of Chomsky (1993), (1995) (see Haegeman (1994:§11)), a more restrictive view has become plausible: that language variation is restricted to morphological properties of heads. Since the morphological make-up of a head canonically affects the amount of its movement to higher heads and the content of the agreement with its specifier, these two properties are the natural loci of language-variation.

As we will see below, the older picture is also inadequate from an empirical point of view. Apart from the very possibility of null subjects, a NSL is not as different from a non-NSL as the above proposals predict. The clause structure of the two types of languages share fundamental properties, which include the position of preverbal subjects, the distribution of weak subject pronouns, the mode of nominative Case-assignment.²

² As for postverbal subjects, there is much disagreement with respect to their position. Some take them to be in a rightward VP-adjointed position (see Rizzi 1982, Samek-Lodovici 1994), others postulate a rightward specVP (see Bonet 1990, Giorgi and Longobardi 1991, Saccon 1993), while a third group of researchers opts for a rightward specifier of a focus projection immediately above VP (Belletti and Shlonsky 1995). In all these proposals, such positions exist only in those languages with postverbal subjects. Again, two very different subject-systems are postulated. Recently, a fourth proposal has been explored by Ordóñez (1994), who hypothesises that the postverbal position is nothing else but the thematic position of subjects, i.e. a leftward specVP from which all subjects start out (see Zagona 1982, Kitagawa 1986, Kuroda 1988, Koopman and Sportiche 1991). This approach is more restrictive than the older ones: it needs not hypothesise a new difference, over and above the possibility of the subject remaining downstairs.
A more restrictive view, which is sufficient to account for the grammar of subjects in a NSL such as Italian, has the following features:

a) in NSLs, preverbal subjects are not necessarily in a sentence-peripheral A' position, but occupy the canonical subject position, akin to that of e.g. English; as a consequence, a null subject is not always generated in NSLs;
b) pro is strictly preverbal;
c) there is no Case assignment to the postverbal subject position, but Case assignment always takes place preverbally via spec-head agreement;
d) the sole difference between NSLs and non-NSLs is the nature of the agreement head. As originally proposed by Taraldsen (1978), NSLs have "rich agreement" which legitimates pro, through specifier-head agreement (see also Rizzi 1986b).

2. On the Preverbal Position of Null Subjects

Where is pro? Since it is impossible to establish the position of an empty category directly, recourse to indirect evidence is necessary. When the position of overt subjects is taken into account, the question becomes more intriguing: On the one hand, most NSLs allow both preverbal and postverbal subjects, cf. (1a) above, on the other hand, not all subjects are allowed in both positions, cf. §2.2 below. With which type of subject does pro pattern?3

Three possible answers are found in the literature: pro is limited to the preverbal position, pro must be in postverbal position, pro can occur in both. Of these, only the first answer turns out to be compatible with the syntactic status of this pronoun. In the typology of pronouns recently proposed by Cardinaletti and Starke (1994), a null subject qualifies as a 'deficient' (i.e. clitic-like) pronoun, opposed to 'strong' pronouns. Compare Italian with languages which have two series of overt subject pronouns such as French (for which see Kayne 1975, 1983): pro patterns with the deficient il-series rather than with the strong lui-series. Like French il in (2), pro in (3) can be used as expletive, quasi-argument (see Chomsky (1981:325ff)), and impersonal and can have both [+ human] and [- human] referents; in all these contexts, strong pronouns such as French lui 'he' / eux 'they' and Italian lui 'he' / loro 'they' are ungrammatical, (4)-(5):

(2) a. Il est arrivé trois filles.
    it is arrived three girls
b. Il pleut.
    it rains
c. Ils m'ont vendu un livre endommagé, dans ce magasin.
    they to-me have sold a book damaged, in that shop
d. Ils sont tres beaux. (= ✓ les garçons; = ✓ les livres)
    they are very nice (= the boys; = the books)

3 Since the preverbal and the postverbal subject positions are in general specialized informationally, recourse to pragmatic evidence provides a preliminary answer to the initial question: In Italian, for instance, the pragmatic conditions in which a null subject is used are closer to those of a preverbal overt subject (old information) than to those of a postverbal overt subject (new information / focus).
(3) a. *pro sono arrivate tre ragazze.
b. pro piove.
c. pro imp mi hanno venduto un libro rovinato, in quel negozio.
d. pro sono molto belli. (= i ragazzi; = i libri)

(4) a. *Lui est arrivé trois filles.
b. *Lui pleut.
c. Eux imp m’ont vendu un livre endommagé, dans ce magasin.
d. Eux (ils) sont tres beaux. (= les garçons; = les livres)

(5) a. *Lui / Loro sono arrivate tre ragazze.
b. *Lui piove.
c. *Loro imp mi hanno venduto un libro rovinato, in quel negozio.
d. Loro sono molto belli. (= i ragazzi; = i libri)

Like French *il (see Rizzi 1986a), a null subject is usually analysed as a maximal projection, rather than a head. It is therefore a 'weak' pronoun, not a clitic (see Cardinaletti and Starke 1994). Let's keep comparing *pro with *il and consider the distribution of this pronoun. Like weak pronouns in general, *il has a very restricted distribution: It is strictly preverbal, (6a), and cannot appear in what seems to be its base position, (6b), nor in any sentence-peripheral position, (7a,c). Grammatical examples with full DPs are provided in (6c) and (7b,d) for comparison (for the notion DP, see Introduction, §4.3):

(6) a. Le jour où il est arrivé ...
   the day where he is arrived ...
b. *Le jour où est arrivé il ...
c. Le jour où est arrivé Jean ...

(7) a. *Il, il est parti.
b. Jean, il est parti.
   he / Jean, he is left
c. *Il est parti, il.
d. Il est parti, Jean.
   he is left, he / Jean

Given these observations, we expect *pro to occur in the preverbal subject position, specAgrSP. The (indirect) syntactic evidence discussed in the next sections points to the preverbal position for null subjects in Italian.

2.1. Previous evidence

Burzio (1986) and Rizzi (1987) have observed that a null subject patterns with a preverbal rather than with a postverbal subject. In existential constructions, (8),
where only postverbal subjects are allowed, a null subject cannot occur (see Burzio (1986:129f)). This shows that pro must be preverbal.\footnote{The paradigm (8) holds with a non-dislocated locative. (8a,c) have a grammatical reading in which ci is a locative clitic which anticipates the right-dislocated locative alla festa 'at-the party' (accordingly, the right-dislocation intonation is needed).}

\begin{align*}
\text{(8)} & \quad \text{a. } \text{Io ci sono} \quad \text{alla festa.} \\
& \quad \text{b. } \text{Ci sono io} \quad \text{alla festa.} \\
& \quad \text{c. } \text{Ci sono} \quad \text{alla festa.} \\
& \quad \text{I there am I at-the party}
\end{align*}

Floating quantifiers, on the other hand, are only compatible with preverbal subjects: Compare (9b) with (10b). A null subject, as in (11), is now possible. Although this argument is weaker than the former one, only showing that pro can be preverbal, Rizzi (1987) concluded, like Burzio, that pro is preverbal in Italian.\footnote{The other argument discussed by Rizzi (1987), concerning coreference with subjects in adverbial clauses, is more controversial (see Solà (1992:140-145) and Guasti (1995) for discussion).}

\begin{align*}
\text{(9)} & \quad \text{a. } \text{Tutti i soldati sono andati via.} \\
& \quad \text{b. } \text{I soldati sono tutti andati via.} \\
& \quad \text{(all the soldiers are (all) gone away)}
\end{align*}

\begin{align*}
\text{(10) a. } & \text{Sono andati via tutti i soldati.} \\
& \text{b. } \text{Sono tutti andati via i soldati.} \\
& \text{(all the soldiers gone away (all))}
\end{align*}

\begin{align*}
\text{(11) } & \text{Sono tutti andati via.} \\
& \text{(all the soldiers gone away)}
\end{align*}

This has become the standard view about the position of null subjects, and complies with the hypothesis that pro is licensed and identified by a rich agreement head in a spec-head configuration (see Rizzi 1986b).\footnote{On the basis of verbal agreement with postverbal conjoined subjects in Arabic varieties, Aoun, Bennamoun, and Sportiche (1994) also conclude that pro is not postverbal but "enters in a spec-head relation with its identifier V + I" (p. 218).} Nevertheless, this view is periodically challenged. For instance, Adams (1987) and Solà (1992), in a discussion including Spanish and Catalan, argue that null subjects occupy the postverbal subject position. It must be noted that these proposals are very theory-internal, and compelling empirical data have rarely been provided.\footnote{Adams (1987) proposes that pro is postverbal in Italian because of her account of null subjects in Old French in terms of directional government (see Cardinaletti (1990) and Roberts (1993) for independent arguments against a directional approach to pro licensing, based on both Germanic and Romance languages). Solà (1992) makes the same proposal in a crosslinguistic account of postverbal emphatic subjects, as in John did it himself.}

At the same time, the proposal has often been made that wh-phrases occur in specAgrSP, which is then taken to be both an A and an A' position (see Pesetsky 1989, Bonet 1990, Diesing 1990, Guasti 1994, among others). This implies that
interrogative sentences, (i) the position is not available for the subject, and (ii) a null subject is then restricted to the postverbal subject position.

One piece of evidence for postverbal pro is discussed by Roberts (1993:73). On the basis of Rizzi's (1987) observation that postverbal subjects cannot license floated quantifiers in Italian (cf. (9)-(11) above), Roberts takes (12) as evidence that referential pro is postverbal in interrogatives (whereas it is preverbal in declaratives):

(12) * Che film sono tutti andati a vedere?
which film are all gone to see

If this were true, floating quantifiers should never be present in interrogative sentences. Notice, however, that the sentence in (12) could be ungrammatical for a different reason. Under the hypothesis that the past participle andati 'gone' should move to a position which precedes the FQ, in (12) it has not moved enough. If this is the correct analysis, we predict that floating quantifiers are compatible with the word order 'past participle - quantifier'. The grammaticality of the following sentences shows that the participle-movement analysis makes the correct predictions, whereas the postverbal-pro analysis does not:

(13)a. Che film sono andati tutti a vedere?
   b. Che film sono andati a vedere tutti?

Given (9)-(11) above, (13) is only compatible with the presence of a preverbal pro. If pro were postverbal, (13) should be ungrammatical on a par with (10b). The participle-movement analysis is supported by the observation that there is much dialectal variation in the scope of past-participle movement (see Cinque 1994) and that sentence (12) is grammatical in those varieties which allow the FQ to precede the past participle (which thus also allow (9b) and (11) instead of (I soldati) sono andati tutti via, (I soldati) sono andati via tutti).

In conclusion, no postverbal pro should be hypothesized in interrogative sentences. In what follows, I present definitive arguments in favour of the preverbal position of pro in Italian.

2.2. ON ITALIAN WEAK SUBJECTS

Italian possesses realised weak subjects, which allows us to establish the distribution of this class of pronouns and consequently of pro unambiguously. Like French il mentioned in §2 above, the pronouns belonging to the egli 'he' / esso 'it' series are deficient, for instance they cannot be modified and coordinated: The a. sentences in (14) and (15) contrast with the b. sentences, which contain a pronoun of the strong series (lui 'he', lei 'she', loro 'they', etc.) and a full DP (Gianni):

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8 A welcome consequence of this conclusion is that wh-phrases can be said to occur in a specifier position higher than AgrSP in all languages (perhaps specFocP in matrix clauses, cf. (43)). The proposal that wh-phrases occur in specAgrSP is incompatible with the conclusion that pro occurs in the preverbal subject position, specAgrSP, and should be abandoned.

9 The full series of weak subject pronouns is: egli (3rd pers. sing. masc., only human), ella (3rd pers. sing. fem., only human), esso (3rd pers. sing. masc., only non-human; also human in some dialects), essa (3rd pers. sing. fem., only non-human; also human in some dialects), essi (3rd pers. pl. masc.,
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(14)a. * [Anche / Pure / Solo egli] ha dichiarato la propria disponibilità. 
   [also / also / only he] has declared the his availability 
b. [Anche / Pure / Solo lui / Gianni] ha dichiarato la propria disponibilità. 
   [also / also / only he / Gianni] has declared the his availability 

(15)a. * [Egli e suo fratello] hanno dichiarato la propria disponibilità. 
   he and his brother have declared the their availability 
b. [Lui / Gianni e suo fratello] hanno dichiarato la propria disponibilità. 
   [he / Gianni and his brother] have declared the their availability 

Like French *il*, these pronouns also have a very limited distribution. They can only occur in the preverbal subject position, (16a); any other syntactic position for DPs, exemplified in (17a) by the postverbal subject position, in (18a) by left-dislocation, in (19a) by long-distance movement, and in (20a) by isolation, is unavailable. Such restrictions do not hold for strong pronouns and full DPs, as shown in the grammatical b. examples:

(16)a. **Egli** ha aderito. 
   b. Lui / Gianni ha aderito. 
   he / he / Gianni has adhered 

(17)a. * Ha aderito egli. 
   b. Ha aderito lui / Gianni. 
   has adhered he / he / Gianni 

(18)a. * Egli Maria non l'appoggerebbe. 
   b. Lui / Gianni Maria non l'appoggerebbe. 
   he / he / Gianni Maria not her would-support 

(19)a. * Egli mi hanno detto che non si presenterà. 
   b. Lui / Gianni mi hanno detto che non si presenterà. 
   he / he / Gianni [they] to-me have told that [he] not himself will-present 

   who has come? he / he / Gianni 

human and non-human), *esse* (3rd pers. pl. fem., human and non-human). Although these pronouns are lost in colloquial Italian, they still represent a productive possibility of the language, and must be attributed to the competence of Italian speakers.

I do not consider here the special use of the *egli / esso* series as floating elements, which can be modified by *anche* (with obligatory elision of the final vowel, *anch-*) and by postponed agreeing *stesso*:

(i) Il direttore ha parlato anch'esso / anch'egli dei gravi problemi dell'azienda. 
   the director has spoken also-he of the serious problems of the firm 

(ii) Questi problemi sono essi stessi causa di altri gravi problemi. 
   these problems are they self cause of other serious problems 

*Anch*- and *stesso* must differ from other modifiers, such as those in (14a), in having a rich internal structure with functional space to host weak elements.
The distribution of the egli / esso series thus shows Italian-internally that weak subject pronouns are limited to the preverbal position. Since pro is a weak pronoun, it must also appear in preverbal position at S-structure (or, in minimalist terms, it must move to the preverbal position overtly, before Spell-out; see Chomsky (1993), (1995) and Haegeman (1994: ch. 11)).

2.3. AGREEMENT PHENOMENA

A second argument to the same effect comes from agreement phenomena found in Italian dialects. In the Central-Italian dialect spoken in the area of Ancona, for instance, 3rd person plural postverbal subjects may fail to agree in number with the finite verb, which is 3rd person singular; on the other hand, preverbal subjects always agree in number with the verb:

(21)a. Questo, lo fa sempre i bambini.
   b. *Questo, i bambini lo fa sempre.
   c. Questo, i bambini lo fanno sempre.
       thisACC the children itACC does / do always the children

When the subject is null, the plural interpretation is obtained only if the verb bears plural inflection:

(22)a. *Questo, lo fa sempre. (pro = 3rd pl.)
   b. Questo, lo fanno sempre.
       thisACC [they] itACC does / do always

The contrast between (21) and (22) can only be explained if pro is strictly preverbal. If pro was postverbal, on a par with i bambini in (21a), we would expect (22a) to be grammatical, contrary to fact.

The 'postverbal-pro' hypothesis could be maintained by combining it with a functional account. The ungrammaticality of (22a) could be attributed to the absence of a morphologically marked 'plural' element forcing the plural interpretation of the null pronoun. However, the presence of a plural floated quantifier does not change the status of the example, as shown by the following minimal pair, where the floated quantifier contrasts with a postverbal full subject:

10 Spell-out is the point in the derivation at which abstract structures receive an overt form. At that point, all operations which have a visible effect must already have taken place. Operations with no visible consequence are instead said to occur 'covertly' after Spell-out.

11 A subject quantifier with arbitrary reading can appear in postverbal position without agreeing with the verb, (ia). The parallel behaviour of molti 'many' in (ib), which cannot be floated, indicates that tutti 'all' in (ia) is not floated:

(i) a. Questo lo dice tutti.
     thisACC itACC says all
   b. Questo lo dice molti.
     thisACC itACC says many
(23)a. *Questo lo dimostra tutte. (cf. ✓ Questo lo dimostrano tutte)
   b. Questo lo dimostra tutte le teorie.

thisACC, itACC demonstrates all (the theories)

If a floating quantifier requires pro (see (9)-(11) above) and pro occupies the preverbal subject position, then (23a) is ungrammatical because the required agreement between the verb and the preverbal subject is missing.

Lack of agreement is also found in those sentences, such as interrogatives, in which the subject undergoes the so-called process of 'emargination' (see Antinucci and Cinque 1977): It appears destressed at the end of the clause, after all other complements:

(24)a. Cosa fa i bambini?
   whatACC does the children
   b. Quando arriva a casa i tuoi amici?
      when arrives at home the your friends

Although the judgement is delicate, a contrast obtains between (25a) and (25b), where the intonation marks, respectively, emargination and right-dislocation:

(25)a. Cosa fa i bambini?
   b. *Cosa fa, i bambini?

The contrast suggests that emargination implies a 'clause-internal' subject (occurring in the thematic position of the subject, leftward specVP, see Cardinaletti 1995b), whereas right-dislocation implies a 'clause-external' subject, in chain with a cataphoric argumental pro in preverbal position. The lack of agreement with the preverbal plural pro is the cause of the ungrammaticality of (25b): 12

(26)a. Cosa pro_{expl} fa_{j} t_{j} i bambini?
   b. *Cosa pro_{i} fa_{j} t_{i} t_{j} i bambini?

Thus, (ia) differs from (23a): The quantifier is treated here on a par with full subjects, which is impossible with the non-arbitrary tutte 'allPEM' in (23a). (23a) is marginally acceptable if tutte has an arbitrary reading, referring to a group of women.

12 For the present concern, it is immaterial to decide whether or not the verb moves to C° in Italian interrogatives (see Rizzi 1990) - so that in (26) the verb fa precedes pro - and, in the former analysis, how pro is licensed:

(i) Cosa fa_{j} pro t_{j} i bambini?

The formulation in the text is not incompatible with Kayne's (1994:81f) hypothesis that right-dislocation involves a doubling structure, where the right-dislocated item is in its base position. A right-dislocated subject is doubled by an argumental pro, whereas a postverbal subject cooccurs with an expletive pro.
2.4. **Presentative Constructions in Northern Italian Dialects**

In Northern Italian dialects, the following contrast is found:

(27)a. *Ieri ze vignù dentro do omenì [ senza PRO\_i presentarse].*  
\quad (Paduan; P Benincà, p.c.)  
yesterday is come inside two men without introduce-themselves

b. *Ieri do omenì i ze vignui dentro [ senza PRO\_i presentarse ].*  
yesterday two men they have come inside without introduce-themselves

c. *Ieri pro\_i i ze vignui dentro [ senza PRO\_i presentarse ].*  

The postverbal subject of presentative constructions, which does not agree with the verb, cannot control the empty subject of an infinitival adjunct, (27a). On the other hand, agreement and control are grammatical with preverbal subjects, (27b), and with referential null subjects, (27c) (both cooccurring with a subject clitic, i 'they').

This contrast is expected if the overt subject in (27a) and the null subject in (27c) occupy different positions. The overt subject (27a) is in situ, and being too low in the structure, it cannot control into the adjunct at S-structure. Furthermore, given the absence of agreement between subject and verb, covert raising of the subject does not take place, so that control is not obtained at LF either (see Cardinaletti (1995a), Chomsky (1995:§4.4.5)). The null subject in (27c), on the other hand, moves overtly to the preverbal subject position, from where it triggers agreement with the verb and controls into the adjunct. Null subjects thus behave like preverbal subjects, which have both capacities, (27b).

2.5. **Copular Sentences with Nominal Predicates**

One of the proposed derivations for copular sentences with nominal predicates is the following (see Moro 1993): Starting from a D-structure like that in a., in which subject and predicate occur in a so-called 'small clause' (SC), either the subject or the predicate can appear in preverbal position, as in the b. and c. examples of (28)-(29), respectively:

(28)a.  
\quad [AGRSP \ldots [VP sono [SC io il presidente ]]]  
b.  
\quad Io sono il presidente.  
\quad I am the president

c.  
\quad Il presidente sono io.  
\quad the president am I

(29)a.  
\quad [AGRSP \ldots [VP sono [SC Gianni e Maria i miei migliori amici ]]]  
b.  
\quad Gianni e Maria sono i miei migliori amici.  
\quad Gianni and Maria are the my best friends

c.  
\quad I miei migliori amici sono Gianni e Maria.  
\quad the my best friends are Gianni and Maria

In Moro's terminology, (28b) and (29b) are canonical copular sentences, (28c) and (29c) are inverse copular sentences.

When the subject is null, only the canonical word order gives a grammatical result, while the inverse one is ungrammatical, (30a,b). A similar, though opposite pattern is found when not the subject, but the predicate is expressed by a null category, as in (31a,b). Only the inverse order is now grammatical:
These contrasts can be easily accounted for if pro is only preverbal, and if it is impossible to move both the subject and the predicate out of a small clause with nominal predicates. Under the hypothesis that pro is postverbal, on the other hand, both (30b) and (31a) are expected to be grammatical, and one has to postulate ad hoc solutions to account for these particular cases. For instance, Solà (1992) suggests that the Catalan sentence corresponding to (30b) is ungrammatical "because this kind of construction [e.g. (28c), A.C.] is precisely used to focalize the subject, and hence it cannot be dropped" (p. 156). However, postverbal subjects of transitive and intransitive verbs, which are underlyingly subjects like io in (28), are always focalized in e.g. Italian, and therefore, by the same line of reasoning, no postverbal subject should be dropped with these verbs. This explanation is thus incompatible with the general claim that pro is postverbal, and cannot be used by the proponents of postverbal pro to account for the above asymmetry. Furthermore, this explanation does not apply to (31a), since the postverbal predicate in (28b) and (29b) is not focalized. Unless there is some independent reason for the ungrammaticality of (30b) and (31a), copular sentences indicate that pro is preverbal.

2.6. Case theory

All arguments point to the conclusion that null subjects occur in displaced position. No argument forces the opposite conclusion that pro occurs in the thematic, postverbal position of the subject. Question (ii) in Section 1. is thus answered.

Not only can a null subject occur in preverbal position, but it must so do. We take this to derive from the 'weak' nature of pro. Weak subjects are excluded from all positions except specAgrSP, as overtly shown by the distribution of 'weak' subject pronouns of the egli / esso series and in particular by the contrasts in (16)-(17), repeated here (see also the French il-series in (6)-(7) above):

(32)a. Egli ha aderito.
     b. Ha aderito *egli / lui / Gianni.

he has adhered he / he / Gianni

To single out the specAgrSP position, it is straightforward to assume that weak pronouns must move in the syntax to a Case-related specifier position. In the terms of Chomsky's (1993), (1995) checking framework, weak pronouns must move to

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13 See Moro (1993:§1.3.3) for other cases where this restriction manifests itself and for an interpretation of the restriction in terms of the Empty Category Principle (ECP): The copula cannot properly governs both traces.

See §6.1 below for the structural analysis of copular sentences with nominal predicates.
their Case-checking position at S-structure (before Spell-out) and cannot postpone movement to LF.  

14 This result also provides an answer to question (iii) of Section 1. In Italian, the Case position relevant for subjects is preverbal, as is assumed for e.g. English and French. On the other hand, the postverbal subject position is not a Case position in Italian. This conclusion has the welcome consequence that there is no need to stipulate that NSLS possess special mechanisms to assign nominative Case to the postverbal subject position. In minimalist terms, it is sufficient to say that strong subjects, the only subjects which can occur postverbally, can check their Case features in the covert component.  

15 Consequently, the adjacency effects discussed by Rizzi (1990) in terms of Case adjacency (?Ha fatto i compiti Gianni 'has done the homeworks Gianni') should be interpreted otherwise, presumably in phonological terms (cf. Cardinaletti 1995b).

Notice also that since in the 3rd person, nominative and accusative/oblique strong pronouns are non-distinct (cf. lui 'he/ his'), the ungrammaticality of the egli / esso series in (17)-(20) could be attributed to the fact that it consists of "nominative" forms, combined with the hypothesis that the postverbal position, as well as all peripheral positions, requires non-nominative marking. Neither claim can be sustained, however:

A. On the one hand, the postverbal position and the other peripheral positions open to strong pronouns, such as isolation, do not require non-nominative forms: In these contexts ((ia) and (ib) respectively), the strong pronoun which distinguishes nominative and accusative/oblique forms, the 1st person singular, displays the nominative form io 'I' and not the accusative/oblique form me 'me':

(i)  a. Ho telefonato io / *me. I have called
    have called I

    b. A: Chi ha telefonato? B: Io / *Me. who has called? I

B. On the other hand, the esso series can be used in the complement of prepositions, a non-nominative context:

(ii)  a. Di esso hanno parlato a lungo. of it [they] have spoken long

    b. Da esso deriva anche la sua simpatia. from it derives also his sympathy

3. Preverbal realised subjects are not in a sentence-peripheral A' position

Preverbal realised subjects in NSLS have often been considered as syntactically distinct from preverbal subjects in non-NSLS. Consider (33). Although the two
sentences seem to be similar, *John* in (33a) is taken to be an "ordinary" subject in an A position, whereas *Gianni* in (33b) has been claimed to be a sort of adjunct, occurring in a sentence-peripheral A' position:

(33)a. John has called.
   b. Gianni ha telefonato.

As for the exact location of the A' position, there is disagreement: Some take it to be adjoined to AgrSP (see Contreras 1991, Moro 1993, Barbosa 1994), others take it to be a higher Topic position (see Benincà and Cinque 1985). Most of these authors also claim that the position hosts left-dislocated items, so that a preverbal subject must be understood as left-dislocated. This implies that the subject in (33b) cooccurs with a resumptive null subject, as shown by the parallel left-dislocated object DP in (34), which is resumed by a pronominal copy (see Cinque (1990:§2.3.5)):

(34) Gianni, Maria lo conosce da tanti anni.
Gianni, Maria him knows since many years

A left-dislocation analysis thus implies that in NSLs, a null subject is present in every sentence, as shown in (35) (since adjunction has a rather controversial status - see Kayne 1994 - and, further, since left-dislocated subjects can precede wh-phrases, we represent here the left-dislocation analysis not in terms of adjunction to AgrSP, but in terms of a Topic position; cf. also Rizzi 1995):

(35)a. [\[TP \ldots\] non-NSLs, e.g. English]
   b. [\[TP \ldots\] NSLs, e.g. Italian]

The argument for a left-dislocation analysis of preverbal subjects in NSLs usually runs in the following way: Since in many respects, a preverbal subject patterns like a dislocated subject rather than a postverbal subject, it follows that it is dislocated (see Barbosa (1994) for a recent revival of this idea). In e.g. Northern Italian dialects, a postverbal subject cooccurs with an unmarked subject clitic, *el*, whereas a right-dislocated subject requires an agreeing subject clitic, *la*. A preverbal subject patterns with the latter, from which the conclusion is drawn that preverbal subjects are left-dislocated:

(36)a. El a telefonà la Maria. (Conegliano dialect, see Saccon 1993)
   b. La a telefonà, la Maria.
   c. La Maria la a telefonà.

Since, as standardly assumed, the subject clitic *la* cooccurs with a null subject (cf. *pro la a telefonà*), the structure of (36c) is parallel to that of (35b): *La Maria, pro la a telefonà*.

It should be pointed out that the above reasoning ignores another logical possibility: that the parallel behavior of preverbal and dislocated subjects, (36b,c), against postverbal subjects, (36a), is simply due to the fact that in both cases there is a preverbal subject. (36b) contains a preverbal pronoun (a null subject) which anticipates the right-dislocated constituent (cf. *pro la a telefonà, la Maria*), as is always the case in right-dislocation constructions (cf. *Maria lo conosce da tanti anni, Gianni 'Maria him knows since many years, Gianni'). Thus, the preverbal realized
subject in (36c) does not behave like the right-dislocated subject of (36b), but rather like the preverbal null subject present in (36b).\textsuperscript{16}

It should also be noticed that there is no strong principled reason as to why the subject should be left-dislocated, in other words nothing 'requires' the subject to be left-dislocated in a NSL. It would be a welcome result if the postulation of such a difference between NSLs and non-NSLs could be avoided, and Gianni in (33b) was an "ordinary" subject on a par with John in (33a).\textsuperscript{17}

The 'left-dislocation hypothesis' is simply wrong for the realised weak subject pronouns of the egli / esso series, since they cannot be left-dislocated. Weak pronouns cannot precede another left-dislocated constituent, e.g. an object ((37) should be judged without assigning any parenthetical intonation to the object):

(37)a. * Egli a Gianni [ pro non gli ha parlato ancora].
   the to Gianni [he] not to-him has spoken yet

b. * Essa questo problema [ pro non lo spiega].
   it this problem [it] not it explains

This is sufficient evidence for denying the claim that NSLs cannot possess preverbal subjects which behave just like subjects in non-NSLs, i.e. not left-dislocated.

Of course, a weaker version of the 'left-dislocation hypothesis' could be correct (very difficult to maintain, though): Realised (non weak) subjects are left-dislocated in a NSL.

But even this weaker version of the left-dislocation hypothesis turns out to be incorrect: Although full subjects can be left-dislocated, giving rise to a grammatical variant of (37),

(38)a. Piero a Gianni [ pro non gli ha parlato ancora ].
   Piero to Gianni [he] not to-him has spoken yet

b. La sua teoria questo problema [ pro non lo spiega].
   the his theory this problem [it] not it explains

they need not be left-dislocated, as shown by the following sentences. A full subject can in fact be found in a position 'internal' to the sentence, comparable to the position of the subject in e.g. English. This is mostly evident in contexts, such as Aux-to-Comp (see Rizzi (1982:ch.3, ch. 4)) and complementizer-deletion (see Polletto 1995), which disallow left-dislocations, but admit full subjects as well as weak pronominal subjects. Notice also that a quantifier such as nessuno 'nobody', which cannot be left-dislocated, is grammatical in these constructions. (39) and (40) exemplify Aux-to-Comp, (41) complementizer-deletion: \textsuperscript{18}

\textsuperscript{16} See Brandi and Cordin (1989:114) for an empirical argument against the left-dislocation analysis of preverbal subjects on the basis of data from Fiorentino.

\textsuperscript{17} Motapanyane (1994) also argues, contra Dobrovie-Sorin (1994:37f), that in Romanian the preverbal subject does not occur in an A' position, but is in specAgrSP, like ordinary subjects of e.g. English.

\textsuperscript{18} In (39) and (40), we use a PP, which does not need a resumptive clitic in Left-Dislocation (see Cinque (1990:§2.3.5)). A DP object is instead always resumed by a clitic. Thus, a DP object could be ungrammatical simply because there would be no way of expressing such a resumptive clitic: It couldn't be attached to the auxiliary verb, because it would c-command the left-dislocated item, and
(39)a. Avendo Gianni / Avendo egli / Non avendo nessuno telefonato a Maria, ... having Gianni / having he / not having nobody called to Maria, ...
   b. Avendo a Roma vissuto per venti anni, conosce un po' tutti.
      having in Rome [he] lived for twenty years, [he] knows almost everybody
   c. * Essendo a Roma piovuto tutto il pomeriggio, ...
      being in Rome [it] rained the whole afternoon, ...

(cf. A Roma (ci) ha vissuto per venti anni
   in Rome [he] (there) has lived for twenty years
   A Roma (c')ha piovuto tutto il pomeriggio)
   in Rome [it] (there) has rained the whole afternoon, ...

(40)a. Avesse Gianni / Avesse egli / Non avesse nessuno telefonato a Maria, ...
      had Gianni / had he / not had nobody called to Maria, ...
   b. Avesse a Roma vissuto più a lungo, ...
      had in Rome [he] lived longer, ...

(41)a. Credevo Gianni / egli / nessuno avesse telefonato a Maria.
      [I] believed Gianni / he / nobody had called to Maria
   b. ?? Credevo a Roma Gianni (ci) avesse vissuto per venti anni.
      [I] believed in Rome Gianni (there) had lived for twenty years

(cf. Credevo che a Roma Gianni (ci) avesse vissuto per venti anni)
      [I] believed that in Rome Gianni (there) had lived for twenty years

If preverbal subjects were always left-dislocated, these contrasts would remain mysterious. If preverbal subjects are, on the other hand, just ordinary subjects occurring in specAgrSP, then these contrasts follow (quite independent from the subject issue, it remains of course to be explained why the restriction against left-dislocation exists at all in these contexts; for Aux-to-Comp, see §6.2.3 below).

A similar contrast is found in interrogatives. Depending on the type of wh-constituent, a full subject is sometimes allowed to occur between the wh-constituent and the verb, (42a); this position is, however, not available for a left-dislocated item, which tends to precede the wh-phrase, (42b) vs. (42c):

(42)a. A chi Gianni / nessuno ha consegnato l'invito?
      to whom Gianni / nobody has given the invitation?
   b. ?? A chi l'invito Gianni l'ha consegnato?
      to whom the invitation Gianni it has given?
   c. L'invito, a chi Gianni l'ha già consegnato?

(42c) can be represented as in (43) (cf. Rizzi 1995):

(43) [Topic l'invito [Focus a chi [AgrSP Gianni l'ha già consegnato

Criticization to the past participle is independently excluded. The use of a PP does not suffer from these possible objections. The problem does not arise in (41).

Notice that (39b,c), (40b) and (41b) are grammatical in the irrelevant reading in which the PP is parenthetical.
Once again, the 'left-dislocation hypothesis' would remain silent on the contrast between preverbal subjects and left-dislocated items.

Finally, although it is perhaps difficult to be stated precisely, there is a semantic/pragmatic distinction between subjects and left-dislocated constituents. Consider the following sentences:

(44)a. I saw a film about Wim Wenders last night. The director was a young man from Spain.

b. I saw a film about Wim Wenders last night. The director was presented as a rather introvert person.

In (44a), the DP the director refers to the director of 'a film about Wim Wenders'. In (44b), the DP the director refers to Wim Wenders. Observe that a priori, the referent Wim Wenders is more accessible than the director of the film about Wim Wenders. In the latter case, interpreting the DP the director this way involves constructing a new referent which is indirectly related to a DP in the text. Let us turn to Italian examples. In (45),

(45)   Ho visto ieri alla Biennale un film su Wim Wenders. Il regista, Piero l'ha poi incontrato al bar un'ora più tardi.
       [I] have seen yesterday at the Biennale a film on W.W. The film director, Piero him has then met at the bar a hour later

the object DP il regista is left-dislocated and related to a resumptive clitic. In this sentence, it can only refer to the director of the film about Wim Wenders and cannot refer to Wim Wenders himself. This is rather surprising, since intuitively we would imagine that Wim Wenders is more accessible in the discourse. 19 Now, the question is how the subject fares. In (46),

(46)   Ho visto ieri alla Biennale un film su Wim Wenders. Dopo la proiezione, il regista ha ricevuto un premio alla carriera.
       [I] have seen yesterday at the Biennale a film on W.W. After the show, the film director has received a prize for the career

il regista is a subject and may refer either to Wim Wenders or to the director of the said film about Wim Wenders. However, when the subject precedes a left-dislocated object, i.e. if it is itself left-dislocated, then, like other left-dislocated constituents, the DP il regista can only refer to the less accessible director of the film about Wim Wenders:

(47)   Hanno premiato un film su Wim Wenders. Il regista, il premio, l'ha ricevuto dal ministro.
       [they] have awarded a prize to a film on W.W. The film director, the prize, [he] it has received from the Minister

19 These observations are based on a discussion of Greek clitic-doubling by Anagnostopoulou (1993). She points out that the construction shows a 'familiarity' constraint: It is only possible if the referent of the doubled DP is the mentioned Wim Wenders, but ungrammatical if the referent is the understood film director. Italian Left-Dislocation thus has an opposite behaviour: It shows a sort of 'anti-familiarity' effect.
This means that if the subject DP were always considered to be left-dislocated, it would be hard to account for the difference in interpretation between the DP *il regista* in (46) and that in (47).

We conclude that no language variation like the one presented in (35) above is found, a desirable result under current views of language variation. In NSLs, preverbal realised subjects are "ordinary" subjects which do not cooccur with a null subject. Realised and null subjects are therefore in competition.

### 4. Overt Weak Subjects and Parentheticals

The conclusion of the first two sections is that apart from the very pro-drop property, NSLs and non-NLSs behave essentially in a parallel way. In both types of languages, the Case-position is preverbal, and full preverbal subjects pattern alike in that they occupy the structural subject position, which is standardly taken to be specAgrSP.

In what follows, the preverbal subject position will be considered in detail, starting from the following contrast. In Italian, both full subjects and weak pronouns allow a parenthetical to separate them from the verb, whereas in other languages, full and weak subjects behave differently in this respect.20

(48)a. Gianni / Lui, secondo me, è molto simpatico.
    Gianni / he, according to me, is very nice
b. Egli, secondo me, è molto simpatico.
    he, according to me, is very nice

(49)a. John / He (as you know) is a nice guy.
    b. There (* as you know) was a man in the garden.
    c. It (* as you know) rained the whole day.
    d. It (** as you know) costs too much.
    d'. It (** as you know) is too expensive.

(50)a. Jean / Lui (je crois) aime beaucoup la musique.
    b. Il (* je crois) aime beaucoup la musique.
    J. / he (I think) likes much the music

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20 The sentences in (49d,d') show that nothing hinges on the choice between a lexical and an auxiliary verb. Notice also that in (49b), there is an expletive. The word order 'there + parenthetical' could be grammatical as an instance of locative inversion, where *there* is a referential locative (cf. fn. 36 below).

According to Chris Wilder (p.c.), these sentences slightly improve if referential *it* is focalized:

(i)  a.??. IT, I think, costs too much.
     b.??. IT, I think, is too expensive.

Under focalization, *it* is treated as a strong demonstrative pronoun (cf. *that*), and the insertion of the parenthetical becomes possible; however, recategorizing the weak pronoun *it* as a strong element is a highly marked process, hence the marginality of (i).
Before addressing the question of the distinction between Italian on the one hand and English and French on the other, let’s first inquire about the parallel behaviour of full subjects and analyse the distribution of parentheticals.

4.1. Parentheticals

It is currently assumed that preverbal subjects occupy spec Agr SP. For sentences such as in (48a)-(50a), where the verb is taken to be in AgrS° (see Belletti 1990), this implies that parentheticals can freely adjoin to X’. If on the other hand adjunction to X’ is prohibited, the unavoidable conclusion is that subjects must occupy a higher projection.

Cases in which strict spec-head agreement configuration is required provide an ideal testing ground for the syntax of parentheticals: Only if a parenthetical can intervene do we conclude that parentheticals can adjoin to X’. Such cases are provided by focus constructions in several languages, where strict spec-head agreement holds either between the preposed focalised XP and a verb (e.g. Hungarian, see Brody (1990); Puskás (1992), (this volume)), or between a preposed focalised XP and a focus particle (e.g. Gungbe, see Aboh 1995). In both cases, parentheticals cannot intervene between the XP and the head, thus showing that parentheticals cannot freely adjoin to X’: 21

(51)a. JÁNOS
    b.* JÁNOS, öszerinte, went away

(52)a. Jan, went novi ce mo.
    b.* Jan, to Mar si ayixa me, FOC brothermine see

(=according to Mari, it is John that my brother saw)

For completeness, it should be pointed out that parentheticals are not incompatible with focussed XPs: In English and Italian, for instance, parentheticals can follow a focalized constituent:

(53)a. John, I think, they invited, not Mary.
    b. Gianni, credo, hanno invitato, non Maria.

Thus, the contrast between the two types of languages must lie in the fact that in Hungarian (and Gungbe), but not in English and Italian focus constructions, spec-head agreement is required at S-structure (or, in minimalist terms, before Spell-out). In Hungarian, the same ungrammaticality is found in other constructions which require spec-head agreement at S-structure, such as negative and wh-constructions:

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21 Thanks to Michal Starke for pointing out the relevance of these configurations for the point to be made, to Genoveva Puskás and Michael Brody for providing the Hungarian examples, and to Enoch Aboh for providing the Gungbe examples.

This empirical argument complies with Kayne’s (1994) theory that (i) head and complement do not project an X’, but an XP, to which the specifier is adjoined, and (ii) double adjunction is forbidden.
(54)a. * Senki, öszerinte, nem ment el.
    nobody, according to him, not went

b. * Ki, öszerinte, (nem) ment el?
    who, according to him, (not) went

The following contrasts, involving on the one hand 'weak' wh-phrases such as French que and Italian che and on the other strong wh-elements, also support the hypothesis that parentheticals cannot be adjoined to intermediate projections: In (55), the adjacency requirement between the weak wh-phrase and the verb can be taken to be a reflex of the overt spec-head agreement necessary for weak elements (see Cardinaletti and Starke 1994), whereas the possibility of a parenthetical between the strong wh-phrase and the verb in (56) suggests that the two do not (need to) occur in a spec-head configuration at S-structure (before Spell-out):

(55)a. * Que, selon toi, doit-il faire?
    what, according to you, should-he do?

b. * Che, secondo te, potrei fare?
    what, according to you, [I] could do?

(56)a. Qui, selon toi, doît-il inviter?
    who, according to you, should-he invite?

b. Cosa, secondo te, potrei fare?
    what, according to you, [I] could do?

If parentheticals cannot be adjoined to intermediate projections, two possibilities arise: Either they are adjoined to maximal projections, or they appear in the specifier position of a designated functional projection (between the subject and the landing site of the finite verb, in cases like (48)). For the present concerns, it is irrelevant to decide between the two analyses, and we will henceforth indicate the projection which contains the parenthetical as XP.

The important conclusion is that in (48) and (50), full subjects (as well as the Italian weak egli / esso subject pronouns) must occupy a specifier position higher than the one usually associated with the finite verb, specAgrSP. At the same time, however, the subject cannot be analysed as occupying a peripheral, left-dislocated position: In English and French, there is no resumptive pronoun (either lexical or null), and, as observed in Section 3 above, Italian weak subject pronouns cannot be left-dislocated. Nor can the pre-parenthetical subject be considered as a focalized or a topicalized constituent (for these notions, see Puskás (this volume)). Given that only one preposed focus per sentence is allowed, a subject preceded by a focalized object, as in the Italian (57), cannot be also focalized. In the same way, although quantified phrases cannot be topicalized, as shown by the object case in the English (58a), a quantified subject does not disallow parentheticals, (58b):\(^{22}\)

(57) A GIANNI, Maria, credo, ha parlato, non a Sandro.
    to Gianni, Maria, [I] believe, has spoken, not to Sandro

(58)a.? ? Most men, John met.
    Most men, I think, like bagels.

\(^{22}\) Thanks to Norbert Hornstein (p.c.) for the sentences in (58). They are counterexamples to Cardinaletti (1992), who proposed that the subject preceding the parenthetical is topicalized.
To reconcile these two apparently contradictory conclusions, we adopt the more articulated clause structure proposed in Cardinaletti and Roberts (1991), which assumes a split AgrSP and makes two 'subject' positions available. The a. sentences of (48)-(50) and the sentence in (48b) have the representation in (59):

\[(59)\]
\begin{align*}
\text{a. [Agr1P Gianni / lui / egli Agr1° [xp segundo me Agr2P spec è molto ...]} \\
\text{b. [Agr1P John / he Agr1° [xp as you know Agr2P spec is a nice guy]} \\
\text{c. [Agr1P Jean / lui Agr1° [xp je crois Agr2P spec aime beaucoup ...]}}
\end{align*}

### 4.2. English and French Weak Subjects

Let's now turn to the ungrammatical English and French sentences in (49)-(50).

To account for (50b), an adjacency requirement could be at work in French, where nothing can ever intervene between the deficient subject pronoun *il* and the verb:

\[(60)\]  
*Il probablement va arriver demain.*  
he probably will arrive tomorrow

The adjacency exemplified in (60) has been motivated by the requirement that the subject pronoun cliticize on the verb (in the phonological component, see Kayne 1983). However, if French preverbal subject pronouns are not clitics, but weak pronouns (see Cardinaletti and Starke 1994, and §2 above), then this cannot be the explanation of (60). Weak pronouns do not require adjacency with a verb, as shown by Italian (48b) above, by a parallel sentence with an adverb: *Egli probabilmente arriverà domani* 'he probably will-arrive tomorrow', and by English (61), in which no adjacency restriction holds, and an adverb can intervene between the weak subject and the verb:

\[(61)\]
\begin{align*}
\text{a. There surely was a man in the garden.} \\
\text{b. It often rained the whole day.} \\
\text{c. It probably costs too much.} \\
\text{c'.? It surely is too expensive.}
\end{align*}

The contrast between French (60) and English (61) can be explained in the familiar way. In French, linear adjacency is simply a consequence of verb movement: The verb moves as high as the head of the projection whose specifier is filled with the weak subject pronoun. 23 In English, where the scope of verb movement is more limited, there is space for an adverb to intervene between the subject and the verb (see Pollock 1989).

If adjacency cannot be called for, what accounts for the ungrammaticality of (50b)? Further, the contrast found in English between parentheticals, (49b-d'), and adverbs, (61), is still unexplained.

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23 Or to the head of the projection immediately below, if object clitics (which can intervene between *il* and the verb, as in *Il le voit* 'he him sees') adjoin to a head higher than that to which the finite verb is adjoined (see Kayne (1994:§4.6)). This complication will be ignored here and throughout the paper.
A semantic approach could be suggested on the basis of the observation that in (62), referential *it* is more acceptable than both expletive *there* and other instances of the same pronoun (e.g., quasi-argument *it* as subject of weather verbs; some speakers even find a difference between *it* referring to a bracelet - *It costs too much, so I won't buy it -*, and quasi-expletive *it* referring to a whole clause: *It costs too much to go to the movies these days*). The hypothesis could be that only semantically contentful elements are able to precede parentheticals. But the improvement induced by referential *it*, though real, does not lead to full grammaticality when compared to strong pronouns, as in contrast and coordination contexts. Compare (62c) with (62d-e):

(62)a. * There, as you know, was a man in the garden.
    b. * Yesterday it, as you know, rained the whole day.
    c. ?? I saw my favorite car again today. But I can't buy it, because it, as you know, costs too much.
    d. * I'm afraid to invite the Smiths to dinner, because he, as you know, eats too much, and she, as you know, talks too much.
    e. * I'm afraid to invite the Smiths to dinner, because he and his daughter, as you know, eat too much.

The relevant factor seems rather to be the 'weak' status of the ungrammatical / marginal pronouns vs. the 'strong' status of the fully grammatical ones. The point is even clearer in German, where the comparison extends to pronouns such as the masculine pronoun *er*. Only when it has [+human] reference, i.e. it is a strong pronoun, is the insertion of a parenthetical possible. A non-human *er* patterns like *es* (and English *it*). Compare (63b) with (63c):

(63)a. **Es, soweit ich weiß, hat viel geregnet.
    it, as far as I know, has much rained
    b. * Es / Er, soweit ich weiß, kostet zu viel.  
       (er = der Tisch)
       it / he, as far as I know, costs too much
    c. Er, soweit ich weiß, spricht nur Englisch. 
       he, as far as I know, speaks only English

Even if it would turn out to be on the right track, the semantic approach is insufficient to explain these contrasts.24

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24 The fact that non-specific indefinites disallow parentheticals can be explained by both the semantic and the syntactic approach. They are not semantically 'contentful' and are syntactically 'weak' (see Cardinaletti and Starke 1994):

(i)  a. * One, as you know, usually buys ice-cream to calm down before exams.
       one, think I, should this not do

To explain that specific indefinites can precede parentheticals, the semantic approach should regard them as 'contentful', a non-trivial move, while the syntactic approach complies with their syntactically 'strong' status:

(ii) a. One / Someone, as far as I know, has bought a house in the countryside.
    b. Einer, glaube ich, möchte ein Haus kaufen.
       one, think I, would-like a house [to] buy
Exploiting the other interpretive component of grammar, the facts above could be captured by a phonological constraint. Given the observation that weak elements are not major syntactic constituents, one could formulate the following constraint: Only major syntactic constituents can precede parentheticals. In spite of its prima facie plausibility, such a phonological constraint has an ad hoc flavour. First of all, it should be rephrased in such a way that it distinguishes between Italian and English / French weak pronouns. Although this seems to be easily done, for example by resorting to the distinction bisyllabic (e-gli) vs. monosyllabic (il), the very nature of this constraint is unclear. Firstly, the difficulty cannot be due to lack of word stress, given that weak pronouns can have word stress (Cardinaletti and Starke 1994), and should therefore be able to stay alone before parentheticals, contrary to fact. Secondly, the constraint cannot simply mean that weak pronouns are unable to form a phonological constituent by their own and need to attach (cliticise) to some other element of the clause. In French, for instance, the cooccurrence of weak pronouns and parentheticals is also banned in embedded clauses, where the pronoun could in principle attach to the complementizer:

(64) * Le fait qu'il, selon toi, parle tres bien ...
   the fact that he, according to you, speaks very well, ...

To explain this sentence in phonological terms, the requirement should be formulated in such a way that weak subject pronouns have to form a phonological constituent with the following verb. But no such requirement seems to exist independently of the very cases to be explained here. Nor can French il be marked as a proclitic rather than an enclitic pronoun. As Toman (1992) has convincingly shown on the basis of Czec data, the direction of (phonological) cliticization cannot be stated univocally, but depends on the phonological environment. This implies that (64) should satisfy phonological requirements and be grammatical, contrary to fact. Given these difficulties, it seems more promising to attribute the ungrammaticality of (64) - and of (49b-d’)-(50b) above - to a syntactic constraint which relies on the distinction between weak and strong constituents.

Finally, both the semantic and the phonological approach would have nothing to say about the following contrasts between weak pronouns and full DPs: Some English speakers dislike adverbs such as frankly immediately after a weak pronoun, but accept them after full subjects:

(65)a. It (?? frankly/honestly) costs too much.
b. John (frankly/honestly) eats too much.

(66)a. It (*incredibly) costs too much.
b. John (?incredibly) eats too much.

The parallel behaviour of speaker-oriented adverbs and parentheticals can be captured by noting that parentheticals also express speaker-orientation. The two categories of elements have one and the same position in the syntactic tree.

After having dismissed both the semantic and the phonological approach, suppose that the asymmetries seen above are simply due to the different position of weak and full subjects. In the structure proposed above in (59), weak pronouns occupy the spec position of the projection which hosts the finite verb. Parentheticals,
which occur in a position between weak pronouns and strong subjects, can only follow strong subjects:25

\[
(67) \quad \text{strong} \quad \text{weak}
\]
\[
a. \quad [\text{Agr}\text{IP} \{\text{John / he}\} \text{ Agr}1^o \text{ [XP parenth.}] \quad [\text{Agr}\text{2P} \{\text{it}\} \text{ Agr}2^o \text{ [Vfin]}]
\]
\[
b. \quad [\text{Agr}\text{IP} \{\text{Jean / lui}\} \text{ Agr}1^o \text{ [XP parenth.}] \quad [\text{Agr}\text{2P} \{\text{il}\} \text{ Vfin} \quad [\ldots]
\]

5. *ON THE 'SPECIALIZATION' OF SUBJECT POSITIONS*

We have concluded that in English and French, weak and full subjects occupy distinct specifiers. A full subject occupies a position higher than parentheticals, but this possibility does not arise for weak subjects. The two subject positions thus seem to be specialized to host different types of subjects. Let's call this the "specialization hypothesis".

Although Italian pronouns of the egli / esso series belong to the same pronominal class as English or French weak subject pronouns, they are treated on a par with full subjects as far as the occurrence in the preverbal specAgr1P is concerned. The contrast between Italian on the one hand and English and French on the other is however only apparent, if one considers that Italian has another weak subject pronoun: the null subject pro (cf. Section 2 above).

Now, if the specialization hypothesis is correct, we expect that pro occupies the same specifier position as the weak subjects of English and French, whereas strong and overt weak subjects must be higher:

\[
(68) \quad \text{strong / (overt) weak} \quad \text{weak}
\]
\[
\quad [\text{Agr}\text{IP} \{\text{Gianni / lui}\} \text{ egli Agr}1^o \text{ [XP parenth.]} \quad \quad [\text{Agr}\text{2P} \{\text{pro}\} \text{ Vfin} \quad [\ldots]
\]

As above, indirect evidence will help us in the task of establishing the position of pro.

---

25 The paradigm in (49) shows that in English, a lower position of parentheticals, between specAgr2P and the verb, is disallowed.

The two projections hosting the subject need not be adjacent, as apparently implied by (59) / (67). Further projections could intervene, such as a designated projection for parentheticals (see Section 4.1. above), and a projection hosting quantified subjects, if their distribution must be distinguished from that of non-quantified full subjects (see Poletto (1993:76) for some arguments). It is however important to note that the highest subject position is lower than focalized constituents, as shown in the Italian (57). A subject preceding a focalized constituent is left-dislocated, as confirmed by the ungrammaticality of egli / esso in this word order:

(i)  
\[
a. \quad \text{Maria, a GIANNI ha parlato, non a Sandro.}
\]
\[
\quad \text{Maria, to Gianni [she] has spoken, not to Sandro}
\]
\[
b. \quad \text{*Egli, a GIANNI ha parlato, non a Sandro.}
\]
\[
\quad \text{he, to Gianni [he] has spoken, not to Sandro}
\]

Word order possibilities are apparently different in Romanian, where, as argued by Motapanyane (1994), the subject always precedes focalized items.
5.1. Floating Quantifiers

Floating quantifiers (for which see Sportiche 1988) provide one piece of evidence that a null subject cannot occur in the higher subject position, specAgr1P, typical of overt subjects, nor can an overt subject be in specAgr2P, reserved to null subjects.

Consider the following contrast: The distribution of a quantifier floated off from the subject is rather unconstrained, but it cannot occur in preverbal position, (70):

(69) Non so se gli studenti, questo libro, pro l’hanno \{tutti\} comprato \{tutti\}.
    [I] not know whether the students, this book, [they] it have all bought

(70) * Non so se gli studenti, questo libro, tutti l’hanno comprato.

Two observations must be made here: Firstly, tutti cannot function alone as a resumptive element, as confirmed by the corresponding object case in (71), where the resumptive clitic ‘li’ ‘them’ is necessary:

(71)a. * Questi studenti ho promosso tutti.
    b. Questi studenti li ho promossi tutti.
    these students [I] (them) have passed all

In (70), there must be a resumptive pro. Secondly, a floating quantifier must be c-commanded by the element off which it is floated (see Sportiche 1988). Sentence (69) satisfies both conditions: A preverbal pro functions as a resumptive element for the left-dislocated subject gli studenti and c-commands the floated tutti.

Given the more articulated preverbal structure proposed above, the two conditions could be met in (70) only if the null subject could occupy the higher subject position, specAgr1P, as in (72a). But the sentence in (70) is ungrammatical. We take this to mean that pro cannot occupy specAgr1P and that, at the same time, an overt element (tutti) cannot occur in specAgr2P (cf. also §6.2.3 below). On the other hand, pro in specAgr2P does not c-command tutti in specAgr1P, and ungrammaticality is also produced, (72b): 26

(72)a. * [Agr1P pro] Agr2P tutti l’hanno [comprato
    b. * [Agr1P tutti] Agr2P pro l’hanno [comprato

5.2. Non pro-drop in Italian

Further support for the ‘specialization’ hypothesis comes from the only context in which pro-drop is disallowed in Italian. In this case, the overt weak pronoun has the same distribution as English and French weak overt subjects, specAgr2P.

26 That an overt element cannot occur in specAgr2P, reserved to null subjects, is also shown by the sentences corresponding to (72a) but containing a full subject, such as (ia) and (ib), in the analysis depicted in (ic):

(i) a. * Non so se gli studenti tutti l’hanno comprato.
    b. * Non so se essi tutti l’hanno comprato.
It is an old observation that in the present subjunctive, which does not distinguish among the three persons of the singular, a null subject can be interpreted either as 1st or as 3rd person. The 2nd person interpretation is ungrammatical, and the overt 2nd person pronoun is obligatorily inserted:

(73a) Che pro possa riuscirci non è chiaro. \( (\text{pro} = I/\text{*you}/\text{he}) \)
that [I/he] cansUBJ manage-it not is clear
b. Che tu possa riuscire non è chiaro.
that you cansUBJ manage-it not is clear

In the past subjunctive, things are very similar. The 1st and 2nd person singular have the same form, and the 2nd person interpretation of a null subject is rather marginal, although not excluded:

(74a) Che pro potessi riuscire non era chiaro. \( (\text{pro} = I/\text{??you}) \)
that [I/??you] couldSUBJ manage-it not was clear
b. Che tu potessi riuscire non era chiaro.

In the complementizer-deletion contexts discussed above in Section 3., speakers divide in two groups: One group is represented by the judgments given before in the paper, where all kinds of subjects are accepted; the other group only accepts null subjects and, in subjunctive paradigms, the 2nd person singular pronoun tu, as in (75) and (76) (examples and judgments by Cinque (p.c.) and (1981:298,fn.12), respectively; see also Giorgi and Pianesi (to appear)):

(75a) Pensa pro sia in grado di aiutarlo. \( (\text{pro} = I/\text{*you}/\text{he}) \)
that [I/he] thinks [I/he] amSUBJ/issUBJ able to help-him
b. Pensa tu sia in grado di aiutarlo.
that [I/he] thinks you areSUBJ able to help-him
c.*? Pensa Gianni sia in grado di aiutarlo.
that [I/he] thinks Gianni isSUBJ able to help-him

27 A functional approach, as seen for the Central Italian facts discussed in §2.3 above, cannot explain the paradigm, and it must be the licensing capacity of the AgrS head which is at stake here. The presence of a 2nd person reflexive pronoun does not change the status of the sentence (there is only a very slight amelioration if the reflexive is preverbal, cf. (iia) vs. (iia)):

(i) a.* Penso che debba comportarti meglio.
b. Penso che tu debba comportarti meglio.
[ I think that (you) mustSUBJ behave-yourself better

(ii) a.*Penso che pro ti sia comportato male.
b. Penso che tu ti sia comportato male.
[ I think that (you) yourself areSUBJ behaved badly

28 In the past subjunctive, pro can be interpreted as 2nd person when the subject of the matrix verb is 1st person and coreference between the two subjects is disallowed:

(i) Non sapevo che pro fossi malato. \( (\text{pro} = \text{*I}/\text{you}) \)
[I] not knew that [you] wereSUBJ sick
(76)a. Non sapevo pro fosse malato. 
    (pro = he)
b. Non sapevo tu fossi malato.
c. *Non sapevo Gianni fosse malato.
    [I] not knew [he] / you / Gianni was SUBJ / were SUBJ sick

Notice that in these cases, *tu is a weak pronoun: The second group of speakers cannot modify nor conjoin it (*Pensa solo tu sia in grado di aiutarlo 'he' thinks only you are SUBJ able to help-him', *Non sapevo tu e Maria foste malati 'I' not knew you and Maria were SUBJ sick').

The particular grouping of null subjects and *tu against the other overt subjects shown in (75) and (76) can be explained by the specialization hypothesis as follows. In the grammar of the most restrictive speakers, complementizer-deletion implies that the Agr1 projection is empty or inactive. Full subjects, which occur in spec Agr1 P, are therefore excluded. Only those subjects which occur in spec Agr2 P are possible: pro and tu.

5.3. Non-referential weak subjects

The choice between a realised and a null subject is usually attributed to the Avoid Pronoun Principle (Chomsky 1981:65). It is, however, a priori undesirable to have a constraint which makes explicit reference to the null vs. realised form of the subject. A reformulation of this principle is possible, as argued in Cardinali and Starke (1994): The choice between a realised and a null subject is better stated in terms of a general economy strategy which regulates the choice of weak pronouns (including pro) over strong pronouns. The preference of pro over lui is therefore parallel to that of e.g. French il over lui.

---

29 It should be pointed out that with other moods, where pro is available, the 2nd person singular pronoun *tu is not weak, but strong. With indicative verbs, for instance, *tu can be modified and conjoined and can be followed by a parenthetical:

(i)  
a. Solo tu hai capito la situazione.
    only you have understood the situation
b. Tu, per quanto ne so, non hai superato l'esame.
    you, as fas as [I] know, not have passed the exam

The homophony disappears in some varieties, where *tu is the weak pronoun used with subjunctive mood and *le is the strong one.

30 Things are a bit more complicated, since other overt pronouns are marginally admitted in contexts such as (75) and (76) if simple, i.e. not modified nor conjoined:

(i)  
a.? Pensa lui sia in grado di aiutarlo.
b. *Pensa solo lui sia in grado di aiutarlo.
    [he] thinks (only) he is SUBJ able to help-him
c. *Pensa lui e Maria siano in grado di aiutarlo.
    [he] thinks he and Maria are SUBJ able to help-him

These cases need further examination, given that in no other context do these pronouns display the properties of weak elements.
In Italian, there is however a Residual Avoid Pronoun Principle effect: In a number of cases, a null subject must be used instead of a realised weak pronoun. These include expletive, quasi-argument and impersonal subjects, in general non-referential usages. We illustrate this effect contrasting Italian with English and French:

(77)a. * Esso è chiaro che ha ragione.
   a' pro è chiaro che ha ragione.
   b. It is clear that he is right.
   c. Il est clair qu'il a raison.

(78)a. * Esso piove tanto qui.
   a' pro piove tanto qui.
   b. It rains a lot here.
   c. Il pleut beaucoup ici.

(79)a. * In quel negozio, essi mi hanno venduto un vecchio libro.
   a' In quel negozio, pro mi hanno venduto un vecchio libro.
   b. In that shop, they have sold me an old book.
   c. Dans ce magasin, ils m'ont vendu un vieux livre.

Again, we can avoid a constraint which makes explicit reference to the null vs. realised form of the subject. Suppose that non-referential subjects are restricted to specAgr2P, whereas referential subjects are free to occur in either positions (see §7 for a possible derivation of this restriction). It follows that a realised weak subject, which in Italian occurs in specAgr1P, is excluded from non-referential usages. The English and French counterparts trivially respect the constraint by only being allowed in specAgr2P.31

5.4. CONCLUSION

(80) shows the generalizations about the position of preverbal subjects in NSLs (e.g. Italian), and in non NSLs (e.g. English and French), respectively:

(80)a. [Agr1P {Gianni / lui / egli}] [Agr2P {pro / tuweak}] Vfin [ ... 
   b. [Agr1P {John / he}]               [Agr2P {it}]             Agr2° [ Vfin ... 
   c. [Agr1P {Jean / lui}]              [Agr2P {il}]            Vfin [ ... 

---

31 Whether or not pronouns belonging to the egli / esso series have "demonstrative" nature, as sometimes claimed, the contrasts in (77)-(79) cannot be traced back to this factor. French has a subject pronoun with "demonstrative" morphology, ça, which can be used as quasi-argument. In this case, it is a weak demonstrative and occurs in specAgr2P, as testified by the ungrammaticality of a parenthetical following it:

(i) Ça (*selon lui) pleut fort.
it (*according to him) rains a lot
The two subject positions are specialized for different subject types. In NSLs, overt subjects, either strong or weak, occupy the higher subject position. Null subjects occur in the lower subject position (as well as Italian weak tu with subjunctive verbs). In non-NSLs, on the other hand, only strong subjects occur in the higher specifier, whereas weak subjects occupy specAgr2P.

The last question we have to address concerns the derivation of the sentences containing full subjects, given that two competing structures are in principle available:

(81)a. \([\text{Agr1P} \text{DP}_i] [\text{Agr2P} pro \text{Vfin} ... [\text{vp} t_i]]\)
b. \([\text{Agr1P} \text{DP}_i] [\text{Agr2P} t_i \text{Vfin} ... [\text{vp} t_i]]\)

Whereas (81b) is the only choice for non-NSLs such as English and French, (81a) could be an option for NSLs such as Italian (for thematic reasons, pro can only be expletive).

We do not see any language-internal advantage to assume (81a) rather than (81b), nor to postulate such a difference between NSLs and non-NSLs. For economy reasons we adopt the simpler derivation, (81b), for NSLs as well (see also §7 for an additional argument).

6. SOME EXTENSIONS

The proposed clausal structure containing two subject positions can be extended to account for a number of constructions where a constituent different from the subject is fronted to what seems to be the subject position. These include inverse copular sentences, sentences with a class of psych verbs, and PP fronting with other unaccusative verbs.

6.1. COPULAR SENTENCES

Let's consider copular sentences again, briefly mentioned in §2.5 above. The enriched clause structure containing two subject positions can be extended to account for what Moro (1993) calls inverse copular sentences, i.e. copular sentences in which the predicate appears in preverbal position instead of the subject (cf. (28c)-(29c) above and (82)):

(82) La causa della rivolta sono Gianni e Maria.
the cause of the riot are Gianni and Maria

Moro's (1993:31) analysis of sentences like (82) is that the preposed predicative DP is adjoined to IP (=AgrSP), where it is left-dislocated. This proposal cannot be taken literally, given that preposed predicative DPs pattern with subjects and against left-dislocated phrases in occurring in Aux-to-Comp and complementizer-deletion constructions, (83) (see Section 3 above and Moro (1993:34)):

(83)a. Essendo la causa della rivolta Gianni e Maria,...
being the cause of the riot Gianni and Maria,...
b. Credevo la causa della rivolta fossero Gianni e Maria.
   [I] believed the cause of the riot were Gianni and Maria

Extending the double subject structure to this type of sentences, we can rephrase Moro's proposal as in (84): The preposed predicate la causa della rivolta appears in the higher subject position specialized to host full DPs, specAgr1P, while the subject Gianni e Maria remains postverbally, a possibility always available in Italian for strong DPs:

(84) [Agr1P la causa della rivolta] Agr2P pro sono [SC Gianni e Maria t pred

(84) allows us both to account for the data in (83) and to dispense with the theoretically doubtful mechanism of adjacency, thus complying with Kayne's (1994) theory of phrase structure (cf. fn. 32).

6.2. The Subjects of Psych Verbs

The above remarks have a direct consequence for the analysis of the subject of psych verbs of the piacere class (interessare 'interest', piacere 'please', venir voglia di 'feel like'; cf. Calabrese 1986 and Belletti and Rizzi 1988). These psych verbs are unaccusative: They select a theme and a dative experiencer. Their characteristic is that either the theme or the experiencer can be preposed to the preverbal position:

(85)a. La musica piaceva molto a Gianni.
   b. A Gianni piaceva molto la musica.
   "the music pleas'd much to Gianni
   'Gianni liked music a lot"

As we will show in the next sections, the preposed dative in (85b) displays the same properties as a subject.

32 What motivates Moro's proposal is the fact that in (82), the verb does not agree with the singular preposed predicate, but with the plural postverbal subject. To avoid the assumption that the verb agrees directly with the postverbal subject and to ensure instead that agreement always obtains in a configuration of spec-head agreement, he suggests that an empty predicate is present (pro in spec1P), which, sharing the features of the postverbal subject, triggers agreement with the verb. The empty predicate also occurs in presentative sentences like: Sono Gianni e Maria, which display the same agreement pattern as (82). For this and other questions raised by inverse copular sentences, we refer the reader to Moro's work. Here, we only mention one piece of evidence that is a problem for the empty-predicate approach to (82), but supports our analysis in (84). In German, the overt predicate es is obligatory in presentative sentences: ... daβ es Hans und Maria sind '... that it Hans and Maria are', but ungrammatical with nominal predicates in inverse copular sentences: Die Ursache des Tumults sind (*es) Hans und Maria 'the cause of the riot are (*it) Hans and Maria'. Since in German, agreement patterns are the same as in Italian, i.e. the verb is plural, this is evidence that in inverse copular sentences, agreement with the postverbal argument is not contingent on the presence of a null predicate. To account for the agreement pattern, we propose that specAgr2P is filled with an expletive pro, and that agreement with the postverbal subject takes place as in the other cases of postverbal subjects in Italian and German, e.g. by covert raising of the subject at LF (see §2.6 above).
6.2.1. **On the Subjecthood of the Dative Experiencer of Piacere**

On the basis of the different extraction possibilities of 'experiencer' datives found with *piacere* and 'goal' datives, Belletti and Rizzi (1988) consider the former not as left-dislocated 'outside' the clause, but as occupying a position 'inside' the clause, the subject position specIP:

\[ (86a) \] I libri che a Gianni sono piaciuti sono questi.
the books that to Gianni are 'pleased' are these
b.?? I libri che a Gianni ho dato sono questi. (Belletti and Rizzi 1988:337)
the books that to Gianni [I] have given are these

\[ (87a) \] il periodo in cui a Gianni piaceva la musica rock ...
the period in which to Gianni 'pleased' the music rock ...
b.?? il periodo in cui a Gianni gli studenti parlavano di questo ...
the period in which to Gianni the students spoke of this ...

Unfortunately, the contrasts in (86)-(87) not only show that experiencer datives and goal datives may have a different distribution, as claimed by Belletti and Rizzi, but also that they have a different behaviour with respect to left-dislocation. As will become clear in §6.2.4 below (where no 'subject' analysis of the experiencer dative is available), the former do not need to cooccur with a resumptive clitic, whereas a resumptive clitic is, to my ears, almost obligatory in the latter case. In other words, the strong marginality of (86b) and (87b) can be attributed to the fact that a resumptive clitic is missing. With the clitic, these sentences improve a lot: Wh-extraction over a left-dislocated item gives rise to only a slight marginality:

\[ (88a) \] ? I libri che a Gianni Maria gli ha dato sono questi.
the books that to Gianni Maria to-him has given are these
b. ?? il periodo in cui a Gianni gli studenti gli parlavano di questo ...
the period in which to Gianni the students to-him spoke of this ...

Although the contrast is not as sharp as Belletti and Rizzi claimed, their conclusion that the two types of dative have an asymmetrical distribution seems correct. It is supported by the Aux-to-Comp and the complementizer-deletion constructions, which, as seen above in Section 3., do not allow left-dislocated items. In these contexts, a dative experiencer is grammatical, but a 'real' dative, which is necessarily left-dislocated, is excluded:

\[ (89a) \] Essendo a Gianni piaciuto molto il regalo, ...
being to Gianni 'pleased' much the gift ...
b.?? Avendo a Gianni dato questi libri, ...
having to Gianni [he] given these books ...

\[ (90a) \] Credevo a Gianni piacessero queste storie.
[I] believed to Gianni 'pleased' these histories
b.?? Credevo a Gianni (gli) avesse dato questi libri.
[I] believed to Gianni [she] (to-him) had given these books

Belletti and Rizzi's proposal that the dative occupies the preverbal subject position is natural for the case in which the dative cooccurs with a realised postverbal subject, (91a). But what happens when the subject is null, (91b)? The evidence discussed in
Section 2. rules out the possibility that it be postverbal, as in (92a). The correct representation must rather be something like (92b), with a preverbal pro:

\[(91)\]
\[
\begin{align*}
&\text{a. A Gianni piaceva molto la musica.} \quad (\approx (85b)) \\
&\text{b. A Gianni piaceva molto.} \\
&\text{to Gianni 'pleased' much (the music)}
\end{align*}
\]

\[(92)\]
\[
\begin{align*}
&\text{a. * A Gianni piaceva molto pro.} \\
&\text{b. A Gianni pro piaceva molto.}
\end{align*}
\]

6.2.2. **On the Position of the Dative Experiencer**

If the preverbal subject position is occupied by pro, the dative must occupy a position to its left. Note that, as in the case of a postverbal subject in (89)-(90), the dative behaves like a subject. It can occur in the constructions which disallow left-dislocation, Aux-to-Comp and complementizer-deletion (cf. Section 3. above), and does not give rise to the slight marginality seen in (88) above.\(^{33}\)

\[(93)\]
\[
\begin{align*}
&\text{a. Essendo a Gianni piaciuto molto, ...} \\
&\text{being to Gianni [it] 'pleased' much ...} \\
&\text{b. Credevo a Gianni non piacentero.} \\
&\text{[I] believed to Gianni [they] not 'pleased'}
\end{align*}
\]

\[(94)\]
\[
\begin{align*}
&\text{il periodo in cui a Gianni piaceva molto ...} \\
&\text{the period in which to Gianni [it] 'pleased' much ...}
\end{align*}
\]

Furthermore, a negative quantifier, which cannot be left-dislocated, (95), is possible as the dative experiencer both with a postverbal subject and with a null subject, (96):

\[(95)\]
\[
\begin{align*}
&\text{a. * A nessuno Gianni gli ha parlato ieri.} \\
&\text{to nobody Gianni to-him has spoken yesterday} \\
&\text{b. * A nessuno gli piaceva la musica.} \\
&\text{to nobody to-him 'pleased' the music}
\end{align*}
\]

\[(96)\]
\[
\begin{align*}
&\text{a. A nessuno piaceva la musica.} \\
&\text{b. A nessuno piaceva.} \\
&\text{to nobody 'pleased' (the music)}
\end{align*}
\]

To reconcile the 'subjecthood' of dative experiencers, pointed out by Belletti and Rizzi and confirmed by these observations, with the presence of a preverbal null

\(^{33}\text{As shown by (93), gerunds seem to differ from the other Aux-to-Comp constructions, which do not allow referential pros:}\)

\[(i)\]
\[
\begin{align*}
&\text{a. *Ritengo essere piaciuta a Gianni.} \\
&\text{b. *Ritengo essere a Gianni piaciuta.} \\
&\text{[I] believe [to] be [it] 'pleased' to Gianni}
\end{align*}
\]

See Rizzi (1982:Ch.4, §3) for the discussion of the types of pro licensed by non-finite verbs when raised to C°.
subject, the more articulated clause structure proposed above in Section 5. can be applied to these cases: The dative experiencer is in specAgr1P, whereas specAgr2P hosts pro:

(97) \[ \text{A}\text{Gianni}_{i} \text{A}\text{gr2P proj} \text{piaceva molto } t_{i} \text{ } t_{j} \]

6.2.3. The correctness of the specialization hypothesis

The specialization hypothesis makes correct predictions also in the case of psych verbs. Although the relative order of pro and the parenthetical in (98) cannot be directly established, and two representations are potentially available, as in (99):

(98) A Gianni, credo, piacevano molto.
    to Gianni, [I] think, [they] 'pleased' much

(99)a. A Gianni pro credo piacevano molto.
     b. A Gianni credo pro piacevano molto.

indirect evidence indicates that pro can only appear in the lower subject position, following the parenthetical, whereas the dative experiencer can only appear in the higher one.

* Aux-to-Comp. In Aux-to-Comp contexts, the dative experiencer of piacere can cooccur with a null subject (see (93a) above, repeated here as (100b)), but the combination with an overt subject is not allowed, under either word order, (100c,d):

(100) a. Essendo questo libro/esso piacito molto a Gianni, ...
     b. Essendo a Gianni pro piacito molto, ...
     c.* Essendo a Gianni questo libro/esso piacito molto, ...
     d.* Essendo questo libro/esso a Gianni piacito molto, ...

being this book/fit to Gianni 'pleased' much (to Gianni), ...

The contrast between (100a-b) and (100c-d) leads to the following generalizations:

1) the gerundive verb moves to the head position immediately above the higher subject position (and, therefore, specifiers of higher projections, such as left-dislocations, cannot follow it; cf. (39b,c) above):

(101) a. Essendo \[ \text{A}\text{gr1P questo libro/esso } t_{i} \text{ } \text{Agr2P } t_{i} \text{ } \text{piacito} \]
     b. Essendo \[ \text{A}\text{gr1P a Gianni } t_{i} \text{ } \text{Agr2P pro } t_{i} \text{ } \text{piacito} \]

2) full DPs and the pronouns belonging to the egli / esso series cannot occupy the same position as pro (otherwise (100c) should be grammatical);

3) the dative experiencer a Gianni occupies the same position as full subjects. It cannot occupy the position of pro, otherwise (100d) and the following should be grammatical:

(102) * Esso a Gianni piaceva molto.
    it to Gianni 'pleased' much
• **Complementizer-deletion.** Complementizer-deletion contexts display a similar pattern. Either the dative experiencer or the overt weak subject can occur in the clause, a combination of the two resulting in ungrammaticality:

(103) a. Ritengo **a Gianni** siano piaciute molto.
    b. Ritengo **esse** gli siano piaciute molto
    c. * Ritengo **a Gianni** essi siano piaciute molto.
    d. * Ritengo **esse** a Gianni siano piaciute molto.

    [I believe to Gianni they (to-him) are 'pleased' much]

(104) a. Credevo **a Gianni** potessero piacere, ma mi sono sbagliato.
    b. Credevo **esse** potessero piacere molto a Gianni, ma mi sono
    c. * Credevo **a Gianni** essi potessero piacere molto, ma mi sono
    d. * Credevo **esse** a Gianni potessero piacere molto, ma mi sono

    [I believed wrong to Gianni they could 'please' much, but [I] was wrong]

As above, the dative can cooccur with pro, but not with an overt subject. The conclusion is again that esse and pro have a different distribution, in particular the egli / esso series cannot occupy the position of pro:

(105) a. Ritengo $[_{\text{Agr1}P} \text{esse} \text{Agr1}^o]$ $[_{Agr2P} \text{siano} \text{piaciute} ...$
    b. Ritengo $[_{\text{Agr1}P} \text{a Gianni} \text{Agr1}^o]$ $[_{Agr2P} \text{pro} \text{siano} \text{piaciute} ...$

6.2.4. **Topicalized Dative Experiencers**

The above conclusions are confirmed by the structures in which the dative experiencer cooccurs with a realised weak subject pronoun:

(106) A Gianni essa piaceva molto.
    to Gianni it 'pleased'ils

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Poletto (1995) suggests that in (105), the subjunctive verb raises to C°. The distribution of pronouns belonging to the egli / esso series shows instead that the landing site of the verb cannot be higher than Agr1°. Being weak, these pronouns must occupy the specifier of an Agr projection, a generalization which seems to hold for all known cases of weak pronouns. Verb movement would have the further consequence that pro occurs after the auxiliary (as it probably happens in interrogatives, see fn. 12 above).

The movement of the subjunctive verb to Agr1° could also account for the fact that the insertion of a parenthetical in complementizer-deletion contexts gives quite marginal results:

(i) a. Pensavano che Gianni, secondo me, non fosse malato.
    b. ?? Pensavano Gianni, secondo me, non fosse malato.

    [they] thought (that) Gianni, according to me, not wasSUBJ ill
Since *esse* occupies specAgr1, we expect that the dative experiencer is now treated
on a par with any other preposed dative argument: i.e., it is left-dislocated in a high
topic position. As a consequence, a negative quantifier becomes ungrammatical
(107) contrasts with (96b) above), and the dative most naturally precedes a
focalized constituent:

(107) * A nessuno essa piaceva molto.
       to nobody it 'pleased' much

(108) a. IN QUEL MODO a Gianni piacciono, non fritte.
        IN QUEL MODO, a Gianni essa piacciono, non fritte.
   c. A Gianni, IN QUEL MODO esse piacciono, non fritte.
        to Gianni in that manner to Gianni they 'please', not fried

The proposed representation for (106) is the one in (109):

(109) [TopicP a Gianni [FocusP ... [Agr1P essa ... Agr1° ... [Agr2P spec piaceva molto

Differently from other topics, however, which are most naturally resumed by a clitic
pronoun, the dative experiencer does not need a resumptive clitic pronoun, a
property still to be explained. As for extraction, the dative experiencer now patterns
with other datives and is more marginal than in (86a)-(87a):35

(110)a. il periodo in cui a Gianni gli studenti gli parlavano di questo, ... (cf. (88b))
       the period in which to Gianni the students to-him spoke of this ...
   b. il periodo in cui a Gianni essa piaceva molto ...
       the period in which to Gianni it 'pleased' much ...

    In conclusion, an experiencer dative can occur both in specAgr1P, rephrasing
Belletti and Rizzi's (1988) 'subject' analysis, and in specTopicP, whereas other
preposed dative arguments only have the latter possibility.

35 Belletti and Rizzi (1988:337) also note that in adverbial clauses, it is possible to front the dative
experiencer of *piacere*, though not "goal" datives, as shown by the contrast in (i). The same contrast
can be reproduced in (ii) in the presence of an overt weak subject:

(i) a. Tutti sono preoccupati perché a Gianni piace la linguistica.
       all are worried because to Gianni 'pleases' the linguistics
   b.?? Tutti sono preoccupati perché a Gianni ho raccontato questa storia.
       all are worried because to Gianni [I have told this story

(ii) a. Tutti sono preoccupati perché a Gianni essa piace molto.
       all are worried because to Gianni it 'pleases' much
   b.?? Tutti sono preoccupati perché a Gianni egli ha raccontato questa storia.
       all are worried because to Gianni he has told this story

Since the b. sentences are grammatical with a resumptive clitic, this again indicates that it is not the
unavailability of left-dislocation which is at stake here, but the privileged status of the experiencer
dative with respect to other datives in not needing a resumptive clitic.
6.3. OTHER VERBS

Other unaccusative verbs behave like *piacere*. An argument different from the subject, in general a locative or a dative, appears preverbally, whereas the structural subject, a theme, stays *in situ* in postverbal position (see also Belletti and Rizzi (1988:341)). The 'subjecthood' tests used above can be repeated here: The locative and the dative are allowed in Aux-to Comp and complementizer-deletion constructions:

(111) a. Su Gianni cadde una grande disgrazia.
   on Gianni fell a big misfortune
   b. Essendo su Gianni caduta una grande disgrazia, ...
      being on Gianni fallen a big misfortune, ...
   c. Credo su Gianni sia caduta una grande disgrazia, ...
      [I] believe on Gianni is fallen big misfortune

(112) a. A Gianni è capitata una grande disgrazia.
   to Gianni is happened a big misfortune
   b. Essendo a Gianni capitata una grande disgrazia, ...
      being to Gianni happened a big misfortune, ...
   c. Credo a Gianni sia capitata una grande disgrazia.
      [I] believe to Gianni is happened a big misfortune

As with *piacere*, a null subject is allowed in the structure, and still the preposed PP behaves like a subject:

(113) a. Su Gianni è caduta l'anno scorso.
   on Gianni [it] is fallen last year
   b. Essendo su Gianni caduta l'anno scorso, ...
      being on Gianni [it] fallen last year, ...
   c. Credo su Gianni sia caduta l'anno scorso, ...
      [I] believe on Gianni [it] is fallen last year

(114)a. A Gianni capita spesso.
   to Gianni [it] happens often
   b. Essendo a Gianni capitata l'anno scorso, ...
      being to Gianni [it] happened last year, ...
   c. Credo a Gianni sia capitata l'anno scorso.
      [I] believe to Gianni [it] is happened last year

The preposed PP occurs in specAgrIP, and the null subject occupies the lower of the two subject positions, as in the representation (115):\(^{36}\)

\(^{36}\) Cases like (111) and (113a) differ from English locative inversions, such as *Every Thursday at noon, into the saloon wander three drunken stevedores* (see Branigan (1992:78)). On a par with ordinary subjects, Italian preposed locatives do not interfere with A' extraction and can be embedded under any verb, (i)-(ii), whereas English preposed locatives do not cooccur with A' movements and are only compatible with bridge verbs, (iii)-(iv) (thanks to Ian Roberts and Chris Wilder for the judgments in (iii)-(iv)):

(i) a. *La disgrazia che su Gianni cadde l'anno scorso ...*
   ...the misfortune that on Gianni fell last year ...
7. Speculations on the nature of the two subject positions

Once the existence of the two preverbal projections has been established, we have to determine the content of these categories.

In the checking framework of Chomsky (1993), (1995), movement is motivated by the need of a functional head to get its features checked. Each head is thus identified by the type of features it checks off. In principle, we should be able to simply inspect the elements attracted into its specifier and deduce what features the head contains.

The inverse copular sentences, psych verbs and the other unaccusative verbs discussed in Section 6. are extremely helpful in this respect: They indicate that specAgr2P is a Case-related position which is also responsible for subject-verb agreement. Let’s see how:

(i) inverse copular sentences, dative fronting with psych verbs and other PP frontings contain a constituent in specAgr1P whose movement cannot be motivated by the need of checking nominative Case or Φ-features (i.e. gender, number, person). As seen above, inverse copular sentences have a predicative DP in specAgr1P. Since predicative DPs do not check Φ-features (they do not agree with the verb), Agr1 cannot be the locus of Φ-features. Similarly, dative fronting and PP-fronting have specAgr1P filled with a PP (not a DP). Since PPs do not check Case (or Φ-features for that matter), Agr1 cannot be the locus of Case features either. If Agr1 checks neither Case nor Φ-features, these features must be checked in Agr2.

(ii) a. So che su Gianni è caduta quella terribile disgrazia.
   [I know that on Gianni is fallen that terrible misfortune]
   b. Mi dispiace che su Gianni sia caduta quella terribile disgrazia.
   [it to-me 'displeases' that on Gianni is fallen that terrible misfortune]

(iii) a. * the day when into the room ran John...
   b. * the days when [John claimed [that on the wall hangs a huge portrait of the Maestro t ]

(iv) a. John claimed that on the wall hangs a huge portrait of the Maestro.
   b. ? Maria said that into the room ran John.
   c. * Everyone regrets that into the saloon wandered three drunken stevedores.

The Italian cases can thus be considered as 'pure' cases of locative inversion, whereas English locative inversion seems to involve an extra step of the locative phrase to an A', topic position (see Den Dikken and Næss (1992), Den Dikken (1992:206f, fn. 32)).
(ii) the features on the postverbal subject of these constructions need to be checked (Case and \( \phi \)-features). Remember from fn. 10 that movement to check a feature can take place either overtly or covertly, and in these costructions we are led to assume that the checking is covert. But since Agr1 is already occupied by the predicative, dative or locative phrase, the only remaining landing site for the postverbal subject is specAgr2P. It thus follows that Agr2 is capable of checking Case and \( \phi \)-features.

In conclusion, specAgr2P is the position to which subject DPs move to check their nominative Case feature and \( \phi \)-features against those of the agreement head. Agr2P is thus essentially the same as AgrSP.

Earlier, in §5.4, we made the hypothesis that a preverbal subject DP never cooccurs with pro. In other words we never have a subject DP in specAgr1 and pro in specAgr2. We can now prove this. Since Agr2 checks Case and \( \phi \)-features, a preverbal subject DP must pass through specAgr2P to check these features. And since preverbal subjects always leave a trace in specAgr2P on their way to specAgr1P, there is no place for pro.

But what is the nature of Agr1 then? Agr1 must contain some feature which attracts a seemingly heterogeneous set of elements: predicative, dative and locative phrases (see Section 6), as well as subject DPs. What we need is a feature that is shared by all these constituents and distinguish them from expletives and (most) weak pronouns, which stop in specAgr2P.

By way of speculation, let us note that in each case, the element in SpecAgr1 is the *subject of the predication* that occurs in the clause. In other words, what seems to put together subject DPs and preposed predicative, dative and locative phrases is a semantic property: their being *subjects of predication* (for related proposals, see Calabrese (1986:29) and Saccon (1993:140f)).\(^37\) If so, Agr1 must contain a 'subject-of-predication' feature. Agr1P would thus be SubjP, meaning that the specifier of this projection defines the subject of predication.

A welcome consequence of these speculations is that they seem to provide an answer to the question raised by §5.3: Why are non-referential subjects restricted to specAgr2P? The answer can now be that non-referential subjects cannot qualify as 'subjects of predication'.

8. **Conclusions**

In this paper, we have shown that, with regard to the syntax of subjects, it is not necessary to stipulate other differences between NSLs and non-NSLs over and above the defining difference concerning the availability of null subjects. The two types of languages share many fundamental properties, among which: the distribution of weak subject pronouns (including pro in NSLs), which is strictly preverbal, the position of preverbal full subjects, which is an A position, the assignment of nominative Case, which only involves the preverbal subject position.

\(^37\) This property thus differs from the Extended Projection Principle (see Chomsky (1982:96), (1986:116)), i.e. the requirement that a structural subject be present in every clause. The Extended Projection Principle is intended to capture the necessity of expletives and is now reduced to the nominal feature D on AgrS (=Agr2) (see Chomsky 1995:232).
Other hypotheses often found in the literature have been discarded: that pro can be postverbal, that in NSLs an overt subject in preverbal position is left-dislocated, that the postverbal subject position can be assigned nominative Case.

Mainly on the basis of the distribution of weak subject pronouns, the conclusion is that two preverbal subject positions exist. These pronouns cannot be left-dislocated, but, in Italian, they can be separated from the verb by adverbs and parentheticals. Since parentheticals cannot adjoin to X' but only to XP, as shown in §4.1 on the basis of instances of overt spec-head agreement, the pronoun cannot occur in one and the same projection with the verb, but, at the same time, cannot be left-dislocated. Similar observations hold for subjects in English and French. The apparent contradiction can be solved under the assumption, which is argued to hold universally, that there is more than one preverbal subject position. The two subject positions assumed are specialized for different subject types.

The enriched clause structure can be extended to account for the syntax of inverse copular sentences, the dative 'subjects' of the piacere-class of psych verbs, and the fronting of PPs with other unaccusative verbs. These constructions also allow us to make some conjectures about the nature of the new posited projection Agr1P. It is not linked to nominative Case and φ-features, for which the responsible head is Agr2, but rather to the property of being subject of the predication.
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