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The Distribution of a Subject Clitic Pronoun in a Franco-Provençal Dialect and the Licensing of Pro

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We study the distribution of null subjects in one Franco-Provençal variety. These are possible in root declaratives, obligatory in embedded subject position, and impossible in root *wh*-questions as well as in the company of weather predicates. We approach null subjects indirectly, by investigating the distribution of one subject clitic, arguing that its optionality in some contexts is due to the possibility of moving *pro* to a peripheral topic position, where formal licensing is not required. We also discuss the circumstances in which an overt complementizer and a robustly inflected verb license *pro*, rendering the clitic redundant. The comparative interest of this dialect is that it reveals synchronically the three mechanisms of *pro* licensing available in Romance diachronically. These are (a) association with rich verbal inflection, (b) government by a complementizer, and (c) doubling by a clitic. We contend that the syntax is sensitive to the formal relationship between an XP and a head that these three mechanisms instantiate.

Keywords: null subject, Franco-Provençal, Romance, French, subject clitic, null topic, government, *pro* licensing, unaccusative, motion verbs

Nominative pronouns may be phonetically null in Italian but not in French. In the Government-Binding (GB) framework, this difference was attributed to the setting of the *pro* drop parameter, which in Rizzi's (1986a) terms controls the propensity of a functional head (e.g., Agr^0) to *license* a *pro* empty category in subject position. The parameter is set positively for Italian Agr_S^0 and negatively for French Agr_S^0 . In the Minimalist Program, "licensing" essentially takes the form

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of feature checking or valuing in the context of a head-XP relation. Uncovering the constraints on head-XP relations is an important theoretical goal.

The distribution of null subjects in Franco-Provençal dialects from the Francophone regions of Switzerland constitutes a particularly interesting domain for investigating the constraints on null subject licensing. This is so because the distribution of null subjects in these dialects does not appear to be governed solely by a parameterizable property of a licensing head: phonetically unrealized subjects are *possible* in root declaratives, *obligatory* in embedded subject position, and *impossible* in root *wh*-questions and in the company of weather predicates.

The investigation of this complex distribution pattern is the main empirical concern of this article. We approach the study of null subjects indirectly, by providing a characterization of the distribution of one (of several) subject clitics in one Franco-Provençal dialect. We show that this subject clitic is a functional head, an Agr in Brandi and Cordin's (1989) and Rizzi's (1986b) sense, whose grammatical role is to license a pro subject.

We then explore the contexts in which this subject clitic is obligatory, optional, or impossible. Its optionality in some kinds of null subject sentences is argued to result from the possibility of moving pro to a root topic position, where it does not need to be formally licensed. In other environments, the subject clitic is absent when pro is licensed by other means. We discuss the precise circumstances in which an overt complementizer and a robustly inflected verb can license pro, rendering the subject clitic formally redundant.

The comparative interest of this Franco-Provençal variety is that it gives rise, on the synchronic level, to the three mechanisms of pro licensing available diachronically in Romance: (a) association with rich verbal inflection, (b) government by a complementizer, and (c) doubling by a clitic.

We conclude that these three mechanisms instantiate a relationship between an XP and a head that, regardless of the name it is given, must be recognized as a formal component of syntactic computation.

1 The Subject Clitic [i] as an X⁰

Like many Franco-Provençal and northern Italian dialects (NIDs), the variety spoken in and around the village of Gruyère in the Swiss canton of Fribourg (henceforth GFP) manifests an elaborate system of subject clitics (henceforth SCLs). In this article, we study one of them, pronounced [i], which is restricted to first and third person singular and third person plural inflections.¹ There are subject clitics for the other persons of the verbal paradigm, namely, for the second person singular and plural and for the first person plural. Only [i], however, has the property of being optional in contexts we describe below; *te*, *no*, and *vo* are always obligatory.

¹ There are grounds to believe that [i] is actually the surface form of two different SCLs, so that GFP (unsurprisingly) incorporates a distinction between the first and third person clitics, albeit masked by surface phonology (see section 5). For most of the discussion, we abstract away from this and treat [i] as a single clitic. Whether associated with first or with third person verbal inflection, [i] can be optional, while *te*, *no*, and *vo* are always obligatory.

The paradigm in (1) illustrates the distribution of the basic set of SCLs in GFP (we adopt the orthographic conventions of Page 1985).

- (1) a. Me (i) medzo dou fre.
 I (SCL) eat.1s PART cheese
 ‘I am eating cheese.’
 b. Tè te medzè dou pan.
 you SCL eat.2s PART bread
 ‘You are eating bread.’
 c. Li (i) medzè chin ti lé dzoa.
 he (SCL) eat.3s that all the days
 ‘She/He eats that every day.’
 d. No no medzin rintyé la demindze.
 we SCL eat.1PL only the Sunday
 ‘We eat only on Sundays.’
 e. Vo vo medzidè avu no.
 you SCL eat.2PL with us
 ‘You (pl.) are eating with us.’
 f. Là (i) medzon to cholè.
 they (SCL) eat.3PL all alone
 ‘They are eating all alone.’

The question arises whether the pronouns glossed as *SCL* in (1) are the thematic subjects of the sentences in (1). A closely related question addresses their X-bar status: are SCLs heads or XPs?

If [i] is the syntactic subject of (1a,c,f) or of (2a), then the pronoun in the former and *Djan* in the latter must be analyzed as left-dislocated DPs. When a pause separates *Djan* from the rest of the clause, as in (2b), [i] is obligatory (this is the so-called hanging topic construction; see Cinque 1990, Grohmann 2000).

- (2) a. Djan (i) medzè na fondia mitya-mitya.
 John (SCL) eats a fondue half-half
 ‘John is eating a “moitié-moitié” fondue.’
 b. Djan, *(i) vinyè.
 John (SCL) came
 ‘John, he came.’

The fact that [i] can cooccur with quantificational subjects argues against the dislocation analysis. Neither *kôkon* ‘somebody’ nor *nyon* ‘nobody’ can be dislocated in (3) (cf. **Somebody/Nobody he came*).

- (3) a. Kôkon (i) vinyè.
 somebody (SCL) came
 ‘Somebody came.’

- b. Nyon (i) vè Marie.
 nobody (SCL) sees Marie
 ‘Nobody sees Marie.’

Hence, although ‘he’ and *Djan* may be dislocated in (1c) and (2), respectively, they do not have to be so analyzed and can be taken to be syntactic subjects.

If [i] is not the syntactic subject in (3), then, by Occam’s razor, it is not the subject in (2) either. Rather, let us adopt the view originally advocated by Brandi and Cordin (1989) and Rizzi (1986b) for SCLs in NIDs and consider [i] to be the head of an Agr-like functional XP that is merged in a position higher than the position accessed by the inflected verb. In grammars with SCLs, the functional heads responsible for the checking or valuation of formal features relating to the clausal subject are phonetically spelled out as dependent morphemes or clitics.

When there is no overt subject in the clause, as in (4), the subject position in Spec,Agr_S is occupied by *pro* and the SCL [i] plays some role in the licensing of *pro*, a role we characterize more explicitly below.

- (4) (I) medzo na findia ou Vatsérin.
 (SCL) eat-1s a fondue with Vacherin
 ‘I am eating a Vacherin fondue.’

Another test useful in distinguishing SCLs from (weak) pronominal subjects is coordination.² Rizzi (1986b) showed that French pronominal subjects can be omitted from the second conjunct of coordinated VPs (or FPs) as in (5a), while pronominal subjects in an NID like Trentino (exactly like object clitics in, say, French) cannot (see (5b–c)). He argued that a subject *clitic*, as opposed to a nonclitic (albeit weak) pronominal subject, must, by definition, appear attached to every coordinated verb.³ The pronoun in (5a) is not a (syntactic) clitic, while those in (5b) and (5c) are.

² The positioning of pronominal subjects with respect to the clausal negative head is another diagnostic for their status as heads or XPs, in particular in those dialects where they systematically follow negation (see, e.g., Poletto 2000, Zanuttini 1997, Manzini and Savoia 1998). Since negation in GFP is expressed by a postverbal particle (of the *pas* type; see Zanuttini 1997), it is of no use as a diagnostic for clitichood.

³ Not all French pronouns behave alike with respect to the coordination test. For many speakers, *on* ‘3-IMPERSONAL’ cannot be dropped in the second conjunct (see Sportiche 1998:316–317).

- (i) On chante avec vous et *(on) boit avec lui.
 on sings with you and (on) drinks with him.
 ‘We sing with you and drink with him.’

A possibility worth considering, in our judgment, is that *on* occupies a lower position than the other (droppable) SCLs—a position that must be included in a second conjunct. That this might be the case is suggested by the fact that in Florentine, Friulian, and some Eastern Veneto dialects, impersonal *si* (≅ French *on*) occurs lower than the other SCLs, as in the following example from Poletto 1999:n. 6, where it follows an accusative clitic:

- (ii) Un la si mangia.
 not it si eats
 ‘One isn’t eating it.’

Some French speakers accept (i). For such speakers, *on* is as high as *il* ‘he’.

- (5) a. Ils chantent avec vous et (ils) dansent avec lui.
 they sing with you and (they) dance with him
 ‘They sing with you and dance with him.’
 b. La canta e *(la) balla.
 she sings and (she) dances
 ‘She sings and dances.’
 c. Marie l’a vu et *(l)’a pris.
 Marie it has seen and (it) has taken
 ‘Marie saw it and took it.’

Surveying a substantially larger corpus, Poletto (2000)—essentially following Benincà and Cinque (1993)—shows that different types of SCLs are sensitive to different types of coordination. In many varieties, for example, vocalic clitics may be left out in configurations in which FPs containing two inflected verbs are coordinated. The equivalent of (5b) is thus grammatical in the Piedmontese variety spoken in Turin, as shown in (6).

- (6) I cantu cun ti e balu cun chiel.
 SCL sing with you and dance with him
 ‘I sing with you and dance with him.’

Poletto argues that the acceptability or unacceptability of this type of coordination does not tease SCLs apart from weak pronouns, as Rizzi argued; rather, it defines the split between the highest clitic position and the others. Many of the dialects she studies manifest several SCLs encoding different ϕ -features (person, number, etc.), which are hierarchically represented in the ‘‘agree-ment’’ domain in IP. The highest position is reserved for the invariable or nonalternating clitics, such as Piedmontese [i]. The coordination in (6) arguably affects a clausal chunk that is larger than VP but excludes the position occupied by the [i].

Although GFP [i] differs in distribution from the invariable SCLs discussed in Poletto’s work, its optionality in the second conjunct in (7a) strongly suggests that it is a ‘‘high’’ clitic since it patterns, with respect to coordination, with Piedmontese [i] in (6) and not with Trentino *la* in (5b). Given that [i] is optional in GFP, one might claim that its omissibility in (7a) is simply a matter of phonetic nonrealization—that structurally (i.e., syntactically), there is no omission. If the optionality of [i] were a matter of phonological (non)realization, then not only (7a) but also (7b–c) should be grammatical, with optional omission of the clitic on either one or both conjuncts. But clearly, only (7b) is acceptable.

- (7) a. I medzè è (i) bè.
 SCL eats and (SCL) drinks
 ‘She/He eats and drinks.’
 b. Medzè è bè.
 eats and drinks
 c. *Medzè è i bè.
 eats and SCL drinks

The acceptable patterns of coordination in (7a–b) are schematized in (8a–c). Note that the conjuncts are invariably of like categories: FP is the lower category, from which the clitic is excluded, and GP is the category that includes the SCL. The absence of [i] thus means that the clause is not projected to the GP level, but only to FP. In the ungrammatical (7c), on the other hand, the presence of [i] in the second conjunct means that it projects to GP, and its absence in the first conjunct means that this conjunct can only be an FP. Coordination is thus illicit in (7c) since the two conjuncts are not of the same category: the first is an FP and the second is a GP, as diagrammed in (8d).

- (8) a. [_{GP} i medzè] è [_{GP} i bè]
 b. i [_{FP} medzè] è [_{FP} bè]
 c. [_{FP} medzè] è [_{FP} bè]
 d. [_{FP} medzè] è [_{GP} i bè]

The conclusions that can be drawn at this stage are these:

- [i] is a functional head and not an XP pronoun. It is thus an SCL in Brandi and Cordin's (1989) and Rizzi's (1986b) sense.
- The optionality of [i] is syntactic and not phonological.

2 [i] and the Licensing of Pro

We take the formal role of [i]—like that of other SCLs across the Gallo-Italian domain (see Brandi and Cordin 1989)—to be that of licensing a null pronominal subject. However, [i] is uninflected for person or number features; that is, it provides no overt or visible clue to whether the subject is a first or a third person pronoun and in the latter case, whether it is singular or plural. Given this, it is hard to imagine that the role of [i] lies in *identifying*, *assigning*, or *recovering* the ϕ -feature content of pro. Rather, the feature content of pro is identified by the verbal inflection represented on Agr⁰. We follow Rizzi 1986a and much subsequent work in arguing that the licensing of pro—in addition to the recovery of its person and number features—depends on the existence of a structural, formal licensing relationship with a head. The distribution of [i] can be made sense of in these terms: [i] lexicalizes a head whose grammatical role is to *formally license* pro, where *formal licensing* is the checking of a formal feature of pro on whose content we remain agnostic. This *formal licensing* should be thought of as a visibility condition rendering pro identifiable by verbal inflection.

Whereas Standard Italian Agr serves as both a formal licenser and a source for features for pro, GFP shares with many NIDs the property of having the two requirements of the *pro module* satisfied by two distinct elements. (See also Shlonsky 1990.) Since formal licensing is split from feature identification, it is not surprising that [i] is obligatory in (9), where pro is expletive and has no features in need of identification.⁴

⁴ We interpret the preferred absence of an overt subject clitic in, say, (i), where it would fill in for a pleonastic 'it', to be a distinct phenomenon.

- (9) *(I) arrouvè duvè dzin.
 (SCL) arrived two persons
 'There arrived two persons.'

For reasons discussed at the end of section 7, we take the basic licensing configuration for *pro* in GFP to be local c-command. If c-command is defined as in Chomsky 2001 (A c-commands B iff B is contained in the sister of A) and *locality* is taken to mean the absence of an intervening or closer c-commanding head, then it follows that if [i] is the head of an AgrP, *pro* occupies the specifier of the sister of [i].⁵

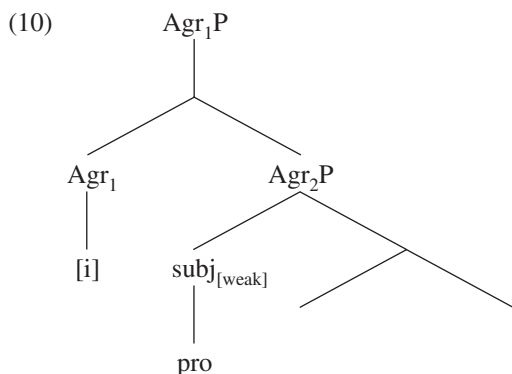
Since the lexical subject, when there is one, occurs to the left of [i], we are willy-nilly led to adopt Cardinaletti's (1994, 1997) view that there is more than one high subject position in the clause (see also Cardinaletti and Roberts 2002, Roberts 1993b, Shlonsky 2000), such that weak pronoun subjects (including *pro*) appear in a different position than do lexical and strong pronoun subjects. In particular, *pro*, whether expletive or referential, occupies Spec, Agr₂ in the diagram in (10). [i] lexicalizes the head of Agr₁P and, in this configuration, locally c-commands Spec, Agr₂. Note, in passing, that in the presence of [i], the verb does not raise to the head of the highest AgrP. We come back to this in section 4.

-
- (i) Chinbyè ke Marie lè malâda.
 seems that Marie is sick
 'It seems that Marie is sick.'

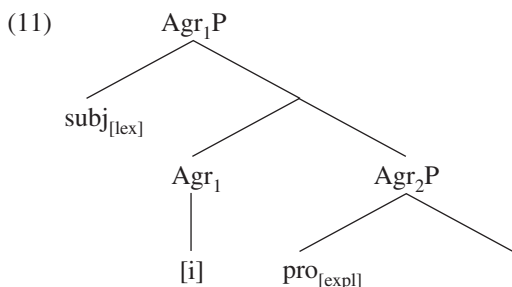
Note the similarity between (i) and the well-documented but little-understood phenomenon of null subjects in colloquial and regional varieties of French, illustrated in (ii), in which null 'it' expletives are licit in the absence of an appropriate licensing mechanism. Like the null subject in (i), those in (ii) are not really optional, at the appropriate level or dialect, but obligatory.

- (ii) a. (Il dit que) semble que Marie est malade.
 (he says that) seems that Marie is sick
 'He says that it seems that Marie is sick.'
 b. (Il dit qu') paraît que Marie est malade.
 (he says that) appears that Marie is sick
 'It appears that Marie is sick.'
 c. Clair qu' il va venir.
 clear that he is to come
 'It is clear that he is going to come.'
 d. (Quand) faut y aller, faut y aller.
 (when) must there to go must there to go
 'When it's time to go, it's time to go.'

⁵ The configuration of *pro* licensing described here is that of government in the GB sense. There is no need, however, to invoke government as a distinct configuration, since it is already defined by the conjunction of c-command and a locality constraint. For further discussion, see Rizzi, to appear.



Lexical subjects occupy Spec,Agr₁. When [i] occurs in the presence of a lexical subject as in (2), there must be a pro in the structure since under the most restrictive statement, [i] appears only when there is a pro. We therefore postulate that Spec,Agr₂ is filled by pro, coindexed with the lexical subject. This is diagrammed in (11).⁶



We assume that when [i] is absent in such sentences, economy of structure dictates that Agr₂P is not generated (the two agreement projections are conflated into a single projection, much like Force and Fin in Rizzi's (1997) treatment of the left periphery).

Given what has been said thus far, we expect [i] to be obligatory whenever the sentence contains a pro. However, [i] is optional in (4)—in the presence of a referential pro—and not

⁶ Spec,Agr₁ here is a topiclike position, though not a dislocated one, as Cardinaletti (1997) implies. Shlonsky (2000) argues that this position is an A(rgumental) topic position. We leave open the question of whether pro in (11) is resumptive, thus tightening the resemblance between (2) and clitic left-dislocation, or pleonastic, in which case (2) would resemble French complex inversion.

An *LI* reviewer wonders whether postulating a pronoun in Spec,Agr₂ in (11) doesn't create a minimality problem for the raising of the lexical subject. A similar issue arises in cases of French complex inversion, illustrated in (i), in which the lexical subject is raised above the coindexed pronoun.

(i) Jean dort- il?
 Jean sleeps he
 'Is Jean sleeping?'

In both (11) and (i), the lexical subject and the pronoun are coindexed so that representationally, no violation of minimality is incurred. Compare also the grammaticality of *What's there in the yard?*, with *wh*-movement over a coindexed expletive.

obligatory. Indeed, the grammaticality of (4), and of the sentences in (12), leads to an apparent paradox: if the SCL is needed to license *pro*, how can one explain its optional absence precisely in circumstances requiring the formal devices for the legitimization of *pro*?

- (12) a. (I) travayè din na fretyire.
 (SCL) works in a dairy
 ‘She/He works/is working in the dairy.’
 b. (I) medzè dou fre ti lé dzoa.
 (SCL) eats PART cheese all the days
 ‘She/He eats cheese every day.’

Our proposal to resolve this paradox consists of showing that the subject of (12a–b) is *pro* when [i] is present but is not *pro*—rather, is the trace of a *pro*—when [i] is absent.

3 Optional [i]

Though optional in root declaratives such as (12a–b), [i] is obligatory when a *wh*-expression appears in C(omp), that is, in a root *wh*-interrogative.

- (13) a. Portyè *(i) travayè?
 why (SCL) works
 ‘Why does she/he work?’
 b. Kan ???(i) travayè?
 when (SCL) works
 ‘When does she/he work?’

If [i] is required in (13a–b) for the licensing of *pro*, then it follows that [i] may be missing in (12a–b) either because there is no *pro* in those examples or because it has access to a mechanism for the licensing of *pro* unavailable in an interrogative clause.

We argue that the subject in (12a–b) (and similarly in (4), without [i]) is moved from its canonical position in AgrP to the specifier of a Top(ic)P in the C domain. GFP thus gives rise to what students of Germanic syntax have called (*subject*) *topic drop*.

3.1 *Topic Drop*

Cardinaletti (1990a,b) shows that in German, referential pronouns can be *dropped* (i.e., remain unpronounced), but only when they occupy the highest specifier position in the clause. Since German is a verb-second (V2) language, the highest specifier in the clause is necessarily in the CP domain, whence the term *null topic*. When Spec,C is filled by any other element (e.g., a topic or a *wh*-phrase), the subject pronoun cannot be dropped. The relevant contrasts are illustrated in (14).⁷

⁷ Thanks to Cornelia Hamann for discussion of these data. A similar state of affairs arises in Yiddish, to judge by Rohrbacher’s (1999:254–255) discussion of Prince 1999.

- (14) a. \emptyset habe es gestern gekauft.
 (I) have it yesterday bought
 'I bought it yesterday.'
 b. *Gestern habe es gekauft.
 yesterday have it bought
 'Yesterday, I bought it.'
 c. *Wann habe es gekauft?
 when have it bought
 'When did I buy it?'

GFP differs from German in that only subject topic drop seems to be grammatical. Subject and object topic drop have different properties, as Cardinaletti has shown, and arise (must arise, according to Cardinaletti) under different grammatical circumstances. Cardinaletti argues that object topic drop is best treated as a base-generated operator-pro relation (as in Cinque's (1990) analysis of Romance clitic left-dislocation). On the other hand, subject topic drop arises when pro is moved to topic position, leaving a trace. Since object drop is a base-generated structure and subject drop a movement structure, it should not be surprising that a particular grammar manifests one but not both types of topic drop.

Discussing the preponderance of root null subjects in child grammar, Rizzi (1994) develops the idea that the limitation of null topics to the root, and hence their unavailability in embedded contexts, follows from the *virtual satisfiability* of the conditions on the identification of empty categories. Whether the empty subject in (14a) is taken to be a pro in topic position (following Cardinaletti), a null constant (as in Rizzi 1994), or a null copy (Rizzi 2000), it benefits from the privilege of occupying the highest position of the clause, where, configurationally speaking, it is *in principle* unlicensed. If it were c-commanded by some head, it would not be in the highest specifier in the clause. There will always be a higher head since, by definition, a head does not c-command its own specifier. Virtually unidentifiable null topics are not grammatically licensed and their content is recoverable from the discourse, as Huang (1984) has argued.

The contrast between the declarative (12a) and the interrogative (13a), repeated for convenience in (15), should be treated along the same lines. In (15a), the subject position is filled either by a referential pro or by the trace of a topicalized pro. [i] is required only if pro is in subject position. If pro is moved to Top, [i] does not appear because the trace of pro does not need to be formally licensed by [i]. However this trace is licensed (e.g., by head government from (the phonetically null) head of FinP or TopP; see Rizzi 1997), [i] is perfectly redundant.⁸ Since [i] is not needed, it is not generated and (15a) has a single AgrP with a trace in its specifier. As for the topicalized pro, it does not require [i] since it is a topic in the highest specifier position and, as such, escapes the need for formal licensing. (15a) is therefore ambiguous. Since no grammatical principle forces either the pro drop or the topic drop strategy, [i] is predictably optional.

⁸ Under the copy theory of movement (Chomsky 1993), the copy of pro is devoid of formal features, much as a copy of a raised or passivized DP lacks a Case feature.

- (15) a. (I) travayè din na fretyire.
 (SCL) works in a dairy
 ‘She/He works/is working in the dairy.’
 b. Portyè *(i) travayè?
 why (SCL) works
 ‘Why does she/he work?’

The obligatoriness of [i] in (15b), on the other hand, testifies to the lack of choice: topic drop is ruled out in this sentence, as it is in the German (14c), on the assumption that the fronted *wh*-word occupies a position higher than that of the topic. As a result, the topic is no longer in the highest specifier position of the clause and cannot be identified through discourse. Since topic drop is not an available option in (15b), the sentence must be analyzed as having a *pro* in subject position, and *pro* requires [i].⁹

The omissibility of [i] in a *wh*-in-situ question such as (16) shows that what is relevant is the *position* of the topic and not the interpretation of the clause. Compare (16) with (13b).¹⁰

- (16) (I) travayè kan?
 (SCL) works when
 ‘When does she/he work?’
 (13) b. Kan ???(i) travayè?
 when (SCL) works
 ‘When does she/he work?’

Some refinement of the split discerned between declaratives and interrogatives can be attempted at this point, since the facts concerning the distribution of [i] are somewhat more complex. In particular, not all *wh*-expressions force the presence of [i]. *Yô* ‘where’ and to a slightly lesser degree *kemin* ‘how’ are compatible with topic drop, as shown by the omissibility of [i] in both (17a) and (17b).

⁹ An *LI* reviewer wonders why the null topic cannot appear higher than the *wh*-word in, say, (15b), since Rizzi’s work on the left periphery shows that the topic position can be generated both to the right and to the left of the landing site of *wh*-phrases. Contrary to Rizzi 1997, but in line with Rizzi, to appear, we believe that there are several positions for *wh*-words (see below) and several positions for topics. It is sufficient, for our purposes, that an adjunct like ‘why’ occupy a *wh*-position higher than that reserved for the highest topic. After all, relative and perhaps other operators are higher than topics even in Rizzi 1997.

Although topicalization (here, of *pro*) over a *wh*-expression might be expected to yield a minimality effect, it is well known that topicalization out of islands gives rise to relatively mild deviance (depending on the language) characteristic of a violation of Subjacency but not of Minimality.

¹⁰ Interestingly, *portyè* ‘why’ differs from *kan* ‘when’ and from all other *wh*-words in GFP in that [i] is required even in an in-situ question; compare (16) and (i).

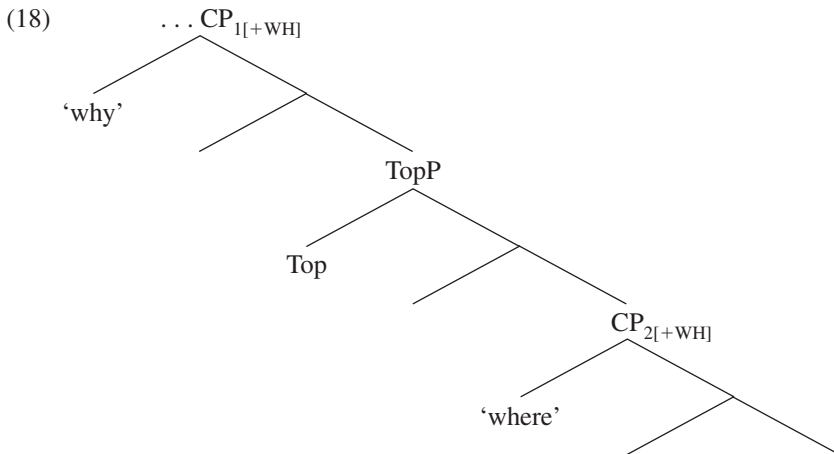
- (i) *(I) travayè portyè?
 (SCL) works why

The reason for this may be that ‘why’ differs from other adjuncts in being base-generated in CP and not moved there, as Bromberger (1992) originally argued (see also Rizzi 1990:47). The word order in (i) could then be derived by fronting IP to the left of ‘why’ (cf. the related proposal in Kayne and Pollock 2000). In other words, (16) is a true in-situ question, in that ‘when’ is not in CP, whereas (i) is derived from a structure such as (14a), in which the *wh*-word is base-generated in C. Topic drop is predictably possible in (16), but not in (i).

- (17) a. Yô (i) travayè?
 where (SCL) works
 ‘Where does she/he work?’
 b. Kemin ?(i) fâ chin to cholè?
 how (SCL) does that all by himself
 ‘How does he do it by himself?’

Kan ‘when’ has an intermediate status, lying between *portyè* and *yô* in disallowing topic drop—witness the slightly less degraded status of (13b), as compared with (13a).

Although these judgments are rather subtle, they point to a split among *wh*-expressions. We propose to characterize this split configurationally or in terms of clausal cartography. Suppose there are (at least) two different positions for *wh*-elements in the C domain. ‘Why’ and perhaps ‘when’ are positioned higher than the node hosting the null topic, whence the impossibility of topic drop in the presence of these adjuncts. ‘Where’ and ‘how’ have access to a position lower than that of the topic so that topic drop is licit in their presence; see the tree in (18).¹¹ When topic drop is ruled out, [i] must be generated to license *pro*.¹²



¹¹ As far as we have been able to determine, GFP does not admit the multiple-*wh* possibilities that one finds in, say, Bulgarian or Serbo-Croatian. However, in many NIDs, different types of *wh*-expressions are subject to different cooccurrence restrictions with SCLs, a fact that leads Poletto (2000) to argue that *wh*-words do not all occupy the same position in the CP layer. The framework of Poletto's analysis, although perhaps not the details, is reinforced by the GFP data.

¹² The ungrammaticality of (ib) without [i] should be interpreted to mean that the position of the TopP housing the fronted adverb is higher than that of the one housing the null topic. The latter is therefore not in the highest specifier in (ib) and is consequently unlicensed; as a result, *pro* drop is the only option.

- (i) a. (I) travayè voué.
 (SCL) work-3s today
 ‘She/He is working today.’
 b. Voué *(i) travayè.
 today (SCL) work-3s
 ‘Today, she/he is working.’

Finally, note that the nonomissibility of [i] in yes-no questions such as (19) argues that root questions incorporate an interrogative operator in CP and that this operator is like a ‘high’ adjunct in that the null topic cannot precede it.¹³

- (19) *(I) medzon?
 (SCL) eat-3PL
 ‘Are they eating?’

4 Verb Movement and the Relevance of Inflection

Whereas [i] is obligatory in a (present tense) ‘why’ question in GFP, it is ungrammatical in the company of conditional inflection and optional with the future tense form; compare (20a) with (20b–d).

- (20) a. Portyè *(i) vin?
 why (SCL) come-PRES-3s
 ‘Why is she/he coming?’
 b. Portyè (*i) vindrê?
 why (SCL) come-COND-3s
 ‘Why would she/he come?’
 c. Portyè (?i) vindrè?
 why (SCL) come-FUT-3s
 ‘Why will she/he come?’
 d. Portyè (i) vinyè?
 why (SCL) come-IMPERF-3s
 ‘Why did she/he come/Why was she/he coming?’

We argued in section 3 that *portyè* ‘why’ appears in a high position in CP, higher than the position that null topics occupy. Since null topics are restricted to the root, topic drop is not possible in (20a), and in the absence of an overt complementizer, [i] is required to license pro. The possibility or even obligatoriness of [i]-omission in (20b–d) is not an indication that topic

Rizzi (to appear) argues that fronted adverbs occupy a distinct position in the left periphery, which he labels *Mod*. Refining the cartography of CP positions proposed in Rizzi 1997, he suggests the following cline of categories:

(ii) Force ^ Top₁* ^ Int(errogative) ^ Top₂* ^ Focus ^ Top₃* ^ Mod ^ Top₄* ^ Fin ^ IP

Our study of GFP suggests that topicalized pro is restricted to appearing in Top₂—above fronted adverbs and low *wh*-words in Foc and below high *wh*-words such as ‘why’.

¹³ Ian Roberts (personal communication) points out the following pattern in (his) English: topicalization in a yes-no question is worse than topicalization from an argumental *wh*-island and is akin to topicalization over *why*. This is similar to the situation in GFP.

(i) a. *Beans, do you like?
 b. *Beans, why do you like?
 c. ??Beans, who likes?

drop is possible, since a modification in a tense or a mood specification has no impact on the “root” nature of topic drop. Rather, the presence of these elements provides an alternative means to license *pro*, rendering [i] redundant.

The contrast in (20) illustrates that when the verb is *not* in the present tense, but appears in the future, conditional, or imperfect form, [i] is optional. This appears to be a general pattern in GFP, valid for all verb classes.

The subject clitic [i] is the head of Agr₁P (see (10) and (11)), and its grammatical role is to formally license a null subject. Implicit in this grammatical state of affairs is that the inflected verb does not raise as high as Agr₁⁰. If it did, [i] would be redundant, just as it is when C⁰ licenses *pro*. Our contention is that a verb in the conditional form raises to Agr₁⁰ obligatorily, a future tense verb raises to Agr₁⁰ optionally, while a present tense verb never raises to Agr₁ (the imperfect form in (20d) is closer in its behavior to the future form than to either the present or the conditional one). When in Agr₁⁰, V locally c-commands and hence can license the null subject, rendering [i] redundant. The occurrence of [i] has the “last resort” property that we attributed to it earlier; namely, it occurs only when necessary to license *pro*.

What is it about the future, conditional, and imperfect inflections in GFP that permits or requires verb movement to a position higher than that accessed by present tense verbs?¹⁴ A glance at the morphological makeup of these inflections suggests a straightforward answer: all but the present tense forms involve tense, mood, or aspect suffixes. Assume that these suffixes signal the activation of functional heads to which the verb must raise in the overt syntax (perhaps a Balkan-style Mood head, as one reviewer suggests for the conditional form). Moreover, take these functional heads to be higher than the position of [i]. The present tense forms in GFP (and in Romance in general) are not associated with such suffixes, an indication that they are not associated syntactically with any functional head higher than [i].

Thus, the more impoverished present tense verb can only move as high as Agr₂ and the licensing of the null subject in Spec,Agr₂ requires the SCL in Agr₁. (Recall that c-command by the licensing head is a necessary condition.) In the future, conditional, and imperfect forms, V raises above the null subject (at least as high as) Agr₁, from where it locally c-commands *pro*, in the specifier of its complement Agr₂P.

The empirical claim that verbs in the suffix-bearing tenses raise higher than verbs in the simple present is supported by the existence of a peculiar but systematic feature in the pattern of interrogative (subject clitic) inversion in (formal) Standard French. (See also the discussion, in a different perspective, in Pollock 2000.) The basic fact is that this sort of inversion is disallowed with a first person pronoun. Compare inversion with the first and second person pronouns in (21).

- (21) a. *Viens -je?
 come -I
 ‘Am I coming?’

¹⁴ From the perspective of French historical morphology, the future and the conditional are compound forms, having evolved from the fusion of a lexical infinitive and the present indicative or imperfect form of Late Latin *habere* (see, e.g., Roberts 1992).

- b. Viens -tu?
 come -you
 'Are you coming?'

This restriction is lifted in the future, conditional, and imperfect forms, for which inversion around a first person pronoun is perfectly licit, as shown in (22).

- (22) a. Viendrai -je?
 come-FUT -I
 'Will I come?'
 b. Viendrais -je?
 come-COND -I
 'Would I come?'
 c. (?)Venais -je?
 come-IMPERF -I
 'Was I coming?'

Whether one analyzes interrogative inversion as movement to C (Rizzi and Roberts 1989) or as incorporation of the verb to a clitic head (Friedemann 1997, Sportiche 1998), it is clear that the verb is in a higher position in these interrogatives than it is in declaratives.

It is tempting to consider this defect, as it were, in French subject-clitic inversion in the same terms as the omission of [i] in GFP. Suppose that the different persons of the verb are associated with hierarchically ordered positions so that the position of the first person singular pronoun in French is higher than that of, say, the second person. Further, suppose that in French, present tense verbs cannot move to or higher than the first person position. This step of movement is restricted to the suffix-bearing forms, namely, the future, the conditional, and the imperfect.¹⁵

In a very literary register, inversion around *je* is possible with first conjugation (-er) verbs, on the condition that an *é* is added (pronounced [ɛ]), as in *chanté-je?* 'sing-I?; do I sing?' (Grevisse 1993:secs. 764, 800). One should view this *é* as a functional head (perhaps bearing an interrogative feature) that attracts the verb, making possible its movement above *je*.

Pollock (1989) observed that nonfinite 'have' and 'be' and certain nonfinite modals can raise above negation in French, whereas nonfinite lexical verbs cannot. This means that morphological richness is relevant only for lexical verbs. Verbs with essentially functional semantics, like auxiliaries and modals, are indifferent to morphology and are invariably higher than lexical verbs. Following Pollock, we suggest that auxiliaries and modals realize functional heads that are located high in the clause. This is why inversion of a present tense verb around a first person pronoun is restricted to functional verbs.

¹⁵ In a similar vein, the optionality of past participle agreement with first and second person object clitics in Italian (as opposed to the obligatoriness of agreement with third person clitics) can be attributed to the existence of a hierarchical ordering of the different persons, with the Italian participle moving obligatorily to the third person position and only optionally to the (higher) first and second person position. See Belletti, to appear.

- (23) a. Puis -je?
 can -I
 ‘Can I?’
 b. Suis -je?
 am -I
 ‘Am I?’
 c. Ai -je?
 have -I
 ‘Do I have?’

Note that the verbal form for the inverted form of ‘can’ is *puis*, as in (23a). Noninverted ‘can’ is *peux*. *Puis* and *peux* are in complementary distribution (i.e., **peux-je*, **je puis*). We take this to mean that *puis* is *peux* + *Q/wh*.

Whereas *je suis* is ambiguous in French, meaning either ‘I am’ (> *être*) or ‘I follow’ (> *suivre*), the inverted form *suis-je* in (23b) can only mean ‘am I?’ (the inverted form of ‘I follow’ is *suivé-je*). This is a clear indication that the relevant factor here is syntactic (i.e., the distinction between lexical and functional verbs) and not morphophonological.

A further manifestation of this difference between functional and lexical verbs is found in GFP, where the future tense and the conditional mood can be formed periphrastically with the modal ‘want’.¹⁶ In (24), for example, future tense is conveyed by the modal, which is inflected for the present indicative. Even though it bears present tense inflection, *vou* renders [i] dispensable, like a verb inflected for the future tense and unlike a present tense verb.

- (24) Portyè (i) *vous* *vinyi*?
 why (SCL) want-3SG come
 ‘Why will she/he come?’

To summarize this section, we have shown that there is a correlation in French between the presence of morphological tense/mood suffixes on verbs and their surface position. This is consonant with Pollock’s (1989) original generalization relating morphological richness and verb movement. Pollock argued that nonfinite verbs in French do not raise as high as finite verbs, a fact that correlates with the poverty of their inflection. Our claim here is that even within the domain of finite lexical verbs, two classes of verb forms must be distinguished: present tense forms, on the one hand, and future, conditional, and imperfect forms, on the other. Present tense verbs cannot invert around *je* in French or license *pro* in GFP, while the suffix-bearing forms do invert around *je* in French and license *pro* in GFP. Finally, we noted that the familiar opposition between

¹⁶ The perfect auxiliary ‘have’ imposes different constraints on subject clitics in GFP, reminiscent of Valdôtain (Roberts 1993a) and Piedmontese (Parry 1995). Discussion of this lies beyond the scope of this article.

auxiliaries/modals and lexical verbs is operative both in French first person subject inversion and in the position of GFP verbs.¹⁷

5 [i] and the Distinction between First and Third Person

[i] is the (surface) form of both the first and third persons. This is unusual. Poletto's (2000) study of NIDs describes clitics that have an invariable form for all persons as well as clitics that mark a more familiar opposition, namely, between first and second persons and third person. None of the paradigms she discusses marks an opposition between first and third persons and second person.

Our analysis of the French data in the preceding section takes the position of the first person to be different from (higher than) that of the other persons. These comparative considerations (as well as diachronic ones) favor an idea (suggested by Paola Benincà, personal communication) that GFP has different clitic pronouns for the first and third persons and that their differences are obscured by phonological neutralization.

Several considerations support this conclusion. First, in a number of other dialects in the region, to judge by the available descriptions, first and third person singular forms are similar but nonidentical. Thus, Savièse has [yo] for the first person and [i] for the third, a distinction that is obliterated when they are followed by a vowel-initial verb, in which case both are transcribed as [y] (Olszyna-Marzys 1964). In the Vaudois variety described by Reymond and Bossard (1979), the preconsontal first and third person clitics are both [ye], but [yo] and [te] surface, respectively, when they are encliticized onto a verb (inversion).

There are also indications that in syntactic contexts that prohibit [i]-omission, the degree of unacceptability is somewhat mitigated in the case of first person inflection. The judgments here

¹⁷ There are grounds to believe that the surface position of auxiliaries/modals is actually *higher* than that of richly inflected (future, conditional, or imperfect) lexical verbs. GFP provides some evidence to this effect. The nonclitic pronoun *chin* (\cong French *ça* 'it') can appear between the subject and a tensed verb, as in (i). There is no difference in acceptability related to the degree of inflection on the verb, since the order subject \wedge *chin* \wedge verb_{FIN} is possible with, for example, the conditional form in (ib). Under no circumstances, however, may *chin* appear between a subject and an auxiliary or modal. This is shown in (iia–b). The contrast between (i) and (ii) can be treated in terms of verb position: lexical verbs (can) remain lower than *chin* but functional verbs cannot.

- (i) a. Chin médjō.
 ÇA eats
 'He eats it.'
- b. Chin medjeri.
 ÇA eats-COND
 'He would eat it.'
- (ii) a. *Chin a médji.
 ÇA has eat
 'He has eaten it.'
- b. *Chin vou médji.
 ÇA want-3SG eat
 'He will eat it.'

are very subtle and the data only partially relevant to the main thrust of this article. We have noticed, however, that in embedded sentences containing a fronted adverbial, where [i] is required for pro licensing, speakers tend to consider the omission of [i] with first person inflection a less severe violation than its omission with third person inflection. This is a general tendency in other syntactic contexts as well. Speakers either fail to see a difference between the patterns involving first and third person SCLs or are more permissive regarding omission of the first person. What is beyond doubt is that the opposite tendency—namely, preferred omission of the third person—is unattested.

6 Atmospheric Pro

In this section, we discuss the distribution of [i] in sentences with nonreferential subjects. The appendix introduces a more complex array of data and relates the licensing of null subjects in nonreferential contexts to their thematic status.

The variety of German that Cardinaletti (1990a,b) discusses manifests a sharp split between grammatical topic drop of referential subjects and ungrammatical dropping of quasi-argumental and nonargumental ones.

- (25) a. *Ø regnet gerade.
 it rains now
 ‘It is raining now.’
 b. *Ø ist ein Mann da.
 there is a man there
 ‘There is a man there.’

Expletive null subjects such as the pro of subject inversion in (9) are illicit as topics in GFP, surely because topicality entails prior mention in the discourse and nonreferential expressions cannot, by definition, be mentioned or serve as figure. Similar considerations apply to the null topicalization of quasi-argumental subjects of weather predicates. Climatological subjects refer to the atmosphere or to the environment, concepts too vague or too general to be construed as sentence topics. Quasi arguments are by definition nonreferential and hence nontopicalizable.

The GFP counterpart to (25a) is (26), ungrammatical without [i].

- (26) *(I) pyà.
 (SCL) rains
 ‘It is raining.’

(26) stands in stark contrast to (15a), as far as the status of [i] is concerned. In the latter, the option of not generating [i] is a consequence of the availability of topic drop of the subject. In the former, however, topic drop is impossible because of the nonreferential status of the (null) subject pronoun. Hence, the only grammatical structure for (26) is one in which the subject position is filled with a phonetically null weather ‘it’, requiring formal licensing by [i].

7 [i] in Embedded Contexts

Topic drop is a root phenomenon. Whether the topic corresponds to a direct object, a possibility in German, or whether only a null subject can be topicalized, as in the so-called “null subject” stage in language acquisition and in GFP, there is no null topic equivalent to the overt topicalization in (27).

(27) I think that (as for) John, he likes couscous.

This is not surprising since null topics, as opposed to overt ones, are possible only in the highest specifier of the clause. In embedded clauses, the topic is always preceded by some material and is therefore unable to benefit from the privilege of the root.

In GFP, a phonetically null subject in an embedded clause can be realized either by a pro empty category in subject position as in (28a) or by the trace of a null topic raised to the root C (28b) (intermediate traces omitted). (28c) diagrams the unavailable option of embedded topicalization discussed above.¹⁸

- (28) a. ... [_{CP} C [_{IP} pro ...]]
 b. Top_i ... [_{CP} C [_{IP} t_i ...]]
 c. *. ... [_{CP} C Top_i [_{IP} t_i ...]]

Having clarified the options in abstract terms, let us turn to the GFP data, exemplified by the sentence in (29a).

- (29) a. Mè moujo ke (*i) travayè la demindze.
 I-REFL think that (SCL) works the Sunday
 ‘I think that she/he works on Sundays.’
 b. (I) travayè la demindze.
 (SCL) works the Sunday
 ‘She/He works on Sundays.’

What (29a) shows is that [i] is entirely banned from this context; it cannot occur optionally, as it does in root clauses, exemplified again in (29b). As far as we have been able to determine, [i] is systematically excluded in embedded contexts with all predicate types (transitive, unaccusative, and weather verbs), indicating that neither the referential status of the subject nor its status as internal or external is relevant.

Clearly, a long-distance topicalization analysis of (29b) cannot and should not be excluded on principled grounds. If (29a) is analyzed as a case of (28b), the option of not generating [i] would be explained by the presence of a trace as opposed to a pro in the embedded subject

¹⁸ Overt topics are certainly available in embedded clauses in Romance, yet they are always associated with a clitic (whence the term *clitic left-dislocation*). The null topics we hypothesize to exist in GFP are closer to Germanic topics, which are not linked to a clitic or pronoun.

position. The issue of how this trace is licensed must then be dealt with, but let us grant that GFP C^0 can serve as a proper head governor for the subject trace (GFP *ke* is thus ambiguous between French *que* and French *qui* ‘that’).¹⁹

The unexpected twist illustrated by (29a) is that the SCL is not optional but impossible.²⁰ Why is [i] ruled out in embedded contexts? What prevents *pro* from appearing in the subject position of a subordinate clause? The answer we would like to explore is that *pro* is available in (29a) but that the grammatical role of [i] in formally licensing *pro* is taken over in embedded contexts by C^0 , rendering [i] redundant.

Perhaps the clearest evidence for the root/embedded split in the distribution of [i] comes from sentences with weather verbs. Recall that [i] is obligatory in sentences such as (26), repeated here as (30a). We have argued that the obligatoriness of [i] is a consequence of the *untopicalizability* of quasi-argumental subjects: in the absence of topic drop, (30a) must conform to the *pro* drop configuration and [i] is hence required. When (30a) is embedded under *ke* ‘that’ or *che* ‘if/whether’, however, [i] is excluded, as in (30b–c).

- (30) a. *(I) pyà.
 (SCL) rains
 ‘It is raining.’
 b. Mè moujo ke (*i) pyà.
 1-REFL think that (SCL) rains
 ‘I think that it is raining.’
 c. Mè dèmando che (*i) pyà.
 1-REFL wonder whether (SCL) rains
 ‘I wonder whether it is raining.’

Here, unlike in (29a), long topicalization (as in the schematic (28b)) is not an option since *pro* is nonreferential, so that the exclusion of [i] in (30b–c) cannot be related to the availability of topicalization. Rather, we take its absence to be directly related to the presence of an overt complementizer. When there is no overt complementizer, as in an indirect question, the distribution of [i] with a weather verb is exactly the same as in a root interrogative, where [i] is obligatory; compare (30c) and (31), the embedded version of (15b).

¹⁹ The fact that subjects can be relativized over *ke* and without [i] supports this idea; consider, in particular, (ib). (*I* in (ia) is a subject clitic belonging to a different class from the [i] studied in this article.)

(i) a. l’homo ke l é yu
 the man that SCL have seen
 ‘the man that I saw’
 b. l’homo ke vinyé
 the man that arrived
 ‘the man that arrived’

²⁰ The unacceptability of an SCL in embedded clauses is an areal feature, found in many of the dialects of the Valais canton, as explicitly noted by Olszyna-Marzys (1964:34–35), though apparently neither in the Vaudois variety described by Reymond and Bossard (1979:79) nor in the Jurassic dialect studied by Butz (1981:63).

- (31) Mè dèmando portyè *(i) pyà.
 1-REFL wonder why (SCL) rains
 'I wonder why it is raining.'

Let us assume that an overt C, be it [+wh] or [−wh], is endowed with the capacity to formally license pro, as it presumably is in, for example, German; see Cardinaletti 1990a, Travis 1984.²¹

We are thus led to a more restrictive statement of the distribution of [i], namely, that it (and the AgrP containing it; see the discussion below (11)) is generated only when required to formally license pro. If there is an overt C in the structure, it licenses pro and Agr₁P is not lexicalized. Since [i] has no semantic but only formal features, it appears only when strictly required, much like English periphrastic *do* as analyzed in Chomsky 1991.

Unlike SCLs, complementizers are carriers of semantic features (e.g., force, mood, finiteness) and are subject to strict constraints on deletion (if, indeed, a complementizer such as English *that* is actually deleted, as opposed to being incorporated into a verb). In GFP, as in French, C cannot be deleted or remain unprojected; moreover, this is independent of the presence or absence of an SCL, as (32) shows.

- (32) *Mè moujo Djan (i) medzè na fondia mitya-mitya.
 1-REFL think John (SCL) eats a fondue half-half
 'I think John is eating a "moitié-moitié" fondue.'

There is substantial evidence that in many NIDs, the phonetically invariable clitic occupies some position within the CP domain. Poletto (2000), for example, argues that in large classes of dialects, this type of SCL is generated in a position higher than that of the declarative complementizer and that C⁰ raises and adjoins to the SCL. Among other types of evidence, Poletto cites the fact that the complementizer is obligatorily contracted in front of the SCL and its final vowel is elided, a fact she construes to be the surface reflex of incorporation of the complementizer to the clitic. The pair in (33) illustrates complementizer contraction in a Veneto variety spoken in Loreo in northeastern Italy.

- (33) a. Vara ch'a vegno.
 look that I come
 'Look, I am coming.'
 b. *Vara che a vegno.
 look that I come

In GFP, however, the contraction of the complementizer, that is, the elision of its final vowel preceding a following vowel, applies regularly *except* preceding the SCL [i], where contraction is unacceptable. The contrast between (34a) and (34b) and, similarly, between (35a) and (35b),

²¹ Old French had general V2 and null subjects just in V2 clauses, so any kind of C could license pro or could attract a verb that could license pro. In Middle French, though, only [+wh] C seemed to have this capacity independently of verb movement, for instance, in embedded clauses. See Adams 1987, Roberts 1993b, and Vance 1997. The Franco-Provençal dialects appear to have extended the property of Middle French [+wh] C to other (perhaps all) C heads.

demonstrates the obligatory nature of the deletion of the final vowel of the complementizer *ke* when followed by a vowel-initial word.

- (34) a. Mè moujo k' ire malâda.
 1-REFL think that was sick-F
 'I think that she was sick.'
 b. *Mè moujo ke ire malâda.
 1-REFL think that was sick-F
- (35) a. Mè moujo k' on medzè bin inke.
 1-REFL think that one eats well here
 'I think that one eats well here.'
 b. *Mè moujo ke on medzè bin inke.
 1-REFL think that one eats well here

The contrast between (36a) and (36b), on the other hand, shows exactly the reverse situation when *ke* is followed by [i].

- (36) a. *Mè moujo k' i travayè avu chon chénya.
 1-REFL think that SCL works with his father
 'I think that he works with his father.'
 b. Mè moujo ke travayè avu chon chénya.
 1-REFL think that works with his father
 'I think that he works with his father.'

This difference between NIDs and GFP indicates that in the latter, [i] is not in CP but belongs to the IP system. The complementizer is not contracted in front of [i] because [i] is not generated when C is lexicalized.²²

If [i] is impossible in embeddings under an overt complementizer, it is obligatory when a fronted adverb follows *ke* (a fact that further demonstrates that [i] is lower than C). Compare (37a) and (37b).

- (37) a. *Mè moujo k' ora pyâ.
 1-REFL think that now rains
 'I think that now, it is raining.'
 b. Mè moujo k' ora i pyâ.
 1-REFL think that now SCL rains
 'I think that now, it is raining.'

Taking the fronted adverb to be the specifier of a Mod or Top projection in the C domain, we

²² It is worth recalling, in this context, that although phonetically invariable, [i] is not available for all the grammatical persons, a property that characterizes the lower prenegative SCLs in Poletto's typology but not the invariable ones.

argue that the head of this projection in (37a) disrupts the locality that must hold between *ke* and *pro* in order for licensing to take place. If, for explicitness' sake, we take *pro* licensing to involve feature transmission from *pro* to its licensing head, then the intervention of the topic can be reduced to a minimality effect, following Rizzi's (1997) contention that the (null) head of an adverbial topic projection is systematically a barrier to head movement. In (37b), *ke* does not locally c-command *pro*. Licensing from C being impossible, [i] must be projected, as predicted.²³

Going back now to the diagram in (10), it becomes clear that local c-command by a head is the only way to uniformly express the licensing configuration of null subjects in root and embedded clauses. Although a head can enter into a number of distinct relations with an XP, it appears that local c-command of XP by a head—as opposed to, say, c-command of a head by XP—is the relevant relation for null subject licensing in GFP, as it was in Old and Middle French. To distinguish these French varieties from, say, Italian or Spanish, a parameter should be invoked, of the sort proposed by Koopman and Sportiche (1991) for Case assignment. It remains to be seen how this parameter should be stated in a minimalist framework.

8 Conclusion

Roberts (1993b) has shown that there is a significant correlation between the erosion of verb movement and the loss of null subjects in the history of French. If *pro* could only be licensed under government, he argues, either the inflected verb had to move above the subject position and/or C must have been endowed with the capacity to license *pro*. Since French was moving away from a V2 system, as a result of changes in the formal properties of C, it was losing null subjects.

GFP is not a V2 system. However, it shares with Old French the setting of the *pro*-licensing parameter: namely, it requires that *pro* be governed by its licenser (Roberts 1993a; see also Adams 1987), where government is defined as local c-command. Its overt complementizers, both [+wh] and [–wh], formally license *pro* and verbal forms bearing rich (though not necessarily discrete) inflection, raise above the position of *pro*, and thereby come to c-command it.

The main comparative interest of GFP, however, lies in the solution it adopted to the problem of the erosion of verb movement: rather than restricting the extent of *pro* drop, as in Modern French, or switching the licensing parameter to permit licensing via agreement with the licensing head, as in some other Romance systems, it introduced a subject clitic, an overt head that took over, as it were, the role heretofore played by the raised verb.

²³ A distinction must be drawn between expressions such as *ora* 'now', *vouè* 'today', and *dèman* 'tomorrow', whose presence forces the appearance of [i], and *chta né* 'tonight' and *la chenanna ke vin* 'next week', whose presence does not. We propose that a structural difference is at work here: those expressions that do not force the appearance of [i] have the option of appearing lower in the structure. Like parenthetical expressions, they have access to a lower position—lower, that is, than *pro* but higher than the verb. Their presence crucially does not disrupt the locality condition for the licensing of *pro* by C⁰.

Appendix: Atmospheric Predicates, Unaccusatives, Motion Verbs, and the Distribution of [i]

In this appendix, we look at the types of predicates that allow topic drop in GFP. We begin with weather predicates and then briefly discuss unaccusative ones. Although the discussion falls short of providing an explanation for the patterns we have discovered, it establishes certain correlations relating to argument structure and the form of weather verbs.

In section 6, we showed that [i] is obligatory when the subject is a quasi argument of a weather predicate. This is true not only for 'rain', but for all of the verbs in (38) (given in the infinitive form).

- (38) a. piovê 'rain'
 b. névê 'snow'
 c. tsère 'fall' (as in 'rainfall')
 d. mèhyâ 'rain and snow simultaneously'
 e. grilà 'hail'

With the atmospheric predicates in (39), however, the omission of [i] is considered marginally acceptable, varying from "?" to "???" according to the verb and the speaker.

- (39) a. chohyâ 'blow'
 b. tenâ 'thunder'
 c. èyutzâ 'make lightning'

Finally, with the predicates in (40), the omission of [i] is basically acceptable to all speakers, as shown in (41).

- (40) a. dzâlâ 'freeze'
 b. tapâ 'beat down'

- (41) ?(I) tapè.
 (it) beats down
 'The sun is beating down.'

Note the following correlations. The meteorological verbs that require [i] in GFP belong to the same class of verbs that, in Italian, select either of the auxiliaries *avere* 'have' or *essere* 'be'. The verbs in the company of which the occurrence of [i] tends toward optionality correlate with the Italian weather verbs that can only appear with *avere*. Contrast the examples in (42) with those in (43), from Benincà and Cinque 1992.

- (42) a. Ha/È piovuto.
 has/is rained
 'It rained.'
 b. Ha/È nevicato fino all'alba.
 has/is snowed until dawn
 'It snowed until dawn.'

- c. Ha/È grandinato in campagna.
has/is hailed in countryside
'It hailed in the countryside.'
- (43) a. Ha/*È lampeggiato fino all'alba?
has/is made lightning until dawn
'Was there lightning until dawn?'
- b. Ha/*È gelato stanotte.
has/is froze tonight
'It was freezing tonight.'

Benincà and Cinque (1992) argue that the climatological verbs that can take *essere* manifest a salient component of 'motion' in their meaning, while the verbs that admit only *avere* do not. 'Rain', 'snow', and the like, imply the movement or displacement of some substance (i.e., rain and snow), while 'make lightning', 'thunder', and 'freeze' do not. Benincà and Cinque further argue that motion verbs should be analyzed as in Hoekstra and Mulder 1990—namely, as raising verbs, which take a small clause complement whose predicate is a locative. Thinking of motion verbs in Cinque's (1999a,b) terms, that is, as quasi-functional verbs or quasi auxiliaries (see also Cardinaletti and Shlonsky 2002), let us say that in their basic format, verbs like 'rain' are treated as motion verbs, that is, as ergative predicates whose single argument is a small clause. (See also Moro 1997.)

The idea, then, is that the *nontopicalizability* of the quasi-argumental subject of verbs like 'rain' and 'snow' is related to the fact that it is not an external argument of the weather verb but an argument of a (null) locative within a small clause complement. Unlike verbs such as 'rain' and 'snow', verbs such as 'beat (down)' and 'freeze' are *lexical* verbs with thematic subjects (albeit quasi-referential); given their obligatory association with 'have', such verbs are bona fide unergative predicates.²⁴

Developing this line of thinking, we suggest that it is not the quasi-argumental status of weather pro as such that renders it untropicalizable, but the fact that it is configured as an internal or, more precisely, as a nonexternal argument.

In Italian, 'rain', 'snow', and the like, can be configured as either unergative predicates or unaccusative ones. GFP appears to lack this choice as far as these verbs are concerned, since they systematically resist the topic drop option (the omission of [i]). It is conceivable that the intermediate status of the verbs in (39) means that the Italian-type choice is available to these predicates.

What is clearer, however, is that the mere existence of a choice between the ergative and unergative formats, as the optionality of auxiliary selection in Italian would seem to suggest, should be interpreted to mean that the status of weather verbs is not rigidly fixed in the lexicon

²⁴ Auxiliary selection is not revealing in GFP: all weather predicates take 'have', as in French. In both French and GFP, auxiliary selection is less of a reliable test for unaccusativity than in Italian.

and, like bona fide manner-of-motion predicates such as ‘run’, they can be aspectually manipulated. Given this, we expect variation not only within a single language but also across languages. Swiss German dialects seem to vary with respect to whether they allow subjects of weather verbs to be null topics. Turgovinian, spoken in eastern Switzerland, is quite free, allowing null topicalization of the subject of all weather predicates (i.e., *regnet* ‘rain’, *šneit* ‘snow’, *haglet* ‘hail’) in root clauses, as shown in (44). The koine of central Switzerland is similar to German in eschewing topic drop of weather ‘it’, while allowing it for an ergative verb like ‘come’, as shown in (45) (data courtesy of Eric Haeberli and Thomas Leu).

(44) Ø *regnet* *graad*.

rain now

‘It’s raining.’

(45) a. ??Ø *rægnət* *graad*.

rain now

‘It’s raining.’

b. Ø *xumæ* *grad*.

(I) come now

‘I am coming right away.’

The correlation between the status of [i] as optional or obligatory and the argument structure of the predicate extends beyond the domain of weather predicates and their quasi-argumental subjects. Comparing verbs of different classes leads us to formulate the following two generalizations:

- [i] is more easily omissible in clauses with transitive or unergative verbs than in clauses with unaccusative ones.
- Among unaccusative verbs, the acceptability of [i]-omission declines as the ‘(manner of) motion’ component of the verb’s meaning gains in saliency.

Thus, while [i] is perfectly optional with ‘work’ in (46), it is practically obligatory with the verbs in (47), as shown by the ungrammaticality of the sentences in (48) lacking [i]. ‘Work’ is an unergative verb, which assigns an external θ -role. The verbs in (47), on the other hand, are all unaccusative.²⁵

(46) (I) *travayè*.

(SCL) works

‘She/He works/is working.’

²⁵ With the exception of *debantyi* ‘get up and leave’ in (47e), all of these verbs select the perfect auxiliary ‘be’ in complex tense constructions. Note, moreover, that the absence of [i] with *montâ* ‘climb, mount’ is considered a weaker violation than its absence with *vinyi* ‘come, arrive’. This difference recalls the fact that the auxiliary ‘have’ can be marginally used with *monter* in French, but never with *venir*.

- (47) a. vinyi 'come'
 b. modâ 'leave'
 c. montâ 'climb, mount'
 d. arrouvâ 'arrive'
 e. debantyi 'get up and leave'
- (48) a. *(I) vin.
 (SCL) comes
 'She/He comes/is coming.'
 b. ??(I) arrouvè.
 (SCL) arrives
 'She/He is arriving.'
 c. *(I) modè.
 (SCL) leaves
 'She/He is leaving.'

Going back to our initial hypothesis that the absence of [i] in root clauses indicates that pro has moved to topic position, we now see that this is much more difficult with an internal argument than with an external one.

But not all unaccusatives are alike. Omission of [i] with the verbs in (49) gives almost perfect results, as (50) illustrates.

- (49) a. chobrâ 'remain, stay, live'
 b. rechtâ 'remain'
 c. dzourè 'remain quiet'
- (50) (?) (I) chabrè.
 (SCL) remains/stays/lives
 'She/He is remaining/staying/living.'

What seems to be at work here once again is the 'motion' component in the meaning of the verb. The verbs that permit [i]-omission more easily are those, like 'remain' and 'stay', that lack a motion component.

We might think of this distinction in structural terms, recalling our discussion of weather verbs. Motion verbs like 'come' and 'leave' might be thought of as obligatorily subcategorizing for a locative PP (null or overt) that, following Hoekstra and Mulder (1990), projects a small clause. The surface subject of the motion verb is thus the "deep" subject of the small clause predicate. In this way of seeing things, the motion verbs are auxiliary-like "light" verbs and do not have a direct thematic relationship with the clausal subject. The gradation that we observe between unergative, ergative, and motion verbs in licensing topic drop thus correlates with the degree to which the potential topic is "distant" from the unergative pattern.

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