

The Null Subject Parameter and correlating properties: the case of Creole languages

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Abstract

The existence of correlations between the positive setting of the Null Subject Parameter and other grammatical properties has recently been called into question (see Newmeyer (2005)). In this paper, I show that the $pro_{ref} \longrightarrow pro_{-ref}$ correlation appears to be exceptionless and that it follows directly from the theory of *pro*-drop in Rizzi (1986a). Rizzi (1982) proposes that the availability of Free Inversion is what allows for the lack of *that*-*t* effects in *pro*-drop languages; this, I further show, is empirically untenable. I present data from several Creole languages that suggest that the lack of *that*-*t* effects in these languages is related to the availability of null expletive *pro*. I take the latter to be a sufficient, but not necessary, condition for the lack of *that*-*t* effects. I finally discuss the implication of this finding for the parametric model.

keywords: null expletives, *that*-*t* effects, free inversion, creole morphosyntax, semi *pro*-drop languages, null subject Parameter

1 Introduction¹²

Much research in the 1980s has uncovered the existence of several correlations between the positive setting of the Null Subject Parameter (henceforth: NSP) and other apparently unrelated grammatical properties. While no less than a dozen such correlations were proposed (according to Rizzi (2004)), only a handful enjoy widespread consensus. In particular, Null Subject Languages (NSLs) are generally taken as adhering to the properties in (1) (Referential Null Subjects, Non referential Null Subjects, Free Inversion, No *that*-*t* effects), see Rizzi (1982), Rizzi (1986a).

- (1) a. *Mangio la pizza*
Eat.1S the pizza
'I eat pizza'
b. **(I) eat pizza*
c. *pro_{expl} è arrivato un uomo*
is arrived a man
'A man arrived'
d. **(There) came a man*

- e. *Ha telefonato Gianni*
Has telephoned Gianni
'Gianni telephoned'
- f. **(There) has telephoned John*
- g. *Chi credi che verrà?*
Who think.2S that come.FUT
'Who do you think will come?' (Italian)
- h. **Who do you think that will come?*

As seen in (1), Italian and English, prototypical examples of a NSL and a non-NSL respectively, contrast in respect of all four properties of Null Referential Subjects, Null Non-Referential Subjects, Free Inversion, No *that*-t effects. However, a large number of languages show partial clusterings only. Different theoretical approaches to the NSP make different predictions with respect to the status of partial clusterings; but no model predicts an 'anything goes' situation.

While the theoretical status of the NSP has given rise to a very lively debate, especially in the late 1980s and early 1990s (see Jaeggli and Safir (1989) for a representative sample of the issues involved), very few studies have offered a systematic analysis of the crosslinguistic distribution of the properties in (1).

A notable exception is Gilligan (1987), who compiled a balanced sample of one hundred languages, carefully selected with respect to geographical distribution and genealogical family. The results of Gilligan's study were roughly that out of the sixteen possible combinations of the four properties in (1), only seven occurred more than once, and two others only once. A numerical breakdown for six theoretically relevant correlations is reported in the table in (2), adapted from Gilligan (1987), Newmeyer (2005)

	yes-yes	yes-no	no-yes	no-no
<i>pro</i> _{+ref} – <i>pro</i> _{-ref}	24	0	15	2
<i>pro</i> _{+ref} – Free Inversion	22	49	11	15
(2) <i>pro</i> _{+ref} – <i>that</i> -t ³	5	3	2	1
<i>pro</i> _{-ref} – Free Inversion	14	25	1	1
<i>pro</i> _{-ref} – <i>that</i> -t	7	2	0	1
Free Inversion – <i>that</i>-t	4	0	3	4

Gilligan's work is still commented upon in the literature and scholars belonging to different traditions have expressed radically different opinions on the theoretical relevance of his findings. Several recent works by Newmeyer (Newmeyer (1998), Newmeyer (2005), Newmeyer (2006)) have considered Gilligan's results damning for generative approaches to the Null Subject Parameter and for the parametric model as a whole. Gilligan showed that certain correlations, unexpected under mid-1980s theories such as Rizzi (1986a), hold; conversely, other correlations predicted to hold by such theories do not. About half of the logically possible combinations of the properties in (1) were not attested at all. Yet, as noted by Roberts and Holmberg (2005) and Baker (2001) among others, the many gaps in the paradigm and

the substantial occurrence of several of the predicted correlations appear to provide important support for the parametric model. A global assessment of Newmeyer’s proposal is beyond the scope of this paper (see Roberts and Holmberg (2005) for a critical assessment of it). Nevertheless, I would like to note that his proposal to entirely abandon the parametric model and to revert to EST-type rules appears questionable at least from a historical perspective; work in comparative syntax clearly began to flourish exactly when the EST model was abandoned in favour of the parametric model.

In this paper, I will show that the parametric model is in fact capable of accounting for both gaps in the paradigm and the observed correlations; the formulation of the 1980s was simply too rigid to account for the observed variation and some of its proposals accordingly need to be weakened.

2 Descriptive correlations and theoretical justification

While uncovering correlations between different grammatical properties is in itself important, what is crucial for any grammatical model is offering a theoretical account for such correlations. The structure of parametric Theory has long been implicitly conceived in such a way that it leads one to predict exceptionless correlations as opposed to crosslinguistic tendencies. The latter have virtually no status in the theory. This state of affairs, it seems to me, derives largely from a general misconception concerning the nature of parameters. The view of Parameters as macroparameters (in the 1980s’ sense) has led researchers to consider parameters as objects necessarily endowed with some internal deductive structure, itself automatically causing the emergence of the observed correlations.

Such an idea, in its most radical form, has never been proposed to my knowledge. Nevertheless, this idea has led researchers to expect an all-or-nothing situation with respect to certain linguistic properties. In fact, however, the standard assumption within the generative framework has always been that parameters are simple, binary-choice points that the language learner has to set.⁴ The observed correlations (or lack thereof) follow from the peculiar position that a given parameter occupies within the entire grammatical system and, more specifically, from its relation to other principles and parameters (see Rizzi (2004) for details).

Rizzi (2004) exemplifies this state of affairs by contrasting the rich array of properties associated with the availability of null subjects with the lack of such correlating properties in the case of null objects. Subjects occupy a much more crucial position than objects in the grammatical system (the EPP and ECP are principles essentially dealing with subjects), while objects are typically much less constrained. Hence, it follows that the intricate interaction between a parameter regulating subjects (say the NSP) and other grammatical principles (ECP, EPP among others) will give rise to a set of correlating properties in several domains (see the discussion below concerning subject extraction and *that*-*t* effects). By contrast, since there is no EPP for objects and the ECP is usually trivially satisfied in cases of object extraction, etc., Rizzi assumes that a parameter regulating the distribution of objects will

not give rise to as many correlations as a parameter regulating the distribution of subjects.

Furthermore, the existence of crosslinguistic tendencies ('relative' correlations) can be thought of as one of the possible ways adopted by a group of languages to resolve the tension between structural constraints and the needs of communication. All languages need to solve the tension between the necessity of questioning subjects (root and embedded) and their general unmovability, under the 'Subject Criterion', Rizzi (2006). Different languages adopt different strategies for this. One of these, very common among NSLs and Creole languages, consists of satisfying the Subject Criterion via the insertion of a null expletive and extracting the subject from a lower position (see below and Rizzi and Shlonsky (2005)). Given that this is not the only possible strategy a language may choose, even among NSLs (see the Hebrew case below), the correlation between the availability of null expletives and the lack of *that*-t effects cannot be an absolute one; rather, it is but a crosslinguistic tendency. Hence, the availability of null expletives is a sufficient, but not a necessary, condition for the lack of *that*-t effects.⁵

2.1 An 'absolute correlation': $pro_{+ref} \longrightarrow pro_{-ref}$ correlation

If the approach sketched out above is on the right track, at least two different types of correlations can be thought of. Certain correlations are expected to be exceptionless: their status entirely follows from the 'logical structure' of the theory. I would like to propose that the $pro_{+ref} \longrightarrow pro_{-ref}$ correlation is an example of this kind of correlation (cf. the first row in the table in (2)). Consider Rizzi's classical theory of *pro*-drop:

- (3) Theory of *pro* (Null Subject Parameter):
 - a. **Formal licensing:** *pro* is licensed by X^0 under agreement or government
 - b. **Identification:** *pro* inherits features from licensing X^0

Formal licensing is, by and large, a parametric property that each language sets independently for relevant functional heads.⁶ If a language is capable of formally licensing referential *pro*, then expletive *pros* (which do not require identification, since they are not endowed with Person or Number features) are licit in that language. A subset of the languages able to license expletive *pro* can also identify referential *pro* (3-b). Only languages with a rich enough inflectional morphology can do so.⁷ Therefore, if [-ref] *pro* is a subcase of [+ref] *pro*, then, in languages where we find the latter, we will always find the former. This is *exactly* what Gilligan found in his sample (see the first row in the table in (2): no language in Gilligan's sample allows for referential *pro* without also allowing for non referential *pro*). More recently, some languages (partially) violating this correlation have been described in the literature, as we shall see below. However, the facts presented do not seem to constitute conclusive evidence that the correlation does not hold in these languages. In fact, it seems to me that the only definite conclusion can be that some NSLs allow for the coexistence of null and overt expletives, which is a very common state of affairs in Creole languages, as discussed below.

Holmberg and Nikkane (2002) describe Finnish as an NSL that features no null expletives and obligatory overt expletives in virtually all contexts.⁸ The authors, however, concede that the language allows for some instances of non-referential *pro*, in particular quasi-referential *pro* (4-a) and the subject *pro* found in extraposition structures. Note that the expletive used in these contexts is in fact *se*, which I take to correspond by and large to the English expletive *it*, rather than the locative *sitä*, which I take to instantiate a *there*-type expletive:

- (4) a. *Nyt (se) taas sataa*
 Now it again rains
 ‘Now it’s raining again’
 b. *(Se) oli hauskaa että tulit käymään*
 it was nice that came.2S visiting
 ‘It was nice that you came to visit’ (Finnish)

Moreover, instances of null expletives also appear to surface in presentational contexts such as (5).

- (5) a. *(Sitä) on ilmennyt ongelmia*
 (There) have appeared problems
 ‘Problems have come up’
 b. *(Sitä) sattui onnettomuus*
 (There) occurred accident
 ‘An accident has happened’
 c. *(Sitä) tuli kiire*
 (There) came haste
 ‘We/they are in a hurry’ (Finnish)

Holmberg and Nikkane (2002) account for the paradigm in (5) without appealing to null expletives. Rather, they propose, following Alexiadou and Anagnostopoulou (1998), that verb movement can itself check the Case feature in I (in morphologically rich languages) and that the EPP feature in F is optional in Finnish.⁹ This idea appears, nonetheless, to be straightforwardly translatable into a system in which null expletives are postulated.

The coexistence of null and overt expletives has also been noted for Galician (see Raposo and Uriagereka (1990)) and Dominican Spanish (see Kaiser (2004)). Kaiser (2004), quoting work by Silva-Villar (1998), observes that overt expletives in Galician Portuguese are restricted to root contexts, but that they are ungrammatical in postverbal position, in embedded clauses and in non-finite impersonal clauses, as shown in (6).

- (6) a. *El choverá hoje?*
 It rain.FUT today?
 ‘Will it rain today?’
 b. **Choverá el hoje?*
 Will.rain it today
 ‘Will it rain today?’

- c. **Xa sei que el chove*
of.course know.1SG that it rains
‘Of course I know that it rains’
- d. *... *pra el chover ...*
for it to rain
‘...for it to rain...’

(Dominican Spanish)

An anonymous reviewer correctly points out that the subject of meteorological verbs is unlikely to be a pure expletive and, therefore, the existence of overt expletives in the language does not immediately follow from the data in (6) (see Bennis (1986)). In a recent paper, Hinzelin and Kaiser (2006) show that *ello*, while never obligatory, surfaces in about 30% of the elicited answers in existential, impersonal constructions such as (7):¹⁰

- (7) *Ello hay muchos mangos este año*
There has many mangos this year
‘There are many mangos this year’

(Dominican Spanish)

The Finnish and Dominican facts reported in this section therefore do not show that the $pro_{ref} \rightarrow pro_{expl}$ correlation does not hold, since null expletives are available in several contexts and crucially also in embedded contexts. They, instead, cast doubt on the universal applicability of the Avoid-Pronoun-Principle (Chomsky (1981)), which would predict a null pronoun to always be preferred over an overt one when both are available.

In this section, I have shown that the $pro_{ref} \rightarrow pro_{expl}$ does indeed appear to be exceptionless, as predicted by Rizzi’s (1986) model. This is so purely by virtue of the logical structure of the theory: null expletives only need to be licensed, but null referential subjects need to be identified as well as licensed. The availability of the latter immediately guarantees the availability of the former.

3 Lack of *that*–*t* effects and Free Inversion

Rizzi (1982) made the very influential and still generally accepted proposal that the lack of *that*–*t* effects in NSLs depends upon the possibility of extracting the subject from the free-inverted position, allowing the subject not to go through the *SpecIP* position. This gives rise to the otherwise banned *that*–*t* configuration. Since non-NSLs lack the free-inversion position, the subject is forced to go through the preverbal subject position giving rise to *that*–*t* effects.

Rizzi’s (1982) account appears empirically untenable, however. While Gilligan’s sample was made up of one hundred languages, the subject-extraction data were available for only eleven of these. However, out of the eleven languages, three are problematic for the correlation since they are insensitive to *that*–*t* effects, despite lacking Free Inversion. The three languages displaying these properties in Gilligan’s sample are Basque, Papiamentu, and Yoruba. The ‘*pro*–drop properties’ of these languages are reported in (8):

		<i>pro</i> _{+ref}	<i>pro</i> _{-ref}	Free Inv	No <i>that</i> -t
(8)	Basque	+	+	–	+
	Papiamentu	–	+	–	+
	Yoruba	+	+	–	+

Given the paucity of Gilligan’s data on the issue, I have analyzed a total of eight Creole languages. My findings, described in the next section, are consistent with Gilligan’s data in (8). The languages I have analyzed appear to all crucially lack Free Inversion, while still not displaying *that*-t effects.

4 The partial *pro*-drop status of Creole languages

Creole languages are ‘partial *pro*-drop’ languages in that they display properties typically associated with *pro*-drop languages, despite lacking the availability of null referential subjects, which is the defining property of a *pro*-drop.

The overall results of my inquiry, detailed in Nicolis (2005), are reported in the table in (9):¹¹

(9)

	<i>pro</i> _{+ref}	<i>pro</i> _{-ref}	Sub Inv	No <i>that</i> -t	Lexifier
Berbice Dutch Creole	–	+	–	+	Dutch
Cape Verdean Creole	–	+	–	+	Portug.
Haitian Creole	–	+	–	–	French
Jamaican Creole (basilect)	–	+‡	–	–(?)	English
Jamaican Creole (mesolect)	–	?	–	–	English
Kriyol	–	+	–	+	Portug.
Mauritian Creole	–	+	–(?)	+	French
Papiamentu	–	+	–	+	Portug. Spanish (Dutch)
Saramaccan	–	+	–(?)	+	Portug. Spanish

‡ Available in root clauses only

It is worth pointing out that a couple of well-known properties are shared by all Creole languages. First, all Creoles are SVO languages. Moreover, they are generally characterized by the lack of any person/number morphology on the verb, which under standard assumptions concerning the relationship between morphological richness and *pro*-drop (Taraldsen’s generalization) should make *pro*_{+ref} impossible. The prediction is borne out, as shown in (9). I will now discuss, in turn, each of the four properties summarized in (9) since some interesting asymmetries emerge among the languages under inquiry.

4.1 No Referential Null Subjects

As anticipated, the prediction that Creole languages should not allow referential null subjects holds. However, some alleged cases of referential null subjects are reported in the literature. These cases, however, appear to be accounted for on different grounds: their distribution appears to match that of Root Null Subjects (Rizzi (1994)) and/or that of the null subjects in English diaries, studied by Haegeman (1990), or even pure coordination. I exemplify this with a case in Berbice Dutch Creole, taken from Kouwenberg (1994: 180):

- (10) a. *En justu mu mui, aplgi di.. potman fi gutwap, kap fi..*
 3PL PAST.HAB go PURP trouble the old-man 3POSS thing-PL cut 3POSS
junggwa: jef fi.. nanafi
 sugarcane eat 3POSS pineapple
 ‘They would go to trouble the father’s thing, cut his sugarcane, eat his pineapples’
- b. *Drestɛ alma gutu, krikteni.. gutu fi dekeni mu, mutɛ bi main*
 Dress-PF all thing, get-PF=3PL thing for take=3PL go go-PF say mind
ju
 2SG
 ‘(They) dressed and so on; (they) got their thing to carry them there; (they) went; (she) said: be careful’
(Berbice Dutch Creole)

All the null subjects of this sort are only attested in root contexts, which is consistent with what is predicted by Rizzi’s (1994) theory. Moreover, the style employed seems to be very close to the diary style analyzed by Haegeman (1990) as not involving *pro*.

Referential null subjects have also been claimed to exist in Haitian Creole in DeGraff (1993) and in Cape Verdean Creole in Baptista (2001). The issue has been the subject of considerable debate in the case of Haitian Creole, mainly involving Michel DeGraff and Vivienne Deprez: DeGraff (1993) proposes that Haitian Creole pronominal subjects should be analyzed as INFL heads, following proposals in Rizzi (1986b) and Brandi and Cordin (1989) accounting for the distribution of clitics in two Northern Italian Dialects (NIDs), while Deprez (1994) considers such clitics full subjects, much like French clitic subjects which are generally considered phonological clitics.

As noticed by Deprez (1994), Haitian Creole, unlike NIDs, allows XPs to intervene between the subject clitic and the verb, thus suggesting that ‘Haitian pronouns do not necessarily form a unit with the verbs or with the inflectional aspectual particles’ (Deprez 1994: 11).

- (11) a. *Jan/ li toujou ap travay fò*
 Jan/ he always PROG work hard
 ‘John/ he is always working hard’
- b. *Jan/ m pokò ap rakonte yon istwa*
 John/ I PROG not.yet tell a story
 ‘John/ I am not yet telling a story’

- c. *M fout rayi sa*
 I fucking hate this
 ‘I fucking hate this’ (Haitian Creole)

DeGraff has argued that, despite the data in (11), certain properties of clitics in the language still suggest that these clitics are heads after all. In particular, the relevant properties are that they cannot occur in isolation or be contrastively stressed and that they cannot head complex NPs, for example appositive relatives. However, as pointed out by Roberts (1999), all these properties only show that Haitian Creole subject pronouns are phonological clitics. In fact, Standard French clitics also share these properties. I therefore conclude, following Roberts, that Haitian Creole does not allow referential null subjects. I also extend the same conclusion to Cape Verdean Creole, for which Baptista (2001) proposed an analysis fully parallel to DeGraff’s.

4.2 Availability of *pro_{expl}*

All the languages in (9) allow for at least some instances of null expletives, with the likely exception of the Mesolectal Jamaican Creole variety described by Veenstra and den Besten (1995), which appears to be fairly close to standard English. The most common situation across these languages is that both null and overt expletives coexist, much as in Galician and Dominican Spanish, as discussed above. Cape Verdean Creole is the only language in (9) in which null expletives are attested in every context where they may surface and in which no overt expletives exist. This is an important fact on which I will briefly address below.

The languages in (9) display considerable variation with respect to the contexts in which a null or overt expletive is required and in the contexts where either one can be used. Thus, to advance any kind of generalization concerning the language-internal or cross-linguistic distribution of null vs. overt expletives is virtually impossible. Notice that it does not seem to be the case that the nature of the expletive (say, broadly speaking *there* vs. *it* type expletives) plays a role in the observed pattern of variation (at least not in a crosslinguistically consistent way).

Consider for example the following two contexts:

- *Extraposition Contexts*: In Haitian Creole, in extraposition contexts a null expletive is impossible and an overt expletive must therefore surface (12) (taken from Deprez (1994)), while the mirror image case is attested in Saramaccan (example from Byrne (1987: 75))¹²

- (12) **(Li) difisil pou pale ak Jan*
 It difficult for speak with Jan
 ‘It is difficult to speak with John’ (Haitian Creole)

- (13) *(*A) tuù tàa di wòmi gò disà déé fàmiì feen*
 It true that the man go leave the.PL family of him
 ‘It is true that the man left his family’ (Saramaccan)

- *Raising Contexts*: While Kouwenberg (1994) claims that Berbice Dutch Creole has no raising verbs, she also admits that some raising contexts are indeed attested, a fact she attributes to the influence of Guyanese English. Be that as it may, an overt expletive is still required in raising contexts in this language:

- (14) *Or lur kɛkɛ, hosen bif...*
 3SG look like, how=3PL say, ...
 ‘It looks like, how do they say (it)’ (Berbice Dutch Creole)

The mirror image case is attested in Papiamentu, where expletive subjects of raising verbs must be null (example from Kouwenberg (1990)):

- (15) *pro (tawata) parse ku Maria ta(wata) malo*
 (PAST) seem COMP Maria be(PAST) ill
 ‘It seems/seemed that Mary is/was ill’ (Papiamentu)

The intermediate case, namely *pro* alternating with an overt expletive, is also attested as exemplified in the following Jamaican Creole (examples from Durrleman (2004), Durrleman (2003)):

- (16) a. *(I) komiin kile seh di pickney a go run weh*
 (EXPL) seem like seh the child PROG PROSP run away
 ‘It seems like the child is going to run away’
 b. *(I) look like im nuh like yu*
 (EXPL) look like 3SG NEG like 2SG
 ‘It looks like s/he does not like you’ (Jamaican Creole)

As mentioned above, Cape Verdean Creole exhibits a partly different pattern: null expletives are mandatory. See Nicolis (2006) for an account of this property. According to Baptista (2001), Cape Verdean Creole has recently developed an inflectional affix (*-ba*) and has V-to-T movement as a consequence. These facts are considered preconditions for the generalized syntactic licensing of *pro_{expl}*, following Robert’s (1993) idea that Licensing is itself dependent upon V-to-T at least in languages where nominative is assigned under government by T.

4.3 No Free Inversion

All the languages in (9) lack genuine cases of Free Inversion, but some do allow postverbal subjects. However, these cases appear to be constrained in exactly the same way as postverbal subjects in non NSLs are: the verb must be unaccusative and the subject indefinite. Consider the examples from Cape Verdean Creole in (17) (adapted from Baptista (2001), Costa and Pratas (2003)) and the Haitian Creole examples in (18) (taken from Lumsden (1992: 273))

- (17) a. *Txiga tres pesoa*
Arrived three people
'Three people arrived'
- b. **Txiga Djon*
Arrived Djon
'John arrived'
- c. *Dja kai un abion*
TMA fell/crash a plane
'A plane crashed'
- d. **Dja kai abion di Lisboa*
TMA fell/crash plane of Lisbon
'The Lisbon plane crashed' (Cape Verdean Creole)
- (18) a. *(Li) rete / manke Jan yon liv*
(EXPL) remain / lack Jan a book
'A book remains to Jan / Jan is missing a book'
- b. **Li rete Jan liv la*
EXPL remain Jan book the
'The books stays to Jan'
- c. **Rete Jan liv la*
Remain Jan book the
'The book stays to Jan' (Haitian Creole)

4.3.1 An aside on null expletives and Free Inversion

Given the general availability of null expletives in Creole languages, it may come as a surprise that all of them appear to lack Free Inversion. Since Safir (1985), Free Inversion has been taken to involve a chain between a null expletive in the preverbal subject position and the postverbal subject. So, why is Free Inversion never available in Creoles? Nicolis (2005), following Belletti (2005), argues that the kind of *pro* in subject position in Free Inversion structures is not a pure expletive, but must be a featurally richer *pro*, possibly a referential *pro*. Belletti (2005) suggests that, much as in Strong Pronoun Doubling Structures, the free inverted subject and *pro* are generated as parts of a 'big DP' (see Cecchetto (2000) and Kayne, this volume): it follows that the features of the subject are inherited/copied on to *pro*; the two parts of the big DP will then split during the course of the derivation. In particular, the free inverted subject will occupy a low, VP-external focus position and *pro* will move all the way up to the EPP position. I would like to speculate that doubling configurations only occur in structures where a focal interpretation forces movement of an XP to a Focus projection, such as in Free Inversion and in the Strong Pronoun Doubling structure studied by Belletti. Therefore if the subject stays *in situ* (as in presentational contexts) the doubling configuration cannot occur. If I am right in claiming that the features of referential *pro* in these cases are copied from the doubler, then it follows that when no movement to a Focus projection is licit, only *pro_{expl}* can occur in the structure. Abstracting away from the precise technical implementation of this idea, it is worth pointing out that very straightforward

evidence from the diachronic development of Brazilian Portuguese suggests that referential *pro* might, in fact, be involved in Free Inversion structures.

The impoverishment of inflectional morphology has led to a progressive decrease in referential null subjects in the language (see Duarte (1996, 2000)). This change has co-occurred, by and large, with the loss of Free Inversion in the language (see de Andrade Berlinck (2000), Kato (2000)), which is a direct argument in favour of the necessity of referential *pro* in order for Free Inversion to occur, along the lines discussed above. However, Gilligan (1987: 145) reports five languages which he takes to show Free Inversion, despite the lack of referential *pro*. The five languages are Babungu, Duka, Yebamasa, Icelandic, and Tagalog. While I have no data on the first three languages, the claim that Icelandic displays Free Inversion is simply untenable. Subjects in this language cannot be freely inverted, but they are restricted by the well-known (in)definiteness condition. Moreover, Norvin Richards (p.c.) points out to me that testing the availability of Free Inversion in Tagalog is extremely problematic, given the VSO basic word order of the language.

4.4 No *that*-t effects

Creole languages clearly lack Free Inversion. Yet, they are still typically insensitive to *that*-t effects. Data comparable to the Cape Verdean Creole case in (19) (Baptista, p.c) are found for most of the languages in (9) (see below for detailed discussion of the Basilectal Jamaican Creole and Haitian Creole cases).

- (19) *Kenke ki bu pensa ma ben?*
 Who COMP you think COMP came?
 ‘Who do you think that came?’ (Cape Verdean Creole)

4.4.1 The No *that*-t effects \longrightarrow *pro*_{expl} correlation as a strategy of subject extraction

The table in (9) clearly shows that Rizzi’s (1982) proposal, namely that the lack of *that*-t effects is dependent upon Free Inversion, is empirically untenable. On the theoretical side, it must be pointed out that Rizzi’s analysis was elaborated in a model where subjects are generated in *SpecIP*. Therefore, a real asymmetry was apparent between languages that allow and those that do not allow Free Inversion: only in the first type of language could extraction take place from a position lower than *SpecIP*. Such a theoretical stance cannot be maintained under current assumptions in which subjects are universally generated vP-internally. In principle, English could then extract the subject directly from the vP-internal position and fill the EPP position with an overt expletive. This point does not, of course, imply that free-inverted subjects in NSLs occupy their base generation position. Several recent works (see Belletti (2005), Belletti (2002), Belletti (2001)) have shown that free-inverted subjects carry a new, information-focus interpretation, a property that can be structurally expressed if they occupy a VP-external, right-peripheral FocP position, whose existence has been independently argued for, see Cecchetto (2000), Cecchetto (1999)). Crucially, this op-

tion is either very marginal or totally impossible in non-NSLs, where null expletives are not available.¹³ I would like to propose that the availability of null expletives is a sufficient condition for the lack of *that*-t effects. As pointed out above, all the languages in (9) (with the exception of Mesolectal Jamaican Creole) do indeed have null expletives, consistent with the current proposal. An important validation of the proposed correlation comes from Basilectal Jamaican Creole. Durrleman (2003) shows that this language does allow for null expletives, though in root contexts only (where a null expletive alternates with an overt one, a familiar state of affairs in Creoles, as described above)

- (20) a. *Im tell me seh *(i) komiin laik di pickney a go run weh*
 3SG tell 1SG seh (EXPL) seem like the child PROG PROSP run away
 ‘S/he told me that it looked like the child is going to run away’
 b. *Im tell me seh *(i) look like im nuh like yu*
 3SG tell me seh (EXPL) look like 3SG NEG like 2SG
 ‘S/he told me that it looks like s/he does not like you’ (Jamaican Creole)

Given that a null expletive is unavailable in embedded contexts, we expect the language to be sensitive to *that*-t effects, since subject extraction across an overt expletive is, at best, a very marginal option. The prediction is borne out, as the subject object asymmetry in (21-b-c) shows:

- (21) a. *Mi wanda ef Jan tief di mango-dem*
 I wonder if Jan steal the mango-PL
 ‘I wonder if John stole the mangoes’
 b. *Hmm? A wa yu wonda ef Jan tiif?*
 Hm? A what 2SG wonder if John steal
 ‘Hm? What do you wonder if John stole?’
 c. **A huu yu wanda ef tiif di mango-dem?*
 A who 2SG wonder if steal the mango-PL
 ‘Who do you wonder if stole the mangoes?’ (Jamaican Creole)

I have claimed above that the correlation between *pro_{expl}* and No *that*-t effects is, in fact, a one-way *pro_{expl}* \longrightarrow No *that*-t effects relation. An anonymous reviewer correctly points out that this proposal is much weaker than Rizzi’s original proposal. I entirely agree. On the other hand, I do not think this immediately translates to being an overall weaker theory.

As I have anticipated above, the availability of *pro_{expl}* and the lack of *that*-t effects is the result of the application of one of the possible strategies that a language can adopt in order to grammatically extract subjects (in the sense of Rizzi and Shlonsky (2005)). What is absolute and non-violable, both in Rizzi’s theory from the 1980s and in current parametric models (including my proposal), is the locality principle regulating the extractability of subjects, be it the ECP or the Subject Criterion (see Rizzi (2004), Rizzi and Shlonsky (2005)). I am claiming (following the cited authors) that different languages can adopt different strategies to circumvent the general unextractability of subjects.

A strategy freely available and widely adopted by Null Subject Languages consists of satisfying the EPP (or the Subject Criterion) via a null expletive and extracting the subject across it from a lower position. However, nothing forces the adoption of such a strategy; hence the sufficient but non-necessary status of the correlation. Data from Hebrew reported by Rizzi and Shlonsky (2005) perfectly exemplify this state of affairs. Hebrew is an NSL and it clearly allows for extraction across overt complementizers. The example in (22) (taken from Rizzi and Shlonsky (2005: 7)) can be analyzed along the lines discussed above: a null expletive satisfies the EPP in the embedded preverbal subject positions and extraction can take place from a lower position:

- (22) *kaniti et ha-šulxan še xana amra še dalya ta'ana še ya'ale harbe*
 (I) bought acc the-table that Hanna said that Dalya claimed that will cost a lot
keseš
 of money
 'I bought the table that Hannah said that Dalya claimed that will cost a lot of
 money' (Hebrew)

However, (22) is not the only way in which a relative clause can be formed in Hebrew; restrictive relative clause formation can also involve the use of a resumptive pronoun. An interesting asymmetry emerges: while the resumptive pronoun can surface in any intermediate *SpecIP* in the case of object extraction (23), it can only surface in the most embedded one in cases of subject extraction (24). Rizzi and Shlonsky (2005) attribute the asymmetry to the Freezing Effect triggered by the application of the Subject Criterion:¹⁴ this principle affects subjects, but not objects, object position not being a Criterial position¹⁵).

- (23) *kaniti et ha-šulxan še {oto} xana amra še {oto} dalya ma'amina*
 (I) bought acc the-table that {him} Hannah said that {him} Dalya believes
še {oto} Kobi raca {oto}.
 that {him} Kobi wanted {him}
 'I bought the table that Hannah said that Dalya believes that Kobi wanted.' (Hebrew)
- (24) *kaniti et ha-šulxan še {*hu} xana amra še {*hu} dalya ta'ana*
 (I) bought Acc the-table that {he} Hannah said that {he} Dalya claimed
še {hu} ya'ale harbe keseš.
 that {he} will cost a lot money
 'I bought the table that Hannah said that Dalya claimed that (it) will cost a lot of
 money' (Hebrew)

So, while Hebrew certainly allows null expletives, it also clearly allows for the resumptive strategy in (23), (24), hence making apparent the sufficient but non-necessary status of the availability of null expletives for the suppression of *that*-t effects.

A well-known strategy adopted by French to avoid ECP/Subject Criterion effects is the so-called *que/qui* alternation. The *que/qui* alternation has been given various interpretations over the years. In Rizzi (1990), the alternation was directly linked to the ECP. French cannot

Going back to Creole languages, an interesting contrast between Haitian Creole and Mauritian Creole further shows that the availability of null expletives does not force the grammar of a language to adopt the skipping-strategy typical of *pro*-drop languages described above. Both Haitian Creole and Mauritian Creole clearly allow null expletives – see (25) for Mauritian Creole (data from Syea (1993: 92)) and (26) for Haitian Creole (data from Deprez (1994)):

- The data in (26) and (25-c) show that, in both languages, null non-referential subjects are available in embedded clauses, contrary to the Jamaican Creole case discussed above. There-

fore, both languages could, in principle, extract subjects from the base generated position, filling the embedded subject position with a null expletive. However, the two languages, both lexified by French, differ in this respect. Both languages have lexified the finite complementizer as *ki*, clearly homophonous to *qui* in Standard French. It is well known that in French, a non-NSL, the complementizer has a different form in cases of subject extraction and object extraction: *que* in cases of object extraction and *qui* in cases of subject extraction. Haitian Creole, despite the availability of null expletives, has retained the French extraction strategy. *Ki* in Haitian Creole appears to be an agreeing complementizer used only in cases of subject extraction (see (27) and the ungrammatical (28) where object extraction across *ki* is attempted; data from Deprez (1994)).¹⁷

- (27) a. *Kimoun ou kwè Mariz te wè a?*
 Who 2SG think Mariz PAST see
 ‘Who do you think Mariz saw?’
 b. *Kimoun ou kwè (ki) pati¹*
 Who 2SG think that left
 ‘Who do you think left?’ (Haitian Creole)
- (28) **Kimoun Jan kwè ki Mari te we?*
 Who Jan believe that Mari PAST see
 ‘Who does John believe that Mary saw?’ (Haitian Creole)

I take the data in (28) to indicate that Haitian Creole is sensitive to *that*-t effects the same way French is. *Ki* in Haitian Creole is an agreeing-complementizer much like French *qui*, as witnessed by the ungrammaticality of (28), and serves as a device allowing Haitian Creole to circumvent the effects of the ECP/Subject Criterion.

The pattern is different in Mauritian Creole. In this language the complementizer *ki* has lost its status as an agreeing-complementizer and has essentially evolved into a non-agreeing-complementizer, much like English *that*, as shown by the grammatical status of both subject (29-a) and object (29-b) extraction across *ki* (data from Syea (1993: 99)).

- (29) a. *Kinsela_i to pãse [ki [t_i ti fer sa]]?*
 Who you think that TNS do this
 ‘Who do you think did this?’
 b. *Ki_i to pãse [ki [Pyer ti fer t_i]]*
 What you thing that Peter TNS do
 ‘What do you think that Peter did?’ (Mauritian Creole)

Mauritian Creole has clearly adopted the ‘*pro-drop*’ subject extraction strategy: (29-a) is grammatical because the subject is extracted from the vP-internal position and the preverbal subject position is filled by a null expletive.

5 Conclusion

Recent criticism of parametric Theory (e.g. Newmeyer (2005)) has correctly pointed out some empirical inadequacies of the idea that certain correlations between the positive setting of the NSP and other apparently unrelated grammatical properties hold. However, the criticism appears too harsh and the proposed solution, essentially the demise of the parametric model in favour of a not very well-spelled-out alternative, is unduly pessimistic.

In this paper I have shown that the absolute nature of one NSP-related correlation, the $pro_{+ref} \longrightarrow pro_{expl}$ one, appears to still hold, despite some opposing claims in the literature. It is certainly possible that there are languages where overt and null expletives coexist (e.g. Finnish, Galician). However, no convincing case of a language entirely lacking null expletives while allowing referential null subjects has been described.

Furthermore, I have shown that certain empirical inadequacies of Rizzi's (1982) proposed correlations should not immediately be taken to show that the parametric model lacks ANY explanatory power. In this paper, I have tried to show that the enlargement of the empirical base of inquiry coupled with certain theoretical modifications of Rizzi's model, which follow directly from changes in syntactic theory over the last 25 years, can account for the lack of crosslinguistic support for certain correlations (for example that between Free Inversion and the lack of *that*-t effects). I have also tried to show that empirical investigation may provide support for some unexpected correlations – for example the one involving null expletives and the lack of *that*-t effects.

The analysis of a total of eight Creole languages suggests that the availability of null expletives is a sufficient condition for the lack of *that*-t effects. The lack of Free Inversion in these languages also suggests that Rizzi's original correlation between Free Inversion and the lack of *that*-t effects cannot be maintained.

Newmeyer (2005) noted that 'in three of the four correlations [for which crosslinguistic support is found] null non thematic subjects are entailed'. If the proposal offered in this paper is on the right track, one more such correlation should be added to the list. Newmeyer claims that correlations in which non-thematic null subjects are entailed are essentially always true, 'given the virtual nonexistence of languages that manifest overt non-thematic subjects'. This claim seems to me questionable. Mainland Scandinavian languages and English all seem to lack null expletives. Some cases of root sentences in which the non-thematic subject appears to be null may exist, but it is well-known that these case are better analyzed as not involving a null expletive but rather a different type of null category (a *null constant* in Rizzi (1994)). In embedded contexts, these languages entirely lack any kind of null subject.

The lack of empirical support for certain correlations does not immediately show that the underlying theoretical model should be dispensed with. Rather, it shows that things are more complex than initially assumed—a very standard state of affairs in scientific research. More specifically, while the proposed $pro_{expl} \longrightarrow$ No *that*-t effects is weaker than Rizzi's proposal in the 1980s, it appears to be more empirically adequate than its predecessor. Moreover, the core of the argument has remained unchanged: pro_{expl} is a way to satisfy the ECP (or the Subject Criterion), but it is clearly not the only one. More research within the parametric model is needed to understand precisely what the strategies of subject extraction are in

different languages (see Rizzi and Shlonsky (2005) for a very promising approach) and why one language ‘chooses’ one strategy over the other.

References

- Alexiadou, A. and Anagnostopoulou E. 1998. “Parametrizing Agr: Word Order, V-Movement and EPP checking”. *Natural Language and Linguistic Theory* 16:491–539.
- de Andrade Berlinck, R. 2000. Brazilian Portuguese VS order: a Diachronic Analysis. In *Brazilian Portuguese and the Null Subject Parameter*, in M. Kato and E. Negrão (eds.), 175–194. Madrid: Iberoamericana.
- Baker, M. 2001. *Atoms of Language*. London: Basic Books.
- Baptista, M. 2002. *The Syntax of Cape Verdean Creole. The Sotavento Varieties*, [volume 54 of *Linguistik Aktuell*]. Amsterdam: Benjamins.
- Belletti, A. 2001. “Inversion as Focalization”. In *Subject Inversion in Romance and the Theory of Universal Grammar*, A. Hulk and J.Y. Pollock (eds.), 60–90. Oxford: Oxford University Press.
- Belletti, A. 2002. “Aspects of the Low IP Area”. In *The Structure of IP and CP. The Cartography of Syntactic Structures, volume 2*, L. Rizzi (ed.), Oxford: Oxford University Press.
- Belletti, A. 2005. “Extended Doubling and the VP Periphery”. *Probus* 17:1–35.
- Brandi, L. and Cordin P. 1989. “Two Italian Dialects and the Null Subject Parameter”. In *The Null Subject Parameter*, O. Jaeggli and K. Safir (eds.), 111–142. Dordrecht: Kluwer.
- Byrne, F. 1987. *Grammatical Relations in a Radical Creole*. Amsterdam: Benjamins.
- Byrne, F. and Holm J. (eds.) 1993. *Atlantic Meets Pacific*. Amsterdam: Benjamins.
- Cecchetto, C. 1999. “A comparative analysis of left and right dislocation in Romance”. *Studia Linguistica* 53(1):40–67.
- Cecchetto, C. 2000. “Doubling structures and reconstruction”. *Probus* 12(1):93–126.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 1993. “A Minimalist Program for Linguistic Theory”. In *The view from Building 20*, S. Keyser and M. Hale (eds.), 1–52. Cambridge, Mass.: MIT Press.
- Costa, J. and Pratas, F. 2003. “Cape Verdean creole: some parametric values”. Ms., Universidade Nova de Lisboa.
- DeGraff, M. 1993. “Is Haitian Creole a *pro*-drop language?” In *Atlantic Meets Pacific* F.Byrne and J. Holm (eds.), 71–90. Amsterdam: Benjamins.
- Déprez, V. 1994. “Haitian Creole: a *pro*-drop language?” *Journal of Pidgin and Creole languages* 9(1):1–24.
- Duarte, M. 1996. “Do Pronome Nulo ao Pronome Pleno: a Trajetória do Sujeito no português do Brasil”. In *Potuguês Brasileiro. Uma viagem diacrônica*, I. Roberts and M. Kato (eds.), 107–125. Campinas: Editora da Universidade Estadual de Campinas.
- Duarte, M. 2000. “The Loss of the ‘Avoid Pronoun’ Principle in Brazilian Portuguese”. In *Brazilian Portuguese and the Null Subject Parameter*, M. Kato and E. Negrão (eds.), 17–36. Frankfurt: Vervuert.

- Durrleman, S. 2003. "That t in JC". Paper given at a seminar at the University of Geneva.
- Durrleman, S. 2004. "Topics, Focus & wh in Jamaican Creole". Paper given at the SPCL Conference, January 9th 2004.
- Gilligan, G. 1987. *A cross-linguistic approach to the pro-drop parameter*. Ph.D. Dissertation, University of Southern California.
- Haegeman, L. 1990. "Understood subjects in English diaries. On the relevance of theoretical syntax for the study of register variation". *Multilingua* 9(2): 157–199.
- Hinzlin, M. and Kaiser, G. 2006. "El pronombre 'ello' en el léxico del Español Dominicano". In *Lenguas en contacto y cambio lexico-gramatical en el Caribe*, W. Mihatsch and M. Sokol (eds.), Duisburg: Peter Lang.
- Holmberg, A. 2005. "Is There a Little Pro? Evidence from Finnish". *Linguistic Inquiry* 36:533–564.
- Holmberg, A. and Nikanne, U. 2002. "Expletives, Subjects and Topics in Finnish". In *Subjects, Expletives and the EPP*, P. Svenonius (ed.), 71–105. Oxford: Oxford University Press.
- Jaeggli, O. and Safir, K. (eds.) 1989. *The Null Subject Parameter*. Dordrecht: Kluwer.
- Kaiser, G. 2004. "(Apparent) Subject Expletive Pronouns in Romance: Variation and historical development". Paper presented at DIGS VIII, Yale University.
- Kato, M. 2000. "The Partial Pro-Drop Nature and the Restricted VS Order in Brazilian Portuguese". In *Brazilian Portuguese and the Null Subject Parameter*, M. Kato and E. Negrão (eds.), 223–258, Frankfurt: Vervuert.
- Kato, M. and Negrão, E. eds. 2000. *Brazilian Portuguese and the Null Subject Parameter*. Frankfurt: Vervuert.
- Kayne, R., this volume. "Expletives, datives, and the tension between morphology and syntax".
- Kouwenberg, S. 1990. "Complementizer *pa*, the finiteness of its complements, and some remarks on empty categories in Papiamentu". *Journal of Pidgin and Creole languages* 5:1:39–51.
- Kouwenberg, S. 1994. *A grammar of Berbice Dutch Creole*. Berlin: Mouton de Gruyter.
- Lumsden, J. 1992. "Expletives in double object constructions in Haitian Creole". In *Focus and grammatical relations in Creole languages*, B. Francis and D. Winford (eds.), 189–212. Amsterdam: Benjamins.
- Neeleman, A. and Szendrői, K., this volume. "Case morphology and radical *pro*-drop".
- Newmeyer, F. 1998. *Language form and language function*. Cambridge, Mass.: MIT Press.
- Newmeyer, F. 2005. "Against a Parameter-setting approach to language variation". *Linguistic Variation Yearbook* 4:181–234.
- Newmeyer, F. 2006. "A rejoinder to 'On the role of parameters in Universal Grammar: a reply to Newmeyer' " by Ian Roberts and Anders Holmberg. Ms. University of Washington.
- Nicolis, M. 2005. *On pro-drop*. Ph.D. Dissertation, Università degli Studi di Siena.
- Nicolis, M. 2006. On 'zero-morphology'. Ms. University of Siena/Queen's University.
- Raposo, E. and Uriagereka, J. 1990. "Long-distance Case Assignment". *Linguistic Inquiry* 21:505–537.

- Rizzi, L. 1986a. "Null objects in Italian and the theory of *pro*". *Linguistic Inquiry* 17:501–557.
- Rizzi, L. 1986b. "On the status of subject clitics in Romance". In *Studies in Romance linguistics*, Osvaldo Jaeggli and Carmen Silva-Corvalan (eds.), 391–419. Foris.
- Rizzi, L. 1990. *Relativized minimality*. Cambridge, Mass.: MIT Press.
- Rizzi, L. 1994. "Some notes on linguistic theory and language development: the case of root infinitives". *Language Acquisition* 3:371–393.
- Rizzi, L. 2004. "On the study of the language faculty: results, developments and perspectives". *Linguistic Review* 21(3–4): 323–344.
- Rizzi, L. 2006. "On the Form of Chains: Criterial Positions and ECP Effects". In *Wh-Movement: Moving On*, L. Cheng and N. Corver (eds.). Cambridge, Mass.: MIT Press.
- Rizzi, L. and Shlonsky, U. 2005. *Strategies of Subject Inversion*. Ms. University of Siena/University of Geneva.
- Roberts, I. 1993. *Verbs and diachronic syntax: a comparative history of English and French*. Dordrecht: Kluwer.
- Roberts, I. 1999. "Verb movement and markedness". In *Language creation and language change*, M. DeGraff (ed.), 287–327. Cambridge, Mass.: MIT Press.
- Roberts, I. and Holmberg, A. 2005. "On the role of parameters in Universal Grammar: a reply to Newmeyer". In *Organizing Grammar: Linguistic Studies in honor of Henk van Riemsdijk*, H. Broekhuis, N. Corver, R. Huybregts, U. Kleinhenz, and J. Koster (eds.), 538–553. Mouton de Gruyter.
- Safir, K. 1985. *Syntactic chains*. Cambridge: Cambridge University Press.
- Svenonius, P. (ed.) 2002. *Subjects, Expletives and the EPP*. Oxford: Oxford University Press.
- Silva-Villar, L. Subject positions and the roles of CP. In Schwegler, A., B. Tranel and M. Uribe-Etxebarria (eds.): *Romance linguistics. Theoretical perspectives. Selected papers from the 27th Linguistic Symposium on Romance Languages (LSRL XXVII)*, Irvine 20–22 February 1997. 247–270. Amsterdam: Benjamins.
- Syea, A. 1993. "Null subjects in Mauritian Creole and the *pro*-drop parameter". In *Atlantic Meets Pacific*, Byrne and Holm (eds.), 91–102. Amsterdam: Benjamins.
- Taraldsen, T. 2002. "The *Que/Qui* Alternation and the Distribution of Expletives". In *Subjects, Expletives and the EPP*, P. Svenonius (ed.). Oxford: Oxford University Press.
- Tomioka, S. 2003. "The semantics of Japanese null pronouns and its cross-linguistic implications". In *The Interfaces. Deriving and interpreting omitted structures*, K. Schwabe and S. Winkler (eds.). 321–339. Amsterdam: Benjamins.
- Toribio, A.J. 1993. *Parametric variation in the licensing of nominals*. Ph.D. Dissertation, Cornell University.
- Veenstra, T. and den Besten, H. 1995. "Fronting". In *Pidgins and Creoles. An introduction*, J. Arends, P. Muysken, and N. Smith (eds.), 303–315. Amsterdam: Benjamins.

Notes

¹In random order: two anonymous reviewers, Adriana Belletti, Valetina Bianchi and everyone at CISCL, Ian Roberts, Anders Holmberg, Theresa Biberauer, Yves Roberge, Diane Massam, Alana Johns, Marlyse Baptista, Sandhya Chari, Chiara Frigeni, Chianti Classico, Charlotte Reinholtz, Mireille Trambly, Monique Dufresne, Anne Graham, Yitay Yüксеker – thank you! Luigi Rizzi – special thank you! Usual disclaimers apply.

²Abbreviations: COMP: complementizer, EXPL: expletive, FUT: future tense, HAB: habitual, MOD: modal, NEG: negation, PAST: past tense, PF: predication focus, PL: plural, POSS: possessive, PROG: progressive, PROSP: prospective, PURP: purpose, SG: singular, TMA: tense/mood/aspect marker, TNS: tense.

³‘*that-t*’ in the table is a shortcut for lack of *that-t* effects

⁴The actual formulation of any given parameter is a far from trivial task and changes in syntactic theory make frequent refinements necessary. It seems plausible, however, to associate parameter setting with properties of functional heads, as first proposed by Chomsky (1993); see also Roberts and Holmberg (2005) for a refinement of the idea

⁵I would to thank two anonymous reviewer for their illuminating comments on this issue

⁶This traditional view might be too simplistic. The possibility of formally licensing *pro* seems correlated in many languages with the availability of V-to-T movement, which is itself dependent upon the morphological richness of the inflectional paradigm of that language. See Roberts (1993) and Nicolis (2005) for an idea along these lines. This point is inessential for the ideas defended in the main text.

⁷A long-standing issue is the status of East Asian languages in this respect, which appear to allow for referential *pro* even in absence of any inflectional morphology. However, even a cursory look at the properties of ‘*pro-drop*’ in these languages reveals a situation remarkably different from what is observed in connection with the NSP. For example, while null subject languages essentially just allow for null subjects and some instances of impersonal null objects, East Asian languages allow for a much higher degree of null objects, null PPs etc. . While several different solutions have been proposed to account for the phenomenon in these languages, there currently appears to be widespread agreement in the literature in treating this phenomenon as very different from the NSP (see for example Tomioka (2003), Neeleman and Szendrői, this volume), for the idea that certain properties of the nominal and pronominal system clearly distinguish Null Subject Languages like Italian from ‘radical *pro-drop*’ languages like East Asian languages). Two different parameters are therefore active in the two classes of languages

⁸Finnish third-person subjects can only be dropped under rather unclear discourse con-

ditions – see Holmberg (2005)

⁹FP in Holmberg and Nikkane (2002) is the highest projection of the IP field

¹⁰See Hinzelin and Kaiser (2006) for a numerical breakdown of the various constructions in which this expletive pronoun is used. Interestingly ‘*ello*’ can also surface in unaccusative contexts (30), even if ‘very rarely’, an observation attributed to Toribio (1993).

- (30) *Ello* *llegó Juan*
 There left Juan
 ‘Juan left’

¹¹The ‘?’ in the table indicate cases for which clear data were not fully available; in the cases of Mauritian Creole and Saramaccan, I have taken the lack of any discussion of Free Inversion in all my sources as a sign of the lack of this feature in the language.

¹²Notice that the Saramaccan facts cast some doubt on the often assumed referential nature of the null expletive in extraposition contexts, given the general lack of referential *pro* in the language (see section 4.3.1 for discussion)

¹³In English, this strategy seems to be confined to structures in which the verb *to be* is used; if any other verb is used (including other Unaccusatives, as in (31-b)), the result is ungrammatical.

- (31) a. Who do you think that there is *t* in the box?
 b. *Who do you think that there came *t*?

¹⁴Rizzi (2006) and Rizzi and Shlonsky (2005) subsume classical ECP-related subject-object asymmetries under two distinct principles, Criterial Freezing, which states that a phrase satisfying a criterion (for example the Wh- Criterion) is frozen in place, and the Subject Criterion, which stipulates the criterial nature of the preverbal subject position. I refer the reader to Rizzi and Shlonsky (2005) for the implementation of the idea. Nothing in this paper hinges directly on this specific proposal. The point shown by the Hebrew sentences in the main text can also be made in an ECP framework.

¹⁵See Rizzi and Shlonsky (2005) for thorough discussion of these cases.

¹⁶An anonymous reviewer points out that French might make use a null expletive in Stylistic Inversion structures. Still, even if that is the case, the distribution of null expletives in the language is far more restricted than in *bona fide* NSLs or in Creole languages.

¹⁷There appears to be some disagreement in the literature over the extraction data. A certain degree of variability is expected in Creole languages, where the coexistence of several

varieties in the Creole continuum raises all sorts of interesting sociolinguistic questions. The data reported are certainly reliable in the variety studied by Deprez (1994).