

SESSION I: NULL-SUBJECT PHENOMENA AND THE NULL SUBJECT PARAMETER

1. BACKGROUND

1.1. What are Null Subjects?

- (1) a. *Parla italiano* [Italian]  
speaks Italian = “(S)he speaks Italian”
- b. *Habla español* [Spanish]  
speaks Spanish = “(S)he speaks Spanish”
- c. *Mila ellinika* [Greek]  
speaks Greek = “(S)he speaks Greek”
- d. *Am început să citesc Cei trei mușchetari* [Rumanian]  
have-1SG started să read the three musketeers  
“I have started to read *The Three Musketeers*”
- e. *Fillova të lexoj Tre Muskëtjerët* [Albanian]  
started-1SG të read three musketeers.the  
“I have started to read *The Three Musketeers*”
- f. *Nie rozumiem* [Polish]  
not understand-1SG = “I don’t understand”
- g. *Šte uspee* [Bulgarian]  
AUX-3SG succeed-3SG = “He will succeed”
- h. *Lai- le* [Chinese]  
come-PERF = “I/you(s/pl)/(s)he/it/we/they came”
- i. *Shira-na- i* [Japanese]  
know-NEG-PAST = “I don’t know”
- j. *Lamad- ti albanit* [Hebrew]  
study.PAST-1SG Albanian = “I studied Albanian”
- (2) a. *Gianni ha detto che parla italiano* [Italian]  
Gianni<sub>i</sub> has said that speaks Italian  
“Gianni said that he (i.e. Gianni) speaks Italian”
- b. *Zhangsan shuo bu renshi Lisi* [Chinese]  
Zhangsan say not know Lisi  
“Zhangsan said that he (himself or another male) did not know Lisi”
- c. *Tanaka-san wa [kaisya de itiban da to] itte- iru* [Japanese]  
Tanaka-Mr TOP company in best is that saying-is  
“Mr Tanaka is saying that he (himself or another male) is the best in the company”

→ **referential** null subjects

- (3) a. *Parece que Juan está enfermo*  
[Spanish]  
seems that Juan is sick  
“It seems that Juan is sick”
- b. *Existen varias soluciones*  
exist various solutions  
“There exist various solutions/Various solutions exist”
- c. *Mistaber se- ‘Avihu ‘ohav bananot*  
[Hebrew]  
turns-out that-Avihu loves bananas = “It emerges that Avihu loves bananas”
- d. *Er sagte, dass ihm scheint, dass Hans den Hund*  
[German]

he-NOM said that him-DAT seemed that Hans the-ACC dog

*getötet hat*

killed had

“He said that it seemed to him that Hans had killed the dog”

e. *Gestern wurde getanzt*

yesterday became danced

“Yesterday there was dancing”

f. *Es ist möglich, dass getanzt wurde*

it is possible that danced became

“It is possible that there was dancing”

g. *Nú er augljóst að Jón hefur barið Mariu* [Icelandic]

now is obvious that Jon has beaten Maria

“Now it is obvious that Jon has beaten Maria”

h. *Í gær hefur komið strákur*

yesterday has come boy

“Yesterday there came a boy”

(4) a. *Piove* [Italian]

rains = “It is raining”

b. *È presto*

is early = “It is early”

c. *Í gær rigndi* [Icelandic]

yesterday rained = “Yesterday it rained”

d. *Prší/Svívalo*

[Czech]

rains.PRES/dawn.PAST = “It is raining/It dawned”

e. *Temneet*

[Russian]

darken.PRES = “It is getting dark”

→ **non-referential/explicative** null subjects

## 1.2. Why postulate Null Subjects?

A. Theoretical considerations:

- **Projection Principle (PP):** Lexical information must be syntactically represented (Chomsky 1981, 1982)
- **Extended Projection Principle/EPP (original formulation)** (Chomsky 1982:10): Every clause must have a subject occupying the privileged subject position that features in all clauses, i.e. Spec-IP/TP

Compare English and Italian:

English:

(5) a. *John speaks English*

b. *\*speaks English*

(6) a. *John said that he speaks English*

b. *\*John said that speaks English*

(7) a. *It is raining*

b. *\* is raining*

(8) a. *There are a bunch of students stealing the port-labels off the decanters*

b. *A bunch of students are stealing the port-labels off the decanters*

c. *\*are a bunch of students stealing the port-labels off the decanters*

Italian:

(9) a. *Gianni parla italiano*

Gianni speaks Italian = “Gianni speaks Italian”

- b. *Parla italiano Gianni*  
speaks Italian Gianni = “Gianni speaks Italian”
- c. *Parla italiano*  
speaks Italian = “(S)he speaks Italian”
- d. *LEI parla italiano*  
she speaks Italian = “SHE (focus) speaks Italian”
- (10) a. *Gianni ha detto che LUI/lui parla italiano*  
Gianni<sub>i</sub> has said that he<sub>i,j</sub> speaks Italian  
“Gianni has said that HE (Gianni himself)/he (i.e. another male) speaks Italian”
- b. *Gianni ha detto che parla italiano*  
Gianni has said that speaks Italian  
“John said that he (i.e. Gianni himself) speaks Italian”
- (11) a. *\*Ciò piove*  
this rains
- b. *Piove*  
rains = “It is raining”
- (12) a. *Sono arrivati alcuni ospiti*  
are arrived-<sub>3PL</sub> some guests = “There arrived some guests”  
(presentational)
- b. *Alcuni ospiti sono arrivati*  
some guests are-<sub>PL</sub> arrived-<sub>3PL</sub>  
“Some guests arrived” (non-presentational/contrastively focused declarative)

- **Binding Theory:** Binding Principle A: Anaphors must be bound in their governing category

- (13) a. *John/he always talks about himself/\*herself/\*itself/\*themselves, etc.*  
b. *\*always talks about himself/herself/itself/themselves, etc.*  
c. *\*Himself/Herself left*  
d. *John said that Mary/she always talks about herself/\*himself/\*itself, etc.*

- (14) a. *Juan/él siempre habla de si mismo* [Spanish]  
Juan/he always talks about himself = “Juan/he always talks about himself”
- b. *Siempre habla de si mismo*  
always talks about himself = “He always talks about himself”
- c. *\*Si mismo siempre habla*  
himself always talks
- d. *Juan/ él dijo que Maria siempre habla de \*si mismo/si misma*  
Juan/ he said that Maria always talks about himself/ herself  
“Juan said that Maria always talks about herself”

NB: *Si* is gender-neutral and can in principle mean either “he” or “she”. *Mismo/-a* = an emphatic particle which does, however, signal gender.

NB: There are languages which have so-called **long-distance reflexives** which do permit more distant antecedent, but English and Spanish do not have reflexives of this type (cf. Pica 1987 and Cole, Hermon & Huang 2005 for discussion)

#### B. Empirical considerations

- Parallelism in **distribution** of null subjects in languages permitting them and pronouns in non-null-subject languages (see (1-14) above)

- Parallelisms in **interpretation**

- (15) a. *The professor spoke after he arrived* (ambiguous)  
 b. *Mary laughed after she saw John* (ambiguous)
- (16) a. *Il professore ha parlato dopo che è arrivato* [Italian]  
 the professor has spoken after that is arrived  
 “The professor spoke after he (i.e. the professor) arrived”  
 b. *Il professore ha parlato dopo che lui è arrivato*  
 the professor has spoken after that he is arrived  
 “The professor spoke after he (i.e. another man) arrived”
- (17) a. *I Maria jelase afou idhe ton Yianni* [Greek]  
 the Maria laughed after saw the Yiannis  
 “Maria laughed after she (i.e. Maria) saw Yiannis”  
 b. *I Maria jelase afou afti idhe ton Yianni*  
 the Maria laughed after she saw the Yiannis  
 “Maria laughed after she (i.e. another woman) saw Yiannis”

And cf. also the examples in (10) above.

Thus: Null-subject languages (NSLs) lack an ambiguity present in non-NSLs.

And more generally: NSLs and non-NSLs appear to differ systematically i.r.o. pronoun interpretation.

- (18) Interim list of NSLs vs non-NSLs:  
 a. Non-NSLs: English, French, Swedish, Norwegian, Danish, Afrikaans  
 b. NSLs: Italian, Spanish, Portuguese, Greek, Rumanian, German, Icelandic, Russian, Polish, Czech, Slovak(ian), Serbian, Croatian, Chinese, Japanese, Korean, Arabic, Hebrew, Hindi, ...

## 2. MOTIVATION FOR A PARAMETER? CLUSTERING OF PROPERTIES

- (19) “If parameters are options incorporated in the formulation of Universal Grammar (UG), then fixing a value **v** for parameter **P** on the basis of limited evidence available about construction **C**<sub>1</sub> will result in knowledge about a range of constructions **C**<sub>n...m</sub> that does not arise as a result of experience of **C**<sub>n...m</sub>.” (Jaeggli & Safir 1989: 8)  
 → a range of unrelated phenomena appear to correlate with the possibility of having null subjects (cf. Perlmutter 1971, Rizzi 1982, 1983, Jaeggli & Safir 1989, Roberts 2007)

### NSP-related properties

- A. The possibility of a null (silent) referential/definite subject in finite clauses
- B. Free Subject Inversion
- (20) a. *Ha telefonato delle ragazze* [Italian]  
 have telephoned some girls = “Some girls phoned” (cf. also (9b) above)  
 b. *Ektise i Maria to spiti* [Greek]  
 built the Maria the house = “Mary built the house”  
 c. *Todos los días compra Juan el diario* [Spanish]  
 all the days buys Juan the newspaper  
 “Everyday Juan buys the newspaper”  
 d. *Telefonou o João* [European Portuguese]  
 telephoned the João = “João called”

### C. Lack of *That*-Trace Effects

- (21) a. *What<sub>i</sub> did you say t<sub>i</sub> (that) John ate t<sub>i</sub>?*  
 b. *Who<sub>i</sub> did you say t<sub>i</sub> ate the sandwich?*  
 c. *\*Who<sub>i</sub> did you say t<sub>i</sub> **that** t<sub>i</sub> ate the sandwich?*
- (22) a. *Chi hai detto che ha scritto questo libro?* [Italian]  
 who have-<sub>2SG</sub> said that has written this book  
 “Who did you say wrote this book?”  
 b. *Pjos ipes oti egrapse afto to vivlio?* [Greek]  
 who said-<sub>2SG</sub> that wrote this the book  
 “Who did you say wrote this book?”  
 c. *Quién dices que compró un ordenador?* [Spanish]  
 who say-<sub>2SG</sub> that bought a computer  
 “Who do you say bought a computer?”

D. The availability of null expletives/The non-availability of overt expletives

- (23) a. *(El) dijo que le parece que Juan mató al perro* [Spanish]  
 (he) said-<sub>3S</sub> that to-him seems that Juan killed the dog  
 “He said that it seems to him that Juan killed the dog”  
 b. *Eftase ena pedi/o Jorgos/kathe filas mu* [Greek]  
 arrived a child/the Jorgos/every friend of mine  
 “A child/Jorgos/every friend of mine arrived”  
 Cf. also the examples in (3-4) above.

E. “Rich” agreement

- NSLs must have “rich” agreement
- Contrast non-NSLs English, French, Swedish and Afrikaans with Italian, Spanish, Greek, etc.
- Contrast European and Brazilian Portuguese (cf. Kato & Negrão 2000):

- (24) a. *me custou sai de casa* [European Portuguese]  
 me cost-<sub>3PS</sub> leave from house  
 “It took me a long time to leave the house”/“I took a long time to leave the house”  
 b. *parece que os homens gostaram da cidade*  
 seems that the men enjoyed-<sub>3PPL</sub> the city  
 “It seems that the men enjoyed the city”  
 c. *há/tem muita violência na cidade*  
 is/has much violence downtown  
 “There is a lot of violence downtown”
- (25) a. ***Eu** custei a sair de casa* [Brazilian Portuguese]  
 I cost to leave from house  
 “I took a long time to leave the house”  
 b. *Os homens parecem que (**eles**) gostaram da cidade*  
 the men seem-<sub>3PPL</sub> that (they) enjoyed the city  
 “The men seem to have have enjoyed the city”  
 c. ***Você** tem muita violência na cidade*  
 you have much violence downtown  
 “You have a lot of violence downtown”

- Contrast conjugations of *falar* – “to speak”:

- (26) European and former Brazilian Portuguese Brazilian Portuguese  
*(eu)falo* *(nos) falamos* *eu falo* *a gente fala*

<i>(tu) falas</i>	<i>(vos) falais</i>	<i>você fala</i>	<i>vos falais</i>
<i>(ele/ela) fala</i>	<i>(eles) falam</i>	<i>ele/ela fala</i>	<i>eles falam</i>

NB: both the verbal and pronominal systems have undergone change

- Cf. also Old French vs Modern French (Vance 1993); the Old vs Modern Swedish (Falk 193), etc.
- Languages in which null subjects are only possible with some verb forms, e.g. Hebrew (cf. Borer 1983) and Irish (cf. McCloskey & Hale 1984): referential null subjects are possible in some persons and numbers (1<sup>st</sup> and 2<sup>nd</sup>), but impossible in others (3<sup>rd</sup>)
- Japanese, Chinese, Korean, etc. have always been a clear exception to this, though ...

F. Obligatory overt realisation of arbitrary subject pronouns as clitics

- (27) a. *Si mangiano gli spaghetti* [Italian]  
 ARB eat-3PL the spaghetti = “People eat spaghetti”  
 b. *Se comen los espaguétis* [Spanish]  
 ARB eat-3PL the spaghetti = “People eat spaghetti”

G. Clitic climbing (cf. Kayne 1989)

- (28) a. *Li voglio mangiare* [Italian]  
 them want-1SG eat-INFIN = “I want to eat them”  
 b. *Los quiero comer* [Spanish]  
 them want-1SG eat-INFIN = “I want to eat them”

H. Infinitive-clitic order

- (29) a. *Mangiarli sarebbe un piacere* [Italian]  
 eat-INFIN.them be-SUBJ a pleasure = “To eat them would be a pleasure”  
 b. *Comerlos sería un plazer* [Spanish]  
 eat-INFIN.them be-SUBJ a pleasure = “To eat them would be a pleasure”

Question: How can a parameter be formulated so that it “connects” all these properties?

### 3. INTRODUCING THE NULL SUBJECT PARAMETER (NSP)

#### 3.1. Rizzi’s *pro* Theory

Rizzi (1982, 1986): *Pro* Theory (“small *pro*”): NSLs feature a lexical element, *pro*, that is absent in non-NSLs – cf. Chomsky’s Avoid Pronoun Principle

- 2 conditions on the occurrence of *pro*:
  - The **Licensing Condition**: *pro* must be formally licensed (i.e. the appropriate structural requirements must be met for *pro* to occur)
  - The **Recoverability Condition**: the content of *pro* must be recoverable from the phonetically realised environment.

• Licensing:

- (30) **Licensing Principle for *pro***: *pro* is governed by  $X_y^0$  (Rizzi 1986: 519)  
 i.e. *pro* is licensed by a governing head of type *y*, where the class of licensing heads can vary from language to language.  
 e.g. Italian: I, V<sup>1</sup> (i.e. both subjects and objects can be dropped)

<sup>1</sup> Rizzi (1986) argues that dropped objects in Italian are fundamentally different from dropped objects in English. Roughly, the idea is that Italian null objects are syntactically represented, whereas English null objects are not. So English *This leads \_\_\_ to the following conclusion* is not the same as *Questo conduce \_\_\_ alla seguente conclusione*. So V in Italian is said to license a null object (*pro* which is always assigned the interpretation of an arbitrary pronoun), while English V can’t do this; English null objects are lexically created. French behaves like Italian in this regard, even though it is like English in not permitting null subjects.

French: V, P<sup>2</sup> (i.e. only objects can be dropped)

English: / (i.e. no arguments can be dropped)

[**government:**  $\alpha$  governs  $\beta$  iff:

- (i)  $\alpha$  is a governor (e.g. V, P, A, N, I, i.e. a head), and
- (ii)  $\alpha$  c-commands  $\beta$ .

**c(onstituent)-command:**  $\alpha$  c-commands  $\beta$  iff:

- (i)  $\alpha$  does not dominate  $\beta$  and vice versa, and
- (ii) every branching node that dominates  $\alpha$  dominates  $\beta$ .

**Empty Category Principle (ECP):** Every empty category must be **properly governed**.

**Proper Government** (Chomsky 1981 version):  $\alpha$  properly governs  $\beta$  iff:

- (i)  $\alpha$  governs  $\beta$  (i.e.  $\alpha$  must be a head) **and**
- (ii)  $\alpha$  is a lexical category (V, P) **or**
- (iii)  $\alpha$  is coindexed with  $\beta$ .

So V will always properly govern its object, but I will only properly govern the subject where I and the subject are co-indexed, i.e. have the same “referential” features]

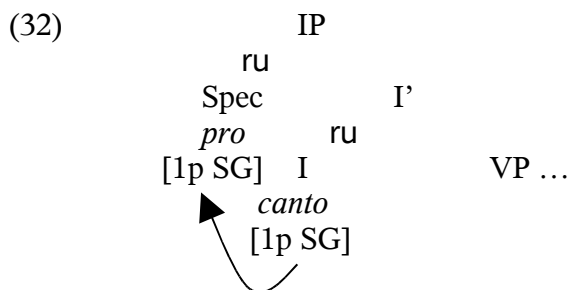
• Recoverability:

(31) **Recoverability Principle for *pro*:** Let X be the licensing head of an occurrence of *pro*: then *pro* has the grammatical specification of the features on X co-indexed with it (Rizzi 1986: 520)

i.e. *pro* isn't assumed to have specified featural content; this needs to be “filled in” on the basis of material present on the head governing *pro*

• For subjects, the content of *pro* is recovered via rich agreement specification, i.e. binding from  $\phi$ -features present on a local head (I).

→ Expectation: NSLs will be those that exhibit sufficiently “rich” agreement to “fill in” *pro*'s  $\phi$ -feature specification.



### 3.2. Rizzi's *pro* Theory and the null-subject facts

• NSLs are those which have an I that licenses *pro*

(33) The Null Subject Parameter (cf. Rizzi 1982: 143)

- (a) I can be specified [+pronoun]
- (b) I can be referential, i.e. [+pronoun, F<sub>i</sub> ... F<sub>n</sub>] where F<sub>i</sub>, etc. are  $\phi$ -features
- (c) The lexicon contains an unspecified null pronominal, *pro*

<sup>2</sup> Multisyllabic prepositions permit *pro*-drop, but monosyllabic ones don't (cf. Zribi-Hertz 1984, who proposes that monosyllabic Ps in French as clitics which therefore require an overtly realised host).

- Expectation: a typology of NSLs (cf. Rizzi 1986)

(34)

[+pronoun]	[+φ]
+	+
+	-
-	-
*+	-

Accounting for the cluster of properties in section 2:

A. Referential null subjects

- EPP-violations are only apparent: the EPP is **covertly** satisfied by the presence of *pro*

B. Free Subject Inversion

- Rightward movement of the subject is possible because *pro* is available for subsequent insertion in Spec-IP (the external argument position):

(35) *ha telefonato Gianni* – “has telephoned Gianni”

DS: [<sub>IP</sub> Gianni I [<sub>VP</sub> ha telefonato ...

FI/SS: [<sub>IP</sub> pro<sub>i</sub> I [<sub>VP</sub> ha telefonato ...] Gianni<sub>i</sub> ...

- (36) a. *Hanno telefonato delle ragazze* [Standard Italian]  
 have-3PL telephoned some girls = “Some girls have called”  
 b. *Sono venute delle ragazze*  
 are-3PL come-FEM.PL some girls = “Some have come”

- (37) a. *Gli ha telefonato delle ragazze* [Florentine Italian]  
 SCL has telephoned some girls = “Some girls have called”  
 b. *Gli è venuto delle ragazze*  
 SCL is come-MSG some girls = “Some girls have come”

where, usually, we see:

- (38) a. *Mario \*(e) parla*  
 Mario SCL-3MSG speaks = “Mario speaks”  
 b. *\*(E) parla*  
 SCL-3MSG speaks = “He speaks”  
 c. *Maria \*(la) parla*  
 Maria SCL-3FEMSG speaks = “Maria speaks”  
 d. *\*(La) parla*  
 SCL-3FEMSG speaks = “She speaks” (cf. Brandi & Cordin 1989)

[Cf. also: Arabic (Aoun, Benmamoun & Sportiche 1994):

- (i) a. *Naama al- awlaad-u*  
 slept-3SG the children-NOM  
 “The children slept”  
 b. *al- awlaad-u naamuu*  
 the children-NOM slept-PL  
 “The children slept”

And other VSO languages ...]

- Why can't Free Inversion take place in non-NSLs? *Pro* isn't licensed

C. Lack of *that*-trace effects

- The availability of *pro* as a means of satisfying the EPP means subjects can be extracted from a lower position – they don't have to pass through Spec-IP

(39) *Chi hai ditto che ha telefonato?* = “Who have-2SG said that has telephoned?”

DS: [IP *pro* hai detto [CP *che* [IP *chi* I [VP *ha telefonato* ...

FI: [IP *pro* hai detto [CP *che* [IP *pro*<sub>i</sub> I [VP [VP *ha telefonato*] *chi*<sub>i</sub>

*Wh*-MOVT/SS: [CP *chi*<sub>i</sub> *hai detto* [CP *t*<sub>chi</sub> *che* [IP *pro*<sub>i</sub> I [VP [VP *ha telefonato*] *t*<sub>chi</sub>

**Thus:** Free Inversion feeds the obviation of *that*-trace effects, i.e. we have an **implicational relation** between Free Inversion and *that*-trace obviation.

[Manzini & Savoia (1998) propose that the French *que/qui* alternation also points to the presence of an expletive in Spec-IP wherever *wh*-subjects are extracted across an overt complementiser.

- (i) a. \**Qui as- tu dit qu' \_\_ a écrit ce livre?*  
 who have-you said that \_\_ has written this book  
 b. *Qui as- tu dit qui a écrit ce livre?*  
 who have-you said that+*i* has written this book  
 “Who did you say has written this books?”

where *qui* = *que* + *il* (the expletive required in *Il arrive quatre filles* – “It arrive-3SG four girls”, i.e. “There arrived four girls”)

Taraldsen (2002) proposes that *qui* is actually *que+i*, where *i* differs from *il* in not being able to control agreement; it's an extremely impoverished clitic – cf. *gli* above.]

- The key here: the availability of *pro* allows NSLs to extract subjects from a lower subject position (Spec-vP, etc; cf. Rizzi 1982 for the original discussion [short version in Appendix] and Rizzi & Shlonsky 2005 for a general perspective on subject extraction)
- Why doesn't English license *wh*-subject extraction? Subjects must move to Spec-IP to satisfy the EPP, and from there, they can't be extracted (cf. Chomsky 2005 for recent (Probe-Goal-style minimalist) speculations as to why this might be)

#### D. Availability of null expletives

- Once again, the availability of *pro* means that Spec-IP isn't actually empty in contexts in which non-NSLs would require an overt expletive

(40) *dijo que le parece que Juan mató al perro* [Spanish]  
 said-3S that to-him seems that Juan killed the dog  
 “He said that it seems to him that Juan killed the dog”

[IP *pro* *dijo* [CP *que* [IP *pro* *le* *parece* [CP *que* [IP *Juan mató al perro* ...

i.e. 2 *pros* in this structure: the matrix one is referential ([+pronoun, +φ]) and the second one is expletive ([+pronoun])

(41) *Eftase ena pedi/o Jorgos/kathe filas mu* [Greek]  
 arrived a child/the Jorgos/every friend of mine  
 “A child/Jorgos/every friend of mine arrived”  
 [IP *pro* *eftase* [VP *ena pedi/o Jorgos/kathe filas mu* ...

- Worth noting at this stage already: null expletives are rather different from their overt counterparts: notably, they don't appear to trigger the same Definiteness Effect/Restriction as their overt counterparts – cf. (41) above and also (42):

(42) a. *Vindran els professors* [Catalan]  
 come-FUT.3PL the professors

- “The professors will come”  
 b. *Vindrem nosaltres*  
 come-FUT.1PL we  
 “We will come”

- Why can't English have expletiveless structures? The lexicon doesn't contain *pro*.

E. Richness of inflection

- Rich inflection required to meet Recoverability Condition (31): without sufficiently rich inflection, content of *pro* can't be recovered (assigned)
- “strong” agreement not necessarily required to license “object *pro*” (cf. Rizzi 1986: 518 and note 1), although it is worth noting that this kind of non-agreement-licensed *pro* can't be interpreted referentially.
- Referential object-drop, like subject-drop, does require “rich” agreement, though:

- (43) a. *Mikango yanu i- na- thamangits-a mbuzi zathu* [Chichewa]  
 lions your SUBJ.AGR-PAST-chase- ASP goats our  
 “Your lions chased our goats”  
 b. *Mikango yanu i- na- zi- thamangits-a mbuzi zathu*  
 lions your SUBJ.AGR-PAST-OBJ.AGR-chase- ASP goats our  
 “Your lions chased our goats”  
 c. *Mikango yanu i- na- zi- thamangits-a*  
 lions your SUBJ.AGR-PAST-OBJ.AGR-chase- ASP  
 “Your lions chased them”

- A particularly interesting case:
  - Nominative-accusative case system in the present tense; verb agreement on the subject → subject *pro* permitted; no object drop
  - Ergative-absolutive case system in the past; verb agreement on the object (but not subject) → object can be dropped; no subject drop

- (44) a. *mana xwr-am* b. *Za \*(mana) xwr-am*  
 apple eat- 1MSG I apple eat- 1MSG  
 “I eat the apple” “I eat the apple”

- (45) a. *\*(Ma) mana wa- xwar-a* b. *Ma wa-xwar-a*  
 I apple PERF-eat- 3FEM.SG I PERF-eat- 3FEM.SG  
 “I ate the apple” “I ate it”

3.3. Rizzi's *pro* Theory and the predictions it makes about types of NSLs (typology)

- Pre-Rizzi: Perlmutter (1971): Type A (non-NSL) vs Type B (NSL) languages
- Rizzi's (1982) typology:

- (46) a. I [-pronoun]: no *pro* – non-NSL (e.g. English, French)  
 b. I [+pronoun]: only non-referential *pro* (e.g. Icelandic)  
 c. I [+pronoun, (+ φ)]: referential and non-referential *pro* (e.g. Romance NSLs)

BUT: non-referential pronouns/expletives aren't all equally “contentless” (cf. also Bennis 1986, Vikner 1995):

“An expletive pronoun can be found in three basic environments: in construction with an extraposed sentential subject [“anticipatory” *it* – TB], in construction with a postverbal subject [known as the **associate** – TB], and with atmospheric (or “temporal”) predicates” (Rizzi 1986: 528)

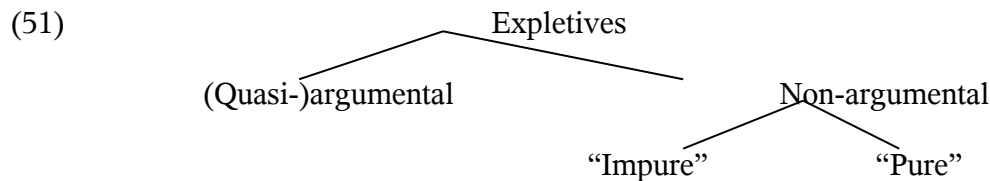
- (47) a. *There is a girl knocking on the door* → *A girl is knocking on the door*

- b. *There **are** five girls knocking on the door → Five girls **are** knocking on the door*
- (48) a. *It **seems** he is late → He **seems** to be late*  
 b. *It **seems** they are late → They **seem** to be late*
- non-argumental expletives differ in their ability to control agreement (“pure” vs “impure” expletives – cf. Lasnik 1995)

- (49) a. *It is raining/snowing/hailing/thundering/cold/dark/late...*  
 b. *Zeus/Thor thundered*  
 c. *Paaus padat aahe* [Marathi]  
 rain fall-IMPERF be-PRES  
 “Rain is falling”, i.e. “It is raining”

- (50) a. *It<sub>i</sub> rained for days without PRO<sub>i</sub> stopping*  
 b. *\*There<sub>i</sub> arrived many people without PRO<sub>i</sub> understanding why they had come (but: [Many people]<sub>i</sub> arrived without PRO<sub>i</sub> understanding why they had come)*  
 c. *\*It<sub>i</sub> is possible PRO<sub>i</sub> to please him*  
 (but: *It<sub>i</sub> is possible PRO<sub>j</sub> to please him* where j = ARB/GENERIC)
- “quasi-arguments” are really special cases of arguments” (Rizzi 1986: 528)

Thus:



- The difference between different types of expletives is also reflected in intra- and crosslinguistic null-subject behaviour:

Crosslinguistically:

- (52) a. *(\*Du) denkst* [German]  
 you think  
 b. *Heute schneit \*(es)*  
 today snows it = “Today it is snowing”  
 c. *Gestern ist \*(es) ja doch ein Mann gekommen*  
 yesterday is it MODAL PART a man come  
 “Yesterday, there did after all come a man”  
 d. *Gestern wurde \*(es) getanzt*  
 yesterday became it danced = “Yesterday there was dancing”
- and also (3d-f) above  
 → only non-argumental expletive *pro* permitted; no referential *pro*

- (53) a. *\*hefur komið* [Icelandic]  
 has-3SG come  
 b. *Í gær rigndi (\*það)*  
 yesterday rained it = “Yesterday it rained”  
 b. *Í gær hefur (\*það) komið strákur*  
 yesterday has it come boy = “Yesterday, there came a boy”
- and also (3g) above  
 → both argumental and non-argumental *pro* permitted; no referential *pro*

- Language-internally (epistemic complement clauses in Italian):

- (54) a. *Ritengo che sia simpatico*  
believe-1SG that is nice-MSG = “I believe that he is nice”  
b. *Ritengo che sia troppo tardi per Silvio*  
believe-1SG that is too late for Silvio  
“I believe that it is too late for Silvio”  
c. *Ritengo che sia probabile che Silvio ...*  
believe-1SG that is likely that Silvio  
“I believe that it is likely that Silvio ...”

→ Finite complement clauses: referential and both types of non-referential *pro* permitted, i.e. full null-subject behaviour

- (55) a. *Ritengo di PRO essere simpatico*  
believe-1SG of PRO be-INF nice = “I believe/think that I am nice”/ “I believe myself to be nice”  
b. \**Ritengo di pro essere simpatico*  
believe-1SG of pro be-INF nice ≠ “I believe him to be nice”  
c. \**Ritengo di pro essere troppo tardi per Silvio*  
believe-1SG of pro be-INF too late for Silvio  
≠ “I believe it to be too late for Silvio”  
d. *Ritengo di pro essere probabile che Silvio ...*  
believe-1SG of pro be-INF likely that Silvio ...  
≠ “I believe it to be likely...”

→ Non-finite complements: only PRO possible, i.e. English-style non-null subject behaviour

- (56) a. \**Ritengo pro simpatico*  
believe-1SG pro nice ≠ “I believe him (to be) nice”  
b. \**Ritengo pro troppo tardi per Silvio*  
believe-1SG pro too late for Silvio  
“I believe it (to be) too late for Silvio”  
c. *Ritengo pro probabile che Silvio ...*  
believe-1SG pro likely that Silvio ... = “I believe it likely that Silvio ...”

→ Small clause complements: only non-argumental expletive *pro* possible (cf. German)

- (57) a. \**Ritengo essere pro simpatico*  
believe-1SG be-INF pro nice ≠ “I believe to be (he) nice”  
b. *Ritengo essere pro troppo tardi per Silvio*  
believe-1SG be-INF pro too late for Silvio  
“I believe to be (it) too late for Silvio”  
c. *Ritengo essere pro probabile che Silvio ...*  
believe-1SG be-INF pro likely that Silvio  
“I believe to be (it) likely that Silvio ...”

→ Aux-to-C(omp) infinitival complements: both argumental and non-argumental expletive *pro* possible, but referential *pro* not available (cf. Icelandic)

- Rizzi’s (1986: 541) typology (a sketch):

- (58) a. *pro* not licensed – non-NSLs (e.g. English, French)  
b. only non-referential, non-argumental *pro* licensed – **semi *pro*-drop** languages (e.g. German)

- c. both quasi-argumental and non-argumental non-referential *pro* licensed – **semi pro-drop** languages; referential *pro* not licensed (e.g. Icelandic)
- d. all types of *pro*, referential and non-referential, licensed – **full pro-drop** languages (e.g. Romance NSLs)
- “nonarguments, quasi arguments and referential arguments are hierarchically ordered with respect to the required richness of their content expressed in terms of  $\phi$ -features” (Rizzi 1986: 543)
- “if no content is recovered, *pro* will be restricted to nonargumental use [“raising” and anticipatory *it* and *there* – TB]; if only the number specification is recovered, *pro* will be restricted to nonreferential uses [all expletive uses – TB]; if both person and number are recovered, it will have the full range of uses.” (Rizzi 1986: 547)

## REFERENCES

- Aoun, J., E. Benmamoun & D. Sportiche (1994). Agreement and conjunction in some varieties of Arabic. *Linguistic Inquiry* 25: 195 – 220.
- Bennis, H. (1986). *Gaps and dummies*. Dordrecht: Foris.
- Borer, H. (1983). *Parametric Syntax*. Dordrecht: Foris.
- Brandi, L. & P. Cordin (1989). Two Italian dialects and the Null Subject Parameter. In: Jaeggli, O. & K. Safir (eds.). *The Null Subject Parameter*. Dordrecht: Kluwer, 111 – 142.
- Chomsky, N. (1981). *Lectures on Government and Binding Theory*. Dordrecht: Foris.
- Chomsky, N. (1982). *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, Mass.: MIT Press.
- Chomsky, N. (2005). *On Phases*. Unpublished ms: MIT.
- Cole, P., G. Hermon & C-T.J. Huang (eds.). (2001). *Long Distance Reflexives*. New York: Academic Press.
- Falk, C. (1993). *Non-referential subjects in the history of Swedish*. Ph.D. dissertation: Lund.
- Huang, C-T. J. (1984). On the Distribution and Reference of Empty Pronouns. *Linguistic Inquiry* 12: 531 – 574.
- Jaeggli, O. & K. Safir (eds.). (1989). *The Null Subject Parameter*. Dordrecht: Kluwer.
- Kato, M. & E. Negrão (2000). (eds.). *Brazilian Portuguese and the Null Subject Parameter*. Germany: Vervuert.
- Kayne, R. (1989). Null subjects and clitic climbing. In: Jaeggli, O. & K. Safir (eds.). *The Null Subject Parameter*. Dordrecht: Reidel, 239 – 261.
- Lasnik, H. (1995). Case and expletives revisited: on Greed and other human failings. *Linguistic Inquiry* 26: 615 – 633.
- Manzini, R. & L. Savoia (1998). Varietà romanze a verbo secondo. In: Chiappini, G. (ed.). *Studi in memoria di Giorgio Chiarini*. Florence: Editore Alinea, 459 – 492.
- McCloskey, J. & K. Hale (1984). On the Syntax of Person-Number Inflection in Modern Irish. *Natural Language and Linguistic Theory* 1: 487 – 533.
- Perlmutter, D. (1971). *Deep and Surface Constraints in Syntax*. New York: Holt, Rinehart & Winston.
- Pica, P. (1987). On the nature of the Reflexivation Cycle. *Proceedings of NELS* 17: 483 – 499.
- Rizzi, L. (1982). *Issues in Italian Syntax*. Dordrecht: Foris.
- Rizzi, L. (1986). Null Objects in Italian and the Theory of *pro*. *Linguistic Inquiry* 17 (3): 501 – 557.
- Rizzi, L. & U. Shlonsky (2005). *Strategies of Subject Extraction*. Unpublished ms.: University of Siena/University of Geneva.
- [Available on-line at: [http://www.ciscl.unisi.it/doc/doc\\_pub/rizzi\\_shlonsky2005.pdf](http://www.ciscl.unisi.it/doc/doc_pub/rizzi_shlonsky2005.pdf)]
- Roberts, I. (2007). Introduction. In: Roberts, I. (ed.) *Comparative Grammar*. Volume II: The Null-Subject Parameter. London: Routledge.
- Taraldsen, T. (2002). The *Que/Qui* alternation and the distribution of expletives. In: Svenonius, P. (ed.). *Subjects, Expletives, and the EPP*. Oxford: Oxford University Press.
- Vance, B. (1997). *Syntactic change in Medieval French: Verb Second and Null Subjects*. Dordrecht: Kluwer.
- Vikner, S. (1995). *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford: Oxford University Press.

Zribi-Hertz, A. (1984). Prépositions orphelines et pronoms nulls. *Recherches Linguistiques* 12: 46 – 91.

---

APPENDIX

**Evidence that *wh*-subject extraction takes place from a “low” position**

- Italian has a clitic pronoun *ne* which pronominalises N' (cf. English *one*); it always attaches to the finite verb
- This pronoun is obligatory wherever the complement of a quantified phrase located in object position is deleted:
  - (1) a. *John took some stones*
  - b. *John took some*
  - (2) a. *Mario ha preso alcune pietre*  
Mario has taken some stones
  - b. *\*Mario ha preso alcune*
  - c. *Mario ne ha prese alcune*  
Mario of-them has taken some  
“Mario has taken some of them”
- *Ne* is, however, barred if N'-deletion takes place in (surface) subject position (i.e. Spec-IP)
  - (3) a. *Alcune pietre sone cadute in mare*  
some stones are-3PL fallen in sea = “Some stones fell into the sea”
  - b. *Alcune (\*ne) sone cadute in mare*  
Some of-them are-3PL fallen in sea
- In *wh*-extraction contexts, *ne* is always obligatory
  - (4) a. *Quante pietre hai preso?*  
how-many stones have-2SG taken  
“How many stones have you taken?”
  - b. *Quante \*(ne) hai preso?*  
how-many of-them have-2SG taken  
“How many of them have you taken?”

Therefore: *Quante* must be extracted from a position that is not Spec-IP here.