

SYNTACTIC ATTRITION IN ITALIAN AND GREEK NEAR-NATIVE SPEAKERS OF ENGLISH*

Maria Bouba[@], Francesca Filiaci[#], Caroline Heycock[#],
Antonella Sorace[#] and Ianthi Tsimpli[@]

[#]UNIVERSITY OF EDINBURGH AND
[@]UNIVERSITY OF CAMBRIDGE

**International Conference on L1 attrition:
Interdisciplinary perspectives on methodological issues**

Vrije Universiteit Amsterdam,

22-24, August 2002

* This research was supported by ESRC grant R000239158

Table of contents

I.	Background Assumptions and the basic hypothesis	1
II.	Aims and Hypotheses of the Study	2
III.	Subjects and Methodology of the study	4
IV.	Results	6
V.	Discussion and Conclusions	11

Background assumptions and the basic hypothesis

- Syntactic attrition is a consequence of long-term contact of the native with the second language; it is expected to be found primarily in near-native speakers of the second language .
- Syntactic attrition could be described as a **change** in the steady-state of L1 as this is found in monolingual speakers.
- Within the Principles and Parameters framework, the change in the S_x (L1) is predicted to affect **aspects** of a parameter for which the L1 and L2 assume a different value (e.g. the Null Subject parameter in Italian vs. English).
- However, syntactic attrition cannot be argued to change (or ‘unset’) the L1 value of a given parameter as this would imply that the syntax of the native language can be lost in case a second language is acquired.
- In Minimalist terms (Chomsky, 1995), morpho-syntactic features differ in terms of their **interpretability** at LF. Parameters are associated with the value of non-interpretable features only. By assumption, parameter-setting in L1 acquisition remains constant and cannot be affected by syntactic attrition (for reasons to do with the Critical Period and Modularity of the language system).
- In L2 acquisition and language impairment, the distinction between interpretable and non-interpretable features seems to affect learnability (Tsimpili, 1996, 2001).
- The Hypothesis: Syntactic attrition primarily affects morpho-syntactic features that are interpretable at the LF interface (Sorace, 2000). Being an interface level, LF is not modular and allows for changes in the interpretation of morpho-syntactic features in the context of L1/L2 contact resulting in syntactic attrition.
- Through attrition the affected features become unspecified, giving rise to optionality.

Aims and hypothesis of the study

Null / Overt subjects

- To investigate syntactic attrition in the domain of **subjects** in Greek and Italian near-native speakers of English.
- The areas of investigation include: the use of null and overt subjects, pre- and postverbal subjects, the interpretation of overt subject pronouns, the old/new interpretation of pre- and postverbal subjects and subject extraction out of declarative complement clauses.

2.1. Null vs. overt subjects

- Greek and Italian are [+null subject], English is [-null subject]:

- (1)
- a. Efije.
left-3s
“He / She left.”
 - b. E’ partito.
Is gone-masc.
“He / She left.”
 - c. *(He/she) left.

- In Greek and Italian, the option of a null or overt subject is conditioned by the the [topic-shift] and the [focus] feature.

- (2)
- a. O Janis_i prosvale ton Petro_k otan *pro*_i / aftos_k ton plisiase.
the Janis insulted the Petro when pro / he him-approached
“Janis insulted Petro when he_{i/k} approached him.”
 - b. O Janis_i prosvale ton Petro_k otan AFTOS_{i/k} ton plisiase.
“Janis insulted Petro when HE approached him.”

- Hypothesis: Attrition is **not** expected to affect the null subject option of Greek and Italian (given that this is a parametric option regulated by a non-interpretable feature).
- However, attrition is expected to affect the use of overt subjects in L1 Greek and Italian (given that this is regulated by the interpretable [topic-shift] and [focus] features). In particular, we expect the features to become unspecified and, thus, overt subjects in attrited Greek and Italian will not necessarily be interpreted as shifted topics or foci.

Aims and hypothesis of the study

Preverbal and postverbal subjects

2.2. Preverbal and postverbal subjects

- Postverbal subjects are possible in null subject languages as a consequence of the [+null subject] value of the parameter (Rizzi, 1982, 1986).
- The choice of postverbal over preverbal subjects in Greek and Italian one-place predicates is further regulated by (i) the definiteness of subject (cf. Belletti, 1988) and (ii) the thematic properties of the verb (Pinto, 1997):

- (3) a. Irthan kapji fitites.
arrived some students
b. I fitites irthan.
the students arrived.
- (4) a. Edho dulevi o Yanis.
here works the Yanis
b. % Edho o Yanis dulevi.
here the Yanis works
- (5) a. Sto telos tis tenias o Yanis jelase.
at the end of the movie the Yanis laughed.
b. % Sto telos tis tenias jelase o Yanis.
at the end of the movie laughed the Yanis.
“At the end of the movie Yan is laughed.”

- English too shows a definiteness effect in ‘there’-structures.

- (6) a. There arrived some students.
b. *There arrived the students.

- *Work*-type verbs prefer postverbal subjects whereas *laugh*-type verbs prefer preverbal subjects ((4) & (5)).
- Greek differs from Italian with regard to postverbal subjects: Greek is a VS(O) language, the postverbal option being the ‘canonical’ option.
- Hypothesis: The effects of attrition are predicted to be unidirectional: attrition will result in preverbal subjects being preferred over postverbal subjects, overriding differences in the thematic properties of the verb. Thus, the frequency of postverbal subjects will decline, but when used, they will be used correctly.

Methodology of the study

Subjects

- 4 groups of subjects participated in the study: one group of Italian near-native speakers of English (n=20), one group of Greek near-native speakers of English (n=19), one group of Italian controls (n=20) and one group of Greek controls (n=20).
- Subjects in the experimental groups (Greek and Italian near-native speakers of English) had a minimum of 6 years of residence in Britain, used L1 and L2 in everyday contexts and their level of English (L2) was near-native according to White & Genesee's (1996) criteria.
- Subjects in control groups live in Italy & Greece respectively and have minimum or no knowledge of English.

Tasks

- The study consisted of 4 tasks testing production and comprehension of null and overt NP and pronominal subjects, and a grammaticality judgment task:

- Production:

- 1) Cartoons
- 2) Story-telling
- 3) Headlines

- Comprehension:

- 1) Picture-verification

- Grammaticality Judgments

This paper is restricted to the presentation of relevant data from the Headlines task and the Picture-Verification Task.

Methodology of the study

The Headlines task

- **The Headlines task:** The subject was asked to produce a sentence consisting of a given verb, an NP and an adverbial expression presented to him/her as scattered phrases on the computer screen. The phrases were presented together with a picture depicting the story meant to be described by the phrases. The subject was asked to produce a sentence starting with the phrase ‘Did you hear that...’.

Examples: ‘...a building collapsed because of an explosion?’ (Indefinite subject)

‘...the Wimbledon tournament started in bad weather?’ (Definite subject)

- The aim of the task was to test the use of pre- and postverbal subjects in this context. The postverbal position was expected to be preferred by the Control group to a greater extent than by the Experimental group.

The Picture-Verification task

- **The Picture-Verification task:** The subject was presented with a sentence and a set of three pictures and was asked to indicate which of the three pictures matched correctly the meaning of the sentence. The sentence consisted of two clauses one main and one subordinate. The main clause subject was always an NP; the subordinate clause subject could be either an overt pronoun or a null subject. The main clause always had an animate complement. The subordinate clause could either precede or follow the main clause.

Example: ‘La madre_i da’ un bacio alla bambina_k mentre lei_{k/1/pro_i} si mette il cappotto’. / ‘Mentre lei_{k/1/pro_i} si mette il cappotto, la madre_i da’ un bacio alla bambina_k.’

The mother kisses the daughter while she/pro puts on her coat.

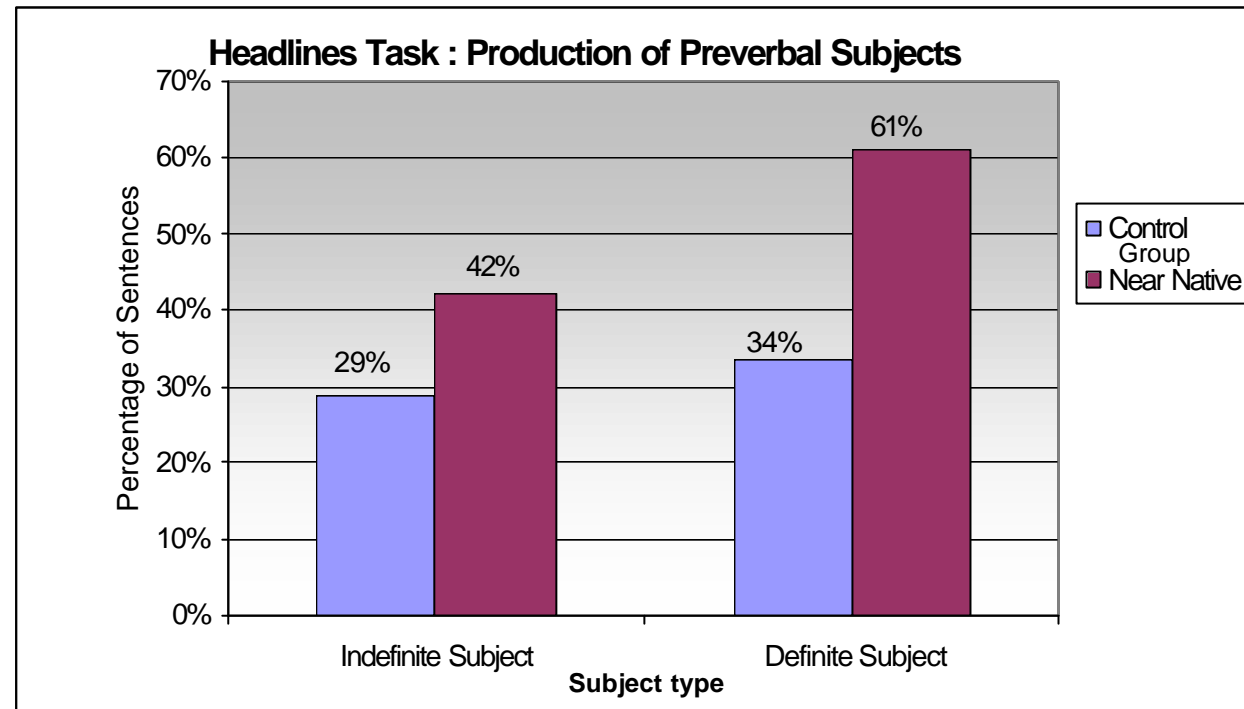
The three pictures represented: **1-**The subject of the main clause performing both the actions described in the main clause and in the subordinate clause. **2-** The subject of the main clause performing the action described in the main clause and the object of the main clause performing the action described in the subordinate clause. **3-** The subject of the main clause performing the action described in the main clause and another person performing the action described in the subordinate clause.

- The aim of the task was to identify the preferred interpretation for the referent of the subject of the subordinate clause.

Results

Headlines Task

TABLE 1: Production of PREVERBAL SUBJECTS (Greek)



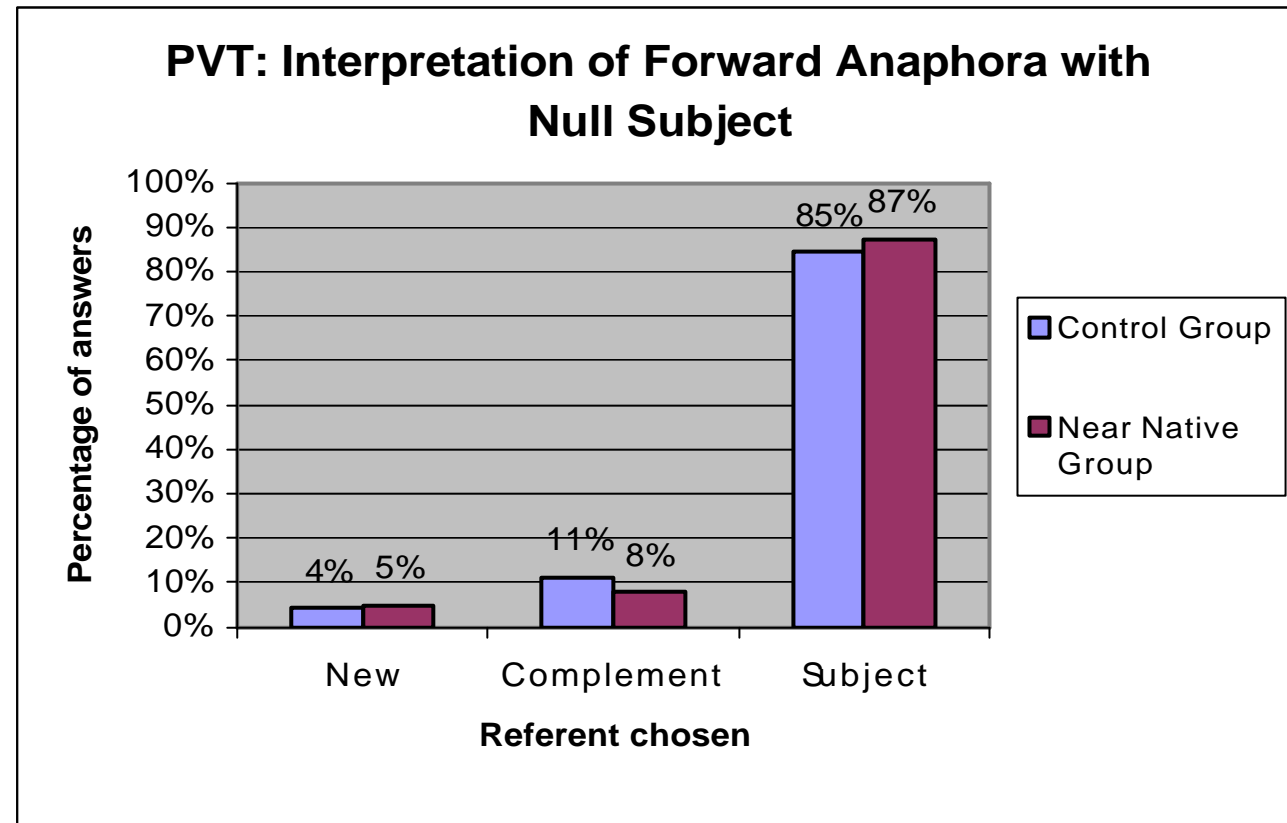
Significant differences

- Statistically significant performance between the 2 groups in Preverbal definite subjects (sig = .002). There is also an effect of subject type/definiteness within the 2 groups (Subj type*Group: sig = .034).

Results

Picture Verification Task

TABLE 2: Forward Anaphora with Null Subject (Italian)



Group: $F(1, 38) = 1; p = .324$

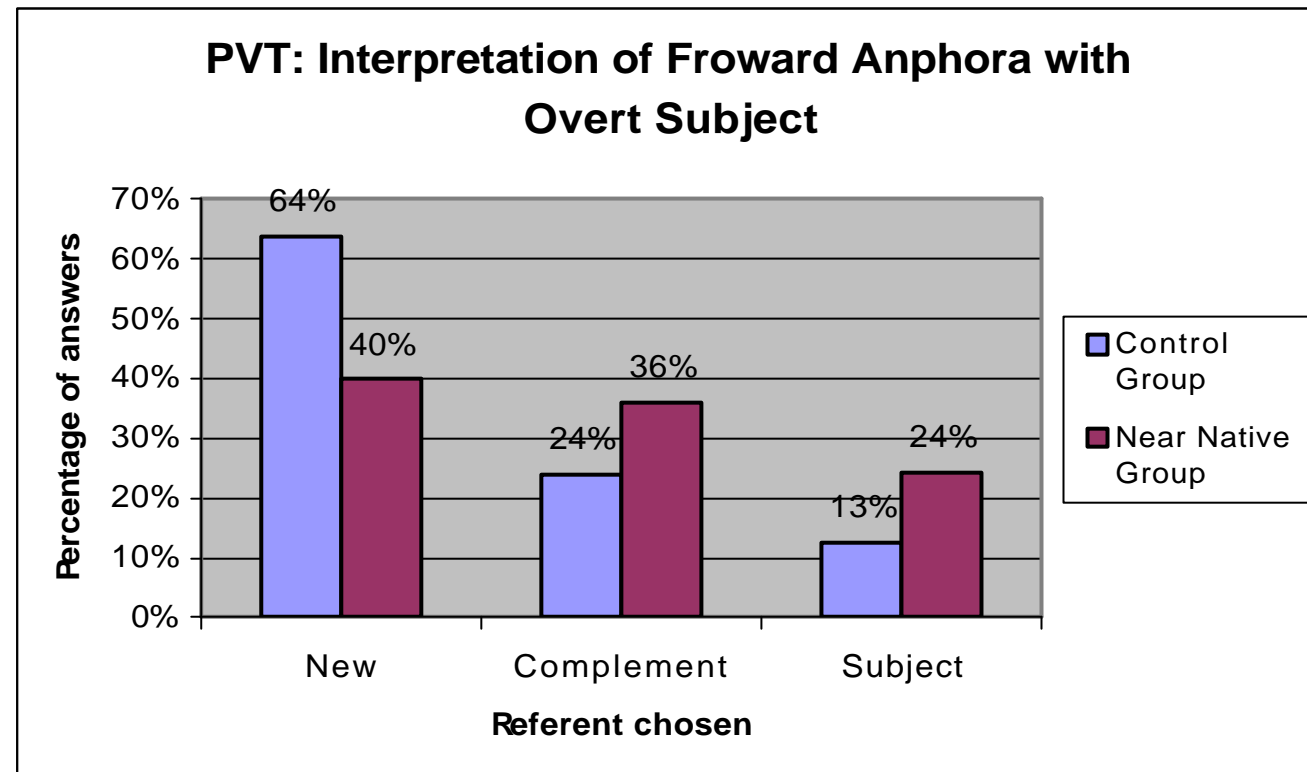
Referent*Group: $F(2, 76) = .373; p = .690$

- No difference between the two groups.

Results

Picture Verification Task

Table 3: Forward Anaphora with Overt Subject (Italian)



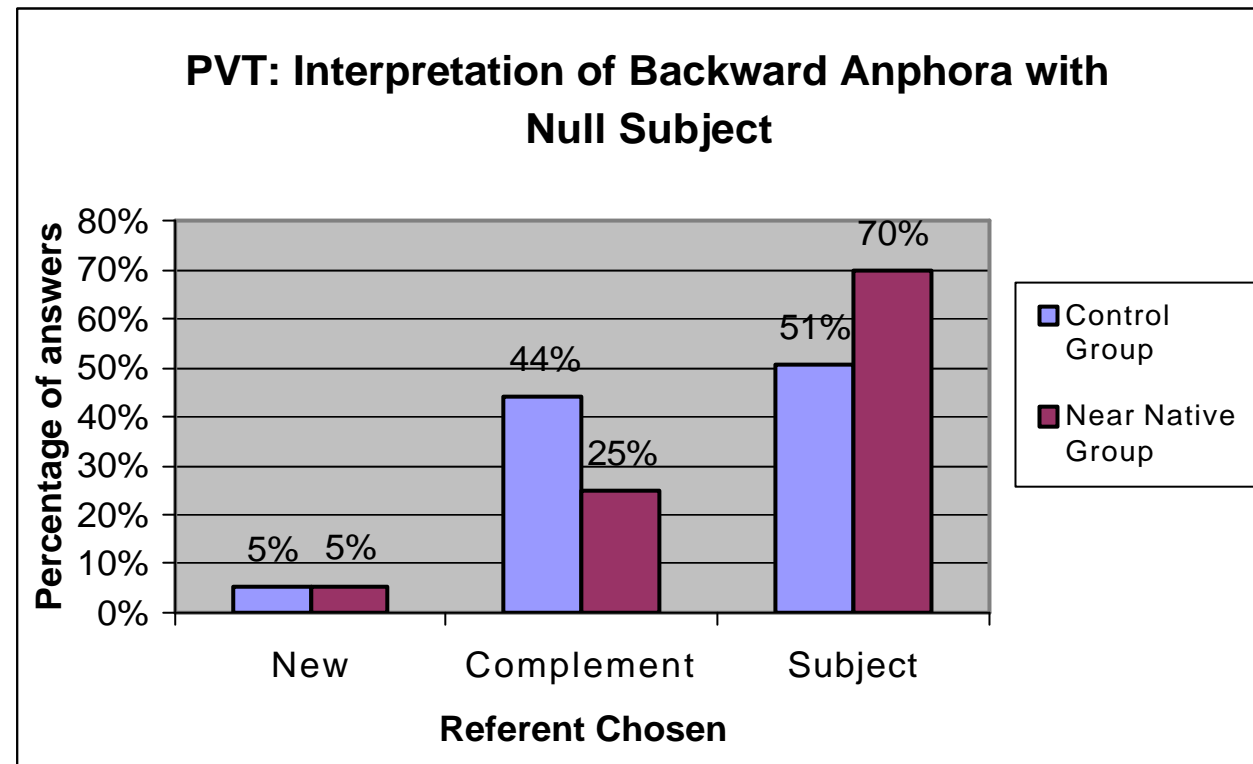
Referent*Group: $F(2,76) = 3.877$; $p = .025$

- 'New' (another participant) is chosen significantly less often by the Near Native group than by the Control Group as an antecedent of the Overt Pronominal Subject.

Results

Picture Verification Task

Table 4: Backward Anaphora with Null Subject (Italian)



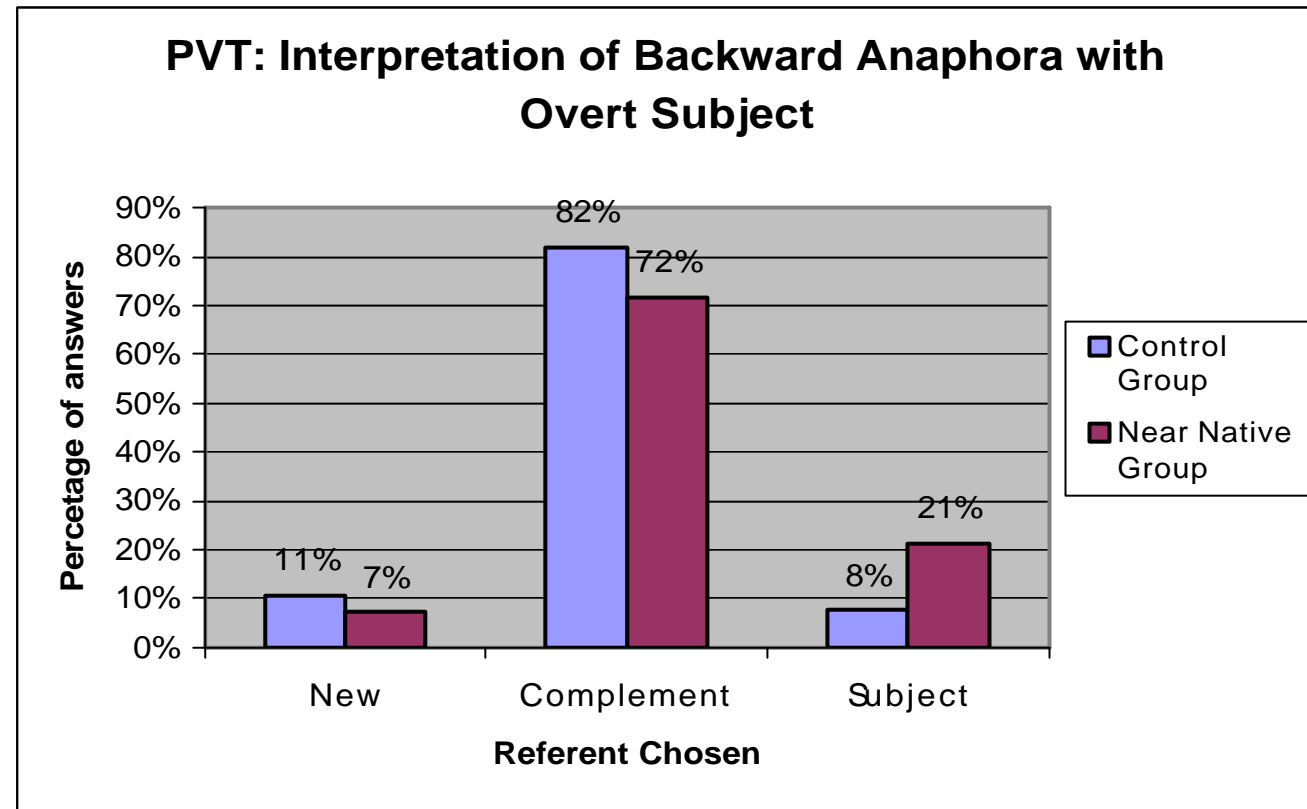
Referent*Group: $F(2, 76) = 8.433; p = .003$

- 'Subject' is chosen significantly more often by the Near Native Group than by the Control Group as an antecedent of the Null subject.
- 'Complement' is chosen significantly less often by the Near Native Group than by the Control Group as an antecedent of the Null subject.

Results

Picture Verification Task

Table 5: Backward Anaphora with Overt Subject (Italian)



Referent*Group: $F(2, 76) = 8.433; p < .001$

- 'Subject' is chosen significantly more often as a referent for the Overt Subject by the Near Native Group than by the Control.

Discussion and conclusions

Discussion with reference to tasks

Headlines Task

- The experimental group prefers the preverbal subject position for both definite and indefinite subjects over the controls. The difference between the experimental and the control groups regarding the production of preverbal **definite** subjects is significant in the Headlines Task. This result supports the original hypothesis, namely that preverbal subjects will be preferred by the experimental group over postverbal ones.
- A definiteness effect is also found in the results of the experimental group: Definites are more strongly preferred in preverbal position and indefinites in postverbal position. This is probably associated with the default interpretation of a definite subject as a topic, assumed to be a universal (semantic/pragmatic) condition.
- Note, crucially, that the controls show a **syntactic** preference for a postverbal subject which overrides the definiteness/topichood condition whereas the experimental group opts for the latter.

PVT task

- In sentences of forward anaphora with a **null** subject in the subordinate clause (see Table 2), (e.g. “While *pro* was crossing the street, the old woman greeted the girl”), the preferred choice of referent is the Subject for both groups (85% vs. 87%). This result confirms our original hypothesis: the interpretation of null subjects is not affected by attrition since the parametric choice determining the availability of null subjects in the language remains the same.
- In contrast, Table 3 shows that the control group differs significantly from the experimental group when the subject of the subordinate clause is an **overt** pronoun. The controls strongly prefer a ‘new’ referent for the interpretation of the subject pronoun whereas the experimental group do not show any strong preference for any of the choices (i.e. ‘new’, ‘complement’, or ‘subject’), indicating multiple ambiguity in the interpretation of the overt subject pronoun. This result also confirms our original prediction, i.e. that the interpretation of overt pronouns will show attrition effects.

Discussion and Conclusions

Discussion with reference to Tasks

- Tables 4 and 5 present results from sentences with backward anaphora (e.g. “The old woman greeted the girl, while *pro* / she was crossing the street”). In the null pronoun case (see Table 4), the controls seem to allow for either the matrix subject or the complement as a possible referent whereas the experimental group strongly prefers the subject interpretation (51% in the controls’ responses vs. 70% in the experimental group’s responses): unexpected result.
- A possible explanation: the experimental group treats the subordinate clause as a non-finite one (cf. the English sentence “The old woman greeted the girl, while crossing the street”) in which case the matrix subject is necessarily the controller of the null subject in the subordinate clause.
- When the embedded subject is an overt pronoun (see Table 5), the two groups show a similar strong preference for the matrix complement to be the referent of the pronoun (82% and 72% respectively). Crucially, however, the difference in the choice of the matrix subject as a possible referent is significant between the control and the experimental groups (8% vs. 21% respectively). This result is consistent with our original prediction, i.e. that the interpretation of overt pronouns will show attrition effects.

Ianthi Tsimpli: imt20@cus.cam.ac.uk

Antonella Sorace: antonell@ling.ed.ac.uk

Caroline Heycock: heycock@ling.ed.ac.uk

Francesca Filiaci: francesc@ling.ed.ac.uk

Maria Bouba: bmaria@btopenworld.com