Overt and null subjects across coordinate sentences in a text: a large-scale study on L2 learners of Italian

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(1) Background. Our contribution touches upon the acquisition of null pronominal subjects in L2 Italian across 338 instructed learners having different L1s. The Interface Hypothesis (IH) predicts residual instability and optionality in adult SLA for those language phenomena placed at the (external) interfaces between syntax and pragmatics-discourse. According to the IH, even if advanced L2 grammars already license pro, learners will not able to drop pronominal subjects until they map the discourse-level [±Topic Shift] pragmatic values onto [OVERT] or [NULL] syntactic values of the anaphoric pronominal subject. Both data from learner corpora and experimental findings (e.g. Tsimpli & Sorace 2006; Belletti 6 Sorace 2007; Sorace & Serratrice 2009; Sorace 2011) show that learners overextend the scope of overt subjects to the scope of null subject pronouns (they are likely to add unnecessary pronominal subjects), while the opposite (dropping necessary pronouns) is much less frequent even at near-native stages.

(2) Novelty of the approach. The IH makes predictions about L2 processing of sentences that are made up by more clauses with two or more NPs competing for bridging of the antecedent. The IH is not concerned about how learners use overt and null subjects in a text. The operation of integrating discourse-related features and syntactic features in a text gets complicated because L2 learners must assess not only whether the Topic shifts or not within a sentence, but also the accessability of the Discourse Topic (DT) across sentences. Learners have to make the decision about whether the DT needs to be *reactivated* or not. *Reactivation* may become necessary because (a) one or more potential competitors for the role of DT have appeared in the text (b) DT continuity has been interrupted. As an instance, text segmentation (full stops, commas etc.) may affect a learner's decision about whether the antecedent must be reactivated or not. We hypothesize that a short, simple text made of coordinate sentences, with always highly accessible DT could be a good experimental ground to revealing the nature of learners' difficulties with overt/null pronominal subjects in general. We have therefore built an experiment where DT continuity was manipulated and where a learner's capacity of detecting tha DT across sentences was isolated from factors such as verb-subject agreement tracking or other processing difficulties.

(3) Participants, design and material. Two groups of subjects participated in our study. The experimental group consists of 338 L2 Italian undergraduate learners (range 19-25) recruited from five Universities in Italy. In our study learners' L1s is classified according to null subjects parameter values (see Roberts & Homberg 2010:5-13) such as consistent prodrop (e.g. L1 Spanish), partial prodrop (e.g. L1 Russian), expletive prodrop (e.g. L1 German), discourse prodrop (e.g.L1 Chinese) and non-prodrop (e.g. L1 English). Levels of proficiency in Italian were assessed by the screening procedure of an official proficiency exam of Italian (CILS). The control group consists of 90 native speakers of Italian (range: 17-24). Participants underwent two different tests. The first one consisted of a verb morphology test from the official proficiency certificate of Italian (level B1 of the Common European Framework of reference for Languages) where subjects are asked to fill 24 verbal blanks with the appropriate forms. Learners' knowledge of verb morphology in L2 Italian provided a score that served as a covariate together with other descriptive variables (hours of instruction, length of immersion). The target test in the study consisted of a selective Pragmatic Cloze Task (PCT) containing 15 three-option multiple-choice gaps. To avoid pragmatic ambiguity the PCT is preceded by a six-scene picture story illustrating the written narrative. Participants had to choose one of the three cues: the null anaphora, the 3rd person singular stressed pronominal anaphora (*lui* 'he') and a distractor. The text included coordinate sentences only (where the Sentence Topics are also syntactic Subjects) with six compulsory occurrences of null anaphora and

six compulsory pronominal completions, three intrasentential and three intersentential each. A coordinate "sentence" was defined by two full stops or a colon. Pronominal anaphor were made compulsory by pragmatic constraints, by verb semantic properties and by referential ambiguity. In these six instances the pronominal anaphora was required in order to create Subject Topic discontinuity in adjacent clauses. In the remaining six gaps overt pronominal Subjects were redundant since the 3SG agreement dependency resolution could be processed locally, namely by looking at the antecedent immediately available in the previous adjacent clause. There were no time constraints.

(4) **Results and discussion**. A multivariate ANOVA with post-hoc Tukey showed that in general L2ers scored significantly worse in the PCT than controls (F=106.58, p***) across all conditions, but particularly in "null" condition (p***). Proficiency, amount of instruction hours in a formal setting and knowledge of verb-morphology were strong factors (p***) for scoring, while kind of L1s and length of exposure-immersion to the target-language were not. As to levels of proficiency, while the differences between N controls on one side and beginner and intermediate students on the other side were significant across all conditions, advanced L2ers and N controls patterned alike in anaphoric pronouns (p =0.78), but still scored differently in null pronouns contexts (p = 0.053) . It can be concluded that in our data all L2ers – regardless of their proficiency – seemed to follow a non target-like rule of the kind: "whenever the antecedent is in another sentence, overt pronouns are needed". The PCT data showed that also very advanced L2ers strictly comply with this non target-like rule. On the contrary, a certain degree of reluctance to reactivate the pronoun – especially if the antecedent is in the same sentence – is shared between L2ers and native controls. This result seems to tear apart *optionality* (concerning pronominal anaphora) from deviant representations (concerning prodrop exclusively). Overall, if either dropping or adding pronominal subjects in a text is driven by the need of reactivating the antecedent, then *textual* distance outranks pragmatic and semantic factors in this process. Finally, it is worth noticing that learners' choices were not predictable on the basis of their L1s. As an instance, Chinese subjects (L1 discourse prodrop) were more radical than others in overtly expressing unnecessary pronouns where sentence and discourse topics coincided and were easily available.

Minimal references

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