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Subject-object asymmetry in the production of wh-questions in early Italian

Italian wh-questions represent a peculiar object of investigation in that they display the same order of elements both in subject and object questions: Wh V DP, as shown in (1a) and in (1b) respectively, being the position for subjects in Italian wh-questions postverbal.

- (1) a. Chi insegue i cavalli? b. Chi inseguono i cavalli?
 Who chases the horses? Who chase-pl the horses?

It is agreement on the verb that disambiguates between the two options: a subject question if the verb agrees with the wh- trace, an object question if the verb agrees with the postverbal subject.

Our presentation, based on an elicited production experiment of wh-questions administered to Italian children and adults, capitalizes on three main findings and a proposal:

1. although Italian children master wh-questions very early (Guasti, 1996), object questions are significantly more difficult than subject questions (see De Vincenzi et al. 1999 for similar results on comprehension);
2. the score of correct responses for object questions raises considerably if the two DPs (the subject and the object) are differentiated for animacy features;
3. children partly resolve the difficulties posed by object questions by producing object questions not displaying the expected Wh V DP order but using different legitimate strategies sharing one crucial feature: the subject DP occupies a preverbal position (with one exception).

Capitalizing on the work by Franck et al. (2006) we propose that the difficulties children experience in the production of wh- object questions result from the intervention of the object copy on the Agree relation between the postverbal subject and the verb. The strategies children adopt are a mean to get rid of the interference effect and to strengthen the Agree relation between the verb and the subject by raising the latter to a preverbal position.

An elicited production test using pictures was administered to 33 Italian-speaking aged 4-5 years and 20 adult controls. The test elicited 24 subject and 24 object questions. Given the categorical nature of our data, response accuracy, results were analyzed using a repeated measures logistic regression analysis (Dixon, 2008:1) which revealed that adults were more accurate than children in producing questions ($\chi^2(1)= 14.43$, $p=0.0001$), that the rate of correct subject questions was higher than that of object questions ($\chi^2(1)= 9.37$, $p=0.002$), that who-questions were easier to produce than which-questions ($\chi^2(1)=13.06$, $p=0.0003$).

The structure Wh V S is employed more by adults than by children and it is more frequently employed for subject than for object questions, especially for children. Rather than object questions, children produced subject questions or irrelevant responses. In addition, as opposed to adults, the object questions they produced took different shapes (all legitimate in Italian, see table 1):

- a. the DP subject is preposed to a left peripheral position, before the wh-element (3)

- (3) I cavalli, chi rincorrono? The horses, who chase-pl?
 b. a cleft structure, as in (4)
 (4) Chi è che lavano i cavalli?
 Who is it that wash the horses “Who is it that the horses wash?”
 b. a question with a null pronominal subject, as in (5)
 (5) Chi rincorrono?
 Who chase-pl? “Who do (they) chase?”

Adults reacted to the difficulty posed by object questions by often turning them into passive subject questions, as in (6).

- (6) Chi è rincorso dai cavalli? Who is chased by the horses?

In order to explain these facts, we assume that agreement can consist of AGREE, a relation through which the functional node AgrS gets valued by the subject in its base position, and a Spec-Head relation, through which the subject (optionally) moved in Spec AgrSP checks the features on AgrS (Guasti & Rizzi, 2002; Franck et al., 2006). Franck et al. have shown that, during adult production, attraction errors (whereby a DP intervening between the verb and the subject values, incorrectly, the AgrS feature of the verb) are more frequent in OVS than in OSV configuration and have explained this asymmetry by claiming that in OVS configuration the copy of the moved object interferes in the AGREE relation giving rise to attraction errors. These errors are reduced when the additional agreement checking operation occurs in the Spec-Head configuration. In a similar vein, we claim that the subject/object asymmetry observed in the production of Italian wh-questions can be reduced to a phenomenon of attraction, whereby the object copy erroneously values the features of AgrS. This can happen when the object and the subject share the same (animacy) features generating a sort of relativized minimality effect (Rizzi, 1990) that is particularly damaging for children, as their processing capacities are not fully developed and are thus more prone to err. The attraction errors are corrected when the subject occurs in a preverbal position (as when it is null, Cardinaletti, 2004 or when it is preposed to the wh) and can check agreement for a second time in a spec head configuration.

| | | WH V N | | DP-preposing | | Cleft | | Null argument | | Passive | |
|----------|---------|--------|-------|--------------|-------|-------|-------|---------------|-------|---------|------|
| | | S | O | S | O | S | O | S | O | S | O |
| Children | Who | 73,4% | 37.7% | 0 | 19.8% | 23,9% | 12.5% | 2,6% | 29.8% | 0 | 0 |
| | Which N | 89.5% | 30% | 0 | 20,9% | 3.6% | 1,9% | 6.7% | 46,4% | 0 | 0,6% |
| Adults | Who | 93.4% | 83% | 0 | 2% | 0,8% | 0,8% | 0,8% | 0,8% | 4,9% | 14% |
| | Which N | 91% | 60% | 0 | 0,1% | 2,9% | 0 | 0 | 0 | 5,9% | 38% |

Table 1. Frequencies and percentages of use of the structures in children and in adults, as a function of type of questions and of wh-element

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