INTRODUCTION

A well-known finding from acquisition, adult processing and pathological populations is that object relatives (1b) are more difficult to parse, comprehend and produce than subject relatives (1a). The featural Relativized Minimality approach (RM, Rizzi 1990, 2004, 2013, Starke, 2001, Friedmann et al. 2009) ascribes this asymmetry to a grammatical constraint bearing on intervention configurations.

1) a. SR: the elephant that ___ is washing the lion.
   ([+R][NP]) ([+R][NP]) ([NP])
   no intervention

   b. OR: the lion that the elephant is washing ___
   ([+R][NP]) ([NP]) ([+R][NP])
   inclusion

Under RM:

2) X ... Z ... Y
Y is in a local configuration with X if there is no Z such that - Z structurally intervenes between X and Y - Z fully matches the specification of X in the relevant morphosyntactic features

3) X Y Z CHILDREN ADULTS
a. +A... +A... <+A> identity * *
   b. +A,+B... +A... <+A,+B> inclusion * ok but hard
   c. +A,+B... +A,+C... <+A,+B> intersection ok ok
   d. +A... +B... <+A> disjunction ok ok

(Rizzi 2016 for recent discussion)

Only the features that participate in triggering movement seem to be relevant for intervention (Belletti et al. 2012, Friedmann et al. 2016). What about animacy? ORs with an animimate head and an animate subject seem to be easier to parse and comprehend compared to ORs with an inanimate head and an animate subject, and they are the most frequent type of ORs found in corpora (Kidd et al. 2007, Brandt et al. 2009, Guasti et al. 2012, Hamman, Tüller 2015, Benten 2016, on acquisition, Mak et al. 2002, 2006, Traxler et al. 2002, Lowder, Gordon 2014, Baudfild et al. 2011, on adults). However studies in which the effect of the animacy feature was systematically explored show that a match/mismatch in animacy of subjects does not play a role (Adani, 2012 on German children’s comprehension, Belletti, Chou, 2014 on Italian adults’ production).

THE STUDY

A new study on the elicited production of relative clauses.

88 French-speaking children aged 3:2-9:2 took part in the study. The children were divided into four age groups: the 3 y.o. group (20; aged 3:2-4:5, MA:3.8), the 5 y.o. group (24; aged 4:7-6:2, MA:5.5), the 7 y.o. group (23; aged 6:9-7:4, MA:7.1), and the 8 y.o. group (21; aged 8:9-9:2, MA: 8:8).

The production of 16 SRs and 16 ORs was elicited using a game inspired by Novogrodsky, Friedmann (2006)’s preference task. The animacy feature of the subject and the object was manipulated, in order to obtain the four possible combinations both in SRs and in ORs. All the other morphosyntactic features were in a match condition. Both the noun phrases were lexically restricted.

4) SR elicitaton, animate subject–animate object:
Il y a deux mamans. Une maman caresse une fille, une maman embrasse une fille. Quelle maman est-ce que tu préfères?
There are two mums. One mum caresses one girl, one mum kisses one girl. Which mum would you prefer?
Expected answer: la maman qui caresse/embrasse la fille
the mom that caresses/kisses the girl

5) OR elicitaton, animate subject–animate object:
Il y a deux filles. Une grand-mère écarte une fille, une grand-mère file une fille. Quelle fille est-ce que tu préfères free?
There are two girls. One grandma listens to one girl, one grandma films one girl. Which girl would you rather be?
Expected answer: la fille que la grand-mère écoute/file au
the girl that the grandma listens to

2 x 4 DESIGN: 8 experimental conditions, 4 stimuli x condition. 16 fillers. 2 practice trials. Random order, 2 lists. Within subjects design. Within items design for the structure variable and between items design for the animacy variable. Data analysis with multilevel mixed-effects regressions (deviation coding).

If animacy in French belongs to features relevant for RM, we expect to find out better performances in the mismatch conditions (intersection configuration) compared to the matched conditions (inclusion configuration).

RESULTS

Table 1. % of target SRs produced across conditions and age groups

<table>
<thead>
<tr>
<th>Age</th>
<th>3 yo</th>
<th>5 yo</th>
<th>7 yo</th>
<th>8 yo</th>
</tr>
</thead>
<tbody>
<tr>
<td>No subj-Arm obj</td>
<td>46%</td>
<td>52%</td>
<td>67%</td>
<td>90%</td>
</tr>
<tr>
<td>Arm subj-in obj</td>
<td>57%</td>
<td>46%</td>
<td>49%</td>
<td>35%</td>
</tr>
<tr>
<td>In subj-Arm obj</td>
<td>46%</td>
<td>52%</td>
<td>67%</td>
<td>90%</td>
</tr>
<tr>
<td>In subj-in obj</td>
<td>57%</td>
<td>46%</td>
<td>49%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Table 2. % of target ORs produced across conditions and age groups

<table>
<thead>
<tr>
<th>Age</th>
<th>3 yo</th>
<th>5 yo</th>
<th>7 yo</th>
<th>8 yo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm subj-Arm obj</td>
<td>1%</td>
<td>4%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Arm subj-In obj</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>In subj-Arm obj</td>
<td>5%</td>
<td>4%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>In subj-In obj</td>
<td>2%</td>
<td>7%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 3. % of other structures produced in the elicitation of ORs

<table>
<thead>
<tr>
<th>Age</th>
<th>3 yo</th>
<th>5 yo</th>
<th>7 yo</th>
<th>8 yo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various SR</td>
<td>6%</td>
<td>28%</td>
<td>45%</td>
<td>60%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>7%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Passive OR</td>
<td>59%</td>
<td>59%</td>
<td>59%</td>
<td>59%</td>
</tr>
</tbody>
</table>

DISCUSSION AND CONCLUSIONS

As table 1 and 2 show, the subject-object RCs asymmetry is apparent in all age groups and conditions (p<0.05). Children produce the elicited SRs most of the time, whereas the ORs are produced in very few cases.

A match or mismatch in animacy between target and intervener does not affect either SRs or ORs production (p<0.05), as predicted by RM for a non-animacy-based language like French.

As well attested in the literature (Contemomi, Belletti, 2014, Guasti et al. 2012, Adani et al., 2012), in place of the elicited ORs, the participant produce structures in which intervention is totally absent: subject relatives (head/role reversal) and passive relative objects/PORs (see Table 3 and example in (6)). The production of SRs and other non-target responses (mainly simple SVO sentences) decreases with age and the production of PORs increases. It is thus clear that also in an animacy mismatch condition these answer strategies are preferred over ORs.

Animacy does not seem to play a role in manipulating intervention or if it does, its effect is overwhelmed in production by the availability of more optimal structures.

6) POR: La fille qui est [VP embrassée ‘la fille’] par [VP, la maman <VP>]

(according with Belletti (2014) and the smoothing analysis of passive by Collins (2005))

SELECTED REFERENCES