(Unique) errors in the acquisition of relative clauses in Palestinian Arabic and their (movement) account

1. Introduction. It is well-known that the acquisition of relative clauses (RCs) in many languages involves non-target like productions such as over-use of resumptive pronouns, use of resumptive DPs (RDPs), and omission of resumptive PPs in languages such as Hebrew where such omission is not allowed (Labelle 1990, Armon-Lotem et al. 2006, a.o.). Alongside some of the aforementioned errors, children acquiring PA make two unique errors, never documented before.

Goal and main claim: The goal of this study is to clarify the derivational source of these "unusual" errors in production, with reference to the particularities of RCs in PA and their analysis. Assuming the Matching Analysis for RCs (Sauerland 2003), and applying it to the analysis of (Lebanese) Arabic RCs in Aoun & Choueiri 1996 (A & C), we argue that the "unusual" errors in the production of RCs reflect incomplete acquisition of the (covert) movement involved in the derivation of PA RCs (to be elaborated below). (In the talk we will address the question of how this stage in the derivation of RCs might affect their comprehension.)

2. Method. We tested three groups of 20 monolingual, typically developing PA-speaking children, aged 3-4, 5-6 and 8-9 years, and a control group of 10 adults (mean age 31). Two experimental procedures, elicitation of RCs with pictures (Lakshmanan 2000), and elicitation of RCs with props (Varlokosta & Armon-Lotem 1998), were used, targeting 5 relativization sites: main S(subject), D(irect) O(bject), I(ndirect) O(bject), locative PP (LPP), and selected PP (PP). Each site was targeted three times.

3. Results. Similar results were found in both experiments. Subject relatives (SRs) were the easiest to produce; the rate of their correct production differs significantly from that of the other relatives in the two youngest groups (see Table 1).

<table>
<thead>
<tr>
<th>Group</th>
<th>S</th>
<th>DO</th>
<th>IO</th>
<th>LPP</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4 y.o.</td>
<td>92%</td>
<td>65%</td>
<td>70%</td>
<td>63%</td>
<td>43%</td>
</tr>
<tr>
<td>5-6 y.o.</td>
<td>97%</td>
<td>77%</td>
<td>78%</td>
<td>65%</td>
<td>45%</td>
</tr>
<tr>
<td>8-9 y.o.</td>
<td>100%</td>
<td>92%</td>
<td>88%</td>
<td>93%</td>
<td>83%</td>
</tr>
<tr>
<td>Adults</td>
<td>100%</td>
<td>97%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The errors made by the children in the different groups were mainly of three types: the familiar RDP error (1), and two unique errors, Subject Fronting (2), and doubling of the RC complementizer ʻilli (3).

Target: iz-zara:fi ʻilli l-walad ḥaẓan-ha
the-giraffe that the-boy hugged-it

(1) iz-zara:fi ʻilli l-walad ḥaẓan iz-zara:fi
the-giraffe that the-boy hugged the-giraffe

RDP

(2) iz-zara:fi l-walad ʻilli ḥaẓan-ha
the-giraffe the-boy that hugged-it

Subject Fronting

(3) iz-zara:fi ʻilli l-walad `illi ḥaẓan–ha
the-giraffe that the-boy that hugged-it
‘the giraffe that the boy hugged'

Double ʻilli

4. Discussion. Under the Matching Analysis, the derivation of RCs involves movement of the base-generated copy of the relative head and a null operator (Op) from the relativization site to spec-CP, where the copy is deleted under identity (4).

(4) the giraffe [CP [Op giraffe], that [TP the boy hugged [DP t_i]]] Matching Analysis of RCs
Whether RCs in (PA) Arabic are derived via movement or without it is rather controversial, probably because RCs in Arabic (modulo SRs), always include a (resumptive) clitic pronoun (e.g. –ha, ‘it’ in (2), (3), (5)), suggesting a binding derivation (Sells 1984, Shlonsky 1992). However, several authors have noticed that A'-movement related phenomena such as reconstruction, is attested in Arabic relatives, but only in those not involving relativization into islands, strongly suggesting that these structures involve movement. Consequently, in their analysis of RCs in (Lebanese) Arabic, A & C (1996) argue that these structures are derived via movement of pro, which is base-generated in the relativization site, licensing the pronominal clitic. The movement is argued to be motivated by the need to check the φ-features of the relative complementizer, illi (5a). Combining this with the Matching Analysis, we suggest that in the adult derivation of Arabic RCs, pro, rather than the copy of the relative head is base generated with an Op, and both move to spec-CP (5b).

(5) a. iz-zara:fi [CP pro, illi [TP l-walad ḥaZan-ha [DP t_i]]] Adult derivation, A & C
   b. iz-zara:fi [CP [Op-pro, illi [TP l-walad ḥaZan-ha [DP t_i]]] A & C + Matching analysis

Background assumption (to be elaborated and supported in the talk): RDPs in children’s RCs (not necessarily in PA) derived via movement, result from partial A’-movement; Op moves without the copy of the relative head (6).

(6) the giraffe [CP [Op, that [TP the boy hugged [DP t_i] the giraffe]]] RDP

Derivations underlying the errors attested in PA
(i) RDPs in PA: The copy of the relative head, rather than pro, and the Op are base generated, but only Op moves to spec-CP (the features of illi remain unchecked) (7). Note the absence of the verbal clitic in these productions.

(7) iz-zara:fi [CP Op, illi [TP l-walad ḥaZan [DP t_i] iz-zara:fi]] RDP in PA

(ii) Subject Fronting: The Op is base-generated with pro, but still only Op moves. The Op cannot check the features of illi, and therefore the "closest" DP, the subject of the RC is moved to perform the checking (8).

(8) iz-zara:fi [CP Op, ḥaZan-k illi [TP t_k ḥaZan-ha [DP t_i] pro]] Subject Fronting

(iii) Double illi: (8) satisfies the requirement of feature checking of illi, but it creates a structure where the modification relation is "obscured". The relativizer is related to the subject of the RC rather than to the head of the relative. To amend the configuration, children project a DP (bold) above the original one, headed by illi, in whose specifier the head of the relative is moved (9):

(9) [[DP iz-zara:fi [DP illi]] [DP t_j] [CP Op, ḥaZan-ha [DP t_i] pro]] Double illi

5. Conclusion. In the proposed analysis the uniqueness of the errors is derived from the (lexical) properties of the elements involved in the derivation of RCs in Arabic, such as the φ-features of illi which require checking, and the verbal clitic which requires licensing; both are satisfied by (base-generation and movement of) pro. Viewed this way, the proposal lends support to the movement analysis of Arabic RCs in general, and to its specific instantiation via the Matching Analysis. Finally, the proposed derivations predict the discrepancy attested between the comprehension of SRs and other types of RCs, with the latter being more difficult at the relevant stage.