The Acquisition of Relative Clauses: How do Second Language Learners of Arabic do it?

Dola Algady
American University of Madaba
dflalgady@gmail.com

The new developments in syntactic theory under Minimalism reconsiders the relation between the language faculty and general cognitive systems whereby language acquisition is accomplished by the interaction of Chomsky (2005)’s three factors: (F1) a minimally specified UG (Genetic endowment); (F2) Primary Linguistic Data (PLD), i.e., input; and (F3) non-language faculty-specific considerations, including principles of efficient computation and principles of data analysis employed in acquisition. Based on this assumption, this study examines the role of economy conditions of (F3) on syntactic derivation in accounting for the process of second language acquisition by investigating the process by which English-speaking adult L2 learners of Modern Standard Arabic (MSA) acquire different types of relative clauses with Subject (SU), Direct Object (DO), Indirect Object (IO), and Oblique (OBL) extraction sites.

MSA and English differ with respect to the operations involved in the derivation of relative clauses, such that, while English uses Move of an operator to generate relative clauses (1a), in Arabic they are base-generated with a resumptive pronoun in the extraction site (1b) and are hence derived through (external) Merge.

(1)

a. [This is the book which/that Sara is reading.]
b. haaðaa l-kitaab_i [CP OP_i laðii Sara ta-qraʔ-(hu_i)]

‘This is the book that Sara is reading.’

Based on syntactic analyses of MSA relatives and considering the cost of syntactic derivations of relative clauses I argue that OBL relatives involve four derivational steps, IO relatives involve three derivational steps, DO relatives involve two derivational steps, and SU relatives involving only one derivational step. I further note that Merge is, by hypothesis, of a lesser cost than Move; consequently, given the learners’ general preference towards simpler and less costly computations (Platzack, 1996), I hypothesized that the more steps a derivation of Move requires, the more likely interlanguage (IL) grammars will reflect the Merge preference. Hence, the predicted order for operator (OP) Merge-Over-Move within the different types of relatives can be represented as follows: (2) OBL > IO > DO > SU

English-speaking learners of MSA would derive relative clauses via OP merge (as indicated by their use of overt or null resumptive pronouns at the extraction site), most likely following the proposed order in (2) in bearing on economy considerations. Thus, a resumptive pronoun will most likely occur within relative clauses higher up in the hierarchy (e.g. OBL) rather than with those lower down (e.g. SU).

Based on data collected from 16 adult English-speaking learners of MSA who completed 3 tasks: (i) a grammaticality judgment task, (ii) a sentence combination task, and (iii) a picture description task, the results of the study show that: the distribution of resumptive pronouns in the individual IL relative clauses systematically varies depending on their extraction site within relative clauses which obeys to economy conditions of syntactic derivation conforming the hypothesis of the study.

I conclude that, these results suggest that a minimalist account can be implemented to specify what language features and operations are least accessible to the learner. Distribution of resumptive pronouns is constrained by economy conditions of Merge-over-Move and the Shortest Derivation Requirement showing that the general principles of computational efficiency of syntactic derivations (F3) are operative on the process of second language acquisition.