Assessing sentence comprehension abilities: A test for Relativized Minimality

Michaela Nerantzini, Spyridoula Varlakosta, Despina Papadopoulou and Alan Beretta

Introduction

Cross-linguistic studies in agrammatism have attested asymmetries in the comprehension of semantically reversible structures with canonical vs. non-canonical argument order. Recently, these asymmetries have been interpreted within the Relativized Minimality approach (RM) to locality in syntax (Garaffa & Grillo, 2008).

RM predicts that local relations cannot be established between two terms of a dependency if an intervening element possesses similar morphosyntactic features, since this element will be recognized as a possible candidate for the establishment of the dependency relation.

• In an extension of the RM approach, Friedmann et al. (2009) reported that lexical NP-restriction plays an important role for the establishment of a dependency. Specifically, good comprehension in object relative clauses (RCs) was attested in children due to the absence of a lexical NP-restriction, while poor comprehension resulted from the presence of a lexical NP-restriction in the intervening subject. The present study aims at investigating whether the predictions within this extension of the RM framework can be confirmed by the data obtained from Greek agrammatic individuals.

Method

One monolingual Greek agrammatic speaker, P.K., 43-year-old male, participated in this study. In 2003, he suffered a left ischemic ICA including a focal lesion in Broca’s area after a disruption of the middle cerebral artery. He was selected for inclusion on the basis of the Boston Diagnostic Aphasia Examination (BDAE) (Goodglass & Kaplan, 1983; Greek version by Papathanasiou, Feidtari, Katsantoni, Panagiotopoulos, & Nafelaki, 2004).

Three comprehension picture pointing tasks were administered: (i) wh-questions, (ii) RCs, and (iii) free relatives (FRs).

(i) 10 wh-questions: 60 non referential, who and what subject/object questions, and 30 referential, which-NP subject/object questions.

(ii) 60 RCs: 30 right branching and 30 center-embedded, half of which were subject-extracted and half object-extracted.

(iii) 60 FRs: 30 subject/object sentences in which the subject/object consisted of the free relative restrictor and an NP (1). Additionally, 15 object RCs were included in which the subject was a quantificational restrictor (3), and 15 object RCs in which the subject was a quantificational phrase (Q-NP) (4).

Discussion

Our results lend some support for the extension of RM proposed by Friedmann et al. P.K.’s pattern of performance on a sentence-picture-matching task was consistent with some extent with the idea that structural similarity/dissimilarity with respect to a lexical NP-restriction affects aphaic comprehension. Specifically, if both the intervening subject and the moved A’ element in an object-extracted RC or wh-question contained a lexical NP, that similarity was sufficient to compromise understanding. Nonetheless, our data from FRs (1 and 2) and RCs with a quantificational subject (3 and 4) indicate that lexical NP-restriction is not sufficient in all cases and that other features of the moved element or the intervening subject play also a significant role in the intervention effects.

Selected References
