

Compound processing in semantic variant of Primary Progressive Aphasia

Saturday, June 24, 2017 10:50 AM (1h 55m)

We investigated the production and lexical access of compounds in the semantic variant of Primary Progressive Aphasia (PPA-s), a language impairment caused by neurodegenerative disease and characterized by word meaning breakdown in absence of grammatical difficulties (Mesulam, 2013). While inflectional & derivational morphology has been examined in PPA-s (e.g. Auclair-Ouellet, 2015), compounding has not been explored yet. Our goal is to present data of how the degraded semantic system in PPA-s affects compound processing. Participants: Two patients diagnosed with PPA-s on the basis of neurological, neuropsychological and neuroimaging data and four healthy elderly controls.

Stimulus set: 130 Modern Greek compounds; 70 dependent (e.g., *ayrioyata*/'wild cat'), 45 coordinative (e.g., *alatopipero*/'salt&pepper') and 15 exocentric compounds (e.g., *kokkinomalis*/'redhead') from all grammatical categories.

Procedure: a) Naming by definition task: participants were given the definition and they had to utter the actual compound. b) Online simple Lexical Decision task.

Results: Naming performance of both patients was significantly impaired compared to controls. Their errors were mostly substitutions (e.g., *krifovlepo*/'secretly see' instead of *krifokitazo*/'secretely look') and misorderings (e.g., *korfovuno*/'topmountain' instead of *vunokorfi*/'mountaintop'). Lexical decision task showed that PPA-s patients responded slower than controls in absence of significant differences in accuracy. Both tasks revealed more difficulties in dependent compounds.

Discussion: Compound naming is impaired in PPA-s due to semantic deterioration while knowledge of word structure appears to be relatively preserved. Results further suggest an impeded lexical access. This could be attributed either to a difficulty with processing complex semantic relationships within compounds or to factors related to the semantics of each constituent.

Primary author: KORDOULI, Konstantina (Univesity of Patras)

Co-authors: MANOUILIDOU, Christina (University of Ljubljana); TSAPKINI, Kyrana (Johns Hopkins); PAPA-GEORGIOU, Sokratis (University of Athens)

Presenter: MANOUILIDOU, Christina (University of Ljubljana)

Session Classification: Poster 2 (with coffee)

Track Classification: Freely Contributed Paper