Isabelle Simoes Loureiro. PhD Researcher, Cognitive Sciences, UMONS
Laurent Lefebvre. Full Professor, Cognitive Sciences, UMONS

The retrogenesis of the lexico-semantic network: a study using a priming paradigm

Objectives

According to Rubial-Alvarez et al. (2013), the comparison of cognitive functioning between children and patients with an Alzheimer's disease shows a reverse evolution pattern that supports the hypothesis of retrogenesis. The purpose of our research is to analyze the retrogenesis of the lexico-semantic network in order to better understand the conceptual organization of semantic memory.

Population

90 children aged 5-9 and 90 patients at different stages of the Alzheimer's disease.

Methodology

We are elaborating an experimental paradigm adapted to these different populations. Firstly, we adapted a semantic memory questionnaire, initially developed by Laiacona et al. (1993), for children. An original amusing computing interface was then elaborated. The purpose is to create groups at the same stage of semantic development or deterioration. Secondly, we created a priming paradigm in order to evaluate children and AD patients on the words relations strength in their semantic memory. Many pre-tests and psycholinguistic variables analyses (verbal association, frequency, age of acquisition, conceptual strength,...) have allowed to select 22 words (11 naturals and 11 manufactured) associated with a taxonomic and a thematic linked word.

Results

Experiments are now in progress. The semantic memory questionnaire, the priming paradigm and the first results will be presented.