

Abstract

Recent neuroimaging techniques and lesion studies contribute to our understanding of the neurocognitive underpinning of language in the brain, while psycholinguistic studies offer models of how and in which order different components are processed. Most of those studies see language either from a modular or from a connectionist perspective. These two approaches have limitations, however. For instance, they fail to provide a unified account of both agrammatic aphasia and functional reorganization following an injury. A usage-based theory of grammatical vs. lexical status (Boye & Harder, 2012) positions itself between Generative Grammar and Construction Grammar. A theory of the reorganization of elementary functions (REF-model; Mogensen, 2011; 2014) suggests a three-level organization of cognitive functions in the brain and accounts for post-injury recovery. The present thesis aims at deriving hypotheses and testing them through using various methods. The grammar-lexicon distinction and working memory are thus central topics of this thesis.

The results suggest a potential for a successful integration of the two theories. The findings further provide evidence for Boye & Harder's (2012) understanding of the grammar-lexicon distinction, and for the involvement of working memory in language production, as the REF-model would predict. As a starting point for integrating the two theories, the present thesis gives directions for future research on the neurocognitive underpinning of language and its relation to working memory.