# **UC Merced**

# **Proceedings of the Annual Meeting of the Cognitive Science Society**

## **Title**

Compositionality, modularity, and the architecture of the language faculty

### **Permalink**

https://escholarship.org/uc/item/5g25h8d6

### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

## **ISSN**

1069-7977

#### **Authors**

van Tiel, Bob Blokpoel, Mark van Rooij, Iris <u>et al.</u>

## **Publication Date**

2021

Peer reviewed

# Compositionality, modularity, and the architecture of the language faculty

#### Bob van Tiel

Radboud University, Nijmegen, Netherlands

## Mark Blokpoel

Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands

#### Iris van Rooij

Radboud University, Nijmegen, Netherlands

#### Andrea Martin

Max Planck Institute for Psycholinguistics , Nijmegen, Gelderland, Netherlands

#### **Abstract**

It is often assumed that language is strongly compositional, i.e., that the meaning of complex expressions is uniquely determined by the meanings of their constituents and their mode of composition (Fodor, 1987). Compositionality naturally connects to a broadly modular architecture of the language faculty, according to which our capacity for assigning meaning relies exclusively on lexical and syntactic knowledge (Baggio et al., 2015). Here, we discuss several arguments against strong compositionality. One such argument focuses on novel experimental data on the interpretation of privative adjectives (e.g., 'fake') (Partee, 2007). These data show that the interpretation of these adjectives is inexorably connected to the conceptual structure of the modified noun. We argue that lexical and syntactic information serve as important cues for, but do not uniquely determine, the process of meaning assignment (Martin, 2016). We discuss consequences for semantic theorising and the cognitive architecture of the language faculty.