SAVANT Bangla Experiment

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Abstract

A key component of linguistic knowledge is the capacity to form and identify novel combinations of word stems and affixes, e.g., googleable (google + able). Behavioral and electrophysiological studies demonstrate that morphologically complex words are processed by initially decomposing them into their constituent parts, known as the EARLY FORM BASED DECOMPOSITION stage. Followed by morphological RECOMPOSITION which involves two distinct stages: checking the syntactic category of the stem followed by evaluating its semantic interpretation. Earlier reseach has focused primarily in verbal domain using derivational affixes. This study examines the visual word recognition of complex words in Bangla/ Bengali focusing on the derivational prefixes.

Source: [Article Notebook](https://SwarMoi.github.io/Moitra-et-al_SAVANT/index-preview.html)

## 1 Introduction

Introduction goes here, following (Stockall et al. 2019; Neophytou et al. 2018)

Consequently.

## 2 The Present Study

## 3 MATERIALS AND METHODS

### 3.1 Materials

#### 3.1.1 Behavioural experiment

#### 3.1.2 Tarkianen Localiser

### 3.2 Participants

### 3.3 Procedures

## 4 DATA ANALYSIS

### 4.1 Behavioural data

### 4.2 MEG data

#### 4.2.1 The Tarkiainen Localizer

#### 4.2.2 The Morphological processing experiment

##### 4.2.2.1 Grammatical Prefixed Words

##### 4.2.2.2 Pseudowords

## 5 RESULTS

### 5.1 Behavioral data

#### 5.1.1 Accuracy

#### 5.1.2 Reaction Time

### 5.2 MEG data

#### 5.2.1 Functional localizer

#### 5.2.2 Early, Form-based Decomposition in VWFA

#### 5.2.3 Lexeme look-up analysis

##### 5.2.3.1 Log Base Frequency in VWFA

#### 5.2.4 Licensing stage in the left temporal lobe

#### 5.2.5 Composition stage in the left Orbitofrontal Cortex (OFC)

## 6 DISCUSSION

### 6.1 Early, Form-based Decomposition

### 6.2 Lexeme Lookup

### 6.3 Recombination Stages

## 7 Conclusion

## References

Neophytou, K., C. Manouilidou, L. Stockall, and A. Marantz. 2018. “Syntactic and Semantic Restrictions on Morphological Recomposition: MEG Evidence from Greek.” *Brain and Language* 183 (August): 11–20. <https://doi.org/10.1016/j.bandl.2018.05.003>.

Stockall, Linnaea, Christina Manouilidou, Laura Gwilliams, Kyriaki Neophytou, and Alec Marantz. 2019. “Prefix Stripping Re-Re-Revisited: MEG Investigations of Morphological Decomposition and Recomposition.” *Frontiers in Psychology* 10 (September). <https://doi.org/10.3389/fpsyg.2019.01964>.