## Luming Wang & Petra B. Schumacher Johannes-Gutenberg University Mainz

## The Influence of sentence- and discourse-level salience on Japanese Referential Processing

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Sentence- and discourse-level factors may contribute differently to referential processing. The present study investigated referential processing in Japanese and manipulated sentence-level salience features such as word order (SOV/OSV) and markedness (with or without topic/contrastive focus marker *wa*) for a dative object following three types of discourse-level cues each (given/inferred/contrastive information status). We measured time-sensitive event-related brain potentials (ERPs) to assess the impact of each of the salience features. The ERP responses revealed a general context-induced N400-Late Positivity pattern as observed previously (Schumacher 2009, Hirotani & Schumacher 2011). More importantly, the present study further revealed that the N400 was modulated by word order and markedness: in the SOV order where the dative object was at its canonical position, referential processing was independent of markedness. However, in the OSV order where the dative object was displaced to the sentence-initial position, the N400 was modulated by markedness: an enhanced N400 resulted when the dative object was sentence-initial but contextually new; but this N400-amplitude was reduced when the dative object was marked by *wa*. In contrast to the N400, there was a general context-induced Late Positivity in both word order configurations.

The overall data pattern extends previous findings in showing that in contrast to the contextinduced Late Positivity – reflecting discourse updating costs – the observed N400 – reflecting discourse linking processes – draws information from both sentential and discourse level. Crucially, for the modeling of the underlying processes, sentential factors can override discourse factors during this particular processing stage.

## Referenzen

Schumacher, P. B. (2009). Lecture Notes in Artificial Intelligence, 5847, 91-106.

Hirotani, M. & P.B. Schumacher (in press/2011). Journal of Neurolinguistics.