The Interaction of Structure and Plausibility in Comprehension in Two Languages
Jessica L. Montag & Maryellen C. MacDonald
University of Wisconsin-Madison

Introduction

While passives are generally harder to comprehend than active sentences, this is not true in relative clauses, where active object relatives are more difficult than passive relatives (Gennari & MacDonald, 2008).

Active Object Relative:
The thief that the policeman arrested was known to carry a knife.

Passive Relative:
The thief that was arrested by the policeman was known to carry a knife.

In English, Active Object and Passive Relatives differ in word order, so it is difficult to compare the locus of comprehension difficulty. In Korean, word order is the same, which allows us to un-confound voice/structure and word order and examine the unique contribution each in on-line comprehension.

A plausibility manipulation may shed light on comprehension difficulty: King & Just (1991) found larger plausibility effects in the more difficult object relatives compared to the easier subject relatives but it is unclear whether similar results would be obtained for Korean.

- Head final structure of Korean may affect linear comprehension of relative clauses
- Restriction of passives in Korean (Song & Choe, 2007) may make passives more difficult
- The sentence unfolding in English and Korean may have different effects on comprehension.
  - In English, Patient-Verb plausibility information is available earlier in passive relatives than active object relatives.
  - In Korean, Agent-Verb plausibility information is available early in both cases.

If comprehension patterns in English and Korean are similar, word order independent of Active/Passive voice is likely not contributing to comprehension difficulty. If patterns are different, varying word order may contribute.

Plausibility Manipulation

Plausible and neutral sentences differed only in embedded verb (arrest vs. scare). All relative clause nouns were animate and English items were adapted from Traxler, Morris & Seely (2002). Korean items were translations of English items.

Korean

Plausible:

Active Object Relative: The thief that the policeman screamed was known to carry a knife.

Passive Relative: The thief that was screamed by the policeman was known to carry a knife.

Neutral:

Active Object Relative: The thief that the policeman screamed was known to carry a knife.

Passive Relative: The thief that was screamed by the policeman was known to carry a knife.

Discussion

English and Korean showed similar comprehension patterns. In both languages, the more difficult active object relative sentences showed a plausibility effect while the easier, passive relative sentences did not.

Linear word order did not seem to have an effect on comprehension independent of voice. This suggests that similar to how English speakers pay attention to word order information and use it to understand a sentence as it unfolds, Korean speakers use case marking information.

Individuals learn, and are sensitive to, reliable cues to meaning in their language. When a word order is uncommon in English, or a case marking pattern is uncommon in Korean, comprehension is impeded.

References


