INTRODUCTION

This study investigates animacy effects in the online processing of Korean nominal event predicates.

BACKGROUND

Agent first advantage: Comprehenders are better & faster at processing when agents appear as the first argument in a string [1-2].

Animacy bias: When the first argument in a string is animate, participants are:

1. more likely to commit to an agent interpretation early on, and
2. more likely to be inhibited if reanalysis is necessary [3-6].

Subject first bias: Ordering subjects before objects is typologically more common than word orderings that place objects before subjects [7].

Even in languages that have possible object before subject orderings, there are preferences for production of subject before object [8].

Prominence alignment theories interpret these findings as pressures that, when aligned, facilitate faster comprehension [9-13]. Contrastively, misaligned configurations are more difficult to comprehend [14].

Anatomy & Predictions

Animacy by Predicate Type (2 x 2)

Predicate types: “NP,” predicate, “CP” predicate

NP - subcategories: only for an NP complement

CP - subcategories: for only a CP/PP complement

Animacy: animate argument, inanimate argument

Animate: [+human], capable of being an agent

Inanimate: [-animate], incapable of being an agent

Predictions:

This experiment design manipulates the necessary linking of arguments needed for a successful parse of the predicate. Given that animacy biases agentivity:

• CP-animate conditions: no re-analysis possible
• CP-inanimate conditions: re-analysis required

NP-(in)animate conditions: re-analysis optional

EXPERIMENT 1

A plausibility rating study on a 7-point Likert scale, (7 = most natural, 1 = most awkward).

Participants (n=28)

Example item set: (1) "Because the investigation was ongoing, ...the [old man/evidence]'s quiet [compliance/concealment] ... made everyone suspicious."

CP x Anim: accessing-u cyougan hyepon-cnu-

[old.man-GEN quiet compliance-TOP]

CP x Inanim: cungke-u cyougan hyepon-cnu-

[implausible!] [evidence-GEN quiet compliance-TOP]

NP x Anim: accessing-u cyougan unhphy-e-nun-

[old.man-GEN quiet concealment-TOP]

NP x Inanim: cungke-u cyougan unhphy-e-nun-

[evidence-GEN quiet concealment-TOP]

Results:

• The CP-ANIM condition was rated significantly higher than all other conditions, at an average of 5.12.

• Within the NP predicate types, ratings for both animate and inanimate conditions collapse to approximately the same mean, with NP-ANIM at an average of 4.51, and NP-INANIM at 4.43.

EXPERIMENT 2

A self-paced reading study paired with a decision task to reject the sentence for semantic implausibility.

Participants (n=40)

At spillover region 1:

• NP-animates are read slower than all other conditions (not significant).

• CP-animate conditions are read faster than all other conditions (not significant).

At spillover region 2:

• NP-animates are read slower than all other conditions (marginal main effect of predicate type and marginal main effect of animacy interaction factor not significant).

Prior to predicate region (e.g., before argument structure resolution), no effects of animacy emerge.

CONCLUSION

Experiment 1 ordinal regression:

Experiment 2 linear regression (spillover region 2):

DISCUSSION

• Comprehenders were not found to be better at processing when agents were the first argument.

• Suggests a weaker commitment to early agentive role assignment within nominals, in contrast with clauses

• Animacy was found to play only an indirect role in biasing agentivity.

• In NP-animate conditions, animacy, agentivity, and grammatical function are aligned, and yet a prominence alignment advantage was not found.

FUTURE DIRECTIONS

A possible account - resolving implicit arguments:

• Animacy items are good agents, but are also often patient/thema, given their context. Animacy items however, are almost never good agents.

• We see RT slowdown at the predicate representing the calculus of argument integration, but this is noticeably more costly for NP-animate conditions.

• This may represent the cost of identifying and integrating an implicit theme argument, which is only a must in the NP-animate conditions.

• In NP-inanimate conditions, the implicit agent is perhaps already assumed prior to the predicate, facilitating faster processing.