Quantifiers, Restrictors, and Illusory NPI Licensing

NPI Licensing and Illusions

Negative Polarity Items (NPIs) like ever must be licensed by a downward entailment operator (negation, only, etc.) occurring in a structurally accessible configuration.

Psycholinguistic research, however, has found that the presence of a licensor in a structurally inaccessible configuration can lead to an illusion of grammaticality (Parker & Phillips, 2016; Vasishth, et al., 2008).

Two accounts:
- Structurally inaccessible licensors are incorrectly retrieved as part of a noisy cue-based memory retrieval process.
- Reflect issues in the application of semantic/pragmatic processes (Xiang, Dillon, & Phillips, 2009; Xiang, Grove, Giammikado, 2013).

Quantifiers and NPI Licensing

An NPI can be licensed by a universal quantifier
- in the restrictor of a universal quantifier as in (1) as this is a downward entailment environment (Ladusaw, 1980).
- but not in the NPI as in (2) since as this is not a downward entailment environment.

(1) Every the student who has ever come to class: [ ] ever has received a good mark.
(2) Every student who has come to class: [ ] ever has received a good mark.

Hypothesis: A universal quantifier may temporarily license an NPI outside its restrictor.

Research Questions:
- Study 1: Does Illusory NPI licensing occur with universal quantifiers?
- Study 2: Does Illusory NPI licensing occur with existential quantifiers?

General Methods

Design:
- 36 participants from Amazon Mechanical Turk, 48 items per study.
- 2 (No NPI v. NPI) x 3 (Licensed No, Unlicensed The, Unlicensed)

2MAFC speeded acceptability, word-by-word serial visual presentation (400 mSec/word).

Selected References


Study 1: Universal Quantifier Every

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Result: Illusory NPI licensing occurs with universal quantifier every.

Study 2: Existential Quantifier Some

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Result: Illusory NPI licensing does not occur with existential quantifier some.

Study 3: Every + Pre-nominal Modifier

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Result: Illusory NPI licensing by every is weakened by pre-nominal modification.

Summary & Conclusion

Study 1 demonstrated that illusory NPI licensing can occur with the universal quantifier every.
- Study 2 shows that this is not a general effect of quantification.
- Studies 3 and 4 provide evidence that this illusory licensing is driven identification of a quantifier's restriction, not noisy memory retrieval. Uncertainty about the identity of a quantifier's restriction may temporarily license a structurally unlicensed NPI.

Interestingly, no illusory effect was found in offline acceptability judgments versions of Studies 1 and 2, suggesting that the illusion of grammatically driven by universal quantifiers is short lived.

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