The role of event comparison in comparative illusions

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INTRODUCTION: Grammatical Illusions

Comparative illusions like that in (1) ("Escher sentences") are not interpretable, yet are internally judged as acceptable (L2).

(1) More Americans have been to Russia than I have. In (1), more should induce a comparison between the cardinality of the main clause subject ‘more people’ and a corresponding NP in the thus-clause, e.g. (2).

(2) More Americans have been to Russia than Canadians have.

In classic ‘Escher’ sentences, no suitable NP emerges even after VP-ellipsis is resolved:

(3) (more of Americans who have been to Russia, number of Canadians who have been to Russia)

It is remarkable, then, that these sentences initially strike most listeners as highly acceptable. The examples have been known for at least 25 years, but there have been almost no systematic analyses of the illusions, their origins, or of how general the phenomenon is.

HYPOTHESES & PREDICTIONS

A typical listener gets flustered when challenged to explain the meaning of a sentence like (1). Often, she objects that the sentence really does mean something, suggesting e.g.:

- Event comparison: Americans have been to Russia more than I have.
- More than ‘just me’: More Americans have been to Russia than just me.

Our experiments address these intuitions, but, more broadly, aim to investigate whether the illusions really are as acceptable as grammatical comparatives like (2), and under what conditions people are more or less susceptible to the illusion.

Main Hypothesis. Listeners mistakenly assign an event comparison interpretation. There are at least 2 possibilities for how the switch to event comparison could be achieved.

- Syntactic realignments: Americans have to Russia more than I have.
- Semantic coercion: more of events of Americans being to to Russia than events of me going to to Russia.

The syntactic realignment hypothesis: *repeatable* vs. non-repeatable predicates: Participants will be less susceptible to illusion-type sentences with ‘non-repeatable’ predicates (those that denote an action an individual may do only once; e.g. More Americans won the lottery yesterday than I did.)

- Test of the semantic comparison hypothesis: repeatable vs. non-repeatable predicates: Participants will be less susceptible to illusion-type sentences with ‘repeatable’ predicates (those that denote an action an individual may do more than once; e.g. More Americans won the lottery the lottery yesterday than I did.)

Additional Hypotheses

A1 Illusion [5] thought the illusion was restricted to instances of elliptical. If we modify un-ellipsis the thus-clause to provide contrast with the main NP, we predict no difference in acceptability. More Americans have been to Russia than I have been to Canada.

A2 ‘Just me’. Counterbalancing the number of items which do/do not support a ‘just me’, we predict equivalent acceptability. More girls drive to school than the manager was.

A3 Type of subject NP. Classical illusions involve a 1st person pronoun subject.

A3.1 Pronouns vs. full-NPs. Full NPs (e.g. the boy) are better counterparts to ‘more NPs’ and thus more likely to insist on individual comparison.

A3.2 Person. 3rd person pronouns, unlike 1st person, trigger a search for an antecedent, and so will lower acceptability.

A3.3 Singular vs. plural. Plural subjects can induce coercion of a plurality of events, so increase acceptability.

METHODS

12 native speakers of English per study, 7-point scale, offline ratings. In both Exp. 1 and Exp. 2, half of the items had ‘repeatable’ events (predictive subject NP), half ‘non-repeatable’ event (predicates). Exp. 1: 40 target items combined with 144 fillers (balanced for grammaticality/syntax, distributed across 8 quantifiers. Exp. 2: 36 target items combined with 108 fillers, distributed across 6 quantifiers.

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REFERENCE.