

Definiteness, Inverse Linking, and Narrowing

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Nested Definites

Uniqueness presuppositions are mysteriously weakened.

- (1) adapted from (Higginbotham, 2006): (*black* instead of *red*)
- a. Do you see the man in (or: wearing) the black hat?
 - b. #Do you see the man in (or: wearing) a black hat?

“Note that there need not be just one black hat—in fact there might be lots of them, worn by women. But there does need to be just one man wearing a black hat.” (adapted from Higginbotham 2006)



Figure 1: The basic scenario

Narrowing

When the nuclear scope of a quantifier has a presupposition, entities that violate it are often disregarded (Barker 1995, Peters and Westerståhl 2006).

- (2) adapted from Barker (1995) (changed *made of ice* to *dark*):
Most planets' rings are dark.

Astronomical cheat sheet

i. Planets in our solar system	8
Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune	
ii. Out of those, planets that have rings	4
Jupiter, Saturn, Uranus, Neptune	
iii. Out of those, planets that have dark rings	3
Jupiter, Uranus, Neptune	

Example (2) is understood as saying that most items in ii. are in iii., **not** that most items in i. are in iii.

1 Our Proposal

1.1 Nested definites

Step 1: Assign inverse scope, for example by quantifier movement. We assume that a definite description like *the black hat* is a generalized quantifier of type $\langle et, t \rangle$.

Illustration:

- (3) I. The man in the black hat is walking
II. [the [black hat]]_x [λx the man in x is walking]

“There is exactly one black hat such the man in it is walking.”

Step 2: apply Intermediate Accommodation (van der Sandt, 1992) (or whatever captures its effects)

- (4) 'Intermediate Accommodation':
D [R] [S] if S presupposes P can be interpreted as D [R \wedge P] [S]
- (5) Every European country cherishes its king.

Illustration:

- (6) III. [the [λx x is a black hat and there is exactly one man in x]] _{x} [λx the man in x is walking]

"There is exactly one black hat such that (i) there is exactly one man in it; and (ii) that man is walking."

1.2 Narrowing

- (7) a. Most planets' rings are dark.
b. The rings of most planets are dark.
c. The rings around most planets are dark.

Step 1: Assign inverse scope

Illustration:

- (8) I. The rings of most planets are dark.
II. [most [λx x is a planet]] _{x} [λx the rings of x are dark]

Step 2: apply intermediate accommodation

- (9) III. [most [λx x is a planet and has rings]] _{x} [the rings of x are dark]

1.3 Blocking of the Indefinite

Follows from a preference for definite over indefinite (Hawkins, 1981; Heim et al., 1991)

- (10) a. Do you see the man in (or: wearing) the black hat?
b. #Do you see the man in (or: wearing) a black hat?

2 The Locality Prediction

2.1 Locality of Inverse Linking

Non-Islands for Scope:

Inverse linking (Wide scope over D) is possible from arguments and some adjuncts like *in*-PPs

- (11) a. Someone from every city despises it.
b. A representative from every company attended the meeting.
c. An apple in every basket is rotten.

Relative Clause Islands

Inverse linking is not possible in subject relatives containing an object quantifier (Rodman, 1976):

- (12) a. Someone who hails from every city despises it.
b. A representative who represents every company attended the meeting.
c. An apple that is in every basket is rotten.

3 Survey data

Pilot test designed in preparation of an experiment with the following goals:

- to confirm the basic judgments on nested definites reported in the literature
- to test interaction of locality and definiteness

3.1 Predictions of the theory

- Nested definites are sensitive to islands
- If there is no island, nested definites are better than indefinites (This is the pattern reported in the literature.)
- Inside islands, nested definites are worse than indefinites

3.2 Methodology

3.2.1 Procedure

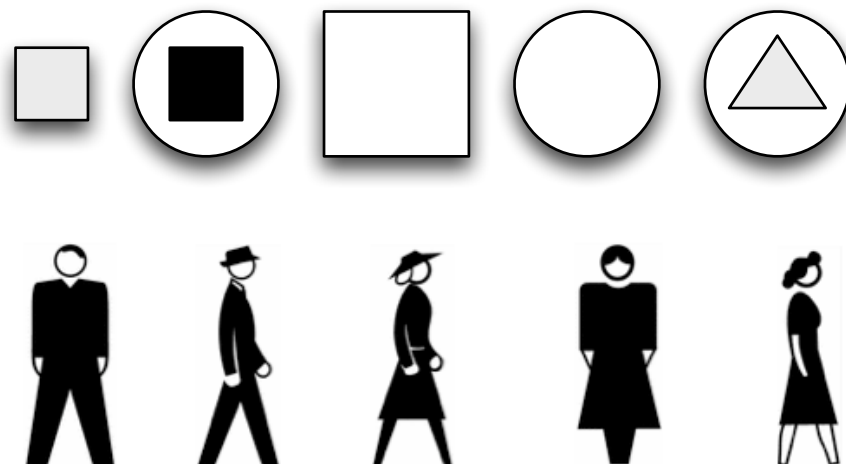
Web-based survey with 21 participants, all native speakers of English (17 from USA; 2 from UK; 1 each from Australia and Canada); ages 22-47; sex: 10 female, 12 male; occupations: all were students or graduates/faculty; all but 2 were linguists

Data gathered using magnitude estimation which has been shown to yield reliable and maximally fine-grained judgment data (Bard et al., 1996; Cowart, 1997; Keller, 2000) and detect acceptability differences that go unnoticed if an ordinal scale is used (Sorace, 1992)

The general design and instructions largely follow Keller (2000):

- Participants were asked to give judgments in numerical form on open ended scale, relative to a reference item
- Judgements were proportional: participants were asked not only if a sentence is better or worse than the reference sentence, but also how many times better or worse
- Participants were presented with sentences and pictures and asked to rate how good or bad the sentence was.
- Participants were told that they were free to decide what “low” or “high” meant in this context. The concepts of grammaticality vs. semantic felicitousness were *not* introduced.

3.2.2 Design



- Two pictures to control for lexical effects
- Reference sentences

(13) a. The square is small and grey.
b. A woman with the hat is walking.
- 6 sentences with a determiner inside a definite, but not inside an island

(14) a. The square in the/a circle is black
b. The man in the/a hat is walking
c. The man wearing the/a hat is walking
- 8 sentences with a determiner within an island inside a definite

(15) a. The square that is in the/a circle is black
b. The square that is surrounded by the/a circle is black
c. The man that is covered by the/a hat is walking
d. The man that is wearing the/a hat is walking

3.3 Preliminary Results

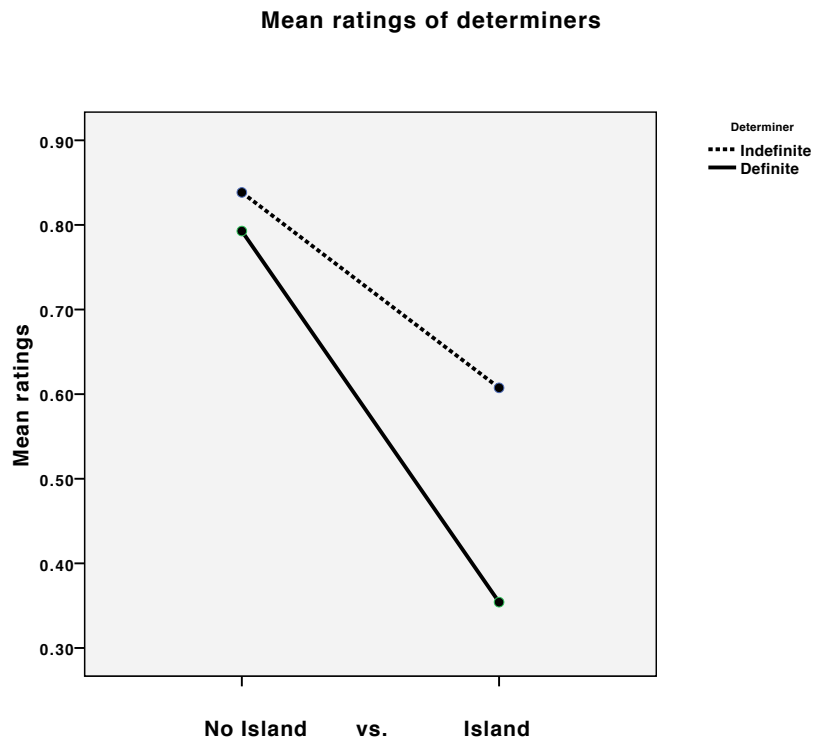


Figure 2: Overall results, z-scores

No support for Higginbotham’s judgment: definites not significantly preferred when there is no island (paired t-test on within-subject averages, $p = .679$)

Indefinites are preferred when there is an island (paired t-test on within-subject averages, $p = .023$)

ANOVA in the making (requires substantial rearrangement of survey data)

4 Conclusion

Main Conclusions:

- The pilot study does not support the judgment of Higginbotham (2006) that “the” is preferred to “a” in non-islands.
- The study shows that “a” is preferred when there is a relative clause island.
- A more controlled, fully counterbalanced followup study seems fruitful.

Possible explanation for “a” / “the”-optionality in non-islands:

- the preference for definite over indefinite applies to scope-disambiguated LFs
- scoping of indefinites out of definites is optional
- “a” cannot be replaced with “the” when it doesn’t scope out of DP

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