

Bound variable interpretation

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Anaphoric dependencies

- pronouns
- reflexives
- “traces”
- variables bound by quantifiers

pronoun “linked up” to referent very fast within and across sentences

- within sentence: priming (e.g. Nicol 1988)
- across sentences: eye-movement studies (e.g. Garrod et al. 1993)

- (1) Everyone thinks he is a good cook.
 - a. Everyone thinks Peter is a good cook.
(coreferential)
 - b. Everyone considers himself a good cook. (bound)

Bound vs. coreferential reading

- is the bound interpretation immediate?
- are both readings considered?
- which one is preferred?

Frazier and Clifton (2000)

questionnaire and self-paced reading

motivation: children prefer bound reading

- processing advantage for bound interpretations in VP-ellipsis
 - even across sentence boundary
- no preference for bound interpretations in other contexts

VP-ellipsis

- (2)
- a. Bound, one sentence:
Sally happened to strain her back yesterday and / Fred did too.
 - b. Bound, two sentences:
Sally happened to strain her back yesterday. / Fred did too. /
 - c. Coreferential, one sentence:
John thinks it's a good idea to shave his face before he goes to sleep and / Alice does too.
 - d. Coreferential, two sentences:
John thinks it's a good idea to shave his face before he goes to sleep. / Alice does too.

- (3) a. According to Sam, everyone loves his sister.
 b. According to Ann, everyone loves his sister.

written questionnaire (choose paraphrase) + difficulty rating: 1 - 7 (7 = difficult)

- (a) 31% bound (b) 42% bound
- bound difficulty: 3.4 (43% extrasentential)
- coref difficulty: 2.6 (15% coreferential)

Carminati et al. (2002)

Is c-command necessary for bound interpretation?

- (4)
- a. Every British soldier aimed and then he killed an enemy soldier.
 - b. Every British soldier thought that he killed an enemy soldier.
 - c. The old British soldier aimed and then he killed an enemy soldier.
 - d. The old British soldier thought that he killed an enemy soldier.

monitoring eye-movements

- no differences on first pass
- no effect of c-command

Carminati et al. (2002)

typically a quantifier can't take scope outside the sentence:

(5) ?Every boy arrived at noon. He sat down.

telescoping (Roberts 1989, Poesio and Zucchi 1992)

(6) Each degree candidate walked to the stage. He took his diploma from the dean and returned to his seat.

- predictable series of subevents
- sensitive to quantifier
- accommodation: “if . . . then” structure
for all x , if x is a degree candidate, x took x 's diploma from the dean

- sentence 1:
quantifier (“each” vs. “every”) or name
- sentences 2-3:
expected vs. unexpected order of events
- sentence 4:
identical in all conditions

initial John Frederick

Each executive

Every executive went home.

expected He broiled a steak. He ate dinner.

unexpected He ate dinner. He broiled a steak.

final Then he watched television.

results:

- extra cost of logophoric interpretation on first pronoun
- only numerical “each” vs. “every” difference
- cost of unexpected order only for Noun condition

different possible uses of telescoping?

bound variables are not a uniform type

following Bosch (1983)

- the canonical cases should be analyzed as syntactic agreement pronouns
- the problematic ones are anaphoric referential pronouns

(7) If a farmer owns a donkey, he beats it.

an implicit quantifier binds *a donkey* (and *a farmer*), cf.

(8) Every farmer who owns a donkey beats it.

the “content” of the donkey pronoun:

- the (donkey) (Elbourne 2001)
- the donkey the farmer owns (Heim 1990)

If a waiter serves a glass of water to an actress, he garnishes *it*...

- Heim: activation of “(glass of) water” and of “actress”
- Elbourne: activation of “(glass of) water”

cross-modal lexical decision

Wenn ein Kellner einer Schauspielerin ein Glas Wasser . . . #
serviert, ist es # mit einer Limone garniert.

probes:

- related to “water”
- related to “actress”
- unrelated

facilitation: difference between response times at early
and late probe position

results:

- priming for "water" (54 ms)
- priming for "actress" (57 ms)

interpretation of the pronoun:

“the water the waiter serves to the actress”

Control: ordinary pronoun

Bevor der Kellner der Schauspielerin ein Glass Wasser . . . #
serviert hat, wurde es # mit einer Limone garniert.

- priming for “water” (48 ms)