Two Principles of Spatial Premise Integration

Example of premise pair:
P1: [The snake]relatum is to right of [the deer]relatum.
P2: [The donkey]relatum is to the left of [the snake]relatum.

- Relatum = Given: Integration is easier if given term figures as relatum of P2.

Varying Word Order: Projective Prepositions

(1.a) Der Eselnew ist rechts von der Schlangegiven. The donkeynew is to the right of the snakegiven.

(1.b) Die Schlangegiven links vom Eselnew. The snakegiven is to the left of the donkeynew.

(2.a) Rechts von der Schlangegiven ist der Eselnew. To the right of the snakegiven is the donkeynew.

(2.b) Links vom Eselnew ist die Schlangegiven. To the left of the donkeynew is the snakegiven.

Predictions

- Relatum = Given: (1.a), (2.a) easier than (1.b), (2.b)
- Given-New: (1.b), (2.a) easier than (1.a), (2.b)

Procedure

- Self-paced reading of first premise, P1
- Self-paced reading of second premise, P2
- Picture verification

Results: P2 comprehension times

cf. Hörmig, Oberraer, & Weidenfeld, 2005

Varying Word Order: Projective Adverbs

(3.a) Der Eselnew ist von der Schlangegiven aus rechts. The donkeynew is from the snakegiven right.

(4.a) Von der Schlangegiven aus ist der Eselnew rechts. As from the snakegiven the donkeynew is right.

(5.a) Von der Schlangegiven aus rechts ist der Eselnew. As from the snakegiven right is the donkeynew.

(6.a) Rechts von der Schlangegiven aus ist der Eselnew. Right as from the snakegiven is the donkeynew.

Problems:

1. = unmarked word order; 2 = marked word order

Predictions

- Relatum = Given: F11,24 = 285.10, p < .001; F21,126 = 158.82, p < .001
- Licensing (relatum = word order):
  F11,24 = 25.58, p < .001; F21,126 = 18.36, p < .001
- Given-New licenses OSA (SOA vs. OSA = relatum):
  F11,24 = 10.59, p < .01; F21,126 = 5.311, p = .023
- Poiet licensing stronger than Given-New (OSA vs. OAS = relatum):
  F11,24 = 10.59, p < .01; F21,126 = 7.74, p < .01

Discussion

Contextual Licensing:

- Given-New licenses marked word order
- Poiet licensing even stronger than given-new licensing
- Contextual licensing is a matter of degree

Processing Assumptions

- Earlier availability of given relatum speeds up premise integration
- Speeding up antecedent access
- Earlier availability of given relatum together with relational expression, speeds up adding new place
- Speeding up relational processing

References


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