Accessing discourse referents for nonspecific versus specific entities

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Discourse referents

Entities introduced within descriptions of factual situations are represented by unique **discourse referents**

⇒ Prerequisite for **anaphora resolution**

Discourse referents for entities of nonfactual situations?

Antoine wants to marry a **hairdresser**.

**specific interpretation** ⇒ specific entity

**nonspecific interpretation** ⇒ nonspecific entity

**YES**

**No?**
Anaphoric reference to nonspecific entities is possible

→ Antoine wants to marry a hairdresser.
   *He would ask her every day to do his hair.

But only within nonfactual situations, not within factual situations

→ Antoine wants to marry a hairdresser.
   *He asks her every day to do his hair.
Simulation of language comprehension

**Simulation of**

Antoine wants to marry a hairdresser.  
[nonspecific interpretation]

**Discourse Representation Theory (DRT; Kamp, 1981 → Roberts, 1989)**

**DRS for**

Antoine wants to marry a hairdresser.  
[nonspecific interpretation]
Experimental texts: narrative containing a critical sentence pair

Two versions of the introducing sentence:

**desire world** (non-specific) / **factual situation** (specific)  [within-subject]

(Text about Markus who has saved his pocket money)

*With the money he wants to buy a racing bike.*
*With the money he has bought a racing bike.*

And two versions of the test sentence:

**desire world** / **factual situation**  [between-subjects]

*He wants to go on a bicycle tour with the racing bike.*
*He goes on a bicycle tour with the racing bike.*

→ Reading times for the test sentence
Mean Reading Times for the Test Sentence (in ms)

- **Factual Situation**
  - Desire World: 1700 ms
  - Factual Situation: 1650 ms

- **Desire World**
  - Desire World: 1700 ms
  - Factual Situation: 1650 ms

*Experiment 1: Result*

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Experiment 1: Bridging inference

*With the money he wants to buy a racing bike.*
*He goes on a bicycle tour with the racing bike.*

Bridging inference to establish local coherence (buying of bike)

Prolonged reading times for condition ‘introducing sentence: desire world → test sentence: factual situation’
→ simply and solely due to a bridging inference?
two versions of the **introducing sentence:**

**nonspecific / specific** desired entity  

[within-subject]

With the money he wants to buy a racing bike that should have at least 20 gears. he saw in a bicycle store.

**test sentence:** He goes on a bicycle tour with the racing bike.

→ Bridging inference is required in both versions
With the money he wants to buy a racing bike that should have at least 20 gears. He saw in a bicycle store.
Experiment 2: Result

Mean Reading Times for the Test Sentence (in ms)

nonspecific   specific
Conclusions

Nonspecific entities of non-factual situations are represented by discourse referents

limited accessibility for anaphorical linkage
nonfactual vs. factual

Difference between nonspecific and specific entities of described nonfactual situations
Kiitos

Thanks for your attention