The Role of Probabilistic Information in Aspectual Processing

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Ambiguity Resolution of Situation Aspect (SA)

(1) Hans jogged… a) in the park b) two miles
• Situation aspect (SA) doesn’t depend on the verb only, (1a) expresses an atelic activity, (1b) is telic due to the path argument two miles
• At jogged comprehenders thus have to deal with aspectual ambiguity

(2) Hans jogged… a) for two hours b) *in two hours
• Activities are good with for-adverbials but ungrammatical with in-adverbials

(3) Hans constructed the design model… a) ?for two hours b) in two hours
• Accomplishments show the opposite pattern

The Role of Lexical Frequency Information: Exp. 1

Activity Verbs
(for, act) Hans | joggte | zwei Stunden lang | im | Park.
(for,acc) Hans | joggte | zwei Stunden lang | durch | den ganzen Park.
(in, acc) Hans | joggte | in zwei Stunden | durch | den ganzen Park.

Accomplishment Verbs
(for, act) Hans | konstruierte | zwei Stunden lang | an | dem Modell herum.
(in, act) ??Hans | konstruierte | in zwei Stunden | an | dem Modell herum.
(for,acc) Hans | konstruierte | zwei Stunden lang | das | neue Modell.
(in, acc) Hans | konstruierte | in zwei Stunden | das | neue Modell.

Aspectsal Underspecification
No difference in RT between in and for; both verb classes are processed alike

Selective Parsing

Evidence for PP

- RTs after activity verbs: in slower than for
- RTs after accomplishment verbs: no significant difference between in- and for-adverbials
- Lexical frequency is used online
- Judgments: [for,acc]-sentences with activity verbs were rated as acceptable as their [in,acc]-counterparts (activity verbs: for-act 96%, for-acc 88%, in-act 29%, in-acc 83%)
- Accomplishment verbs: for-act 94%, for-acc 94%, in-act 61%, in-acc 93%)
- Mismatch is only temporary

Evidence for GA

- Judgments: only atelic in was rated unacceptable (26%), other conditions were about 75% acceptable
- RTs of the adverbial: only atelic in was rated unacceptable (control)
- Telic for (coercion) and atelic in (mismatch) were slow
- Discourse information is used right away
- Context can even override lexical preference
- Multiple constraints determine SA ambiguity resolution!