The Event-Extraction Correlation

Coordinate Structure Constraint. Ross’s (1967) Coordinate Structure Constraint states “In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved, out of that conjunct.” Yet, extraction is licensed when the first conjunct contains a “light” verb (come, go, run, etc.), as in pseudo-coordinations. Trueswell (2006) observed that extraction was permitted out of adjacent islands? What did you get upset [because Mary said it] when the adjunct and the main clause describe a single event (What are you working so hard in order to achieve it?)

Two approaches to capturing the generalization.

1. Direct Approach: Encode the single event requirement directly into a constraint on wh-movement

Two approaches provide some initial support for the indirect approach over the direct one.

Ordinary Coordination: 2 Lexical Vs.

(2) Extraction illicit
a. John walked and drank a cold beer.

b. ?? What did John walk and drink?

(3) Two event adverbs licensed
a. John simultaneously walked and drank a cold beer.

Pseudo-Coordination: Light + Lexical V.

(4) Extraction licensed
a. John went and drank a cold beer.

b. What did John go and drink?

(5) Two event adverbs prohibited
a. *John simultaneously went and drank a cold beer.

Coordination

Predictions. If the Event-Extraction Holdings elicits, then single event structures (unambiguous pseudo-coordination) Light, ambiguous pseudo-coordination —LightPP— should be rated higher than two event counterparts (Lex).

Materials & Method. Participants in an offline questionnaire rated the acceptability of the materials (24 quartets as in 9) on a 7 point scale (17 = highest).

(9) A. What did the electrician go and repair after his afternoon coffee?

B. What did the electrician go in the attic and repair after his afternoon coffee?

C. What did the electrician crawl in the attic and repair after his afternoon coffee?

D. Neither

Results. Pseudo-coordination conditions were indeed rated higher than two event counterparts, as well as extraction from Purpose clauses.

Questionnaire study

<table>
<thead>
<tr>
<th>Condition</th>
<th>Mean Rating</th>
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<tbody>
<tr>
<td>LightPP</td>
<td>4.77 (1.05)</td>
</tr>
<tr>
<td>Lex</td>
<td>5.23 (1.05)</td>
</tr>
<tr>
<td>LexPP</td>
<td>6.39 (1.29)</td>
</tr>
<tr>
<td>Light</td>
<td>7.21 (0.90)</td>
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Pairwise comparisons:

Light vs. Lex: p = .01
Light vs. LexPP: p = .001
Lex vs. LexPP: p = .001

Results are consistent with the indirect account, and may still be compatible with some version of the direct account. If monoclausal structures are required for extraction in such cases, and they are independently preferred in online processing, then processing differences should appear in online reading times.

Self-Paced reading study

Predictions. I assume a syntax-first incremental parser. Conjunctions in the Light condition are coordinated Low, as monoclusal structures. Thus Locality (ii) is satisfied. LightPP structures may optionally be analyzed as monoclusal structures, and such an analysis is favored by the parser. In either case, no realignment is required.

Lex & LexPP conditions cannot be construed as a single event, and thus must be represented as biclausal structures, which in turn violates the Locality constraint. Expect that violation of the Syn-Sem constraint prompts syntactic reanalysis to a biclausal structure, which will be reflected in increased reading times.

Materials & Method. 60 UMass undergraduates participated in an online self-paced moving window task testing 24 quartets, crossing first conjunct verb (Light vs. Lexical) and presence of preposition (± PP).

(10) A. Abby loved her new computer.

B. What did Abby love in the attic?

C. What did Abby crawl in the attic?

D. Neither

Results. Reading times for regions 4 − 7.

Summary: Lex conditions sustained increased reading times, while Light conditions appeared earlier, primarily on Regions 7 & 8. Light verbs (LightPP) were read faster overall, but with some increased reading time on Region 7, perhaps reflecting split-field coverage from reading the ex-