Food for thought before we begin…

From Futurama: Bender throws a beer bottle at the television set, breaking it. Fry, in response, says, “Now what am I going to watch and drink all day?”

I. Introduction
Goal: To describe the proper generalization of a set adjuncts from which extraction is allowed, in apparent violation of the CED.

The basic data:

1) *Who did Mary cry [after John hit t]? 
2) What did John arrive [whistling t]? 
3) What did John drive Mary crazy [trying to fix t]?

Punchline:

A semantic characterization is responsible. If the event denoted by the adjunct occupies an event position in the argument structure encoded in the matrix verb, then extraction of the complement from within that adjunct is possible.

II. Limits of syntax

4) a. *What does John dance [whistling t]? 
   b. What did John arrive [whistling]?

c. What did John enrage his neighbors [whistling t]? 
d. What did John drive Mary crazy [whistling t]?

These appear to be syntactic differences as b-d have internal arguments whereas a does not.

However …

5) a. What did John drive Mary crazy [trying to fix t]? 
   b. *What did John drive Mary crazy [fixing t]?

Here the additional structure improves extraction, when additional structure should only make it worse.

Furthermore …

6) a. What did John come home [trying to understand t]? 
   b. *What did John come home [beginning to understand t]?

As these two structures are identical, it cannot be purely syntactic constraints barring extraction from 6b.

7) Extraction from Adjunct Secondary Predicates

Extraction of a complement from a secondary predicate is permitted only if the event denoted by the secondary predicate is identified with an event position in the matrix predicate.

8) * What did John arrive [while whistling t]?
III. Verb classes and their argument structure

3.1.1 States and activities

States: knows, lives, owns
Activities: kiss, work, sit

For activities and states, as they cannot be decomposed, the only way that an activity with a secondary predicate to fit (7) is if the two events can be interpreted as a single event.

This happens if there is an asymmetry in “agentivity”:

9) What is John sitting there [eating t]?
10) What was John lying in bed [reading t] all day?

Acceptability remains if the secondary predicate is less agentive:

11) Which chair did John eat his breakfast [sitting on t]?
12) Which bed did John read Finnegan’s Wake [lying in t]?

Also happens if the matrix predicate is modified by around or about. These modifiers appear to “portray the event as aimless, unplanned, or ineffectual, etc” - thus changing the “agentivity” of the matrix event and shifting the construction into the category above.

13) Who are you prancing about [trying to impress t]?
14) What did she jump around [singing t]?

Compare without the about/around.

In general, having two agentive activity predicates will not allow extraction from the secondary predicate.

3.1.2 Accomplishments

Accomplishments: draw a circle, drive Mary crazy, etc

Widely assumed to encode a “cause” relationship between two predicates: an activity that causes an achievement.

15) John drew a circle.

This is true if some event of John’s drawing causes a circle to come into being.

So, accomplishment structures should allow for extraction out of a secondary predicate. That is, if the secondary predicate functions to specify the causing event of the matrix accomplishment, then extraction will be licit.

16) What did John drive Mary crazy [trying to fix t]?
17) What did John cut himself [carving t]?
18) What did you turn the house upside down [hoping to find t]?

If the causing and caused event positions are already filled (as in 15), rather than being underspecified as in 16-18, then extraction will not be allowed, because the secondary predicate cannot fill that role.

19) *What did John draw a circle [hoping to demonstrate t]?

3.1.3 Achievements

Achievements: arrive, come back, intransitive burn or break
Characterized by an instantaneous change from the property not holding to the property holding. No “cause” is encoded. Only “become”.

20)  
   a. The package arrived this morning.
   b. The moment finally arrived.
   c. Our first grandchild arrived this morning. (birth sense)

Arrival must be preceded by some sort of event

Truswell takes this as evidence that certain types of achievements, the nature of the preceding event remains unspecified to some extent, leaving available the possibility of specifying it with a secondary predicate, and it is exactly these cases that will allow extraction from the secondary predicate.

As the relationship between the preceding event and the achievement is non-causal, it must express some sort of temporal relationship: precedence.

So

Accomplishments: $e_1$ CAUSE $e_2$

Many achievements: $e_1$ THEN $e_2$

And a clear parallel exists with:

Causatives: $c_{\text{secondary}}$ CAUSE $c_{\text{matrix}}$

Depictive: $c_{\text{secondary}}$ R $c_{\text{matrix}}$

What is R? Truswell claims it is THEN as well (at least in some cases).

Some are overlap:

21) John drives his car wearing sunglasses.

Predicts that (22) should be bad:

22) What does John drive his car [wearing t]?

**Summary of the proposal:**

**Interpretation of Transparent Secondary predicates:**

A matrix predicate may denote a relation between two events. Two possible such relations are:

(a) **Accomplishments:** $e_1$ CAUSE $e_2$

(b) **Many achievements:** $e_1$ THEN $e_2$

In these cases, a transparent secondary predicate denotes a property of the antecedent event $e_1$. Therefore, (a) transparent secondary predicates modifying accomplishments are interpreted as causatives; and (b) transparent secondary predicates modifying non-causative achievements are interpreted as depictives.

**3.3 Telicity**

(c) **Secondary requirement on secondary predicates:** they must be atelic.

All transparent secondary predicates must be atelic, and must modify telic predicates.

<table>
<thead>
<tr>
<th>Matrix event</th>
<th>Secondary event</th>
<th>Example</th>
<th>Grammatical?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Atelic</td>
<td>Atelic</td>
<td>What did John work whistling?</td>
<td>No</td>
</tr>
<tr>
<td>b. Atelic</td>
<td>Telic</td>
<td>What did John work noticing?</td>
<td>No</td>
</tr>
<tr>
<td>c. Telic</td>
<td>Telic</td>
<td>What did John arrive noticing?</td>
<td>No</td>
</tr>
<tr>
<td>d. Telic</td>
<td>Atelic</td>
<td>What did John arrive whistling?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Secondary predicates modifying other classes of achievements like *appear* or *notice*, will not be transparent.

This is because they do not have any sort of preceding event, whether causative or depictive (unlike *arrive* or *burn*).

### 3.5 Direct Causation

Causation must be direct in order for the secondary predicate to be transparent.

23) *What did John hurt himself [having/owning t]?*

These are bad because there is no direct causal link between owning something and hurting yourself, of course given the appropriate context these can be saved.

Also, if the secondary predicate describes an event which is a subpart of the matrix event (and thus cannot cause it), the secondary predicates will not be transparent.

24) *What did John write a letter [dipping his quill in t]?*

25) *What did John write a letter [dipping t in the inkwell]?*

### IV. Secondary Predicates in declaratives

There seems to be a restriction against telic secondary predicates in declaratives as well.

Declaratives with atelic secondary predicates are unremarkable and much more flexible than the interrogatives.

26) John appeared wearing a beautiful bespoke suit.

27) *What did John appear [wearing t]?*

### V. Conclusions

Proposed a semantically based approach to exceptions:

**Extraction from Adjunct Secondary Predicates**

Extraction of a complement from a secondary predicate is permitted only if the event denoted by the secondary predicate is identified with an event position in the matrix predicate.

So, what to do about the CED?

Well, a solely event-based approach won’t suffice, nor will the purely syntactic CED, so require a compromise.