Presupposition and Extraction: Discourse-based Account of the Factive Island Effect

David Y. Oshima

Adjunct *wh*-phrases like *why* and *how* cannot be extracted from so-called factive islands (i.e. complement clauses of factive predicates such as *know* and *regret*), nor can they occur "in situ" in these environments.

- (1) a. Who does Max regret Pat beat _?
 - b. For what reason does Max regret Pat beat Jack _?
 - c. *Why does Max regret Pat beat Jack _?

In this talk I argue that the factive island effect can be explained as the cooperative effects of two factors, *viz.* the presupposition induced by factive predicates, and the semantic characteristics of *wh*-adverbs like *why* and *how*: namely, they do not allow a partial resolution (or the "mention-some"; cf. Groenendijk and Stokhof 1997).

A discourse consisting of a question with a wh-phrase within a factive environment and its answer involves several presuppositions: for example, for a discourse (2) to be felicitous at least two presuppositions, which is shown in (3), must be in the background:

- (2) A: Who does Max regret Alice insulted?B: (Max regrets Alice insulted) Jack.
- (3) ps1: Max regrets Alice insulted somebody. ps2: Alice insulted Jack.

The speaker A, at the moment when he poses the question, may reasonably expect that the answer should be pragmatically felicitous, i.e., it does not presuppose (or take for granted) what is not in the common background. This means that a sensible answer should be of the form "Max regrets Alice insulted x", where x is such that "Alice insulted x" is in the background. This explains why the argument of a 'one time only' predicate (cf. Szabolcsi and Zwarts 1992) cannot be extracted from a factive environment:

(4) *Who does Max regret Alice was killed by?

A speaker posing the above question, as far as he is expecting a pragmatically felicitous answer, should know the unique possible resolution of the wh-phrase – and the answer to his question, which results in pragmatic oddity.

Those wh-phrases that cannot be extracted from factive environments have a characteristic that lacks to other wh-phrases: they always require a full resolution, whereas other wh-phrases allow a partial resolution when the predicate can be construed as denoting an indefinite group of events.

- (5) A: Who saw Max?
 - B: Pat and Jack (and only Pat and Jack) did. B': Pat did(, for example).
- (5') A: Who killed the three rats?B: Pat and Jack did.B': #Pat did(, for example).

- (6) A: For what reason(s) did Max beat Pat?B: (Max beat Pat on Monday) because Pat insulted Alice and (Max beat Pat on Tuesday) because Pat stole Max's wallet.B': Because Pat insulted Alice, for example.
- (7) A: Why did Max beat Pat?B: Because Pat insulted Alice (*for example).

Consequently, interrogatives with why, how etc. always have a unique valid resolution; the extraction of those wh-phrases from a factive environment is pragmatically infelicitous because its only valid resolution must be in the background (i.e. known to the speaker).

Why do *why*, *how* etc. require the exhaustive resolution? I propose that manner/reasondenoting adverbials are, as a rule, ambiguous between restrictive and non-restrictive uses. Whereas a restrictive adverbial merely poses a semantic restriction on the event denoted by the predicate, a non-restrictive adverbial introduces a new predicate that takes the event denoted by the core clause as its argument. The exhaustive-answer requiring property of *why*, *how* etc. can be attributed to their exclusively non-restrictive character. This assumption is supported by two independent phenomena: (i) ambiguous manner/reason adverbials can take either wide or narrow scope with regard to sentential negation whereas exclusively nonrestrictive adverbials allow only the wide scope reading, and (ii) non-restrictive *wh*-adverbials do not have the so-called narrow scope reading with regard to a QP like *everyone* (É. Kiss 1992). Under the analysis, the question (8) can be roughly paraphrased as (9).

- (8) Why did Max beat donkeys?
- (9) What (reasons) brought about the (plural) event denoted by 'Max beat donkeys'?

Although the event denoted by the predicate of the core clause in (8) is indefinite, (as is manifest in the paraphrase above) it is forced to be construed as definite *qua* argument of the predicate introduced by *why*, which thus denotes a definite group of event, and accordingly a partial resolution of *why* is blocked.

Reference

- Groenendijk, Jeroen and Martin Stokhof (1997) "Questions", in Johan van Benthem and Alice ter Meulen (eds), *Handbook of Logic and Language*, MIT Press: pp.1055-1124.
- É. Kiss, Katalin (1992) "Wh-Movement and Specificity", Natural Language and Linguistic Theory 11: 85-120.
- Szabolcsi, Anna and Frans Zwarts (1992) "Weak Islands and an Algebraic Semantics for Scope Taking", Natural Language Semantics vol.1 n.3: 235-284.