

An Argument/Adjunct Asymmetry in Wh-questions: a novel argument for LF

A famous and important set of puzzles in the word order of many languages are known as ‘intervention effects’; there has been heated debate between syntactic (Beck 1996, Beck & Kim 1997, Hagstrom 1998) and semantic (Honcoop 1998, Beck 2006) accounts. As defined in (1), the problem is that, in certain languages, *wh*-phrases cannot be interpreted in situ under the scope of negation. According to Beck (1996), questions with the relevant elements in languages like German, Korean, and Japanese require a word order permutation which is otherwise optional: one in which the otherwise in-situ object question word is overtly scrambled to a position structurally superior to the negation. The discovery of intervention effects has stimulated a large amount of research which has crucially relied on syntactic constraints on Logical Form to account for them. In recent work, however, Beck (2006) herself has argued that the intervention effects follow from ‘pure’ semantic considerations, and do not require such structural constraints stated over LFs.

(1) Intervention Effects (IE)

In LF, a *wh*-phrase may not move across certain Scope-Bearing Interveners (e.g. NPI, *not*, *only*, *even*)

(Beck and Kim 1997; Hagstrom 1998, Pesetsky 2000)

However, this paper presents a new set of facts which has the potential to reorient the debate on intervention effects. I have found in a series of experiments using magnitude estimation tasks (Fig 1) (Bard, Robertson and Sorace 1996) that only ‘argument’ *wh*-phrases trigger intervention effects in (2), and that ‘adjunct’ *wh*-phrases do not in (3) and (4) (a conclusion confirmed by differential pitch and timing effects in pronunciation as well; Fig. 2,3). This novel fact is extremely surprising given much earlier work on the nature of argument vs. adjunct asymmetries: in fact, it is almost diametrically the opposite of what Szabolcsi & Zwarts (1993) led us to expect. Arguing for a semantic treatment of certain relativized minimality effects (Rizzi 1992), they posit that *wh*-phrases that range over individuals (*wh*-arguments) are good extractors out of all weak islands (can scope over any intervener). However, the present paper provides a counter-argument that it is the adjuncts that are insensitive to the interveners, calling into question a pure semantic account along familiar lines.

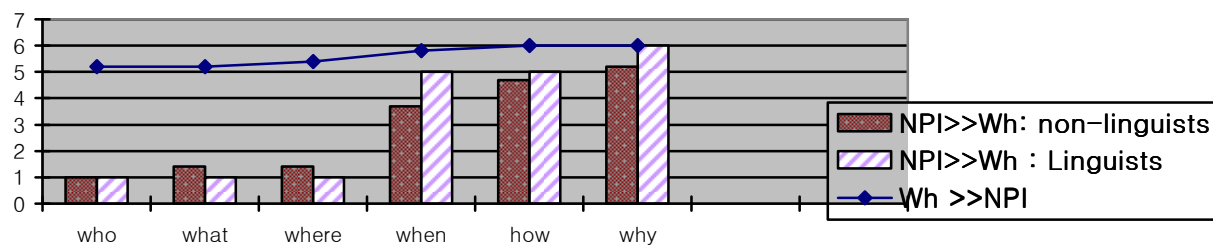


Figure 1. Strength of preference for acceptability and grammaticality with Intervention data Korean *wh*-questions (Also, three way ANOVA supports a significant effect of *wh*-phrases on evaluation scores and negligibility of linguist vs. non-linguist group variation)

- (2) *Wen hat niemand wo gesehen?
whom has nobody where seen
'Where did nobody see whom?'

(Beck 2006) [German]

- (3) a. Way / encey / etteke(hese) amuto jib-e ga-chi anh-ass-ni?
 why / when / how anyone home.loc go.CHI not.Past Q
 b. (?) Amuto way / encey / etteke(hese) jib-e ga-chi anh-ass-ni?
 anyone why / when / how home.loc go.CHI not.Past Q
 ‘Why/when/how did no one return home?’ [Korean]
- (4) a. Naze / itu / doo(nikasite) dare-mo uti-ni kaera-na-katta-no.
 Why / when / how anyone.even home.loc return.not.Past Q
 b. (?) Dare-mo naze / itu / doo(nikasite) uti-ni kaera-na-katta-no.
 anyone.even why / when / how home.loc return.not.Past Q
 ‘Why/when/how did no one return home?’ [Japanese]

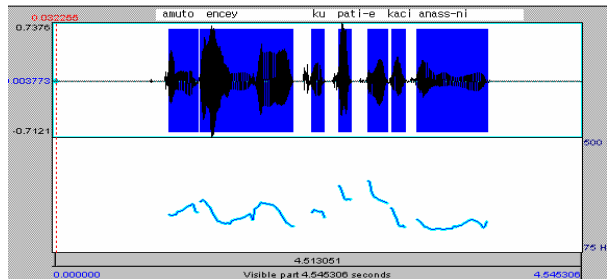


Figure 2. The IE *wh*-argument question remedied by prosodic aid

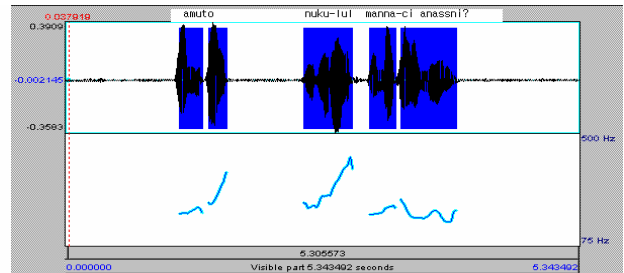


Figure 3. The IE *wh*-adjunct question remedied by prosodic aid

In this respect, this asymmetry provides crucial evidence for a proposal along the lines of Beck (1996), which provides an argument for the necessity of LF (over a purely ‘semantic’ account à la Beck 2006). Based on the categorical (nominal vs. adverb) dichotomy evidenced by structural case attachment tests in (5) and formation of complex *wh*-expressions in (6), I suggest different base locations for *wh*-arguments (inside NegP) and *wh*-adjuncts (outside NegP) in these languages. Accordingly, insensitivity of *wh*-adjuncts to Intervention Effects is naturally predicted by their inherently higher positions at LF. Consequently, Beck & Kim’s (1997) generalization on Intervention Effects in (7) needs to be revised as in (8).

- (5) ACC-marker attachability test: Korean / Japanese *wh*-phrases
 mues-lul / nani-o ‘what-acc’ * etteke-lul / * doo-o ‘* how-acc’
 nuku-lul / dare-o ‘who-acc’ * encey-lul / * itu-o ‘* when-acc’
 eti-lul / doko-o ‘where-acc’ * way-lul / * naze-o ‘* why-acc’
- (6) Formation of complex *wh*-expressions in Korean
 enu {nuku / mues / *et / *encey / *etteke / *elma / *way}
 which who / what / where / when / how /how;much / why (Chung 2000)
- (7) * [. . . [**NPI** [. . . *wh*-phrase . . .]] . . . Q] (Beck & Kim 1997)
- (8) * [. . . [**Neg** [. . . *wh*-phrase . . .]] . . . Q]

SELECTED REFERENCES

- Beck, Sigrid. 1996. *Wh-constructions and Transparent Logical Form*. PhD dissertation, Universität Tübingen.
- Beck, Sigrid. 2006. Intervention Effects Follow from Focus Interpretation. *Natural Language Semantics*. 14, 1-56.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, Massachusetts. MIT Press.
- Rizzi, Luigi. 1992. *Argument/Adjunct (A)symmetries*. to appear in Proceedings of NELS 21.
- Szabolcsi, Anna and Frans Zwarts. 1993. Weak islands and an algebraic semantics for scope taking. *Natural Language Semantics*. 235-284.