Intervention Effects in Alternative Questions

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We observe that intervention effects as they have been observed for *wh*-constructions also exist in alternative questions. All fundamental characteristics of the effect seem to be parallel, and we propose to apply one and the same analysis to both kinds of intervention effects. To this effect we combine Romero and Han's (2003) analysis of alternative questions with the assumption that a certain kind of variable may not be bound across an intervener. A particular type of data considered by Romero and Han now also falls out as an intervention effect.

Wh-intervention effects are illustrated by the data in (1)-(3) (see e.g. Beck (1996), Pesetsky (2000)). Kim (2002) offers the generalization that a quantificational or focusing element may not intervene between a *wh*-phrase and its licensing complementizer. The effect exists in many languages, including English, German and Korean. Example (4) has an interpretation as an alternative question (in addition to one as a Yes/No-question). On this reading, there is a focus on both disjuncts. Appropriate answers are that Sally taught Semantics I and that Sally taught Syntax I. In (5)-(7), we construct alternative questions that are analogous to the *wh*-questions in (1)-(3). Observe that an intervention effect arises that is parallel in all respects: The harmful intervener may not occur between the disjunction and the interrogative complementizer. The same questions without the intervener are fine. And once the disjunctive phrase has moved past the intervener, the example is fine again (see (5b)). Note, moreover, that the intervention effect with alternative questions appears crosslinguistically stable, just like the intervention effect with *wh*-constructions. We must assume that the source of the two types of intervention effects is the same.

We adopt the analysis of Romero and Han's (2003) for alternative questions. According to them, the alternative question in (4) has the Logical Form in (8). They argue that the disjunction is larger than it appears, and that invisible material has been elided. This explains the focus pattern in alternative questions, as well as other restrictions (see Romero and Han for details). Moreover, they assume that a hidden *wh*-phrase ranging over choice functions is part of the structure of alternative questions. This *wh*-phrase originates next to the disjunction, and moves to the vicinity of the interrogative complementizer. A choice function variable remains in the base position and applies to the disjunction.

We suggest that the relation between the base position of that *wh*-phrase and its licensing interrogative complementizer is just as sensitive to an intervener as is the relation between an ordinary *wh*-phrase and its licenser. Adopting Romero and Han's analysis allows us to treat the intervention effect in alternative questions as completely parallel to the standard *wh*-intervention effect. We propose that structures like (9) are excluded, and we will argue that there is a semantic reason for that in terms of variable binding.

Our analysis makes some further predictions. We have an alternative explanation for data like (10), which has a Yes/No-reading but not an alt-reading. Romero and Han analyse this as an effect of focus on negation. We discuss the relation to our explanation. We expect that intervention effects in alternative questions should exist whenever we find *wh*-intervention effects, crosslinguistically and in terms of syntactic configuration. This is manifest in languages like German, Korean, English and Hungarian. We will follow up on those predictions and discuss repercussions for Pesetsky's (2000) notion of feature movement. Finally, intervention effects interact with the assumption that the choice function variable marks the left edge of the disjunction so as to give us an indication of the size of the disjuncts and the nature of the ellipsis posited by Romero and Han. In sum, we find support for Romero and Han's analysis of alternative questions, and for an explanation of intervention effects in terms of interference with variable binding.

- (1) German *wh*-intervention
- a. * Wann hat nur Maria wen eingeladen?
when has only Maria whom invited
- b. Wann hat wen nur Maria eingeladen?
when has whom only Maria invited
'When did only Mary invite whom?'
- (2) Korean *wh*-intervention
- a. ?* Suna-man nwukwu-lul chotayha-ess-ni?
Suna-only who-Acc invite-Past-Q
- b. nwukwu-lul Suna-man chotayha-ess-ni?
who-Acc Suna-only invite-Past-Q
'Who did only Suna invite t ?'
- (3) English *wh*-intervention
- a. ?? Which diplomat should I not discuss which issue with _?
- b. ?? Which book did almost everyone write to which newspaper about _ ?
- c. ?? Which boy did only Mary introduce which girl to _?
- (4) Did Sally teach Semantics I or Syntax I?
- (5) German alt-intervention
- a. * Hat nur Maria den Jonas oder die Ida eingeladen?
has only Maria the Jonas or the Ida invited
- b. Hat den Jonas oder die Ida nur Maria eingeladen?
has the Jonas or the Ida only Maria invited
'Did only Maria invite Jonas or Ida?'
- (6) Korean alt-intervention
- a. ?* Minsu-man Suna-lul chotayha-ess-ni (animyen) Mira-lul chotayha-ess-ni?
Minsu-only Suna-Acc invite-Past-Q (if not) Mira-Acc invite-Past-Q
'Did only Minsu invite Suna or Mira?'
- b. Minsu-ka Suna-lul chotayha-ess-ni (animyen) Mira-lul chotayha-ess-ni?
Minsu-Nom Suna-Acc invite-Past-Q (if not) Mira-Acc invite-Past-Q
'Did Minsu invite Suna or Mira?'
- (7) English alt-intervention
- a. ?? Did only John drink tea or coffee?
- b. Did John drink tea or coffee?
- (8) [Q_i [Sally [wh_i [[teach Semantics I] or [teach Syntax I]]]]
p f[p= w.f({[x. w'.x teaches Semantics I in w'], [x. w'.x teaches Syntax I in w']})(Sally)(w)]
{that Sally has the property selected by f | f is "teaching Semantics I" or "teaching Syntax I"}
- (9) *[Q_x [... [Op_y [... wh_x ...]] ...]]
(where Op is an intervener and wh_x is a *wh*-variable)
- (10) Didn't John drink tea or coffee?

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