

Intervention effects inside islands

Use of alternative semantics (cf. Rooth (1985) among others) is a standard approach to explain why focused phrases including in-situ *wh*-phrases can be employed inside islands. Moreover, as Kotek (2014) and Kotek and Erlewine (2016) show, in English and German (in-situ) *wh*-phrases are subject to intervention effects even when they are inside islands, which is also the case with *wh*-in-situ languages such as Chinese and Malayalam (cf. (2)*b*). However, there are *wh*-in-situ languages such as Japanese, Korean and Sinhala, which do not exhibit intervention effects inside islands (cf. (2)*a*).

- (1) a. *Ranjit-də Chitra [QP mokak-də] kiwi-e? [QP language] [S(inhala)]
 Ranjit-or Chitra what- də said-C_{wh}
 ‘What did Ranjit or Chitra say?’
- b. [QP [_{island} Ranjit-də Chitra mokak kiwia kotə]-də] oyaa paadam kəramin hiti-e?
 Ranjit-or Chitra what say when-də you study doing were-C_{wh}
 ‘(Lit.) You were studying when Ranjit or Chita said what?’
- (2) a. *Rajan maatram [DP/FocP aare] kandu? [non-QP language] [M(alayalam)]
 Rajan only whom saw
 ‘Whom did only Rajan see?’ Mathew (2015: 132)
- b. Anup [FocP [_{island} Rajan (*maatram) aare kaND-appool] [Foc ∅]] koopiccu?
 Anup Rajan (only) who saw-when got.angry
 ‘(Lit.) Anup got angry when only Rajan saw who?’ K. A. Jayaseelan (p.c.)

This presentation compares the two types of language regarding intervention effects inside islands and shows that there are two ways to overcome islands for *wh*-phrases inside islands. More specifically, we will show that there are two kinds of focus domain widening, and languages are divided into two groups whether they can employ both (like Japanese, Korean and Sinhala, which we call QP languages) or one of them only (like Malayalam, Chinese, English, German, and Turkish, which we call non-QP languages). In addition, we will show that *in-situ* non-QP languages, such as Chinese, Malayalam, and Turkish, are not subject to *wh*-islands whereas QP languages (as well as overt *wh*-movement non-QP languages such as English and German) are. The first difference regarding intervention effects is attributed to the morphosyntactic difference of *wh*-elements and the second difference of *wh*-islands is to whether FocP can license *wh*-interrogative C⁰.

Following Cable (2010), we claim that nominal *wh*-phrases (which include ‘when’ and ‘where’, but not ‘why’ or ‘how’) in QP languages project QP over DP and Q⁰ has [foc_Q] (which is explicitly represented as *də* in Sinhala (cf. (1))). QP languages avoid islandhood (except *wh*-islands) because Q⁰ can be separated from DP and be base-generated at the edge of an island as in (1)*b*. In contrast, *wh*-phrases in non-QP languages do not project QP because a *wh*-phrase and [foc_Q] are inseparable.

To circumvent islands, we propose two kinds of focus domain widening (FDW, henceforth) to define the domain of quantification, and one of them is available only in *wh*-questions in QP languages, which we call question FDW because it is limited to *wh*-phrases. Question FDW starts from a *wh*-phrase and stops when it hits a head with [foc_Q] and we assume that Q⁰ has the feature. (QP on the whole is subsequently raised to CP covertly to set the nuclear scope.)

The other kind of FDW is for focused phrases in general, so available in any language, which we call general FDW. Non-QP languages must resort to general FDW to lift islandhood in *wh*-questions. The mechanism starts at a phonologically focused item and stops when it meets a head with [foc]. We assume that Foc⁰ is a phonologically null element with [foc] and

can be base-generated at the edge of an island (cf. (2)*b*). We also assume that interveners carry [foc] too.

Question FDW is not subjected to intervention effects while general FDW is. Since question FDW is terminated by a head with [foc_Q], ([foc] of) an intervener does not block the widening process, which is why QP languages do not display intervention effects inside islands (cf. (1)*b*). In contrast, an intervention effect may be detected inside islands in non-QP languages (cf. (2)*b*) because general FDW must stop at the first [foc], and an intervener carries [foc] too.

Regarding *wh*-islands, there is another difference between QP and non-QP in-situ languages. The *wh*-island condition exists in QP languages because the embedded interrogative C (e.g. *də* in Sinhala, *ka* in Japanese, and *nunci* in Korean) carries [foc_Q], which prevents further domain widening beyond the embedded CP. However, non-QP in-situ languages are not constrained by *wh*-islands because [foc], not [foc_Q], is the target. Moreover, use of general FDW to overcome *wh*-islands, if correct, leads to a prediction that [foc] of Foc⁰ can license *wh*-interrogative CP in non-QP in-situ languages such as Chinese, Malayalam, and Turkish, which is indeed borne out. A disjunction phrase in non-QP languages can make a question a Yes/No or a disjunctive (or alternative) question while one in QP languages is always interpreted in a Yes/No question as follows:

- (3) a. [John-oo Mary-oo] wannu? [M] b. [Taro ka Hanako]-ga kimasita ka? [J]
 John-or Mary-or came Taro or Hanako-Nom came ka
 ‘Did John or Mary come?’ (ambiguous) ‘Did Taro or Hanako come?’ (Y/N only)

Finally, we claim that the difference between QP and non-QP languages is attributable to the morphosyntactic properties of *wh*-elements: ones in QP cannot carry a focus feature (hence, they can be NP) while ones in non-QP languages must (hence, they always represent DP). Suppose that *wh*-interrogative pronouns are base-generated at D⁰ and *wh*-phrases must carry a focus feature crosslinguistically. Then, since *wh*-elements in QP languages cannot entertain a focus feature, another functional category, i.e. Q⁰, is necessary to host a focus feature. In contrast, focus features are inherent in *wh*-elements in non-QP languages, so no QP is projected.

Moreover, Malayalam, Japanese, and Sinhala can make focused existential quantifiers by making a disjunction particle c-command a *wh*-element. However, the two elements must be adjacent to each other in Japanese and Sinhala while they can be away from each other in Malayalam. This difference too can be explained under the present account. In QP languages, *wh*-elements of indefinites can be base-generated and remain in NP because they do not carry a formal feature such as [foc]. Thus, it is possible for a disjunction particle with [foc] to be base-generated in D⁰. If so, it explains why a disjunction particle and a *wh*-element are inseparable. However, in non-QP in-situ languages, *wh*-elements are D⁰ due to their inherent focus feature even if they are non-interrogative phrases, which obligatorily places a disjunction particle (or an operator) outside DP; hence, the particle and a *wh*-element can be placed apart from each other in Malayalam. Similarly, *wh*-elements on their own present various interpretations in Chinese and Turkish depending on what syntactic context they appear in. This fact naturally follows if they need to be bound by clause-level operators, which must appear outside DP, as Tsai (1994) argues.

[Selected references] Cable, S. (2010) *The Grammar of Q: Q-Particles, Wh-Movement, and Pied-Piping*, OUP, Oxford; Hagstrom, P. (1998). *Decomposing Questions*, Doctoral dissertation, MIT; Jayaseelan, K.A. (2001) “Questions and Question-Word Incorporating Quantifiers in Malayalam,” *Syntax* 4:2, 63-93; Kotek, H/ (2014) *Composing questions*, doctoral dissertation, MIT; Kotek, H, and Erlewine M.K.(2016) “Covert Pied-Piping in English Multiple *Wh*-Questions,” *Linguistic Inquiry* 47, 669-693; Mathew, R. (2015) *Head Movement in Syntax*, John Benjamins, Amsterdam/Philadelphia; Rooth, M. (1985) *Association with Focus*, doctoral dissertation, University of Massachusetts, Amherst; Tsai, W.-T. Dylan (1994). *On Economizing the Theory of A'-Dependencies*, doctoral dissertation, MIT.