

Intervention effects inside islands in *wh-in-situ* languages*

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1 Introduction

- There are two kinds of in-situ languages.
- ① QP languages (e.g. Japanese, Sinhala, Korean, etc.)
- ② Non-QP languages (e.g. Chinese, Malayalam, Turkish, etc.)
- There are two ways to escape islands in *wh*-questions.
- The difference is attributable to the structure of *wh*-elements (and the type of C).

1.1 The first difference between QP and non-QP languages

QP languages are **not** subject to intervention effects inside islands while non-QP languages are.

[QP languages]

- (1) a. ?*John-ka Bill-ga **nani-o** nomimasita ka? [J(apanese)]
 John-or Bill-Nom what-Acc drank C_{wh}
 ‘What did John or Bill drink?’
- b. **nani-o**_i John-ka Bill-ga *t*_i nomimasita ka (scrambled)
 ‘What did John or Bill drink?’ (Hoji 1985: 268)
- c. Mary-wa [_{island} John-ka Bill-ga **nani-o** katta atode] dekaketa no?
 Mary-Top John-or Bill-Nom what-Acc bought after left C
 ‘(Lit.) Mary left after John or Bill bought what?’ (Hagstrom 1998: 54, adapted)
- (2) a. *Ranjit-də Chitra **mokak-də** kiwi-e? [S(inhala)]
 Ranjit-or Chitra what- də said-C
- b. **mokak-də**_i Ranjit-də Chitra *t*_i kiwi-e? (scrambled)
 ‘What did Ranjit or Chitra say?’
- c. [Ranjit-də Chitra **mokak** kiwia kotə]-**də** oyaa paadam kəramin hiti-e?
 Ranjit-or Chitra what say when-də you study doing were-C
 ‘(Lit.) You were studying [when Ranjit or Chita said what]?’

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- (3) a. ?? Nwukwunka-ka **mues-ul** ilk-ess-ni? [K(orean)]
 everyone-Nom what-Acc read-Past-C
 b. **mues-ul**; Nwukwunka-ka *t_i* ilk-ess-ni? (scrambled)
 ‘What did everyone read?’
 c. [Nwukwunka-ka **mues-ul** ilk-ess-ta-nun] -sasil-i munce-i-ni?
 everyone-Nom what-Acc read-Past-dec-rel -fact-Nom problem-be-C
 ‘(Lit.) [The fact that everyone read what] is problematic?’
 Tomioka (2007: 1572, 1582)

[Non-QP languages]

- (4) a. *Rajan maatram **aare** kandu? [M(alayalam)]
 Rajan only whom saw
 ‘Whom did only Rajan see?’ Mathew (2015: 132)
 b. Anup [Rajan (*maatram) **aare** kaND-appool] koopiccu?
 Anup Rajan (only) who saw-when got angry
 ‘(Lit.) Anup got angry when only Rajan saw who?’ K. A. Jayaseelan (p.c.)
- (5) a. *Lian Zhangsan dou chi-le **shenme**? [C(hinese)]
 even Zhangsan all eat-Perf what
 ‘(Lit.) Mary is happy because even Zhangsan ate what?’
 b. *Mary kaisin su [yinwei lian Zhangsan dou chi-le **shenme**?]
 Mary happy is because even Zhangsan all eat-Perf what
 ‘(Lit.) Mary is happy because even Zhangsan ate what?’
- (6) a. *Sadece John **kim-i** gör-dü? [T(urkish)]
 only John who-Acc see-Past
 ‘Who did only John see?’ Demirok (2016)
 b. *Mary-yi [sadece John **kim-le** konuş-tuk-tan sonra] mutlu gör-dü-n?
 Mary-Acc only Johnwho-with talk-NML-ABLafter happy see-Past.2sg
 ‘Which person is such that you saw Mary happy after she talked to that person?’
 Demirok (p.c.)

1.2 The second difference

QP languages are subject to WH islands while non-QP ones are not.

[QP languages]

- (7) *John-wa [**dare-ga** kita ka.doo.ka] tazunemasita **ka**? [J]
 John-Top who-Nom came whether asked C
 ‘*Who_i did John ask whether *t_i* came?’
- (8) *Gunee-tə [Ranjit **mokak** gatta də kiyəla] (də) daneganne oon-e? [S]
 Gunee-Dat Ranjit what bought whether that (də) want.to.know-C
 ‘*What_i does Gunee want to know whether Ranjit bought *t_i*?’
- (9) *Ne-nun [Yeji-ka **nwuku-ul** manna-ss-nunci] tul-ess-ni? [K]
 you-Top Yeji-Nom who-Acc meet-Past-whether hear-Past-C
 ‘*Who_i did you hear whether Yeji met *t_i*?’ Cho (2017: 331)

[Non-QP languages]

- (10) Ni xiang-zhidao [**shei weisheme** da-le Zhangsan]? [C]
 you wonder who why beat Zhangsan
 ‘*Who_i did you wonder why *t_i* hit Zhangsan?’ Huang (1982: 384)

- (11) John [**aarə** pooy-oo ennə] coodiccu? [M]
 John who went-whether C asked
 ‘*Who_i did John ask whether *t_i* went?’ Jayaseelan (2001: 76)
- (12) Tolga [**kim**-in **ne** al-dıġ-ı-nı] bil-iyor? [T]
 Tolga who-Gen what buy-NML-Poss-Acc know-Prog
 ‘*Who_i does Tolga know what *t_i* bought?’
 ‘*What_j does Tolga know who bought *t_j*?’ Çakır (2017: 77)

However, an additional *wh*-phrase lifts WH islands in QP languages (additional-*wh* effect)

- (13) Dare-ga [**dare**-ga kita ka.doo.ka] tazunemasita **ka**? (cf. (7)) [J]
 who-Nom who-Nom came whether asked C
 ‘Who asked whether who came?’
- (14) Kau-tə-də [Ranjit **mokak** gatta də kiyəla] daneganne oon-e? (cf. (8)) [S]
 who-Dat-də Ranjit what bought whether that want.to.know-C
 ‘Who wants to know whether Ranjit bought what?’
- (15) **Nwukwu-ka** [Yeji-ka nwuku-ul manna-ss-nunci] tul-ess-ni? (cf. (9)) [K]
 who-Nom Yeji-Nom who-Acc meet-Past-whether hear-Past-C
 ‘Who heard whether Yeji met who?’

Interim Summary

QP languages

- (i) intervention effects are lifted inside islands
- (ii) subject to WH islands

Non-QP languages

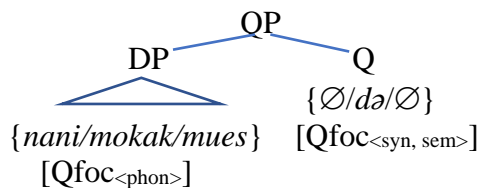
- (i) intervention effects are **not** lifted inside islands
- (ii) **not** subject to WH islands

2 Two ways to overcome islands

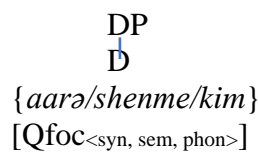
2.1 The structure of a *wh*-interrogative phrase

- (16) QP languages (e.g. (1), (2), and (3)):

(cf. Cable 2010)

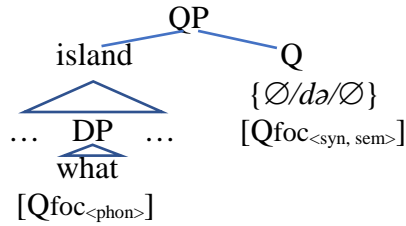


- (17) Non-QP languages (e.g. (4), (5), and (6)):



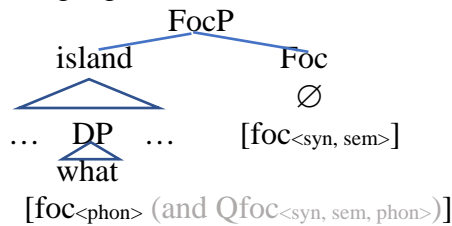
2.2 When a *wh*-interrogative phrase is inside an island

(18) QP languages (cf. (1)c, (2)c, and (3)c):



The domain of quantification expands from [Qfoc<phon>] until it meets [Qfoc<syn, sem>]. (Question focus widening)

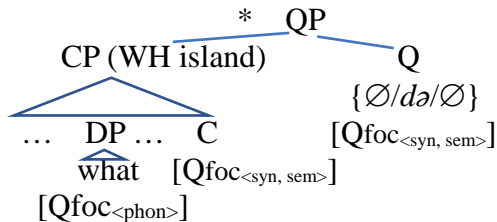
(19) Non-QP languages (cf. (4)b, (5)b, and (6)b):



The domain of quantification expands until it meets [foc<syn, sem>]. (General focus widening)

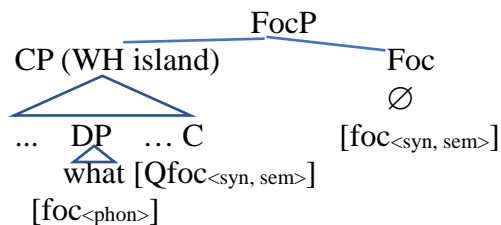
2.3 The reason why QP languages are subject to WH islands while non-QP ones are not.

(20) QP languages (cf. (7), (8), and (9)):



Domain widening does not reach QP because the embedded C carries [Qfoc<syn, sem>].

(21) Non-QP languages (cf. (10), (11), and (12)):



Domain widening does not stop at the embedded C, because it expands until it meets [foc<syn, sem>], not [Qfoc<syn, sem>].

- (30) Chelswu-ka [khophi-na cha]-lul masi-ess-ni?
 Chelswu-Nom coffee-or tea-Acc drink-Past-C
 ‘Did Chelswu drink tea or coffee?’

[K]

Han and Romero (2004: 543)

(cf.

- (31) John [tee-də coopy-də] {*biiwa-də /biiw-e}?
 John tea-or coffee-or drank-C_{y/n} /drank-C_{wh}
 ‘Did John drink tea or coffee?’
 Disjunction with *də* is QP?

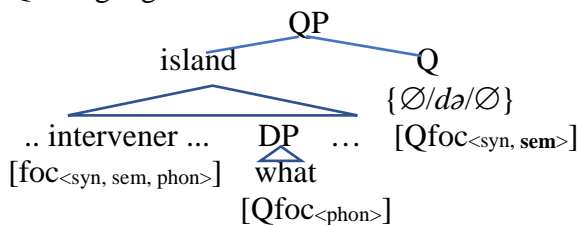
Weerasooriya (2017: 575)

)

2.5 The reason why QP languages are not subject to intervention effects inside (non-WH) islands

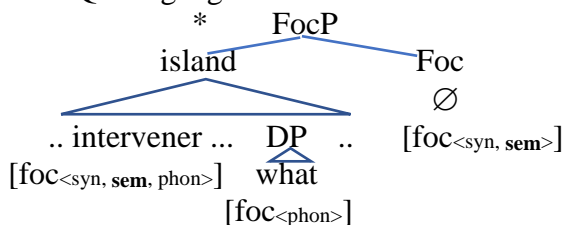
Interveners carry [foc<syn, sem, phon>].

- (32) QP languages



Domain widening reaches QP.

- (33) Non-QP languages



Domain widening is blocked due to [foc<sem>] of the c-commanding intervener on the way.

3 What makes QP languages?

The productive process of generating a variety of quantifiers by attaching a particle to a *wh*-element is not sufficient to distinguish QP and non-QP languages.

QP languages

- (34) Japanese:

WH + *ka* (disjunction) → ‘some’

WH + *mo* (conjunction) → ‘every’, ‘any (NPI)’

WH + *demo* (copular/postposition? + conjunction) → ‘any (free choice)’

- (35) Sinhala (Slade 2011):

WH + *də/hari* (disjunction) → ‘some’

- WH + *t* (conjunction) → ‘every’
 WH + *vat* → ‘any (NPI)’
 (36) Korean (Shin 2005):
 WH + (*i*)*nka*/*(i)**nci* → ‘some’
 WH + (*i*)*na*/*(i)**tunci* → ‘every’, ‘any (free choice)’

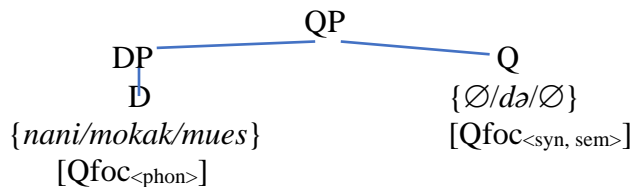
Non-QP languages

- (37) Malayalam (Jayaseelan 2001):
 WH + *um* (conjunction) → ‘any (NPI, free choice)’
 WH + *oo* (disjunction) → ‘some’
 Chinese and Turkish are different.

(QP language → productive, but not necessarily non-QP → productive)

3.1 The structures of *wh*-interrogative pronouns revisited

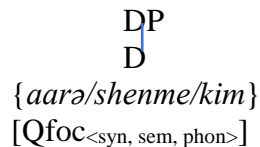
- (38) *Wh*-interrogative pronouns in QP languages (cf. (16)):



Wh-elements in QP languages cannot carry [(Q)foc_{<syn, sem>}].

→ The introduction of an independent functional category hosting [Qfoc_{<syn, sem>}], i.e. Q⁰.

- (39) *Wh*-interrogative pronouns in non-QP languages (= (17)):



Wh-elements in non-QP languages must carry syntactic formal features such as [(Q)foc_{<syn, sem, phon>}]; hence, *wh*-elements and [Qfoc_{<syn, sem, phon>}] are inseparable. → No QP

- ((40) Oyaa [_{DP} **mokak**]-**də** dəkk-e? [S]
 you what-də saw-e
 ‘What did you see?’
 ‘**What is it that you saw?**’ Sumangala (1992: 212, adapted)
)

3.2 The structures of indefinites

[QP languages]: A *wh*-element and a disjunction particle must be adjacent.

- (41) Chitra [DP { **kaa-ge** amma də / ***kaa-ge** də amma }] dəkk-e? [S]
 Chitra { who-Gen mother də / who-Gen də mother } saw-C
 ‘Whose mother did Chitra see?’ Kishimoto (2005: 13, adapted)
- (42) Chitra [DP { ***kaa-ge** amma də / **kaa-ge** də amma }] dəkka. [S]
 Chitra { who-Gen mother də / who-Gen də mother } saw
 ‘Chitra saw someone’s mother.’
- (43) inu-ga [DP { ***dare**-no kodomo-ka-o/**dare**-ka-no kodomo-o}] kannda. [J]
 dog-Nom { who-Gen child-Disj-Acc/who-Disj-Gen child-Acc } bit
 ‘A dog bit somebody’s child.’
- (44) { ***nwukwu**-ui ai-nka / **nwukwu**-nka-ui ai } [K]
 who-Gen child-nka/ who-nka-Gen child
 ‘somebody’s child’ Namkil Kang (p.c.)

[Non-QP languages]: A *wh*-element and a disjunction particle can be separated.

- (45) [DP **aar**-uDe kuTTi-(y)e-(y)oo] nay kaDiccu. [M]
 who-Gen child-Acc-Disj dog bit
 ‘A dog bit somebody’s child.’ Jayaseelan (2001: 72)

[Predictions]

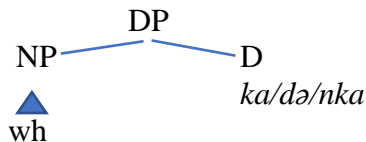
Wh-elements in QP languages: They cannot carry [(Q)foC<syn>].

→ They can be lexical and remain in NP in the case of indefinites.

Wh-elements in non-QP languages: They must carry [(Q)foC<syn>]

→ They must be base-generated in D⁰ whether they function as *wh*-interrogatives or indefinites. That is, they are always pronouns

- (46) Indefinites in QP languages (cf. Tsai (1994)):

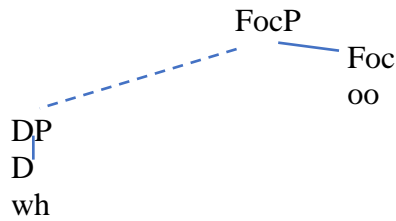


Besides,

dare-sore: ‘who’- ‘it’ meaning ‘someone’

dare-dare: ‘who’-‘who’ meaning ‘someone’ or ‘plural *who*’

(47) Indefinites in non-QP languages (cf. Tsai (1994)):



4 Summary

- There are two kinds of in-situ languages.
 - ① QP languages (e.g. Japanese, Sinhala, Korean, etc.)
 - ② Non-QP languages (e.g. Chinese, Malayalam, Turkish, etc.)
 Differences with respect to
 - (i) intervention effects inside islands
 - (ii) *wh*-islands
 - (iii) alternative (or disjunctive) questions, and
 - (iv) separability of a disjunction particle and a *wh*-element
- For differences (i) and (ii), there are two ways to escape islands: General and Question Focus Domain Widening.
 - Two types of intervention effects inside islands
 - (I) [... Int ... wh ...] Foc⁰
 [foc<syn, sem, phon>] [foc<phon>] [foc<syn, sem>]
 - (II) [wh-island... wh ... C⁰] Q⁰
 [Qfoc<phon>] [Qfoc<syn, sem>] [Qfoc<syn, sem>]
- For differences (ii) and (iii), *wh*-interrogative C in non-QP languages optionally can drop [*u*Qfoc].
- For all the differences including (iv),
 - wh*-elements in QP languages: they are (or can be) lexical.
 - wh*-elements in non-QP languages: they are functional.
 - (But why cannot a lexical category carry [(Q)foc<syn>]? What is “functional”? A finer definition may be needed.)

Future topics

- Does the distinction between QP and non-QP languages also exist in overt *wh*-movement languages?
- Disjunctive questions in English:
Would you like tea or coffee?
- *In-situ* strategy in overt *wh*-movement languages such as French.

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