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Variable Acceptance of Extraction from *Wh*-islands

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Abstract

Properties concerning unbounded dependencies in terms of *wh*-movement actually vary across languages. Some Slavic languages where the covert instances of *wh*-movement posited for English are overt show multiple instances of overt phrasal *wh*-movement to the left periphery of CP or IP and rule out *wh*-phrases in situ. Some multiple *wh*-fronting languages allow extraction from *wh*-islands, in marked contrast to English; other multiple *wh*-fronting languages do not. This paper argues that the asymmetry follows from the Minimal Link Condition and the specifier requirements of CP in those languages.

Keywords: *the Minimal Link Condition, wh-islands, specifier requirements, escape hatch*

1. Introduction

The analyses of properties concerning unbounded dependencies in terms of *wh*-movement lie at heart in generative grammar, and much attention has been devoted to offering theoretical concepts and mechanisms to deal with extraction from *wh*-islands. Principles of Universal Grammar constrain syntactic operation. Deviance of extraction from *wh*-islands as in (1) is captured by such principles.

- (1) *What_i do you wonder [_{CP} how_j [_{TP} John repaired t_i t_j]]?

Chomsky (1995a, 1995b) suggests that the Minimal Link Condition (MLC) is incorporated into analyses of movement system and excludes such *wh*-island phenomena as (1).

However, some languages allow *wh*-extraction from *wh*-islands. Cases in point are multiple *wh*-fronting languages like Bulgarian (see also Chomsky (1999: 11, fn. 28)). However, a close look reveals that such counterexamples are apparent. The cross-linguistic variation is the main concern of this squib, and it is argued that the MLC is tenable

and the variation is derived from the specifier requirements of CP.

2. The Minimal Link Condition

Let us start by reviewing the analyses of *wh*-island phenomena in terms of the MLC. Under the framework of Chomsky (1995a), the MLC is defined as (2).

- (2) Minimal Link Condition

Minimize chain links.

This condition is a mover-oriented condition. The intuitive idea of this is that a category to move must attach to the possible landing site in the already formed in shortest step. Under this framework and the Extension Condition, a sentence like (1) will have a following conceivable derivation.

- (3) a. [_{CP} how_j C [_{TP} John repaired what_i t_j]]

→ b. [_{CP} What_i do [_{TP} you wonder [_{CP} how_j C [_{TP} John repaired t_i t_j]]]]]

The derivation of (3) exhibits a cyclic derivation and thus does not induce an Extension Condition violation. As shown in (3a), the movement of *how* to the embedded CP satisfies the MLC, since the position is the nearest landing site. In (3b), on the other hand, the movement of *what* to the matrix CP-SPEC violates the MLC, since its nearest land-

ing site is the specifier position of the embedded C. Hence the deviance of *wh*-extraction from *wh*-islands.

The MLC of Chomsky (1995a) is modified as the more elaborated version by Chomsky (1995b).

(4) Minimal Link Condition

K attracts α only if there is no β , β is closer to K than α , such that K attracts β .

The notion of “closeness” in (4) is defined as follows:

- (5) β is closer to K than α if β c-commands α and is not in the minimal domain of CH, where CH is the chain headed by γ , γ adjoined within the zero-level projection $H(K)^{0max, 1}$

Under the framework of Chomsky (1995b), in (1), the head of the matrix CP bears a strong Q feature and that of the embedded CP does, too. A strong feature enters into an overt checking relation for the requirement of the interface conditions and then is deleted. Thus the strong feature of the embedded C attracts *how* to the checking domain, viz. its specifier position. The latter checks the former, deleting the strong feature.

- (6) a. [_{CP} how_j C [_{TP} John repaired what_i t_j]]
 → b. [_{CP} What_i do [_{TP} you wonder [_{CP} how_j C [_{TP} John repaired t_i t_j]]]]

In (6a), *how* and the embedded C that bears a strong Q feature can establish a checking relation, and thus the strong feature is deleted. In the step of mapping (6a) to (6b), *what* can check the strong feature of the matrix C. However, the MLC blocks the movement, since *how* in the specifier position of the embedded C is closer to the matrix C than *what*, though *what* can check the strong feature of the matrix C.^{2,3)}

3. Variable Acceptance

However, some multiple *wh*-fronting languages (e.g. Bulgarian) freely allow extraction of *wh*-phrases from interrogative *wh*-clauses, as shown below.

(7) Bulgarian

Vidjah edna kniga, kojato_i se čudja [koj znae [koj prodava t_i]]
 saw-1s a book which wonder-1s who knows who sells

‘I saw a book, which I wonder who knows who sells.’

(Rudin (1988: 457-458))

It seems then that the analysis based on the MLC is in quandary as to how to provide an account for no restriction on extraction of *wh*-phrases from *wh*-islands in such languages. However, a closer look reveals that the variability of *wh*-extraction from *wh*-islands hinges on the structural difference of *wh*-islands between English and languages like Bulgarian.

In Bulgarian, all of the *wh*-phrases in a multiple *wh*-question must move up to the closest interrogative CP. *Wh*-phrases may not remain in situ, nor in the specifier position of a non-interrogative clause.

(8) Bulgarian

- a. Koj kŭde misliš [če e otišŭl ___] ?
 who where think-2s that has gone
 ‘Who do you think has gone where ?’
 b. *Koj misliš [če e otišŭl ___ kŭde] ?
 who think-2s that has gone where
 ‘Who do you think has gone where ?’

(Rudin (1988: 450))

Facts concerning auxiliary placement highlight the constituent structure of the *wh*-phrase sequence in the multiple *wh*-fronting language. According to the report of Rudin (1988), in this language, an auxiliary that occurs in the head of CP cannot break up the cluster of fronted *wh*-phrases. As shown in (9), an auxiliary (in this case, the auxiliary *e*) may not split up the *wh*-phrase sequence.

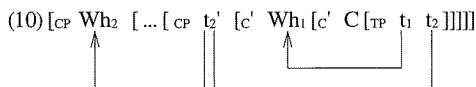
(9) Bulgarian

- a. Koj kakvo na kogo e dal ?
 who what to whom has given
 ‘Who has given what to whom ?’
 b. *Koj kakvo e na kogo dal ?
 who what has to whom given
 c. *Koj e kakvo na kogo dal ?
 who has what to whom given

(Rudin (1988: 461-462))

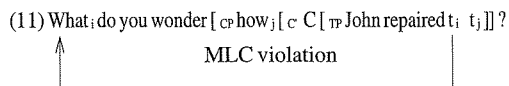
The fact that fronted *wh*-phrases all bear the specifier relation to the same interrogative head C is what results in the potential CP configuration with multiple specifiers in favor of the bare phrase structure theory.

The multiple specifier requirements of C in Bulgarian render *wh*-extraction from *wh*-islands possible in the language.



As shown in the configuration of (10), the movement of Wh₁ does not induce an MLC violation. When Wh₂ moves from its original position to the sentence initial position, it moves through the upper position of the embedded C on its way. This movement does not violate the MLC either, since both Wh₁ and the intermediate trace of Wh₂ are equidistant from any other positions as they are both in the minimal domain of the embedded C. Thus the acceptability of *wh*-extraction from *wh*-islands in Bulgarian results.⁴⁾

In contrast to Bulgarian, a C potentially requires only one specifier in English. Thus extraction from a *wh*-island creates the configuration which induces an MLC violation, as shown in (11).



What makes the matter fascinating is that a *wh*-island effect holds not only in English but also in other *wh*-fronting languages than Bulgarian. Cases in point are Serbo-Croatian, Polish, and Czech.

- (12) a. *Šta si me pitao ko može da uradi?
(Serbo-Croatian)

what have-2s me asked who can to do
“What did you ask me who can do?”

- b. *Co on zapytał kto wynalazł?
(Polish)
what he asked who invented
“What did he ask who invented?”

- c. *Kdo se te ptal co dělá?
(Czech)
who have-3p you asked what does
“Who did they ask you what (he) does?”

(Rudin (1988: 457-460))

Although these languages share with Bulgarian in multiple *wh*-fronting, they have a disparity in the position of auxiliaries or clitics relative to the fronted *wh*-phrases. This disparity involves the variation of *wh*-island phenomena. According to the report of Rudin (1988), in the multiple *wh*-fronting languages, auxiliaries or clitics that occur in the head of CP in a multiple *wh*-question directly follow the first fronted *wh*-phrase. They may not come at the end of the sequence of fronted *wh*-phrases unlike Bulgarian.⁵⁾

- (13) a. Ko je što komr dao?
(Serbo-Croatian)

who has what to whom given

“Who has given what to whom?”

- b. Kto by komu jaką napisał książkę?
(Polish)
who would to whom what kind write book

“Who would write what kind of book for whom?”

- c. Kdo ho kde videl je nejasné
(Czech)
who him where saw is unclear

“Who saw him where is unclear?”

(Rudin (1988: 461-466))

These observations indicate that a C does not potentially require multiple specifiers in these languages and the CP cannot create an escape hatch from *wh*-islands. Hence the deviance of *wh*-island violation phenomena in these languages.

4. Concluding Remarks

To conclude, whether *wh*-extraction from *wh*-islands is allowed or not depends on a typology of specifier requirements of C. In Bulgarian type languages, a C bears multiple specifier positions, and *wh*-extraction from a *wh*-island is executed by way of the escape hatch that the CP creates. Thus the extraction does not violate the MLC. In English type languages, on the other hand, a C requires one specifier position and thus does not yield the configuration to eschew an MLC violation.

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Notes

1. The definition of minimal domain in Chomsky (1995b) is as follows: The minimal domain $\text{Min}(\delta(\text{CH}))$ of CH is the smallest subset K of $(\delta(\text{CH}))$ such that for any $\gamma \in (\delta(\text{CH}))$, some $\beta \in K$ reflexively dominates γ .
2. In mapping (6a) to (6b), it looks like one *wh*-phrase checks against the embedded C and then moves up to the matrix SPEC-CP to check the strong feature of the matrix C, as shown in (i).
 - (i) *What_i did John wonder [t_i [Mary fixed t_i how]] ?
In this case, *how* does not need to move and thus the MLC and the Extension Condition are respected. However, (i) is disallowed. The deviance of such a structure as (i) is straightforwardly captured by the framework of Chomsky (1998, 1999). In this framework, a *wh*-phrase has an uninterpretable feature [wh-] and an interpretable feature [Q]. Driving force of *wh*-movement is due to attraction by the uninterpretable feature that a C bears (i.e. Suicidal Greed). The [wh-] feature of a *wh*-phrase bears is deleted after its checking against the C, while the interpretable feature [Q] it bears remains after the checking (cf. Chomsky (1995a, 1995b)). In the following configuration, either *what* or *how* is attracted by the C bearing an uninterpretable feature.
 - (ii) [_{CP} C [_{TP} John repaired what_i how_j]]
By the checking between the C and the *wh*-phrase which occupies in the specifier position of the C, the uninterpretable feature [wh-] of the *wh*-phrase is deleted, but its interpretable feature [Q] remains. However, the matrix C which is introduced later by Merge cannot attract the *wh*-phrase in the embedded SPEC-CP, since the uninterpretable feature [wh-] of the *wh*-phrase has been deleted. As a last resort, the matrix C attracts the *wh*-phrase in situ in the embedded clause. But the *wh*-phrase in the embedded SPEC-CP c-commands the *wh*-phrase in situ and thus yields an intervention effect. Accordingly, a *wh*-island violation results, if the *wh*-phrase in situ moves up to the specifier position of the matrix C. Furthermore, the matrix C cannot attract the *wh*-phrase in the specifier position of the embedded C because its uninterpretable feature [wh-] has already been deleted by virtue of the

checking between the feature and the embedded C. Thus such a structure as (i) is excluded.

3. Although a *wh*-island violation is explained as a consequence of the MLC, the MLC analysis poses a problem in that it cannot capture subject-object asymmetry and argument-adjunct asymmetry about *wh*-island violations as in (i) and (ii).

- (i) a. *Who do you wonder whether t can help ?
b. ?? Who do you wonder whether we can help t ?
- (ii) a. ?? Which car did you know how John fix t ?
b. *How did you know which car John fixed t ?

The MLC analysis predicts that (i) and (ii) each exhibit the same degree of deviance, contrary to fact. As discussed in Kitahara (1997), it is likely that the degrees of deviance exhibited as in (i) and (ii) are not only determined by the MLC, but by an LF representation. That is, a Full Interpretation violation at LF in addition to an MLC violation induces a severe deviance. See Kitahara (1997: Ch.4) for further details of the discussion.

4. Romanian, which is also a multiple *wh*-fronting language, moves all of the *wh*-phrases in a multiple *wh*-question up to the closest interrogative SPEC-CP and exhibits no restriction on extraction of *wh*-phrases from *wh*-islands.

- (i) Cine ce a spus ?
who what has said
‘Who has said what ?’
- (ii) Pentru care clauză_i vrei să afli cine nu a decis încă ce va vota
for which paragraph want-2s to learn who not has decided yet what will vote t_i ?
‘For which paragraph do you want to learn who has not decided yet what he will vote ?’

(Rudin (1988: 458))

5. In these languages, the second cluster of fronted *wh*-phrases may be hosted by another set of complementizer-type projections above TP (e.g. Culicover’s (1991) Polarity Phrase). Though the matter demands deliberation, I leave it to future research for lack of space.