OVERT Q-FEATURE MOVEMENT IN
JAPANESE WH-CONSTRUCTIONS*

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1 Introduction

• Certain in-situ wh-questions in Japanese appear to show wh-island effects. Notably, these effects can be ameliorated in multiple wh-questions. Although there are wh-island effects, NP-island effects are generally absent. Furthermore, there are intervention effects in which a wh-phrase cannot be c-commanded by a negative polarity item (NPI) or quantifier.

• I argue that these phenomena can be accounted for in terms of head movement of Q-features.

• I claim that a Q-feature is associated with every wh-phrase that has scope in a clause, and that this Q-feature raises to C, where it surfaces as a Q-particle when it is pronounced.


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I argue that there may be more than one Q-feature in certain multiple wh-questions. This differs from Hagstrom (1998:72), who argues that a wh-question can only have one Q-feature, even if the question contains multiple wh-phrases.¹

Head-movement of a Q-feature may be blocked by an intervening quantificational element such as another Q-feature, an NPI, or a quantifier. I attempt to account for how Q-feature movement can be blocked.

In (1), the Q-feature associated with a wh-phrase is unable to move to the matrix C because of the intervening quantificational head Z in the embedded C.

(1)

This blocking of a Q-feature can be accounted for under the Minimal Link Condition (MLC) (Chomsky 1995), which requires attraction of the closest element of the relevant type.

(2) Minimal Link Condition (MLC)

K attracts α if there is no β, β closer to K than α, such that K attracts β. (Chomsky 1995:311)

There are instances in which Q-feature movement does not appear to be subject to the MLC. In multiple wh-questions a Q-feature may move to C even though a closer Q-feature intervenes. I account for this type of example

¹In a similar manner, Maki (1995) argues that a wh-feature moves from a wh-phrasal argument to C. Maki argues for movement of a wh-feature, whereas Hagstrom and Miyagawa argue for movement of a Q-feature, as separate from a wh-feature.
in terms of Richards’s (2001) *Principle of Minimal Compliance*, which is basically the notion that once a particular constraint is satisfied, it may be subsequently ignored.

- In this presentation, I will:
  1. provide an overview of the relevant *wh*-question data in Japanese.
  2. argue in favor of Miyagawa (2001), who following Hagstrom (1998) argues that movement of a Q-feature allows a *wh*-phrase to remain in-situ.
  3. argue that the ungrammaticality of certain *wh*-constructions, which are generally thought to contain *wh*-island violations, results from the blocking of movement of Q-features.
  4. account for the lack of *wh*-island effects in certain multiple *wh*-questions in terms of the *Principle of Minimal Compliance*.
  5. account for the acceptability of *wh*-questions in which a *wh*-phrase occurs within an NP-island.
  6. explain how movement of a Q-feature is blocked by a c-commanding scopal element, such as an NPI or quantifier.

## 2 Background

- In *wh*-questions in Japanese, a *wh*-phrase may remain in-situ, as in (3), in which the object *wh*-phrase *dare-ni* ‘who-DAT’ occurs in-situ between the subject and verb.

(3) *Kare-ga dare-ni atta no?*  
he-NOM who-DAT met Q  
‘Who did he meet?’

- Although a *wh*-phrase may remain in situ, there is evidence for covert movement.
• Notably, Huang (1982a, 1982b) argues that there is covert movement of \(wh\)-phrases to \([\text{Spec}, \text{CP}]\) in \(wh\)-in-situ languages. In the Chinese example (4a), \textit{shenme} ‘what’ has scope over the embedded clause, suggesting the LF representation in (4b).

(4) (a) \textit{Spell-out}

\begin{align*}
\text{Zhangsan} & \quad \text{xiang-zhidao} \quad [\text{Lisi mai-le} \quad \text{shenme}] \\
\text{Zhangsan} & \quad \text{wonder} \quad \text{Lisi} \quad \text{bought} \quad \text{what} \\
& \quad \text{‘Zhangsan wonders what Lisi bought.’}
\end{align*}

(b) \textit{LF}

\begin{align*}
\text{Zhangsan} & \quad \text{xiang-zhidao} \quad [CP \quad \text{shenme}_1 \quad [IP \quad \text{Lisi mai-le} \quad t_1]] \\
\text{Zhangsan} & \quad \text{wonder} \quad \text{what} \quad \text{Lisi} \quad \text{bought} \\
& \quad \text{‘Zhangsan wonders what Lisi bought.’ (Huang 1982a, Huang 1982b, per Watanabe 2003:203)}
\end{align*}

• Similarly, an in-situ \(wh\)-phrase in Japanese may have scope over a clause, suggesting that (5a) has an LF representation along the lines of (5b).

(5) (a) \textit{Spell-out}

\begin{align*}
\text{Kare-wa} & \quad \text{sore-o} \quad \text{dare-ni} \quad \text{ageta} \quad \text{no?} \\
\text{he-TOP} & \quad \text{that-ACC} \quad \text{who-DAT} \quad \text{gave} \quad \text{Q} \\
& \quad \text{‘Who did he give that to?’}
\end{align*}

(b) \textit{LF}

\begin{align*}
[CP \quad \text{dare-ni}_1 \quad [TP \quad \text{kare-wa} \quad \text{sore-o} \quad t_1] \quad \text{ageta}] \quad \text{no?} \\
\text{who-DAT} \quad \text{he-TOP} \quad \text{that-ACC} \quad \text{gave} \quad \text{Q} \\
& \quad \text{‘Who did he give that to?’}
\end{align*}

• Further evidence for \(wh\)-movement in Japanese is the existence of what appear to be island effects (Ross 1967), as discussed by Nishigauchi (1990, 1999), Richards (2001), and Watanabe (1992a, 1992b, 2003), among others.

• The ungrammaticality of (6) may be due to the occurrence of the \(wh\)-phrase \textit{nani-o} ‘what-ACC’ within a \(wh\)-island.\(^2\)

\(^2\)A \(wh\)-island is an embedded clause that contains two or more \(wh\)-phrases, one of which is in \([\text{Spec}, \text{CP}]\) of the clause.
(6) ??[Doko-de nani-o katta ka] oboete-iru no?  
   where-LOC what-ACC bought Q remember-PROG Q  
   ‘What do you remember where we bought?’ (Adapted from Watanabe 2003:205)

- English also shows wh-island effects, as in (7). However, in English movement of the wh-phrase is overt.

(7) ??What\textsubscript{1} do you remember [\text{CP where we bought t\textsubscript{1}}]?

- Whereas island effects appear to occur in LF-movement in Japanese, as in (6), they are absent in LF-movement in English. Compare the ill-formed (8a) with the well-formed (8b). The additional wh-phrase in the matrix clause of (8b) makes the example grammatical.

(8) (a) ??[\text{CP What}\textsubscript{1} do [\text{TP you remember [\text{CP where [\text{TP we bought t\textsubscript{1}}]}]]}]

(b) [\text{CP Who}\textsubscript{1} [\text{TP t\textsubscript{1} remembers [\text{CP where [\text{TP we bought what]}]]}]]? (Adapted from Watanabe 2003:208)

- In (8b), what appears to move covertly to [Spec, CP] of either the embedded or the matrix clause. Even though what moves out of a wh-island, the result is grammatical. (9) is the LF representation.

(9) [\text{CP what}\textsubscript{2} who\textsubscript{1} [\text{TP t\textsubscript{1} remembers [\text{CP where [\text{TP we bought t\textsubscript{2}}]}]]}]

(Adapted from Watanabe 2003:208)

- Based on this evidence, it appears as though in English, overt wh-movement, but not covert wh-movement, shows island effects.

- Similar wh-questions to (8) can be formed in Japanese.

(10) (a) ??[\text{CP John-wa [Mary-ga nani-o katta kadooka] John-TOP Mary-NOM what-ACC bought whether Tom-ni tazuneta no}]

Tom-DAT asked Q

‘What did John ask Tom whether Mary bought?’
Example (10a) is marginal, at least for some speakers, because the wh-phrase nani-o ‘what-ACC’ occurs in a wh-island, just as in the English (8a).

- Example (10b) is better because of the addition of the wh-phrase dare-ni ‘who-DAT’ outside of the wh-island. It appears as though both wh-phrases, or something associated with them, move to [Spec, CP] of the matrix clause.

- Importantly, since the wh-phrases in (10) all occur in-situ, any movement that occurs appears to be covert.

- These facts then result in a paradox. In English, overt wh-movement is sensitive to wh-islands but covert wh-movement is not; in Japanese, covert wh-movement shows island effects in single wh-questions, but it does not show island effects in certain multiple wh-questions.

- Also, there are no island effects in Japanese when a wh-phrasal argument is located inside of an NP-island (which I indicate as a DP).

(11) Kimi-wa [DP dare-o egaita hon-o yomimashita you-TOP who-ACC described book-ACC read ka?]

Q

‘You read a book such that it described who?’ (Nishigauchi 1999:274)

- In (11), the wh-phrase dare-o ‘who-ACC’ has scope over the matrix clause, which would not be allowed if there were an NP-island violation.

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3Watanabe (1992b:12) writes that “the degree of unacceptability” of constructions such as (10a) “varies among different speakers.”

4The type of NP-island discussed in this paper is a noun phrase that contains a clausal modifier with a wh-phrase inside of it.
• English, unlike Japanese, shows NP-island effects, as in a (12).

(12) ?\textbf{Who}_1 is he reading \[^{DP} a \text{ book that criticizes } t_1\]? (Watanabe 2003:205)

• English shows \textit{wh}-island and NP-island effects, whereas Japanese only appears to show \textit{wh}-island effects, at least with respect to \textit{wh}-phrasal arguments.

• Furthermore, ill-formedness results in certain \textit{wh}-constructions in which an NPI or a quantifier c-commands a \textit{wh}-phrase. Note that the examples improve when the \textit{wh}-phrase is scrambled over the NPI or quantifier.

(13) (a) *?\textit{Hanako-sika nani-o yoma-nai no?}
\hfill Hanako-only what-ACC read-NEG Q
\hfill \textit{Nani-o}_1 \textit{Hanako-sika t}_1 \textit{yoma-nai no?}
\hfill what-ACC Hanako-only read-NEG Q
\hfill ‘What did only Hanako read? ’ (Adapted from Tanaka 1999, per Pesetsky 2000, per Karimi & Taleghani, Ms.)

(14) (a) *?\textit{Dare-mo-ga nani-o katta no?}
\hfill everyone-NOM what-ACC bought Q
\hfill \textit{Nani-o}_1 \textit{dare-mo-ga t}_1 \textit{katta no?}
\hfill what-ACC everyone-NOM bought Q
\hfill ‘What did everyone buy? ’ (Watanabe 2003:215)

• I have presented data indicating that, with respect to certain \textit{wh}-constructions in Japanese:

1. there are \textit{wh}-island effects.
2. \textit{wh}-island effects can be ameliorated when there is an additional \textit{wh}-phrase.
3. there are no NP-island effects.
4. a \textit{wh}-phrase cannot be c-commanded by an NPI or quantifier.

• I argue that these data can be accounted for in terms of movement of \textit{Q}-features from within \textit{wh}-phrases.
3 Why $wh$-phrases can remain in-situ

- Miyagawa (2001) proposes that a $wh$-phrase contains a $wh$-feature and that a question particle ($ka$ or $no$) contains a Q-feature.

- Miyagawa follows Hagstrom’s (1998) proposal that the Japanese Q-particle can be base generated next to a $wh$-phrase and then raise to C.

- According to this proposal, C in English contains both a $wh$-feature and a Q-feature, which are uninterpretable, and a $wh$-phrase contains the interpretable counterparts of both features. When a $wh$-phrase moves to [Spec, CP], it checks both of these features on C.

- In Japanese, a $wh$-word contains a $wh$-feature and a question particle contains a Q-feature.

- Following Hagstrom’s proposal, a Q particle moves from a $wh$-phrase to C.

\[ (15) \]

(Adapted from Miyagawa 2001:314)

- Miyagawa argues that movement to CP in both Japanese and English is motivated by the EPP-feature, in accord with Chomsky (2000).

- In English, the EPP motivates movement of a $wh$-phrase to [Spec, CP], and in Japanese, the EPP motivates head movement of a Q-particle. (See Alexiadou & Anagnostopolou 1998 for an argument that the EPP can be satisfied by head movement).

- This analysis supports the following proposal by Cheng (1991):
(16) **Clause typing of wh-questions**

A wh-question has either overt wh-phrasal movement or a question particle. (Cheng 1991, per Miyagawa 2001:316)

- Because movement of a Q-particle satisfies the uninterpretable Q-feature in C, there is no need for overt wh-movement in Japanese.

- In (17), the Q-feature in C is checked by overt movement of the Q particle no and the wh-phrase nani-o ‘what-ACC’ remains in-situ.

(17) \[ CP \quad [ TP \quad [ T \quad John-ga_1 \quad [ nani-o \quad t_2 \quad katta] \quad no_2 ] ] \]  
‘What did John buy?’ (Adapted from Miyagawa 2001:320)

- The diagram in (18) shows the internal structure of (17).

(18) [C']

\[ TP \quad [ T' \quad vP \quad [ t_1 \quad v' ] \quad T \quad -tta\]  
‘PAST’

\[ C \quad no_2 \quad ‘Q’ \]

\[ DP \quad [ nani-o \quad t_2 \quad ka ‘bought’ ] \quad what-ACC \]

- (19), from *Nihon Shoki* provides diachronic evidence for this analysis.

(19) *Sisi husu-to tare-ka kono koto oomae-ni maosu?*  
beast lie-QUOT who-Q this thing emperor-DAT say
‘Who reported to the emperor that beasts were lying?’ (Adapted
from Hagstrom 1998:25, per Moriyama 1971:32, per Ogawa 1977:221)

• (20), from Sinhala, provides cross-linguistic evidence.

(20) Siri mokak do keruwa?
Sri what Q did
‘What did Siri do?’ (Adapted from Gair & Sumangala 1991:93, per Hagstrom 1998:20)

• One potential problem is that movement of a Q-feature to C is not blocked by certain intervening heads, a violation of the Head Movement Constraint (HMC) (Travis 1984), which states that “a head cannot be separated from its trace by an intervening head (Lasnik 2003:70).”

• In (18), v is filled with ka- ‘buy’ and T is filled with the past tense morpheme -tta, yet the Q-feature is able to move to C.

• Hagstrom (1998:61) accounts for why this Long Head Movement (Rivero 1991) may be possible:

  ...feature attraction drives movement of the closest element with the relevant feature. If a feature F is being attracted and a head H carries the feature F, movement of H will only be blocked if there is an intervening head which also carries the feature F. Any head which does not carry this feature is irrelevant.

• Following Hagstrom, a Q-feature may move over any intervening head that does not carry the same feature that is being attracted by the C head. The relevant feature is probably a quantificational feature (Simin Karimi, p.c.) because movement of a Q-feature is blocked by intervening quantificational elements.

• Another potential problem is that a Q-particle can be dropped in Japanese. However, when a Q-particle is dropped, a wh-question interpretation is available when there is rising intonation at the end of a question.
(21) (a) \[CP \[TP \text{John-ga}_1 \text{[nani-o}_2 \text{katta}]_{\text{no}_2}\]? \]

John-NOM what-ACC bought Q

‘What did John buy?’ (Miyagawa 2001:320)

(b) \[CP \[TP \text{John-ga}_1 \text{[nani-o}_2 \text{katta}]_{\text{Q-F}_2}\]? \]

John-NOM what-ACC bought Q-F

‘What did John buy?’

• I propose that in (21b), a Q-feature moves to C where it is pronounced as rising intonation, rather than as a Q-particle. Although, I note that the facts may not be so simple.$^5$

• In summary, Miyagawa and Hagstrom provide an explanation for why there does not need to be overt wh-movement in Japanese; a Q-particle checks a Q-feature in C and a wh-feature does not need to be checked by overt movement.

4 Wh-islands

• The proposal that a Q-particle originates within a wh-phrase leads to an explanation for the ill-formedness of (6), repeated as (22).

(22) ??\[\text{Doko-de}_9 \text{nani-o}_2 \text{katta}_2 \text{ka}_9 \text{oboete-iru}_2 \text{no?}\] where-LOC what-ACC bought Q remember-PROG Q

‘What do you remember where we bought?’

• The ill-formedness of this example is generally considered to be because the wh-phrase nani-o ‘what-ACC’, or an operator associated with it, is unable to move out of the embedded clause (a wh-island).

• However, if a Q-particle (a head), and not a wh-phrase, moves, then the ill-formedness of this construction is not the result of an island effect involving movement of a specifier.

$^5$Miyagawa (2001:312) writes that “the Q-particle contributes quantificational force to the wh-question” and that it is required for questions that have exhaustive, pair-list, and functional interpretations (cf. Miyagawa 2001:311-312). Therefore, questions with and without Q-particles may not be entirely identical.
• (23) is a simplified diagram of the relevant parts of (22) before Spell-Out.

(23)

```
  CP
   ...
   CP
   ...
   vP
   pro
   v'
   AdvP
   doko-de ka
   'where-LOC Q'
   DP
   nani-o no
   'what-ACC Q'
   katta
   'bought'
   v'
   ...
   C
   ...
   C
```

• I propose that the Q-particle *ka*, which is associated with *doko-de* ‘where-LOC’, raises first to C of the embedded clause. Then the Q-particle *no*, which is associated with *nani-o* ‘what-ACC’, is unable to move through this filled C to arrive in the matrix C. This blocking can be accounted for in terms of the MLC.

• (24) is a diagram of the embedded clause before Spell-Out, but after the Q-particle associated with *doko-de* ‘where-LOC’ has raised to the embedded C in order to satisfy the MLC.
• The ungrammaticality of this construction is then due to an MLC violation involving head movement rather than to an island effect involving specifier movement.

• If there is no movement of an XP in the embedded clause, then the embedded clause may not really be a wh-island because it does not contain an element in [Spec, CP]. (But for lack of a better term, I will still use the phrase ‘wh-island’.)

• Example (10a), repeated as (25) can be accounted for in a similar manner.

(25) ??[CP John-wa [Mary-ga nani-o katta kadooka]
John-TOP Mary-NOM what-ACC bought whether
Tom-ni tazuneta no]?
Tom-DAT asked Q
‘What did John ask Tom whether Mary bought?’
• Note that there is only one wh-phrase in the embedded clause, unlike in (22).

• I propose that the presence of *kadooka* ‘whether’ causes an MLC violation because *kadooka* ‘whether’ contains a Q-feature.

![Diagram of CP structure](image)

(26) CP
    ... CP
    ... CP
    ... vP
    ... v
    ... DP
    ... DP
    ... v' (kadook[+Q], 'whether')
    ... vatta (katta, 'bought')
    ... nani-o no (nani-o no, 'what-ACC Q')
    ... Mary-ga (Mary-NOM, 'Mary-NOM')

• Evidence that *kadooka* ‘whether’ has a Q-feature may be that it contains the syllable *ka*, which has the same pronunciation as the Q-particle *ka* ‘Q’.

• One possibility is that *kadooka* ‘whether’ has a complex structure consisting of a head and a specifier that occur in C and [Spec, CP] respectively.

• If *ka* ‘Q’ is the last syllable of *kadooka*, then *kadoo* would be a specifier occurring in [Spec, CP]. But then *kadoo* should appear clause initially, as shown in the highly ungrammatical (27).

14
The only way to obtain the appropriate word order if *kadooka* consists of a head and specifier, is if *ka ‘Q’* is the initial syllable of *kadooka* ‘whether’.

Along these lines, Watanabe (1992a) and Tanaka (1999) indicate that *kadooka* consists of a head *ka* and a specifier *dooka*.

Tanaka argues that a specifier occurs to the right of its head in Japanese, and that *kadooka* has the structure shown in (28).

If (28) is accurate, then the desired word order can be obtained, as shown in (29).

But is it reasonable to assume that the specifier of CP occurs to the right of C, even though the specifiers of other projections appear to occur to the left of their heads in Japanese?
• In (30), the subject *kare-ga* ‘he-NOM’ appears to occur in a specifier to the left of T, because the subject occurs at the beginning, not at the end, of the sentence.

(30)

- If specifiers occur to the right of their relevant heads, then the subject *kare-ga* ‘he-NOM’ in (30) could not be in [Spec, TP]. Another possibility is that the specifier of TP occurs to the left of T, but the specifier of CP occurs to the right of C.

- Instead, I argue that the first syllable of *kadooka* is a Q-feature in C and that *dooka* is not a specifier.

- I do not have a detailed account of the exact position of *dooka*, but some possibilities are:
  1. *dooka* also occurs in C, so *kadooka* is a single head with a Q-feature.
  2. *dooka* occurs in some other projection in an elaborated CP, along the lines of that proposed by Rizzi (2000).

- For the sake of simplicity I assume 1.; that *kadooka* forms a single head in C, and that this head has a Q-feature, as shown in (31).
The following examples may provide evidence for the notion that *dooka* is not a specifier. The only difference between the two examples is what follows *ka*.

(32) (a) ??\[\text{CP } \text{John-wa } [\text{Mary-ga } \text{nani-o katta} \text{ Tom-ni tazuneta no}]?\]
\begin{itemize}
    \item [\text{ka-dooka}] \text{John-TOP Mary-NOM what-ACC bought}
    \item [\text{kadooka}] \text{whether Tom-DAT asked } \text{Q}
\end{itemize}
\begin{itemize}
    \item [\text{Q}]{\text{‘What did John ask Tom whether Mary bought?’}}
\end{itemize}
\begin{itemize}
    \item [\text{to}]{\text{Tom-ni tazuneta no]?
    \item [\text{Q-COMP}]{\text{asked } \text{Q}}
\end{itemize}
\begin{itemize}
    \item [\text{to}]{\text{‘What did John ask Tom whether Mary bought?’}}
\end{itemize}

(b) ??\[\text{CP } \text{John-wa } [\text{Mary-ga } \text{nani-o katta } \text{ka-to} \text{ Tom-ni tazuneta no}]?
\begin{itemize}
    \item [\text{Tom-ni tazuneta no]?
    \item [\text{Tom-DAT}]{\text{asked } \text{Q}}
\end{itemize}
\begin{itemize}
    \item [\text{Q}]{\text{‘What did John ask Tom whether Mary bought?’}}
\end{itemize}

• The element *to* in (32b) appears to be a complementizer because it can occur by itself at the end of an embedded clause.

(33) *Hideya-wa \[\text{CP } \text{[C } [\text{Junko-ga } \text{sore-o katta} \text{ to}] \text{ Hideya-TOP Junko-NOM that-ACC bought COMP}
\begin{itemize}
    \item [\text{kare-ni}]{\text{him-DAT told}}
\end{itemize}
\begin{itemize}
    \item [\text{to}]{\text{him that Junko bought that.’}}
\end{itemize}

• I assume that *to* cannot occur in [Spec, CP] because it is a complementizer, meaning that in (32b), [Spec, CP] of the embedded clause does not contain an overt element.

• Since *kadooka* has virtually the same meaning and occurs in the same position as *ka-to*, it may also be reasonable to assume that there is no overt element in [Spec, CP] of the embedded clause in (32a).

• Further evidence may be seen in (34).
(34) ??John-wa [Mary-ga nani-o katta ka] Tom-ni
tazuneta no]?
‘What did John ask Tom whether Mary bought?’

- Only a Q-particle *ka* appears at the end of the embedded clause, as shown in the following diagram of the embedded clause before Spell-Out.

(35) Only a Q-particle *ka* appears at the end of the embedded clause, as shown in the following diagram of the embedded clause before Spell-Out.

- There is clearly no overt element in [Spec, CP] of (35).

- The ungrammaticality of this example cannot be the result of an island effect caused by an overt specifier in the embedded CP.

- I argue that there is an MLC violation because movement of the Q-feature *no* from a position within the wh-phrase *nani-o* ‘what-ACC’ is blocked by the presence of the Q-feature *ka* in the embedded C.

- If the proposal that *kadooka* is a head is correct, then *kadooka* most likely corresponds to *if*, not *whether*, in English. This is because *if* appears to be a head that occurs in C and *whether* a specifier that occurs in [Spec, CP].

  - *Whether* may be directly followed by PRO, but *if* may not.
(36) (a) John doesn’t know whether PRO to leave.

(b) *John doesn’t know if PRO to leave. (Haegeman 2002:274)

− Within the framework of Government and Binding theory, (36a) is grammatical because whether is in [Spec, CP], from where it is unable to govern PRO. Example (36b) is ungrammatical because if is in C, from where it governs PRO. This is not allowed because PRO cannot be governed (cf. Kayne 1991).

− In the remainder of this handout, kadooka is glossed as ‘if/whether’.

• I have argued that certain wh-island violations result from Q-feature movement, and that these supposed islands do not contain overt specifiers.

• One possibility is that they contain covert specifiers. If this were the case, their ungrammaticality could result from movement of an XP.

• However, I claim that the ungrammaticality of these examples follows straightforwardly as MLC violations involving head movement of Q-features, so there is no need to postulate the presence of a covert element in [Spec, CP].

5 Wh-islands and the Principle of Minimal Compliance

• In this section, I attempt to account for the lack of wh-island effects in certain wh-questions in terms of Q-feature movement.

• Examples (10a-b) are repeated as (37a-b).

(37) (a) ??[CP John-wa [Mary-ga nani-o katta
John-TOP Mary-NOM what-ACC bought
kadooka] Tom-ni tazuneta no]? if/whether Tom-DAT asked Q
‘What did John ask Tom if/whether Mary bought?’
(b) \[ \text{John-wa [Mary-ga nani-o katta kadooka]} \]
\[ \text{John-TOP Mary-NOM what-ACC bought if/whether} \]
\[ \text{dare-ni tazuneta no]?} \]
\[ \text{who-DAT asked Q} \]
\[ \text{‘Who did John ask if/whether Mary bought what?’} \]

- Watanabe (1992a, 1992b, 2003) deals with these data by arguing that in Japanese, there is movement of a null wh-operator to [Spec, CP]. The operator is located in the specifier of the DP that contains a wh-word, as shown in (38). Furthermore, overt movement is subject to wh-island effects, but covert movement is not.

(38) \[
\begin{array}{c}
\text{DP} \\
\text{OP} \\
\text{D'} \\
\text{wh-word}
\end{array}
\]

(Adapted from Watanabe 2003:209)

- Following Watanabe’s analysis, in (37a), the operator associated with nani-o ‘what-ACC’ moves overtly out of a wh-island.

- In (37b), an operator associated with dare-ni ‘who-DAT’ moves overtly to [Spec, CP]. This movement is well-formed. Then the wh-phrases dare-ni ‘who-DAT’ and nani-o ‘what-ACC’ adjoin to the operator at LF. Movement that occurs at LF is not subject to wh-island effects.

- I argue that these data can be accounted for in terms of Q-feature movement, without the presence of a null operator.

- Example (37a) can be accounted for as discussed in the previous section; movement of the Q-feature associated with nani-o ‘what-ACC’ is blocked by the intervening Q-feature of kadooka ‘if/whether’, as can be seen in (26), repeated below as (39).
In (37b), repeated as (40), the Q-feature associated with dare-ni ‘who-DAT’ moves overtly to the matrix C, where it checks the Q-feature of C. Also, nani-o ‘what-ACC’ has scope in the matrix clause, which I assume is evidence that its Q-feature moves to the matrix C.

This is problematic because movement of the second Q-feature to C should violate the MLC, as there are two Q-features that are closer to the matrix C, the Q-feature associated with dare-ni ‘who-DAT’ and the Q-feature associated with kadooka ‘if/whether’.

Richards (2001) provides a possible explanation for these data. This is the Principle of Minimal Compliance (PMC), which is the notion “...that a given constraint only has to be satisfied once in a certain domain (Richards 2001:197).”
(41) (a) Principle of Minimal Compliance (PMC)

If the tree contains a dependency headed by H which obeys constraint C, any syntactic object G which H “immediately c-commands” can be ignored for purposes of determining whether C is obeyed by other dependencies.

(b) A immediately c-commands B iff the lowest node dominating A dominates B and there is no C such that A asymmetrically c-commands C and C asymmetrically c-commands B.

(Richards 2001:199)

• Richards argues that the PMC accounts for instances of reflexivity in Dutch, weak-crossover in English, VP-ellipsis in English, long-distance scrambling of adjuncts in Japanese, etc. If the PMC can explain various phenomena in different languages, then it may be a principle that is at work in language in general, and so an explanation of the multiple wh-question facts in Japanese in terms of the PMC may be desireable.

• In a multiple wh-question, when an uninterpretable Q-feature in the matrix C is checked by the closest Q-feature, the MLC is satisfied. Therefore, the Q-feature in the matrix C heads a well formed dependency. This Q-feature in C immediately c-commands itself, and so it may be ignored with respect to the MLC, thereby allowing a more distant Q-feature to raise to C.

• The grammaticality of (40) can then be accounted for in terms of the PMC. The Q-feature no associated with dare-ni ‘who-DAT’ raises to the matrix C to check an uninterpretable Q-feature. Movement of no ‘Q’ satisfies the MLC because there is no intervening head to block its movement. No ‘Q’ heads a well-formed dependency. Since no ‘Q’ is c-commanded by C, as it is in C, it may be ignored with respect to the MLC.

• The matrix C may then attract the next available Q-feature. The closest Q-feature is the Q-feature associated with kadooka ‘if/whether’ in the embedded C. However, this Q-feature already satisfies the uninterpretable Q-feature in the embedded C and so it has no reason to move. Therefore,
the matrix C is able to attract the lower Q-feature associated with \textit{nani-o} ‘what-ACC’. The LF representation of this example is shown in (42).\textsuperscript{6}

\begin{equation}
(42)
\end{equation}

- One remaining issue is that in (40), two Q-features are present in the matrix C, but only one Q-particle is pronounced. When two Q-particles are pronounced, as in (43), ungrammaticality results.

\begin{equation}
(43)
\end{equation}

\begin{itemize}
\item This sentence is a double object construction with a complex structure. I assume a structure that follows Larson’s (1988) analysis of certain Dative Shift constructions in English, although I note that the exact structure of this sentence is worthy of further analysis.
\end{itemize}
These facts can be accounted for by the following generalization.

(44) There may not be more than one Q-particle (a Q-feature that is pronounced) in C.

This constraint may be a case of haplology (Heidi Harley, p.c.) which prevents there from being two identical adjacent morphemes at Spell-Out.

6 NP-islands

I have accounted for the supposed wh-island effects in Japanese in terms of MLC violations involving feature movement (rather than XP movement). If it is the case that only XP movement is subject to NP-island effects, then the lack of NP-island effects in certain constructions in Japanese can be accounted for.

In (12b), repeated as (45), who moves out of an NP-island, resulting in ill-formedness.

(45) ??Who$_1$ is he reading $[DP\ a\ book\ that\ criticizes\ t_1]$? (Watanabe 2003:205)

The Japanese example (11), repeated as (46) is well-formed, even though the wh-phrase is contained in an NP-island.

(46) Kimi-wa $\left[DP\ dare-o\ egaita\ hon\right.$-o yomimashita you-TOP who-ACC described book-ACC read $ka\?$ Q

‘You read a book such that it described who?’

The ‘standard’ analysis (following Nishigauchi 1990; Choe 1987; Pesetsky 1987; Richards 2000, 2001; Watanabe 1992a, 1992b, 2003; among others) is that the entire NP-island is pied-piped to [Spec, CP] at LF.
• Nishigauchi (1990, 1999) claims that there is “feature percolation (Nishigauchi 1999:275).” A \textit{wh}-feature turns a complex DP into a \textit{wh}-phrase (notated as DP→WhP).

• The complex DP \textit{dare-o egaita hon} ‘book that described who’, from (46), then has the structure shown in (47) (following Nishigauchi 1999:275).

(47)

\[
\text{DP} \rightarrow \text{WhP}
\]

\[
\text{CP} \rightarrow \text{D'}
\]

\[
\text{XP} \rightarrow \text{C'}
\]

\[
\text{dare-o} \quad \text{who-ACC}
\]

\[
\text{t}_1 \quad \text{egaita} \quad \text{described}
\]

\[
\text{NP} \rightarrow \text{D}
\]

\[
\text{hon}_2 \text{book}
\]

• The \textit{wh}-phrase \textit{dare-o} ‘who-ACC’ moves to the specifier of the CP contained within the DP. Then the \textit{wh}-feature located in [Spec, CP] percolates up to the DP, thereby turning the DP into a \textit{wh}-phrase. Because the DP is now a \textit{wh}-phrase, it is able to move directly to [Spec, CP] of the matrix clause and avoid an island effect, as shown in (48).

(48)

\[
\text{CP} \rightarrow \text{DP} \rightarrow \text{WhP}
\]

\[
\text{TP} \rightarrow \text{C'}
\]

\[
\text{dare-o egaita hon-o} \quad \text{‘who-ACC described book-ACC’}
\]

\[
kimi-wa \quad t_1 \quad yomimashita \quad \text{you-TOP read ‘Q’}
\]

• Watanabe (2003) claims that in this type of example, a null \textit{wh}-operator that occurs within the specifier of the \textit{wh}-phrase is pied-piped along with the DP, and so the \textit{wh}-operator does not need to move out of an island to arrive in [Spec, CP].
• The NP-pied piping analysis accounts for the data, but I think that it may be unnecessarily complex.

• I propose that the lack of island effects found in NP-island constructions is evidence that features associated with in-situ wh-phrases, but not the phrases themselves, move.

• In (46), there is no island effect because there is no specifier that must move out of an NP-island to arrive in [Spec, CP].

• A Q-feature moves from a position within the wh-phrase containing dare-o ‘who-ACC’ to C. The MLC is not violated because there is no Q-feature, or other similar head, intervening between the Q-feature of dare-o ‘who-ACC’ and the matrix C, as can be seen in (49).

(49)

7 Blocking of Q-feature movement

• I turn to constructions which show that a wh-phrase cannot be c-commanded by an NPI or quantifier.
As shown in (13a), repeated as (50a), when the NPI sika ‘only’ c-commands the wh-phrase nani-o ‘what-ACC’, the result is ill-formed. When the wh-phrase is scrambled to sentence initial position, as shown in (13b), repeated as (50b), the result is acceptable.

I assume that sika ‘only’ is an NPI because it must be c-commanded by Neg (negation).

(50) (a) *?Hanako-sika nani-o yoma-nai no?
            Hanako-only    what-ACC    read-NEG    Q

(b) Nani-o, Hanako-sika t, yoma-nai no?
            what-ACC    Hanako-only    read-NEG    Q
            ‘What did only Hanako read?’

I propose that in (50a), the NPI sika ‘only’ forces the DP Hanako-shika ‘Hanako only’ to raise to the specifier position of a Quantifier Phrase (QuantP) from a position within vP.

I assume that movement is to a QuantP projection, because an NPI is a scope bearing element and therefore, is quantificational.

Some type of quantificational feature (which I label as QuantF) associated with the NPI sika ‘only’ checks an uninterpretable feature in the head of QuantP. The Q-feature no, which is associated with nani-o ‘what-ACC’, must raise to C to check an uninterpretable Q-feature, but this Q-feature needs to pass through the QuantP head which is filled with the quantifier feature associated with sika ‘only’. (51) is a simplified diagram of (50a).
When the *wh*-phrase is scrambled to clause-initial position, as in (50b), its Q-feature is able to move to C without passing through the QuantP head.

I assume that the *wh*-phrase moves to the specifier of a Focus Phrase (FocP). In (52), it can be seen that movement of the *wh*-phrase to FocP allows the Q-feature *no* to move directly to C without passing through QuantP.
Similar effects are observed when a quantifier and *wh*-phrase co-occur.

When the quantifier phrase *dare-mo* ‘everyone’ c-commands the *wh*-phrase *nani-o* ‘what-ACC’, the result is ill-formed, as in (14a), repeated as (53a). When the *wh*-phrase is scrambled to sentence initial position, the result is acceptable, as in (14b), repeated as (53b).

I assume that *dare-mo* is a quantifier phrase because the particle *mo* appears to add quantificational force to *dare* ‘who’, so that when *dare* ‘who’ is combined with *mo*, the quantificational expression *dare-mo* ‘everyone’ is formed.
(53) (a) *?Dare-mo-ga nani-o katta no?
  everyone-NOM what-ACC bought Q

(b) Nani-o, dare-mo-ga t_1 katta no?
  what-ACC everyone-NOM bought Q

‘What did everyone buy?’ (Watanabe 2003:215)

- In (53a), the quantifier phrase *dare-mo ‘everyone’ raises to the specifier position of a QuantP projection and the quantifier feature associated with the quantifier particle *mo checks an uninterpretable quantifier feature in the QuantP head.

- The quantifier feature associated with *mo then blocks movement of the Q-feature associated with nani-o ‘what-ACC’, which must pass though the QuantP head to arrive in C, thereby resulting in an MLC violation.

(54)

• When the wh-phrase is scrambled over the quantifier phrase in (53b), the Q-feature is able to reach C without passing through the QuantP head, as
shown in (55).

(55)

- I have examined evidence that quantifier features block Q-feature movement. This blocking effect can be accounted for if Q-features and quantifier features have something in common. All of these features are scope bearing elements, and therefore they all are [+ quantificational] (Simin Karimi, p.c.).

- I propose that QuantP and C are projections that attract quantificational heads, thereby accounting for why a Q-feature must move through any intervening QuantP to arrive in C.

8 Conclusion

- If this analysis is on the right track, then the following claims can be made.
1. Certain \textit{wh}-island violations in Japanese result from violations of the MLC that involve movement of Q-features.

2. When the MLC is satisfied by movement of the closest Q-feature to C, then further movement of another available Q-feature is not subject to the MLC. This movement is allowed due to the PMC.

3. Although there may be two Q-features in C, only one Q-particle may be pronounced, due to a constraint against pronouncing two adjacent Q-features.

4. The lack of NP-island effects can also be explained. There is movement of features associated with in-situ \textit{wh}-phrases, but the \textit{wh}-phrases themselves do not move. This proposal suggests that head movement is not subject to NP-island effects, at least not in Japanese.

5. The ill-formedness of constructions in which an NPI or quantifier c-commands a \textit{wh}-phrase is a result of the blocking of Q-feature movement by intervening quantificational heads.

- There are also a number of remaining questions:

1. Can this analysis be accounted for within the framework of Phase Theory (Chomsky 2001)? A Phase Theory based analysis would probably make use of the following:
   - Agree, rather than movement.
   - phases, rather than islands.
   - something like the MLC that blocks agreement between a probe and goal if there is an intervening element of the same type.

2. What is the role of \textit{wh}-features in \textit{wh}-questions in Japanese?
   - One possibility, argued for by Miyagawa (2001), is that in Japanese, a \textit{wh}-feature is checked on T and movement of a \textit{wh}-phrase to [Spec, TP] can check a \textit{wh}-feature. However, a \textit{wh}-phrase does not have to move if a non-\textit{wh}-DP satisfies the EPP feature on T.

3. Why is it that stressing a \textit{wh}-phrase appears, at least for some speakers, to allow a \textit{wh}-question interpretation for constructions that, under the
analysis presented in this paper, should contain MLC violations? For example, Yosuke Sato (p.c.) claims that a wh-question interpretation is possible for examples such as (53a), repeated as (56), when the wh-phrase is stressed.

(56) **Dare-mo-ga nani-o katta no?**
   everyone-NOM what-ACC bought Q
   ‘What did everyone buy? ’

4. How do wh-adjuncts fit into this analysis? Wh-adjuncts appear to be sensitive to NP-island effects, as shown in (57).

(57) *John-wa [DP sono hon-o naze katta] hito]*
   John-TOP that book-ACC why bought person
   -o sasiteru no
   -ACC looking-for Q
   ‘John is looking for the person that bought that book why?’
   (Adapted from Saito 1994:204)

5. How can ordering restrictions involving wh-phrases be accounted for?
   – For example, for some speakers, (58b) is worse than (58a), so an additional wh-phrase cannot c-command a wh-island.

(58)a [CP John-wa [Mary-ga nani-o katta]
   John-TOP Mary-NOM what-ACC bought
   kadooka] dare-ni tazuneta no?]
   whether Tom-DAT asked Q
   ‘What did John ask Tom whether Mary bought?’
   (Watanabe 1992a:208)

(b) ??[CP John-wa dare-ni [Mary-ga nani-o
   John-TOP who-DAT Mary-NOM what-ACC
   katta kadooka] tazuneta no]?]
   bought whether asked Q
   ‘Who did John ask whether Mary bought what?’
   (Watanabe 2003:271)

   – In a multiple wh-question, nani ‘what’ may precede naze ‘why’, but naze ‘why’ may not precede nani ‘what’.

(59)a John-ga nani-o naze katta no
   John-NOM what-ACC why bought Q
   ‘Why did John buy what?’
(b) *John-ga naze nani-o katta no
John-NOM why what-ACC bought Q

6. Big Picture: This analysis, if accurate, accounts for the relevant data. But does it accurately represent the internal grammar of a speaker?

- These and other questions remain for further research.

References


