A Different Approach to the Japanese Mittelfeld and Wh-Scrambling

Aims:

- It represents an attempt at analyzing the Japanese Mittelfeld and Vorfeld along the lines of Kayne’s (1994) antisymmetry hypothesis.
- The Japanese Mittelfeld contains Information Structure (IS)-related features, such as Top and Foc, which get accessed from the left periphery (Foc, Top) under AGREE (Chomsky 2001, 2005). These Mittelfeld-internal Topic and Focus features are parasitic on phi/Case features.
- The SOV and OSV orders, derived orders, are not interpretively equivalent. Further, based on a suggestion by Miyagawa (2005), A-scrambling of wh-phrases is not an optional operation but induces pragmatic effects, i.e. a D-linking reading.
- Within the Kaynean approach, local AGREE and Relativized Minimality can account for Focus/quantifier intervention effects with wh-phrases. Whereas in languages like English the Q-feature, an EPP-feature on the Foc head, attracts a wh-phrase, in languages like Japanese it pied-pipes a Mittelfeld-substructure to Spec FocP.
- As opposed to English and French, Japanese does not exhibit any strong island effect but seems to display the Argument-Adjunct asymmetry with a wh-island if psycholinguistics is considered, such an asymmetry being accounted for under a feature-based view of RM.
- An account of the preferred matrix reading of a long-scrambled wh-phrase is suggested in terms of double status of the Q-particle, i.e. formal feature vs substantive feature.

1. The framework:

Kaynean (1994) antisymmetry hypothesis and the cartographic approach to the clause architecture, such as has been put forth by Belletti (2004), Cinque (1999, 2002, to appear) and (Rizzi 1997, 2004), where the CP (the Vorfeld) and IP (the Mittelfeld) are areas rich in functional projections, roughly represented in (1).

\[(\text{ForceP} [\text{TopP}^* [\text{FocP} [\text{TopP}^* [\text{FinP} ... [\text{MoodP} [\text{ModeP} [\text{TP} [\text{AspP} [\text{VoiceP} ...]]]]]]]]]]


- However, Whitman (2001) gives an account of negation in Japanese and Korean along the lines of Kayne’s antisymmetry.

I owe many thanks to Yoshio Endo for extensive e-mail exchanges and discussions on various aspects of this paper, and his immense help with the data, to Christopher Lenzlinger, Luigi Rizzi and Ur Shlonsky for helpful comments and discussions. This research has been financially supported by the Fonds National Suisse no. 100011-105237.
Ø Hoshi (2005) also proposes pied-piping and remnant movements for his analysis of association with Focus in Japanese.

More generally, other SOV languages have been analysed within the same framework:

Ø Koopman (2005) provides a syntactic account to some Korean and Japanese morphology by showing that inflected words are derived from head-initial structures by phrasal movement and agreement can be triggered under pied-piping.

Ø Wh-phrases in Bangla, another SOV language analysed as SVO merge order (Bhattacharya & Simpson 2003).


Following Kayne’s antisymmetry hypothesis, the structure of Japanese clause is the one given in (2) below.

\[
(2) \quad \text{TopP} \\
\quad \text{FocP} \\
\quad \quad \ldots \\
\quad \quad \text{SubjP} \\
\quad \quad \quad \text{ObjP} \\
\quad \quad \quad \quad \ldots \\
\quad \quad \quad \quad \text{vP} \\
\quad \quad \quad \quad \quad \text{DP}_{\text{Subj}} \quad \text{VP} \\
\quad \quad \quad \quad \quad \quad \text{V} \quad \text{DP}_{\text{Obj}}
\]

Kayne (2003) suggests that as far as the object position is concerned in an OV language, it must have moved to some specifier position higher than V and most plausibly higher than certain classes of adverbs in Cinque’s (1999) hierarchy ⇒ see section 2.5.

Kayne (1994:54) suggests an analysis based on pied-piping that can account for the lack of wh-movement in Japanese:

(3) a. John-ga *nani-o katta no?*  
John-Nom what-Acc bought Q  
‘What did John buy?’

b. 

\[
\]
- Kayne (2003):
  OVX languages (where X corresponds to other constituents within VP) ⇒
  leftward preposing of the object alone to a particular Spec
  *XVO languages (O is a single object and X everything else within VP)

Some cases of right-dislocation, which constitute old information (Kuno 1978)²:

(4) a. Hanako-wa Izumi-ga dekaketa to itta
    Hanako-Top Izumi-Nom left C said
    ‘Hanako said that Izumi left.’
  b. Hanako-wa itta Izumi-ga dekaketa to
    Hanako-Top said Izumi-Nom left C

    John-Nom buy-ni went
    ‘John left to buy.’
  b. John-ga itta, kai-ni
    John-Nom went, buy-ni

    John-Nom LGB-Acc read
    ‘John read LGB.’
  b. John-ga yonda yo, LGB-o.

- Kayne fn 3:143 suggests that wa and ga (and o) are overt heads whose overt
  complements follow them.

Along these lines one may suggest that such heads have an EPP property associated with
them.³ This captures Tomioka’s (2001:557) idea that “true case particles, such as -ga (nom)
and -o (acc) must be replaced by –wa.

² Bhattacharya & Simpson (2003) point out that in Hindi finite CP’s always fill a position after the verb, whereas
in Bangla such a CP apparently shows optionality of CP positioning. However, if a wh-element in the embedded
clause is intended to have matrix scope, the finite complement must occur in pre-verbal position.
(8) a. John-ga-*wa/*mo/*sae kita.
   Nom Top also even came
b. John-wa-*ga/*mo/*sae kita.

(9) a. John-ni-wa/mo/sa
Dat Top also even
   only Nom Top came

(10) a. Usagi-ga mimi-ga naga-i. ⇒ possessive construction
   Rabbit-ga ear-ga long-pres
   ‘It is rabbits which have long ears.’
b. John-ga nihongo-ga wakaru. ⇒ stative predicate
   John-ga Japanese-ga understand
   ‘John understands Japanese.’

   Teacher-Nom John-Gen child-Acc scolded
   ‘The teacher scolded John’s child.’
b.*John-ga sensei-ga kodom-o sikatta.
c.*Sensei-ga John-ga kodom-o sikatta.

⇒ “subjectivisation” does not occur from the object position

The first DP-ga in a ga ... ga construction has the following properties (Vermeulen 2005):
- a subject predicate relation holds between a possessive –ga and the clause to its immediate right, such predication being regulated by c-command;
- the first ga must be focused;
- the word order among ga-phrases is fixed;
- the possessive ga is able to bind the subject-oriented reflexive zibun.

Claim: the ga-head in the examples like (10) is the realization of Rizzi’s (2004) Subject Criterion (the freezing effect discussed in Kuno 1973, Saito 1985):

(13) a. John-ga Mary-ga shimpai-da.4
   John-Nom Mary-Nom anxious-Cop
   ‘John is anxious about Mary.’
c. John-ga Mary-o shimpai-da.

(14) [SubjP Taroo-ni/gai [TP Mary-ga] shimpai-da [vP ti tv tj]]

➢ Such an analysis does way with multiple Spec (Miyagawa 2005) and the strong vs. weak Nom on T (Ura 1999).

3 As argued by Whitman (2001), no also constitutes a phrasal head:
(i) Yuubokumin-no tosij-no ti t_hakai.
   Nomad-Gen city-Gen destruction
   ‘The Nomads’ destruction of the city’
4 The Nominative particle ga can also mark a possessor of the subject or may be suffixed to an adjunct.
Endo (2006) discusses the multiple functions wa may have: in (15a) kyoo-wa = scene-setting adverbial, Mary-wa = Top in the left periphery; in (15b) kyoo-wa = Foc\text{contr}

(15) a. Kyoo-wa kinoo-to chigatte Mary-wa hima soo-da.
    Today-Top yesterday.unlike Mary-Top free seems
    ‘Today Mary seems free/has nothing to do, unlike yesterday.’

b.??Mary-wa kinoo-to chigatte kyoo-wa hima soo-da. ok under a Foc\text{contr} reading of kyoo-wa

2. Short ‘Scrambling’ and IS in Japanese

2.1. ‘Scrambling’…

  - Ishihara (2000) shows for instance that the syntactic component yields a syntactic derivation to two interface levels, PF and LF;
  - Miyagawa (2001) claims that scrambling is a syntactically obligatory operation driven by an EPP feature on T and assumes following Chomsky (1998) that case features are checked in situ by virtue of AGREE. The optionality of scrambling is reduced to optionality of either DP, subject or object, to move for EPP;
  - Endo (2006) discusses more in detail the left periphery of the clause and shows that Japanese exhibits focalisation and topicalisation in the sense of Rizzi (1997, 2002).

2.2. The SOV order

(18) a. Swuni-ka ku si-lul ss-ess-ta.   Swuni-Nom the poem-Acc write-Past-M
   ‘Swuni wrote the poem’.


(19) a. Nin-ne aarə talli?
   You-Acc who beat(Past)
   ‘Who beat you?’

b.*Aarə nin-ne talli?

(20) a. JOn [kon boi-Ta] poRlo.
    John which book –Cl read
    ‘Which book did John read?’

b. JOn [ke cole gEche] bollo.
    John [who left gone] said
    ‘Who did John say left?’

    Bangla Bhattacharya&Simpson2003 (6)
(21) a. JOn [ki meri-ne kyaa xariida] kahaa. Hindi
    John [that Mary-ERG what bought] said
    ‘What did John say tat Mary bought?’
b. *JOn kahaa [ki meri-ne kyaa xariida].

Back to Japanese…

(22) Taroo-ga hon-o katta. Miyagawa, 2005 (52)
    Taroo-Nom book-Acc bought
    ‘Taroo bought a book.’

(22) is a possible answer to (23) below (Miyagawa 2005, Ishihara 2000, Endo 2006):

(23) a. Nani-o atta no?
    ‘What happened?’
b. Taro-ga nani-o katta no?
    ‘What did Taro buy?’
c. Taro-ga nani-o sita no?
    ‘What did Taro do?’

⇒ the subject DP Taroo-ga in (22) fills the Rizzi’s (2004) Criterial Subject position, i.e. it functions like Topic-aboutness. The subject DP gets frozen in place.
⇒ since (22) may also be an answer to (23b), the DP Taroo-ga is some sort of given information and fills therefore Spec SubjP, whilst the object DP moves to SpecObjP, which is necessarily associated with FocPNewInformation in the sense of Belletti (2001, 2004) though a Voice adverb may follow the object.
⇒ since (22) also constitutes a possible answer to (23c), the ObjP containing the DP and the verb pied-pipes to the higher ObjP associated with FocPNewInformation.

2.3. The OSV order

(24) Hon-o Taro-ga katta.

(24) constitutes an appropriate answer to the questions in (25) following Miyagawa 2005, Ishihara 2000:

(25) a. Dare-ga hon-o katta no?
    ‘Who bought the book?’
b. Nani-ga atta no?
    ‘What happened?’
c.*Taro-ga nani-o sita no?
    ‘What did Taro do?’

⇒ in (25a), the DP hon-o represents given information, and thus fills an ObjP associated with the old information, some sort of Mittelfeld-internal Top-feature in the sense of Belletti.
The subject DP Taro-ga moves to a low SubjP position necessarily associated with FocPNewInformation in the Mittelfeld.
But OSV is a tricky order…

**Context:** Mary and her friend know that there is going to be a race car today in which several cars will take part. Mary has to leave before the race starts and later on she asks John.

(26) Q: Nani-ga atta no?  
What-Nom happened Q  
A1:??%Ferrari-o Sauber-ga oikosita.  
Ferrari-Acc Sauber-Nom overtook  
‘The Sauber overtook the Ferrari.’  
Endo (p.c.)

**Context:** Mary and her friend John meet up in the street, John looks a bit pale.

(27) Q: Doo sita nodesu ka  
How did polite Q  
‘What happened (to you)?’  
A1:??Kogitte-o syain-ga otosita.  
Check-Acc office.stuff-Nom lost  
‘One of the stuff member lost some important check’

A1:?? $300,000 syain-ga otosita.  \(\rightarrow\) cardinality interpretation

**Context:** Three kids who are working on their homework in the room and their father comes in and asks:

(28) Q: Nani yatteru no?  
What doing Q  
A:??Yatto 30-page-o Taro-ga owatta.  
Finally page 30-Acc Taro-Nom finished (=Taro finally finished with the problem on page 30)  \(\rightarrow\) cardinality interpretation

**Context:** The three kids have problems to solve from page 30 to page 40 and the father asks:

(29) Q: Nani yatteru no?  
What doing Q  
A: Yatto 30-page-o Taro-ga owatta.  
Finally page 30-Acc Taro-Nom finished  \(\rightarrow\) presuppositionality

Thus OSV cannot be an answer to (25b) unless some presuppositionality is involved.

Further evidence for a fairly low FocNewInformation position comes from the ungrammaticality of (30):

(30) Q: Dare-ga hon-o katta no?  
A:*Taro-ga hon-o katta.
Consider again (24):

(24) Hon-o Taro-ga katta.

⇒ the same object DP may also function as a Topic, thus filling Rizzi’s Spec Top in the left periphery, as shown in Endo (2006). In such a case, an intonational break follows the DP with the remaining part of the sentence constituting the comment regarding the book.

⇒ the object DP may be read with a distinct specific stress, which means that it has undergone movement to a contrastive FocP in the left periphery (Endo p.c.). In all these last three cases, the subject DP fills SubjP associated with new information Focus.

(31) …Top > Foc > Criterial Subj > Top (Belletti) > Obj > FocNew Information > Adv … > vP

Suggestion based on an observation in Endo (2006):

(32) … Top .......... ObjP … … DP Top iTop[ ] φ Top uOCC_{+IS/Top}[ ] OCC_{+IS/Top} Val

Downward Agree

2.4. Subject DP and Adv interaction in the SOV order


‘Unfortunately, three students were involved in that accident.’

b. Gakusei-ga kinoo sannin hon-o yonde-ita. Ono (2001)

‘Yesterday, three students were reading book-Acc.’

c. Gakusei-ga umaku mondai-o toita.

‘The students solved the problems well.’

d. Gakusei-ga subayaku mondai-o toita.

‘The students quickly solved the problems.’
2.5. Object DP and Adv interaction in the OSV order

(35) a. Sono ziko-ni unwaruku gakusei-ga ate.
   ‘Unfortunately the students were involved in that accident.

b. Sono ziko-ni tabun/osoraku gakusei-ga atta.
   ‘Perhaps the students were involved in that accident.’

c. Sono ziko-ni kinoo gakusei-ga ate.
   ‘Yesterday the students were involved in that accident.’

d. Sono ziko-ni saikin gakusei-ga ate.
   ‘Recently the students have been involved in that accident.’

e. Sono mondai-o umaku gakusei-ga toita.
   ‘The students solved the problems well.’

f. Sono cake-o isoide gakusei-ga tabe-ta.
   ‘The students quickly ate the cake.’

The object DP scrambling possibilities in the OSV order are given in (36):
3. Scrambling of wh-phrases and intervention effects

The important question to as is: Are wh-phrases really in situ? Following Kayne, they are obviously not.

3.1. The interaction of Subject wh-phrases and adverbs

(37) a. Hanako-ga subayaku nani-o sita no?
   Hanako-Nom quickly what-Acc did Q
   ‘What did Hanako quickly did?’

b. Hanako-ga sinsetu-ni-mo nani-o sita no?
   Hanako-Nom kindly what-Acc did Q
   ‘What did Hanako kindly did?’

c. Hanako-ga sibasiba/hinpanni nani-o sita no?
   Hanako-Nom often what did Q
   ‘What did Hanako often do?’

d. Hanako-ga saikin nani-o sita no?
   Hanako-Nom recently what-Acc did Q
   ‘What has Hanako recently done?’

e. Hanako-ga kinoo nani-o sita no?
   Hanako-Nom yesterday what-Acc did Q
   ‘What did Hanako do yesterday?’

f. Hanako-ga tabun/osoraku nani-o sita no?
   Hanako-Nom probably what did Q
   ‘What did Hanako probably do?’

g. Hanako-ga kooun-ni-mo nani-o sita no?
3.2. The interaction of Object wh-phrases and adverbs

(38) a. Hanako-ga nani-o subayaku kaiketusita no?
   Hanako-Nom what-Acc quickly solved Q
   ‘What did Hanako quickly deal with?’

b. Hanako-ga nani-o umaku kaiketusita no?
   Hanako-Nom what-Acc well solved Q
   ‘What did Hanako well deal with?’

c. Hanako-ga nani-o sibasiba/hinpanni sita no?
   Hanako-Nom what often did Q
   ‘What did Hanako often do?’

d. Hanako-ga nani-o saikin sita no?
   Hanako-Nom what-Acc recently did Q
   ‘What has Hanako recently done?’

e. Hanako-ga nani-o kinoo sita no?
   Hanako-Nom what yesterday did Q
   ‘What did Hanako yesterday?’

f. Hanako-ga nani-o tabun/osoraku sita no?
   Hanako-Nom what probably did Q
   ‘What did Hanako probably do?’

g. Hanako-ga nani-o kooun-ni-mo sita no?
   Hanako-Nom what-Acc fortunately did Q
   ‘What did Hanako fortunately do?’

h. Hanako-ga nani-o sinsetu-ni-mo sita no? ⇒ subject-oriented reading
   Hanako-Nom what-Acc kindly did Q
   ‘What did Hanako kindly do?’

3.3. Is there any optionality proper with wh-phrases?

Miyagawa (2005) suggests that scrambling of a wh-phrase over another affects the interpretation possibilities.

(39) a. Itsu doko-de Hanako-ni atta no.
   When where-Prtloc Hanako-Dat meet.Past Q
   ‘When did you meet Hanako where?’

b.??Doko-de itsu Hanako-ni atta ka.
   Ok if wh₁ is D-linked

(40) a. Itsu donoyô-ni Hanako-ga hataraita no.
   When how-Prt Hanako-Nom work.Past Q
   ‘When did Hanako work how?’

b.??Donoyô-ni itsu Hanako-ga hataraita no.
   Ok if wh₁ is D-linked

(41) a. Doko-ni donoyô-ni Hanako-ga chûsha shita no.
   Where how Hanako-Nom parked-his-car Q
   ‘Where did Hanako park his car?’
b. ??Donoyô-ni doko-ni Hanako-ga chūshashita ka. Ok if wh₁ is D-linked

(42) *itsu ‘when’ > doko-ni ‘where’ > donoyô-ni ‘how’*

The order of wh-arguments marked for the feature [+Animate]:

(43) a. Dare-ga dare-ni atta no?
   Who-Nom whom-Dat met Q
   ‘Who met whom?’
   b. (?)Dare-ni dare-ga atta no? Ok if wh₁ is D-linked

(44) a. Dare-ga dare-o tataita no?
   Who-Nom who-Acc hit Q
   ‘Who hit who?’
   b. (?)Dare-o dare-ga tataita no? Ok if wh₁ is D-linked

(45) a. Dare-ga dare-ni kimi-o shônoi shôta no?
   Who-Nom whom-Dat you-Acc introduced Q
   ‘Who did you introduce to whom?’
   b. (?)Dare-ni dare-ga kimi-o shônoi shôta no? Ok if wh₁ is D-linked

(46) a. Dare-ni dare-o Ken-ga shônoi shôta no?
   Whom-Dat who-Acc Ken-Nom introduced Q
   b. (?)Dare-o dare-ni Ken-ga shônoi shôta no? Ok if wh₁ is D-linked

(47) *dare-ga ‘who’ > dare-ni ‘whom’ > dare-o ‘who.Acc’*

The hierarchy in (47) constitutes a hierarchy of Case-related positions, given the hierarchy SubjP>ObjPIO>ObjPDO (cf. Laenzlinger & Soare 2005).

Scrambling of a bare wh-phrase over another, i.e. reversing the hierarchy, leads to a SP list interpretation (Miyagawa 2005, Kitagawa, Roehrs & Tomioka 2003).

<table>
<thead>
<tr>
<th>+Animate Arg</th>
<th>Adverbs/Adverbial</th>
<th>-Animate Arg</th>
<th>Adv</th>
</tr>
</thead>
<tbody>
<tr>
<td>dare-ga who</td>
<td>dare-ni whom</td>
<td>dare-o who.Acc</td>
<td>itsu when</td>
</tr>
</tbody>
</table>

Table 1

**Conclusions:**

- With wh-phrases no optionality is involved as A-scrambling affects interpretability;
- Like Romanian and Bulgarian (Krapova & Cinque 2005, Laenzlinger & Soare 2006), Japanese exhibits the same ordering of wh-phrases but unlike them it allows for switching the order with the same interpretive possibilities, i.e. D-linking.
4. Asymmetries...old and new. Subjacency effects in Japanese

Since Huang (1982), LF movement does not obey Subjacency in Japanese (Lasnik and Saito 1984, Nishigauchi 1990), nor does it in Chinese. Issue to be revisited...

   b.??John-wa [Mary-ga nani-o katta kadooka] siritagatte iru no?
       John-Top [Mary-Nom what-Acc bought whether know.want Q ‘What does John want to know whether Mary bought?’

→ (48b) is marked ? by Lasnik & Saito 1984
→ (48b) is marked ?? by Watanabe 1992 (14) and Ura 1993 (5b)

4.1. No Argument – Adjunct asymmetry

The wh-adjunct doo ‘how’ does not show strong island sensitivity. It only shows sensitivity to the wh-island (Ura 2003).\(^5\) Compare (49)-(50)-(51) to (52):

Doo in a CNP island

(49) a. Kimi-wa [John-ga doo nagutta hito]-o hihansi-masita ka?
       You-Top John-Nom how hit person-Acc reproach-Polite Q
    *‘How did you reproach [the person John hit t]?’ Ura 1993, (8a)

Doo/Doko-ni in an Adjunct island\(^6\)

(50) a. Kimi-wa [John-ga doo Mary-o kizutuketa noni] kare-o kabai-masita ka?
       You-Top John-ga how Mary-Acc hurt though he-Acc defend-Polite Q
    *‘How did you defend him [though John hit Mary t]?’ Ura 1993, (8c)

Doo in a Manner-of-Speaking Verb island

(51) Kimi-wa [kimi-no haha-ga doo kimi-mo koibito-o nagutta to] sasayaki-masita ka?
       You-Top you-Gen mother-Nom how you-Gen lover-Acc hit though C whisper-Polite Q
    *‘How did you whisper [that your mother hit your lover]?’ Ura 1993, (b)

Doo in a Wh-island

(52)*Kimi-wa [John-ga doo Mary-o nagutta kadooka] sitte-imasu ka?
       You-Top John-Nom how Mary-Acc hit whether know-Polite Q

\(^5\) The wh-adjunct doo ‘how’ patterns differently from naze ‘why’, in that the latter systematically shows island sensitivity.

\(^6\) As briefly discussed by Richards (2000), not all Adjunct islands have the same status. For instance, doo in an adjunct island introduced by atode ‘after’ gives an ungrammatical result (Endo, p.c.)

\(^7\) It is important to mention that in (52) the special intonation of deaccenting cannot go through till the scope marker ka. To my knowledge this remains a mystery in the literature on prosody-scope effects.
‘How do you know whether John hit Mary?’ Ura 1993

Consider, however, other wh-Adjuncts, like *itsu ‘when’ and *doko-ni ‘where’ which seem to display some fairly marginal deviancy but if this is true, more research needs be done:

**Itsu/Doko-ni in a CNP island**

(53) a. Kare-wa [Taroo-ga *itsu/doko-ni katta hon]-o yonde-iru no?
   He-Top Taro-Nom when/where bought book read-prog Q
   ‘When/where is he reading [a book that Taro bought t]?’
   Endo’s jud.

b. Kare-wa [Taroo-ga *dono hi/ *dono basyo katta hon]-o yonde-iru no?
   He-Top Taro-Nom which day/which place bought book read-prog Q
   ‘Which day/which place is he reading [a book that Taro bought t]?’

→ *if the wh-Adjunct is D-linked, the sentence is perfect*

**Doko-ni in an Adjunct island**

(54) a. Taroo-ga [*doko-ni itta kara] umaku itta no?
   Taro-Nom where-Dat went because well went Q
   ‘Where did things go well because Taro went t?’
   Endo’s jud.

b. Taroo-ga [*dono basyo itta kara] umaku itta no?
   Taro-Nom which pace went because well went Q
   ‘Which place did things go well because Taro went t?’

→ *a D-linked Adjunct gives rise to perfect grammaticality*

• However, Japanese is well-behaved in that it systematically shows Subjacency effects with overtly moved (wh- and lexical) Adv, as shown by the impossibility of XP-Adjunct extraction out of any island type. This is exemplified below:

**CNP Island**

(55)*Doo ki-mi-wa [John-ga nagutta hito]-o hihansi-masita ka?
   How you-Top John-Nom hit person-Acc reproach-Polite Q
   *‘How did you reproach [the person John hit t]?’ Ura 1993, (9a)

**Adjunct Island**

(56)*Doo ki-mi-wa [John-ga Mary-o kizutuketa noni] kare-o kabai-masita ka?
   How you-Top John-ga Mary-Acc hurt though he-Acc defend-Polite Q
   *‘How did you defend him [though John hit Mary t]?’ Ura 1993, (9c)

**Manner-of-Speaking Island**

(57)*Doo ki-mi-wa [kimi-no haha-ga kimi-no koibito-o nagutta to] sasayaki-masita ka?
   How you-Top you-Gen mother-Nom you-Gen lover-Acc hit C whisper-Polite Q
   *‘How did you whisper [that your mother hit your lover]?’ Ura 1993, (9b)

**Wh-Island**

(58)a.*Doo ki-mi-wa [John-ga Mary-o nagutta kadooka] sitte-imasu ka?
   How you-Top John-Nom Mary-Acc hit whether know-Polite Q
   *‘How do you know whether John hit Mary t?’ Ura 1993, (9d)
The same ungrammaticality obtains with *itsu and *doko-ni:
(59) *Itsu [Taro-ga t sore-o te-ni ireta kot]-o okotteiru no?
   ‘When are you angry about the fact that Taro obtained it t?’  Endo, p.c.

(60)*Doo [John-ga Mary-o nagutta kadooka] sitte-imasu ka?
   ‘How do you know whether John hit Mary t?’  Endo, p.c.

➢ Ura observes that long-distance scrambling of the CNP island, of the adjunct island and of the compl of *doo has the same status as the wh-island effect with a wh-Argument, i.e. fairly marginal, but not yet totally ungrammatical, whence his account of the long scrambling of the island in terms of the argumental nature of the chain that pied-pipes at LF, much in the spirit of Nishigauchi’s (1990)analysis:

   *Pied-piping of the long-scrambled CNP under ‘know’*

(61)**[Johni-ga [PROi *doo tj egaita] tj –o yabuita] kadooka sitte-imasu ka?
   ‘How do you know whether Johni broke (the) picturej which hei drew tj t k?’

   *Pied-piping of the compl cl of Manner-of-Speaking V under ‘know’*

(62)**[kimi-no haha-ga *doo kimi-no koibito-o nagutta to]k sasayaita kadooka] sitte-imasu ka?
   ‘How do you know whether your mother whispered that she hit your lover t?’

➢ However, contrary to Ura, a wh-island can front by long scrambling:
(63)**[John-ga *doo Mary-o nagutta kadooka], kimi-wa t sitte-imasu ka?  Endo p.c.

4.2. The overtly moved wh-Arg - overtly moved wh-Adjunct asymmetry

Compare overt scrambling of the wh-Arg in (64)-(65) to (58)-(59) repeated below as (66)-(67). Such asymmetry is treated as a case of RM.

(64) *Nani-o* [John-ga [Taro-ga katta ka] siritagatteiru.
   ‘John wants to know what Taro bought.’

(65) *Nani-o* [John-ga [Taro-ga katta ka] sitteiru no?
   a. Preferred r: ‘What does John want to know whether Taro bought?’
   b. Dispreferred r: ‘Does John want to know what Taro bought?’

→ recall the D-linking interpretation of *nani-o*
(66) *Itsū [Taro-ga it sore-o te-ni ireta kot]-o okotteiru no?
   ‘When are you angry about the fact that Taro obtained it t?’

(67)*Doo kimi-wa [John-ga Mary-o nagutta kadooka] sitte-imasu kā?
   ‘How do you know whether John hit Mary t?’

⇒ Japanese is like Fr, E in that overt wh-Arg mvt from an island is permitted, whereas overt
wh-Adjunct (and lexical Adv) mvt from an island is not.

And yet…

Are there Subjacency effects with a wh-island? What psycholinguistics tells us about it.

On the basis of experimental design, Kitagawa & Fodor (2006) point out the essential role
played by prosody-scope and argue that wh-in-situ in an example like (68) below can only
have matrix scope when uttered with the appropriate (i.e. what they call long-EPD, emphatic
prosody,) intonation. ⇒ experimental evidence that Subjacency is not operative with wh-in-
situ

However, for those speakers able to interpret kadooka ‘whether’ as a scope marker the wh-
phrase will only have the embedded scope interpretation under a short-EPD. ⇒ hence the
source of the Subjacency effects extensively discussed in the literature

(68) Keesatu-wa [Mary-ga ano-ban dare-ni denwasita-kadooka] imademo sirabeteteiru-no?
   Police-Top Mary-Nom that-night who-Dat called whether even.now investigating-Q
   ‘Who is such that the police are investigating whether Mary called him/her, that night?’
   (K&F 2006 (9))

⇒ they point out that if the appropriate complex EPD is supplied the two wh’s have
the same scope

Examples like (69) above have been produced and analyzed to contrast with the one below

(69) John-wa [Mary-ga nani-o katta-kadooka] dare-ni tazuneta-no?
   John-Top Mary-Nom what-Acc bought whether who-Dat asked Q
   ‘What did John ask whom whether Mary bought t?’

⇒ they point out that if the appropriate complex EPD is supplied the two wh’s have
the same scope

Examples like (69) above have been produced and analyzed to contrast with the one below

(70)?? John [Mary-ga nani-o katta-kadooka] Tom-ni tazuneta-no? Watanabe 1992 (15b)
   John-Top Mary-Nom what-Acc bought whether Tom-Dat asked Q
   ‘What did John ask Tom whether Mary bought t?’

Crucially when the appropriate EPD intonation is properly assigned, even the multiple wh-
phrases within an island can be interpreted as a matrix multiple wh-question:
(71) John-wa [dare-ga nani-o katta-kadooka] Tom-ni tazuneta-no?
    John-Top who-Nom what-Acc bought-Q Tom-Dat asked-Q
    ‘What did John ask Tom [whether who bought]?’

- Ishihara (2002): in the multiple wh-question below, both wh’s seem to have the **same scope** due to **deaccenting** till the end of the matrix clause:

(72) Dare-ga Yumi-ni [Mari-ga nani-o nomiya-de nonda to] iituketa **no**?
    bar-Loc drank that told Q
    ‘Who told Yumi that Mari drank what at the bar?’

- As for long-scrambled wh, K & F show that if the wh is assigned **Long-EPD**, only matrix scope is acceptable, but nonetheless if wh is overtly supplied a **short-EPD**, subordinate scope is acceptable and matrix scope is blocked though some awkwardness is noted by the informants. ⇒ experimental evidence that **Subjacency is not operative with overt movement**

(73) Nani-o John-wa [Mary-ga tabeta-ka] siritagatteiru-no?
    What-Acc John-Top Mary-Nom ate-Q wants.to.know-Q
    a. Preferred r: ‘What does John want to know whether Mary ate?’
    b. Dispreferred r: ‘Does John want to know what Mary ate?’

(K&F 2006 (10))

→ Takahashi (1993) claims that only matrix scope is available
→ Miyagawa (2006) and Endo (p.c.) seem to also prefer the matrix reading, while still accepting the embedded reading

4.3. The pied-piping analysis to wh-phrases

- The size of the pied-piped material/Constraints on pied-piping in languages with overt wh-movement:

(74) a. [Who] did you see?
    b. [With whom] will you dance?
    c. [Whose pictures] did you see?
    d. [Who left] do you think?
    e.*[Pictures of who] did you see?
    f.*[Fond of what] is he?

    **Adjunct Island**

(75) a.? [Zer ikusi ondoren] joan ziren hemen-dik?  Basque Ortiz de Urbina 1989, (252)
    What see after  Aux here-from
    ‘What did they leave after seeing t?’
    b.*Zer joan ziren hemen-dik [ikusi ondoren]

    **Wh-Island**

(76) a.*[Nor etorriko d-en] galdetu duzu?  Basque Ortiz de Urbina 1990, (252)
    Who come Aux-Q asked Aux
    ‘Who have you asked whether t has come?’
    b.*Nor galdetu duzu [etorriko d-en]
Simpson & Battacharya (2003) point out that in languages like Basque, Quechua, Marathi, all clausal pied-piping languages, wh-feature percolation may be possible not only from the left-peripheral position in the pied-piped constituent but also from the clause-internal position.

**Conclusions**

- There is no need to posit covert island mvt to avoid island violations (Richards 2000) as overt pied-piping of an island or of any material comes for free;
- Richards (2000) suggests that internal mvt of the wh-Op to Spec XP (at least at LF) is what triggers pied-piping; but that brings in a complication related to the level at which this wh-Op takes place, i.e. this would imply some optionality in Basque, Quechua, Bangla.

In (77) below, *nani-o* has only *matrix scope*.

(77) a. Naoya-wa [Mari-ga *nani-o* nomiya-de nonda to] imademo omotteru *no*?
   Naoya-Top Mari-what-Acc bar-Loc drank that even.now think Q
   ‘What did Naoya still think that Mari drank at the bar?’ (Ishihara 2004 (3b))

⇒ the embedded Foc head has uninterpretable unvalued feature Q, uQ [ ] to which an EPP is associated, which accounts of the successive cyclic movement
⇒ the pied-piped material moves to ObjP and at this point SubjP is probed by the matrix Foc, having iQ [ ] + EPP
⇒ wh-activation takes place on the matrix Foc, the only available location

Consider the example below:

(78) a. Nani-o John-wa [Mary-ga tabeta-ka] siritagatteiru-no?
    What-Acc John-Top Mary-Nom ate-Q wants.to.know-Q
    a. Preferred r: ‘*What* does John want to know whether Mary ate?’
    b. Dispreferred r: ‘Does John want to know *what* Mary ate?’

⇒ if the embedded ka is not a substantive Q-feature, but a purely formal one, the wh-element is further probed by the higher no and therefore interpreted in this latter higher position; conversely, if embedded ka has a substantive Q-feature, it receives the embedded interpretation and can further move to check a Top-feature in the left periphery;

⇒ the embedded pied-piped material moves to matrix ObjP and is probed by the matrix Foc with the iQ feature which also has an EPP specification;
⇒ the Obj wh-phrase is not frozen in place as it is contained into a larger pied-piped constituent and thus following Rizzi (2006) it can get extracted and moves to a higher position;
⇒ however, no violation of RM is involved as *nani-o* bears a special interpretation, it is Top+Foc/wh (see also Miyagawa 2005, 2006 for the D-linked reading of the scrambled wh-phrase).

Consider Saito’s (1989) radical reconstruction example:

    Which book Mary-Nom John-Nom library-from checked.out Q wants.to.know fact
    ‘The fact that Mary wants to know which book John checked out from the library.’

b. Top+Wh

\[
\begin{array}{c}
\text{dono hono} \\
\text{Foc} \\
\text{EPP} \\
\text{SubjP} \\
\text{ObjP} \\
\text{vP} \\
\text{…} \\
\text{SubjP} \\
\text{uQ [ ] +EPP} \\
\text{John-ga} \\
\text{ObjP} \\
\text{AGREE} \\
\text{dono hno} \\
\text{vP} \\
\end{array}
\]

⇒ the wh-element reconstructs or the lower copy is interpreted on the embedded Foc by virtue of the fact that *ka* has a substantive Q-feature;

**Conclusions so far:**

- AGREE is not sensitive to Subjacency, at least in the case of an Argumental wh-phrase;
- Optionality of the long wh-scrambling disappears with pied-piping; optionality is movement triggered by the interpretable unvalued Q-feature on Foc with an associated EPP-feature; the matrix vs. reconstructed reading is associated with the status of the ka-feature on the embedded Foc, i.e. FF vs. Criterial feature;
• Matrix Spec Foc is a criterial position but the goal can further extract by virtue if being included in a larger, pied-piped constituent.

5. Intervention effects

5.1. Agree and RM


It has been observed in the literature and as seen above, ‘wh-in-situ’ are less sensitive to barriers than overt (phrasal) A’-movement, which in our framework means that AGREE is less sensitive to barriers than overt A’ movement is.

We adopt Adger’s (2003:168) definition of AGREE which is a constraint on the locality of feature matching (Adger 2003:218):

(80) An uninterpretable feature F on a syntactic object Y is checked when Y is in a c-command relation with another syntactic object Z which bears a matching feature F.

(81) AGREE holds between a feature F on X and a matching feature on Y only if there is no intervening Z (F).

We also adopt Rizzi’s (2006) feature-based definition of RM and his Criterial Freezing approach:

(82) Criterial Freezing: The criterial goal is frozen in place.

(83) a.?*Daremo-ga nani-o notta no?
   Everyone-Nom what-Acc bought Q
   ‘What did everyone buy?’

b. \[TP [Daremo-ga nani-o not] –ta] [SubjP … [ObjP …

\[uwh \quad iwh \quad \Rightarrow \text{AGREE}

\[uQ \quad iQ \rightarrow \text{gives it its semantic interpretation, i.e. question}

\[c. \quad …no \ Foc \ …[TP [Daremo-ga nani-o not] –ta] [SubjP … [ObjP …

\[uQ \quad iQ \rightarrow \text{gives it its semantic interpretation, i.e. question}
As shown in the literature (Hoji 1985, Miyagawa 2004, Miyagawa & Endo 2005), intervention effects are cancelled under conditions such as embedding, D-linking and scrambling:

(84) a. *Nani-o daremo-ga notta no?*
   b. ...

![Diagram](attachment:image.png)

(85) a. *Ken-wa daremo-ni nani-o ageta no?*  
   Miyagawa & Endo 2005, (10)
   Ken-Top everyone-Dat what-Acc gave Q
   ‘What did Ken give to everyone?’

→ As discussed by Miyagawa & Endo (2005), under D-linking, a quantificational non-subject QP such as *daremo-ni* ‘everyone-Dat’ cancels the intervention effect.

b.
(86) a. Ken-wa nani-o zen’in-ni ageta no?
Ken-Top what-Acc all-Dat gave Q
‘What did Ken give to everybody?’

b.
5.2. More complex cases of intervention

(87)a. Kesatu-wa [Mary-ga ano-ban dare-ni denwasita-kadooka] imademo sirabeteteiru-no?\(^8\)

Police-Top Mary-Nom that-night who-Dat called whether even.now investigating-Q

‘Who is such that the police are investigating whether Mary called him/her that night?’

\[Kadooka = Q + \text{how} + Q \rightarrow [-\text{Argument}]\]

\(^8\)In this paper we consider the dialect where Kadooka ‘whether’ is not a scope marker.
⇒ below Foc we assume there is *IntP* (Rizzi 1999) headed by *kadooka* which is interpretable and valued (Pesetsky & Torrego 2004)
⇒ within such an account the wh-island introduced by *kadooka* ‘whether’ successfully moves to matrix Spec Foc

(88) a. John-wa [Mary-ga *nani-o* katta-kadooka] *dare-ni* tazuneta-no?
   John-Top Mary-Nom what-Acc bought whether who-Dat asked Q
   ‘What did John ask whom whether Mary bought?’
⇒ at some point in the derivation, Foc probes for its goal and “sees” the DO with which it Agrees; permutation of the objects is possible due to scrambling.

(89) a. John-wa [dare-ga nani-o katta kadooka] Tom-ni tazuneta-no?
   John-Top who-Nom what-Acc bought whether Tom-Dat asked-Q
   ‘What did John ask Tom [whether who bought]?’
\[ \Rightarrow \text{as discussed in Kitagawa, Roehrs & Tomioka (2004), the wh-phrases in such an example both take matrix scope} \]

\(^1\text{AGREE (Chomsky 2000, 2001, 2005) is defined as below:} \)

(i) An unvalued feature F (a probe) on a head scans its c-command domain for another instance of F (a goal) with which to agree.

(ii) If the goal has a value, its value is assigned as the value of the probe

\(^1\text{If Move is considered an epiphenomenon of Agree, such a conclusion is expected.} \)

References:


