

Long-Distance Dependency in Japanese Relativization: Resumptivity and Operator Movement*

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1. Long-distance dependencies in Japanese relativization

• **No CNPC effects**

- (1) a. [[[e_i e_j kiteiru] yoohuku_j]-ga yogoreteiru] $sinsi_i$
wearing suit-NOM dirty gentleman
'(lit.) a gentleman who the suit that (he) is wearing is dirty'
— Kuno (1973: 239)
- b. [[[e_i e_j kawaiatte ita] inu_j]-ga sinda simatta] $kodomo_i$
loving was dog-NOM dying ended-up child
'(lit.) the child who the dog (he/she) was fond of died'
— Kornfilt et al. (1980: 189-190)
- c. [[[e_i e_j kaita] hon_j]-ga syoten-ni deteiru] $gakusya_i$
wrote book-NOM bookstore-at appear scholar
'(lit.) the scholar who the book (he/she) wrote is on bookstores'
— Inoue (1976: 222)

Relativization in Japanese can take place beyond clause-boundaries, despite the fact that operator movement from the gap position in the relative clause would violate the Subjacency Condition.

- (2) [CP OP_i [TP [NP [CP OP_j [TP e_i e_j kiteiru]] yoohuku_j]-ga yogoreteiru]] $sinsi_i$
-
- SUBJACENCY VIOLATION

• **No reconstruction/connectivity effects in 'Long-distance' relativization**

(3) **Anaphor licensing**

- *Katie-wa [[[Paul]_j-ga e_i kaita] to iu] giron]-ga wakiokotteiru] [$kare-zisin_j$ -no
-TOP -NOM drew that debate-NOM come out himself-GEN
 e_i]-o taisoo hosigatta.
picture-ACC very wanted
'(lit.) Katie really wanted himself_j's picture_i that the claim/debate that Paul_j drew e_i has come out.
— Kitao (2017: 42)

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(4) **Idiom chunk interpretation**

*Raibaru-wa [[[[[John-ga mizukara e_i **hotta**] to iu] uwasa]-ga tatteiru]
Rival-TOP -NOM himself dug that rumor-NOM be spread
boketu_i]-o totemo yorokonda.
grave-ACC very happy

Idiom: <i>boketu-o horu</i> ‘bring about a ruin’ NP V
--

→ This interpretation is not possible.

‘(lit.) The rival is very happy about the grave_i that the rumor that John himself dug e_i has been spreading out.

(The ruin that has a rumor that John himself brought about made his rival happy.)

— *op. cit.*, p. 42

Reconstruction/connectivity effects such as anaphor licensing and the interpretation of idiom chunks across clause boundaries are not possible in long-distance relativization .

(5) The immunity of the CNPC → Movement is NOT involved in Japanese relative clauses (Kuno 1973, Murasugi 1991, 2000a, b, Ochi 1997, etc.).

[NP [TP [NP [TP pro_i pro_j kiteiru] yoohuku_j]-ga yogoreteiru] sin_i]

● **Problem set**

Short-distance relativization in Japanese shows clear movement properties of relative heads.

- i. **Reconstruction/connectivity effects (anaphor licensing & idiom chunk interpretation)**
- ii. **Weak crossover effects (WCO)**
- iii. **The availability of parasitic gaps**
- iv. **The impossibility of left-branch extraction**

2. **Short-distance relativization in Japanese**

2.1 **Reconstruction/connectivity effects**

(6) **Anaphor licensing**

a. Katie-wa [[**Paul_i**]-ga e_j egaita] **kare-zisin_i**-no e_j]-o taisoo hosigatta.
Katie-TOP Paul-NOM drew himself-GEN picture-ACC very wanted

‘(lit.) Katie wanted himself_i’s picture that Paul_i drew very much.’

— Kitao (2011: 318)

- b. Mary-wa [[**John_i**-ga e_j taipu-sita] **kare-zisin_i**-no ronbun_j]-o mottekita.
 Mary-TOP John-NOM typed himself-GEN paper-ACC brought
 ‘(lit.) Mary brought himself’s paper that John typed.’

— Ishii (1991: 29)

(7) **Idiom chunk interpretation**

- a. Raibaru-wa [[John-ga mizukara e_i **hotta**] **boketu_i**-o totemo yorokonda.
 rival-TOP John-NOM himself dug grave-ACC very happy

Idiom: boketu-o horu ‘bring about a ruin’ → This interpretation is possible.
 NP V

‘(lit.) The rival was very happy about the grave that John himself dug.’

(The ruin John himself brought about made his rival happy.)

— Kitao (2011: 319)

- b. [[Karera-ga magariarinimo e_i **tuketa**] **kettyaku_i**]-wa amari yorokobarenakatta.
 they-NOM somehow came to settle-TOP not so pleasing

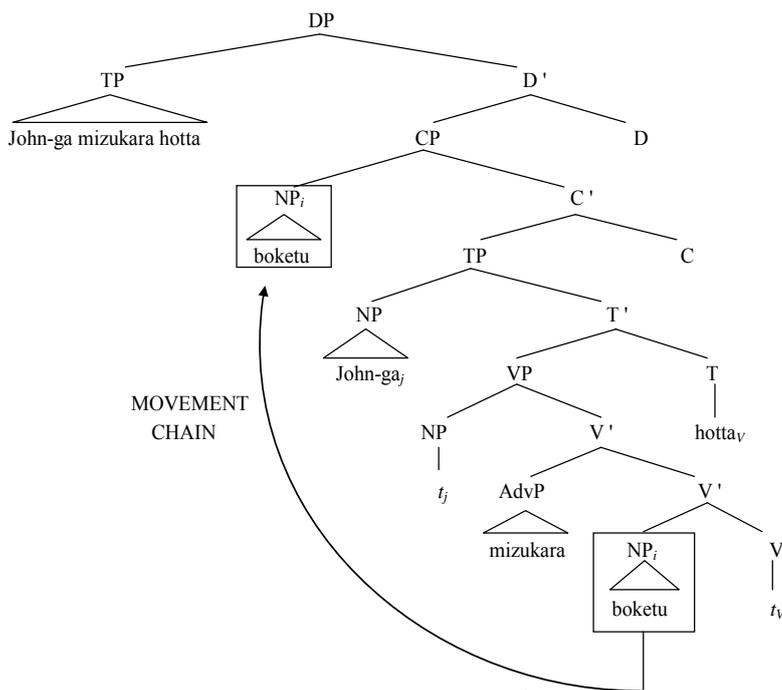
Idiom: kettaku-o tuku ‘come to conclusion’ → This interpretation is possible.
 NP V

‘(lit.) The settlement that they somehow came to was not so pleasing.’

(The conclusion that they reached was not so pleasing.)

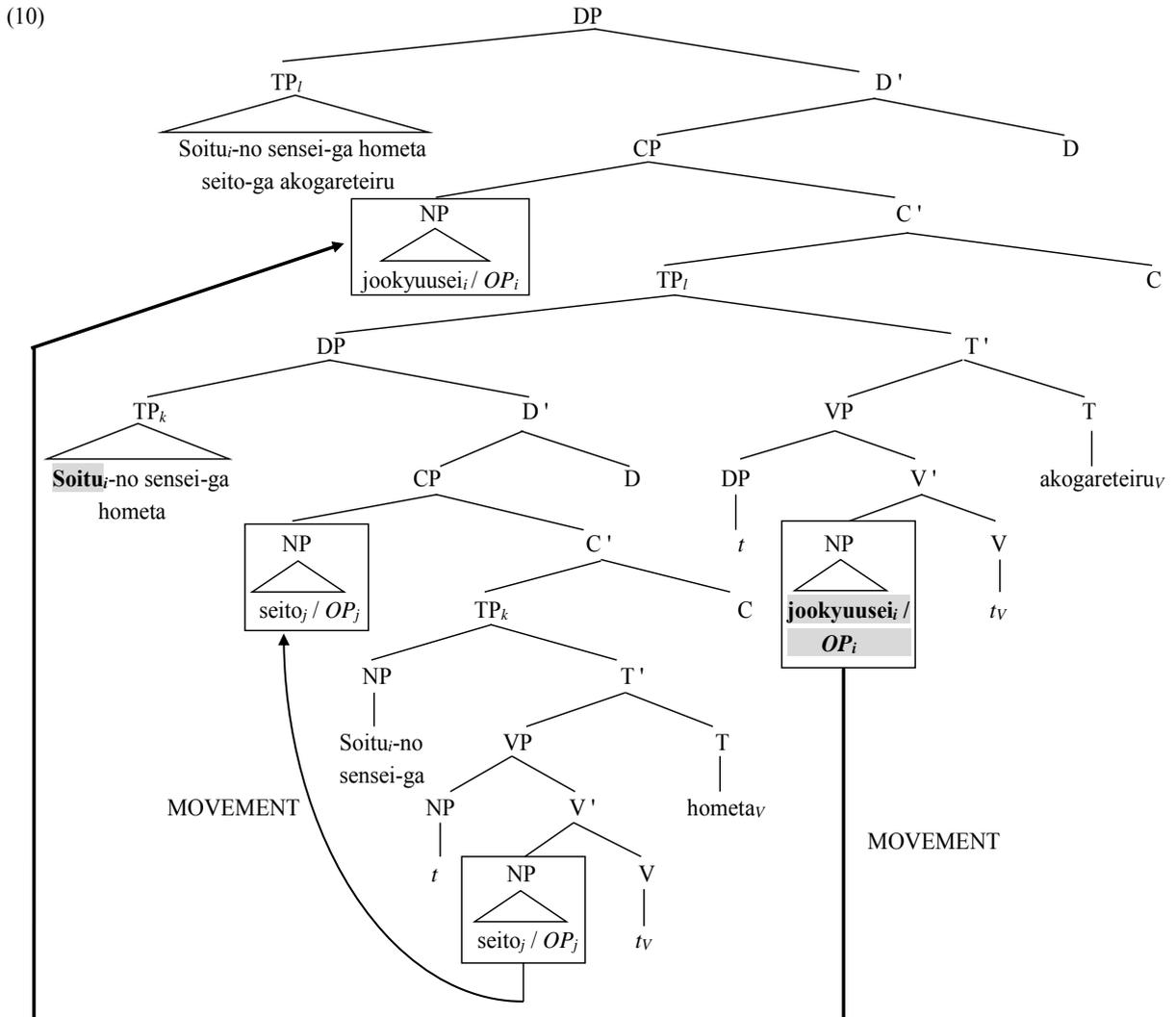
— Inoue (1976: 214)

(8)



2.2 Weak Crossover Effects (WCO effects)¹

- (9) ?* [[**Soitu_i**-no sensei-ga **e_j** hometa] seito_j-ga **e_i** akogareteiru] **jookyuusei_i**
 he-GEN teacher-NOM praised student-NOM admire senior student
 ‘(lit.) the senior student_i who(m) the student_j who(m) his_i teacher praised e_j admires e_i’
 — Kitao (2017: 33)



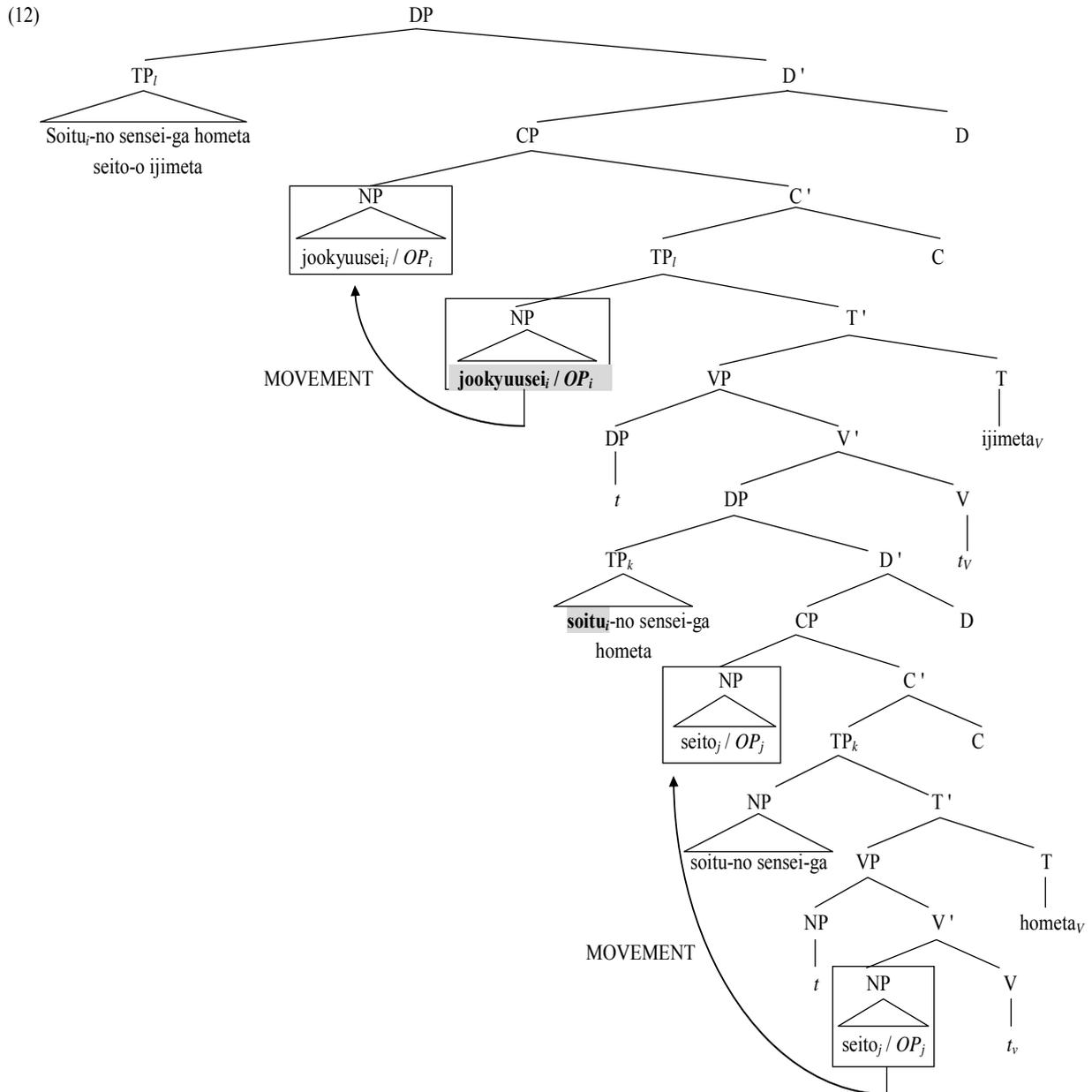
¹ The presence of WCO effects in Japanese relative clauses was firstly proposed by Ishii (1991). The following is the examples given in Ishii (1991):

- (i) a. ?*[[Soitu_i-ga e_j hihansita] onna_j-ga e_i nagutta] otoko_i
 he-NOM criticized woman-ACC hit man
 ‘the man_i who_i the woman he_i criticized hit t_i’
 b. [e_i [soitu_i-ga e_j hihansita] onna_j-o nagutta] otoko_i
 he-NOM criticized woman-ACC hit man
 ‘the man_i who_i t_i hit the woman he_i criticized’

— Ishii (1991: 41)

- (11) [e_i [**Soitu**_{*i*}-no sensei-ga e_j hometa] seito_{*j*}-o ijimeta] **jookyuusei**_{*i*}
 he-GEN teacher-NOM praised student-NOM bullied senior student
 ‘(lit.) the senior student_{*i*} who e_i bullied the student_{*j*} who(m) his_{*i*} teacher praised e_j ’

— *op. cit.*, p. 33



Reconstruction/connectivity effects such as anaphor licensing and the interpretation of idiom chunks and WCO strongly suggest the premise that syntactic movement is involved in **short-distance relativization in Japanese**.

2.3 Parasitic Gaps

2.3.1 The Properties of Parasitic Gaps

- A parasitic gap is a gap that is dependent on the existence of another gap, which is a trace of *wh*-type movement, namely a variable.

- (13) a. **Which articles**_{*i*} did John file *t_i* without reading **e_i**? — Chomsky (1982: 38)
b. **Which colleague**_{*i*} did John slander *t_i* because he despised **e_i**? — Engdahl (1983: 11)
c. **Which boy**_{*i*} did Mary's talking to **e_i** bother *t_i* most? — *op. cit.*, p. 5

- (14) a. *John filed a bunch of articles_{*i*} without reading *e_i*.
b. *Mary's talking to *e_i* bothered John_{*i*} a lot. — *op. cit.*, p. 12

→ Traces of displacement do not exist in (14a, b), and hence no syntactic objects license the gap.

- A resumptive pronoun occurring in the gap position of a displaced element does not license a gap in the adjunct in English.

- (15) a. *Which articles did John file **them**_{*i*} without reading *e_i*?
b. *Which colleague did John slander **her**_{*i*} because he despised *e_i*?
c. *Which boy_{*i*} did Mary's talking to *e_i* bother **him**_{*i*} most?

- Parasitic gaps are not licensed by A-movement like DP-movement.

- (16) a. *John_{*i*} was killed *t_i* by a tree falling on *e_i*.
b. *Mary_{*i*} seemed *t_i* to disapprove of John's talking to *e_i*. — *op. cit.*, p. 13

- (17) **A parasitic gap is licensed by a variable that does not c-command it.**
— Chomsky (1982: 40)

- (18) a. *Who_{*i*} *t_i* met you before you recognized **e_i**? — Chomsky (1986: 54)
b. *Who_{*i*} *t_i* resigned before we could fire **e_i**? — Lasnik and Uriagereka (1988: 75)
c. *Which boy_{*i*} *t_i* expected me to talk to **e_i**? — Engdahl (1985: 5)

2.3.2 Parasitic Gaps in Japanese Relative Clauses

- Parasitic gaps can occur in Japanese headed relative clauses

(19) a. [[[Titi_j-ga **e_i** kau-mae-ni] *pro_j* **t_i** sisyoku-sita] **udon_i**]-wa Sanuki-san
Father-NOM buy-before sampled noodle-TOP Sanuki-origin
desu.

is

‘(lit.) The noodle_i [that Father_j sampled *t_i* [before (he_j) bought *e_i*]] is of *Sanuki* origin.’

b. [[[Musuko-ga **e_i** yoma-nai-node] hahaoya-ga huruhon’ya-ni **t_i**
son-NOM read-NOT-because mother-NOM used bookstore-to
utta] **hon_i**]-wa zituwa kityoo-na mono datta.
sold book-TOP in fact invaluable thing was

‘(lit.) The book_i [[that Mother sold *t_i* to a used bookstore [because (her) son didn’t read *e_i*]] was in fact an invaluable one.’

— Kitao (2016: 100-101)

(20) a. [[udon_i/OP_i [Titi_j-ga *e_i* kau-mae-ni] *pro_j* *t_i* sisyoku-sita] ...



b. [[hon_i/OP_i [Musuko-ga *e_i* yoma-nai-node] hahaoya-ga huruhon’ya-ni *t_i* utta] ...



- (21a, b): There are no variables to license the gap, and the examples are deemed ungrammatical.

→ **e** is parasitic.

(21) a. ?? [[[Titi_j-ga **e_i** kau-mae-ni] *pro_j* **udon_i-o** *t_k* sisyoku-sita]
Father-NOM buy-before noodle-ACC sampled
depaato_k]-wa itumo konde-imasu.
department store-TOP always be crowded

‘(lit.) The department store [that Father sampled **noodle_i** [before (he) bought *e_i*]] is always crowded.’

b.?? [[[Musuko-ga **e_i** yoma-nai-node] hahaoya-ga **hon_i-o** *t_j* utta]
son-NOM read-NOT-because mother-NOM book-ACC sold
huruhon’ya_j]-wa kono mati-no sinise desu.
used bookstore-TOP this town-GEN long-established shop is

‘(lit.) The used bookstore_j [that Mother sold **a book/books_i** to [because (her) son didn’t read *e_i*]] is a long-established shop.’

— *op. cit.*, pp. 101-102

- The LBC is not a universal constraint of movement. Latin and most Slavic languages do not show LBC effects.

(28) Latin

Cuiam_i amat Cicero [_{t_i} puellam]?
whose loves Cicero girl
'Whose girl does Cicero love?'

— Uriagereka (1988: 113)

(29) Russian

a. Čju_i ty čitaješ [_{t_i} knigu]?
whose you are reading book
'Whose book are you reading?'

b. Skol,ko_i emu bylo [_{t_i} let]?
how many to-him was years
'How many years old was he?'

— Ross (1967: 237)

(30) Serbo-Croatian

a. Čijeg_i si vidio [_{t_i} oca]?
whose are seen father
'Whose father did you see?'

b. Koliko_i je zaradila [_{t_i} novca]?
how-much is earned money
'How much money did she earn?'

— Bošković (2005: 2)

- The LBC-type extraction is not allowed in Japanese.

(31) *Dare_i-no Taro-ga [_{t_i} tegami]-o suteta no?
who-GEN Taro-NOM letter-ACC discarded Q
'(lit.) Whose_i, Taro discarded [_{t_i} letter]?'
— Takahashi and Funakoshi (2013: 237)

(32) *Hanako-no_i John-ga [_{t_i} kaban]-o kakusita.
Hanako-GEN John-NOM bag hid
'(lit.) Hanako's_i John hid [_{t_i} bag].'
— Kato (2007: 41)

It is deduced that relativization in Japanese also shows the LBC effects.

2.4.2 Left Branch Extraction in Relativization

- English *wh*-extraction obeys the LBC.
→ **It is deduced that relativization in English also shows the LBC effects.**

- (33) a. *the [man]_i [_{CP} whose_i [_{TP} I introduced [_{t_i} mother] to you]]
b. *the [book]_i [_{CP} whose_i [_{TP} I told you about [_{t_i} cover]]]

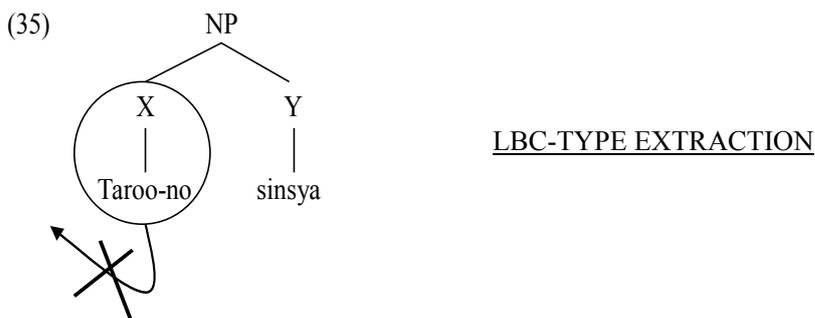
— Sportiche et al. (2014: 407)

- **Japanese headed relatives also show the LBC effects.**

- (34) a. *[John-ga [_{e_i} sinsya]-o zessansiteiru] **Taroo_i**
John-NOM new car-ACC praise Taro
'(lit.) Taro_i whose_i John praises e_i's new car'

- b. *[John-ga [_{e_i} sinsya]-o zessansiteita] **Taroo_i-wa** moo betuno
John-NOM new car-ACC praised Taro-TOP already different
atarasii kuruma-no koonyuu-o kentoo-si-hajimete-iru.
new car purchase-ACC has started thinking of
'(lit.) Taro_i whose_i John praised e_i's new car has already started thinking of a purchase of a new different car.'

— Kitao (in press)



- (36) Under the no-movement theory (*pro*-based theory)
[John-ga [_{pro_i} sinsya]-o zessansiteiru] Taroo_i

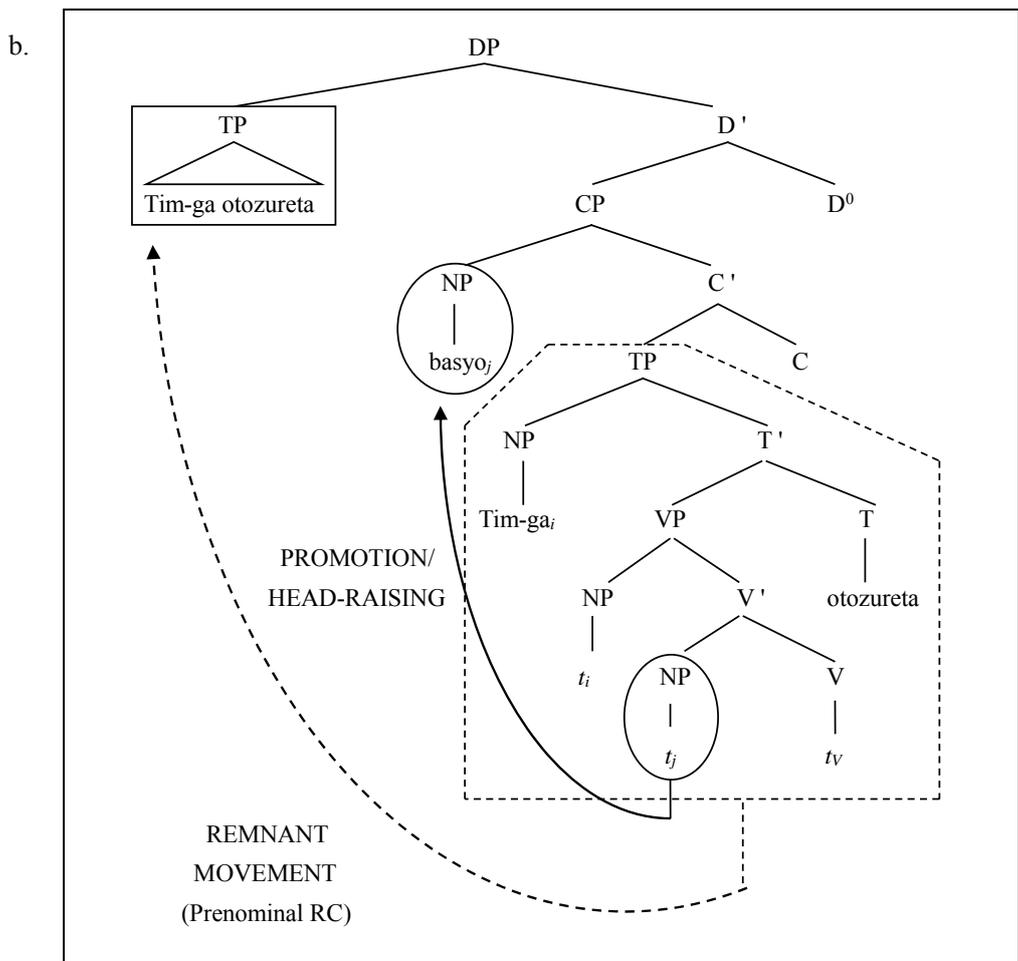
The LBC extraction suggests the presence of syntactic movement in relativization in Japanese.

3. Solution: Conflict between ‘Short-distance’ Relativization and ‘Long-distance’ Relativization

● ‘Short-distance’ relativization: Promotion/Head-raising
 ‘Long-distance’ relativization: Matching (Operator mvt.) + (Null) Resumption

● ‘Short-distance’ relativization shows Reconstruction/Connectivity effects.
 → Presence of Head-raising/promotion²

(37) a. [Tim-ga otozureta] basyo
 Tim-NOM visited place
 ‘the place that John visited’



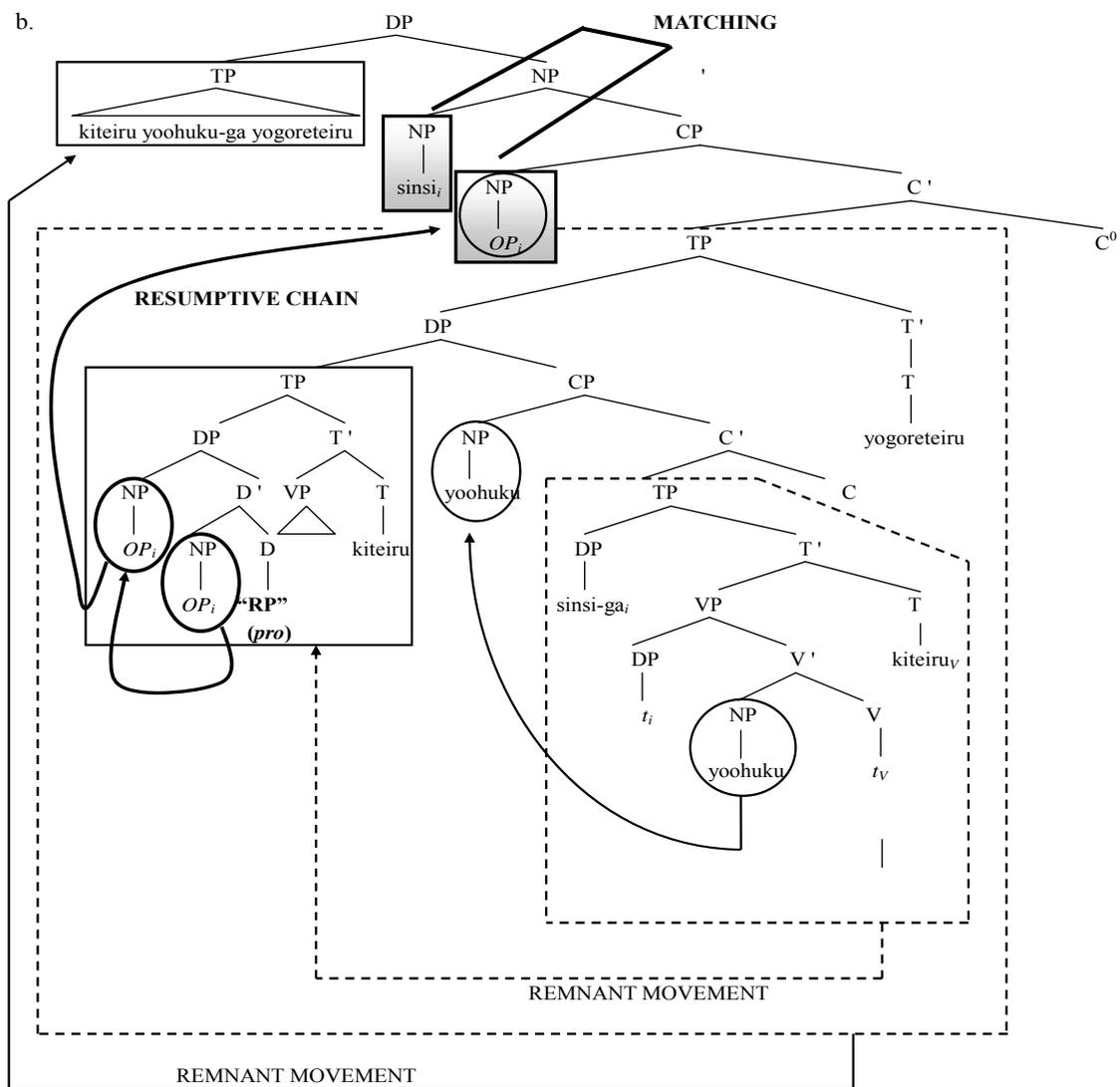
² Brame (1968), Stockwell et al. (1973), Schachter (1973), Vernaud (1974), Áfarli (1994), Kayne (1994), Bianchi (1999, 2000), Bhatt (2002), de Vries (2002), Aoun and Li (2003), Cecchetto (2006), Donati and Cecchetto (2011), Cecchetto and Donati (2015), etc.

● ‘Long-distance’ relativization shows No reconstruction/Connectivity effects.

→ **Lack of Head-raising/promotion**

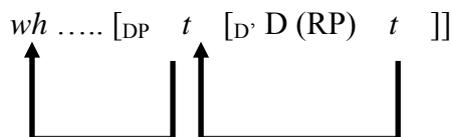
→ **Matching³ (Operator movement) + Resumption**

(38) a. [[[e_i e_j kiteiru] yoohuku_j]-ga yogoreteiru] $sinsi_i$ (= 1a)
 wearing suit-NOM dirty gentleman
 ‘(lit.) a gentleman who the suit that (he) is wearing is dirty’



³ Sauerland (1998, 2000, 2003), Fox (2002), Aoun and Li (2003), Cecchetto (2006), Hulse and Sauerland (2006), Cecchetto and Donati (2015), etc.

(39) The Resumptive-stranding Model (Boeckx 2003, Kitao 2011)



stranding (subextraction)

(40) [Irish]

a. *An fear a phóg mé an bhean a phós _ _
the man aL kissed I the woman aL married
'the man that I kissed the woman that married'

b. An fear a bpóg mé an bhean a phós _ é
the man aN kissed I the woman aL married him
'the man that I kissed the woman that married (him).'

— Sells (1984: 200-201)

→ The presence or absence of AGREEMENT plays a crucial role in extractability. When agreeing complementizers appear, the chain becomes sensitive to islands; but when non-agreeing complementizers appear, the chain becomes island-insensitive.

(41) * [_{TP} John_i seems [_{TP} t'_i is [_{t_i} clever]]]

(CH (John)) = {T_{seem}*, T_{is}*, Adj_{clever}}

— Boeckx (2003: 13)

(42) The Principle of Unambiguous Chain (PUC)

Chains are unambiguous if they contain at most one strong occurrence (one EPP-checking site).
— *op. cit.*, p. 13

(43) Boeckx's (2003) Resumptive-stranding Model

- Movement is potentially unbounded. This is led by the Principle of Unambiguous Chain (PUC). The PUC dictates that chains are unambiguous if they contain at most one strong occurrence (one EPP-checking site).
- On First Merge, resumptive pronouns form a constituent DP with their antecedent in resumptive relative clauses. Then the *wh*-complement of D is extracted from DP and a resumptive pronoun is stranded (subextraction).
- The emergence of islands is tied to the presence of AGREEMENT. Those chains that have agreeing complementizers are sensitive to islands, while those chains which have non-agreeing complementizers are island-insensitive.

- **This stranded resumptive pronoun gets island violations invalidated, making it possible to extract the operator of the relative head across a CNPC island.**

(cf. Shlonsky 1992, Abe 2014, etc.)

Evidence

- **Lack of reconstruction/connectivity effects**

(Anaphor licensing)

- (44) *Katie-wa [[[Paul]_i-ga e_i kaita] to iu] giron]-ga wakiokotteiru] [kare-zisin]_j-no
 -TOP -NOM drew that debate-NOM come out himself-GEN
 e]_i]-o taisoo hosigatta. (= 3)
 picture-ACC very wanted

‘(lit.) Katie really wanted [the picture of himself]_i that the claim/debate that Paul_j drew e_i has come out.
 — Kitao (2017: 42)

- The example (45), where anaphor does not occur in the relative head, is deemed grammatical, even though the gap of the relative head is in the complex NP.

- (45) Katie_i-wa [[[kanojo_i-no senzo-ga e_j kaita] to iu] giron]-ga wakiokotteiru]
 -TOP she-GEN ancestor-NOM drew that debate-NOM come out
 [Einstein-no e]_i]-o taisoo hosigatta.
 Einstein-GEN picture-ACC very wanted

‘(lit.) Katie_i really wanted the picture of Einstein_j that the claim/debate that her_i ancestor drew e_j has come out.
 — *op. cit.*, p. 43

(Idiom chunk)

- (46) *Raibaru-wa [[[[John-ga mizukara e_i hotta] to iu] uwasa]-ga tatteiru]
 Rival-TOP -NOM himself dug that rumor-NOM be spread
 boketu]_i]-o totemo yorokonda. (= 4)
 grave-ACC very happy

Idiom: *boketu-o horu* ‘bring about a ruin’
 NP V

→ This interpretation is not possible.

‘(lit.) The rival is very happy about the grave_i that the rumor that John himself dug e_i has been spreading out.

(The ruin that has a rumor that John himself brought about made his rival happy.)

— *op. cit.*, p. 42

- When the relative head NP is not an idiom chunk that needs to be linked to the verb in the relative clause, the sentence is deemed grammatical, as represented in (47).

- (47) ? Raibaru-wa [[[[[John-ga mizukara e_i okasita] to iu] uwasa]-ga tatteiru]
 Rival-TOP -NOM himself made that rumor-NOM be spread
 sippai_i]-o totemo yorokonda.
 mistake-ACC very happy
 '(lit.) The rival is very happy about the mistake_i that the rumor that John himself made e_i has
 been spreading out. — *op. cit.*, p. 43

MATCHING, a semantic operation as in (48), relates the external relative head and the operator. An empty/null operator movement in the relative clause creates semantically an open λ -predicate. Since the relative head is not directly moved to the external head position under the matching analysis, relativization does not show reconstruction/connectivity effects. (Sauerland 1998, 2000, 2003, Hulsey and Sauerland 2006, etc.)

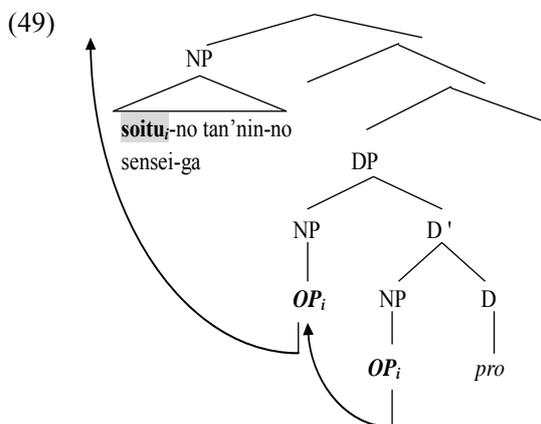
- (48) the picture of Einstein λ_x her ancestor drew t_x

● WCO

- (48) ?? [[[[[Soitu_i-no/kare_i-no tan'nin-no sensei-ga e_i sagasiteita] to iu] sirase]-o
 he-GEN homeroom teacher-NOM look for that notice-ACC
 uketa] seito_i]-wa sugu syokuin-situ-e hasitta.
 received student-TOP immediately teachers' room-to dashed
 '(lit.) the student_i who(m) received the notice that his teacher was looking for e_i dashed to the
 teachers' room.'

'Long-distance' relativization also shows WCO effects.

→ The resumptive-stranding model as in (38b) involves null operator movement, and hence this 'crossover' effects can be explained.



• Example (50), which does not involve a bound pronoun in the subject of the relative clause, is acceptable (contra 48).

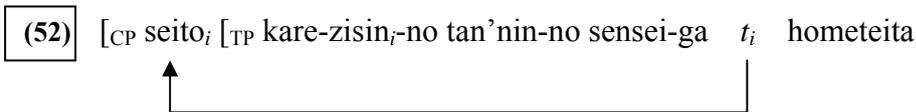
- (50) [[[[[Suugaku-no sensei-ga e_i sagasiteita] to iu] sirase]-o uketa]
 math teacher-NOM look for that notice-ACC received
seito_i]-wa sugu syokuin-situ-e hasitta.
 student-TOP immediately teachers' room-to dashed
 '(lit.) the student_i who(m) received the notice that the math teacher was looking for e_i dashed to the teachers' room.'

4. Possible Questions and Their Solutions: The Unavailability of A-scrambling in Relativization in Japanese

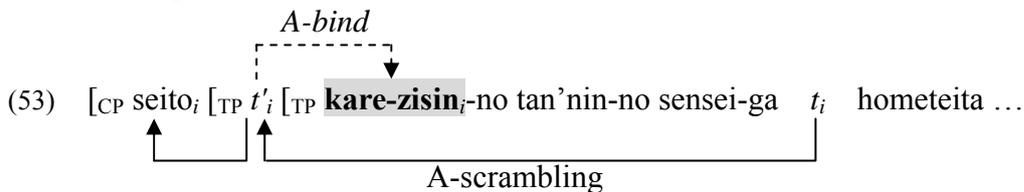
● 'Short-distance' relativization involves promotion/head-raising, namely phrasal movement of a relative head.
 → However, data reveal that A-scrambling does not occur in the movement of the relative head.

(Anaphor Licensing)

- (51) * [[**Kare-zisin_i**-no tan'nin-no sensei-ga e_i hometeita] **seito_i**]-wa
 himself-GEN homeroom teacher-NOM praised-ASP student-TOP
 zenkoku sakibun konkuuru-de syoo-o totta.
 national composition contest-in award-ACC got
 '(lit.) The student_i that himself_i's homeroom teacher praised got a prize in the national composition contest.'
 — Kitao (2011: 329)



A-scrambling



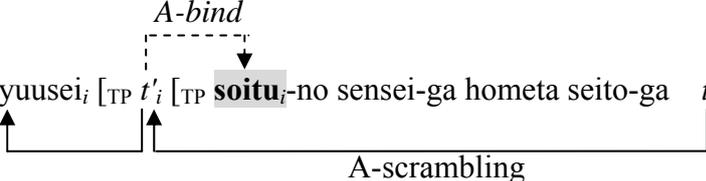
→ The ungrammaticality of (51) indicates that this derivation is NOT possible.

(WCO)

- (54) ?* [[**Soitu**_{*i*}-no sensei-ga ***e_j*** hometa] seito_{*j*}-ga *e_i* akogareteiru] **jookyuusei**_{*i*} (= 9)
 he-GEN teacher-NOM praised student-NOM admire senior student
 ‘(lit.) the senior student_{*i*} who(m) the student_{*j*} who(m) his_{*i*} teacher praised *e_j* admires *e_i*’
 — Kitao (2017: 33)

- (55) [CP jookyuusei_{*i*} [TP **soitu**_{*i*}-no sensei-ga hometa seito-ga *t_i* akogareteiru...


A-scrambling

- (56) [CP jookyuusei_{*i*} [TP *t_i*' [TP **soitu**_{*i*}-no sensei-ga hometa seito-ga *t_i* akogareteiru ...


→ The ungrammaticality of (54) indicates that this derivation is NOT possible.

(Parasitic gaps)

- (57) *[[[Ryoosin-ga *e_i* sikaru-mae-ni] **kare-zisin**_{*i*}-no tan'nin-no sensei-ga *t_i*
 parents-NOM scold-before himself-GEN homeroom teacher-NOM
 sikatta] seito_{*i*}]-wa mattaku hansei-site-inai.
 scolded student-TOP not at all be sorry for-NEG
 ‘(lit.) The student_{*i*} [(who) [himself_{*i*}'s homeroom teacher *t_i* scolded [before (his) parents *e_i*
 scolded]]] is not sorry (for what he did) at all.’
 — Kitao (2016: 105)

A-position is not available for parasitic gap licensing.

- (58) a. *John_{*i*} was killed *t_i* by a tree falling on *e_i*. (= 16a, b)
 b. *Mary_{*i*} seemed *t_i* to disapprove of John's talking to *e_i*. — Engdahl (1983: 13)
- (59) *Which house_{*i*} was sold *t_i* [before we could demolish *e_i*]? — Legate (2003: 511)

(60) A parasitic gap is licensed by a variable that does not c-command it.

— Chomsky (1982: 40)

(61) [_{CP} seito_i [_{TP} **kare-zisin_i**-no tan'nin-no sensei-ga *t_i* sikatta ...



• Evidence: Take the anaphor out of the example (57), then it yields a grammatical outcome.

(62) [[[Ryoosin-ga *e_i* sikaru-mae-ni] tan'nin-no sensei-ga *t_i* sikatta] seito_i-wa
 parents-NOM scold-before homeroom teacher-NOM scolded student-TOP
 mattaku hansei-site-inai.
 not at all be sorry for-NEG
 ‘(lit.) The student_i [(who) [(his) homeroom teacher *t_i* scolded [before (his) parents *e_i* scolded]]]
 is not sorry (for what he did) at all.’

— Kitao (2016: 105)

● Relativization is special?

(63) ? [_{TP} **(Sono) Seito-o_i** [_{TP} **kare-zisin_i**-no tan'nin-no sensei-ga *t_i* hometeita/hometa]].
 (the) student-ACC himself-GEN homeroom teacher-NOM was praising/praised
 ‘(lit.) the student_i, himself_i’s homeroom teacher was praising/praised.

— Kitao (2011: 330)

(64) a. ?* Soitu_i-no hahaoya-ga dare_i-o aisiteiru no.
 he/she-GEN mother-NOM who-ACC love Q
 ‘Who_i does his_i/her_i mother love?’

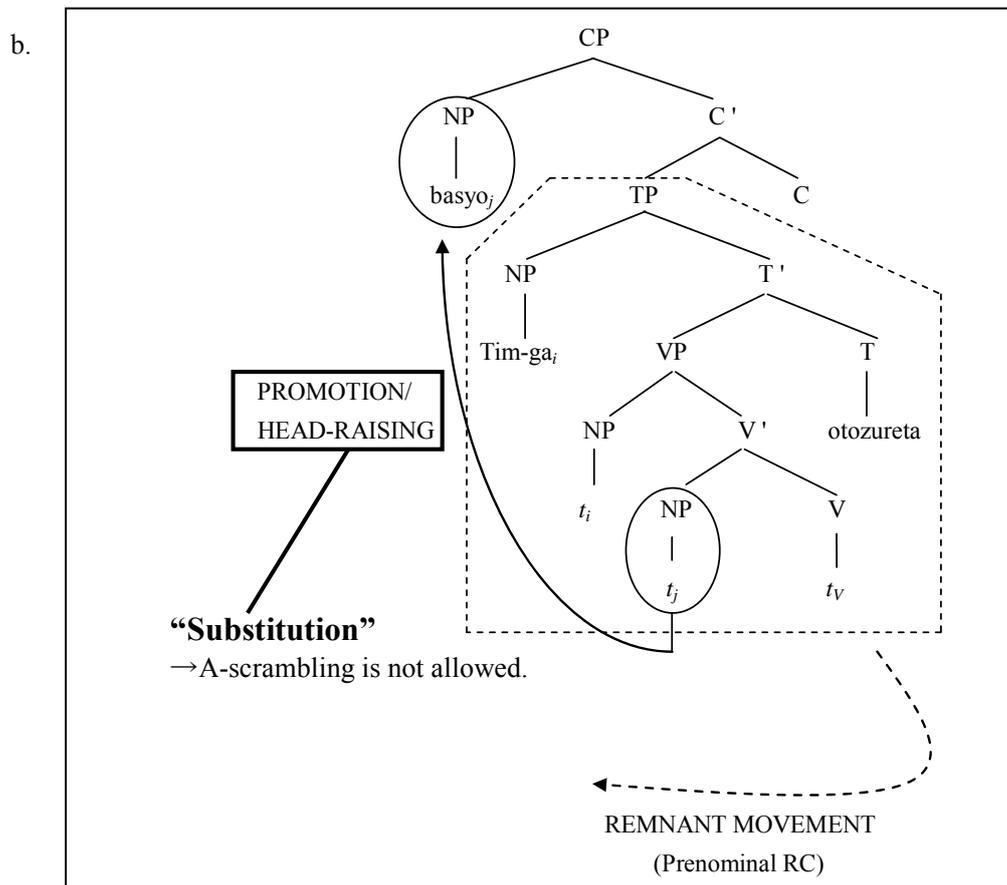
— Yoshimura (1992: 14)

b. ? **Dare-o_i** **soitu_i**-no hahaoya-ga *t_i* aisiteiru no?
 who-ACC he/she-GEN mother-NOM love Q
 ‘Who_i does his_i/her_i mother love?’

— Saito (1992: 73)

● ‘Short-distance’ relativization in Japanese

- (65) a. [Tim-ga otozureta] basyo
 Tim-NOM visited place
 ‘the place that John visited’



● ‘Long-distance’ relativization in Japanese

- (66) a. [[[e_i e_j kiteiru] yoohuku_j]-ga yogoreteiru] **sinsi_i** (= 1a)
 wearing suit-NOM dirty gentleman
 ‘(lit.) a gentleman who the suit that (he) is wearing is dirty’

Improper movement

(69) Principle of Unambiguous Binding (PUB)

- (a) A variable that is α -bound must be β -free in the domain of the head of its chain (where α and β refer to different types of positions).
— Müller and Sternefeld (1993: 461)
- (b) A'-movement to a certain type to position (say, α) must not be followed by movement to another type of position (say, β); otherwise, the initial variable will be bound ambiguously (i.e., from two different positions simultaneously) and hence will violate the PUB.
— Müller and Sternefeld (1996: 496)

5. Conclusion

(70) Relativization in Japanese

- **'Short-distance' relativization: Promotion/Head-raising**
- **'Long-distance' relativization: Matching (Operator mvt.) + (Null) Resumption**

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