

Raising-to-Object: From a Different Plane*

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- Argue AGAINST the optional approach to ECM/Raising-to-Object (RTO) in the framework of Chomsky (2000, 2001)
- Claim that the RTO NP is a non-thematic element (cf. Marantz 1983)
- Attempt an analysis in terms of the *n*-ary structure (Chomsky 2001) and a theory of predication put forth in Heycock 1993.

1. Introduction

- (1) Analyses of ECM/RTO in the literature
 - a. Raising (Postal 1974, Lasnik and Saito 1991, Lasnik 1999)
 - b. No raising; exceptional Case-marking across clausal boundaries (Chomsky 1973, Massam 1985)

- (2) RTO in Japanese:
Kuno 1976; Marantz 1983, Saito 1983, Takezawa 1987, Sakai 1990, 1998, Sells 1990, Hoji 1991, Bruening 2001a, b, Hiraiwa 2002a, b, John 2002, Takano 2002, Koizumi 2003, among many others
 - a. *ga*-variant:
Taroo-wa Ziroo-**ga** baka-da to omot-ta.
Taro-TOP Jiro-**NOM** fool-COP.PRES DEC think-PAST
Lit. 'Taro thought that Jiro was a fool.'

 - b. *o*-variant = RTO:
Taroo-wa Ziroo-**o** baka-da to omot-ta.
Taro-TOP Jiro-**ACC** fool-COP.PRES DEC think-PAST
Lit. 'Taro thought Jiro to be a fool.'

2. Hybrid Properties of Raising-to-Object in Japanese

- (3) Conflicting behaviors of RTO sentences
 - a. Movement (Section 2.1) (Kuno 1976, Sakai 1990, 1998, John 2002)
 - b. Non-Movement (Section 2.2) (Saito 1983, Hoji 1991, Takano 2002, Koizumi 2003)

2.1. Major arguments for raising

2.1.1. Compatibility with a matrix adverb

- The nominative-marked embedded subject cannot be scrambled over a matrix adverb, while the accusative-marked NP can.
- (4) The adverb test with the *ga*-variant
 - a. **Orokanimo**, Yamada-wa **John-ga** tensai-da to omot-te i-ta.
stupidly Yamada-TOP John-**NOM** genius-COP.PRES DEC think-GER be-PAST
'Stupidly, Yamada thought that John was a genius.'

* This research was supported in part by the National Institute of Information and Communications Technology of Japan.

- b. *Yamada-wa, **John-ga, orokanimo**, tensai-da to omot-te i-ta.
(Adapted from Kuno 1976:25)

- (5) The adverb test with the *o*-variant
 a. **Orokanimo**, Yamada-wa **John-o** tensai-da to omot-te i-ta.
 stupidly Yamada-TOP John-ACC genius-COP.PRES DEC think-GER be-PAST
 ‘Stupidly, Yamada thought that John was a genius.’
 b. Yamada-wa, **John-o, orokanimo**, tensai-da to omot-te i-ta.
 (Adapted from Kuno 1976:25)

2.1.2. Scrambling

- The accusative-marked phrase in RTO can be scrambled over the matrix subject, despite the ban on scrambling of subject NPs (Saito 1985).

- (6) Long-distance scrambling of the *ga*-marked embedded subject
 a. Yamada-wa **John-ga** tensai-da to omot-te i-ta.
 Yamada-TOP John-NOM genius-COP.PRES DEC think-GER be-PAST
 ‘Yamada thought that John was a genius.’
 b. ***John-ga**, Yamada-wa tensai-da to omot-te i-ta.
 (Kuno 1976:26)

- (7) Long-distance scrambling of the *o*-marked embedded subject
 a. Yamada-wa **John-o** tensai-da to omot-te i-ta.
 Yamada-TOP John-ACC genius-COP.PRES DEC think-GER be-PAST
 ‘Yamada thought that John was a genius.’
 b. **John-o**, Yamada-wa tensai-da to omot-te i-ta.
 (Kuno 1976:26)

2.1.3. Quantifier scope

- (8) Dareka-ga **minna-o** mihat-te i-ta.
 someone-NOM everyone-ACC watch-GER be-PAST
 ‘Someone was staking everyone.’ **ambiguous**
 a. Surface scope (some > every; the predominant reading)
 There was someone who was watching all.
 b. Inverse scope (every > some)
 For each person, there was someone who was watching him/her.
 (Kuno 1976:27)

- (9) Dareka-ga **minna-ga** baka-da to omot-te i-ru.
 someone-NOM everyone-NOM fool-COP.PRES DEC think-GER be-PRES
 ‘Someone is thinking that everyone is a fool.’ **unambiguous**

Raising-to-Object: From a Different Plane

- a. Surface scope (some > every)
There is someone who thinks that all are stupid
- b. Inverse scope (every > some) --- **NOT available**
For each person, there is someone who thinks that he is stupid

(Adapted from Kuno 1976:28)

- (10) Dareka-ga minna-o baka-da to omot-te i-ru.
someone-NOM everyone-ACC fool-COP.PRES DEC think-GER be-PRES
'Someone is thinking that everyone is a fool.'
ambiguous

2.1.4 Proper Binding Condition violations

- RTO sentences seem to pattern with raising (and not with control) with regard to the Proper Binding Condition, which is operative in structures involving displacement (Saito 1985, 1989, among others).

- (11) a. Taroo-ga Hanako-ni [Masao-ga Yumi-kara
Taro-NOM Hanako-DAT Masao-NOM Yumi-from
hon-o kari-te i-ta to] tutae-ta.
book-ACC borrow-GER be-PAST DEC tell-PAST
'Taro told Hanako that Masao was borrowing a book from Hanako.'

- b. *[Masao-ga t_i hon-o kari-te i-ta to]_j
Masao-NOM book-ACC borrow-GER be-PAST DEC
Yumi-kara_i Taroo-ga Hanako-ni t_j tutae-ta.
Yumi-from Taro-NOM Hanako-DAT tell-PAST
Intended reading: 'Taro told Hanako that Masao was borrowing book from Hanako.'
(Adapted from Sakai 1994:295)

- (12) a. John-wa ik-u-yooni Bill-o settokusi-ta.
John-TOP go-PRES-to Bill-ACC persuade-PAST
'John persuaded Bill to go.'

- b. *John-wa baka-da to Bill-o omot-ta.
John-TOP fool-COP.PRES DEC Bill-ACC think-PAST
'John considered Bill to be a fool.'

(Adapted from Sakai 1990:18; see also Kuno 1976,
Bruening 2001a, b, Hiraiwa 2002a, b, John 2002)

- (13) a. For (12)a:
John-wa [PRO_i iku-yooni] Bill-o_i settokusi-ta.
John-TOP go-PRES-to Bill-ACC persuade-PAST

- b. For (12)b:
*John-wa [t_i baka-da to] Bill-o_i omot-ta.
John-TOP fool-COP.PRES DEC Bill-ACC think-PAST
(Adapted from Sakai 1990:18)

2.2. An argument against raising

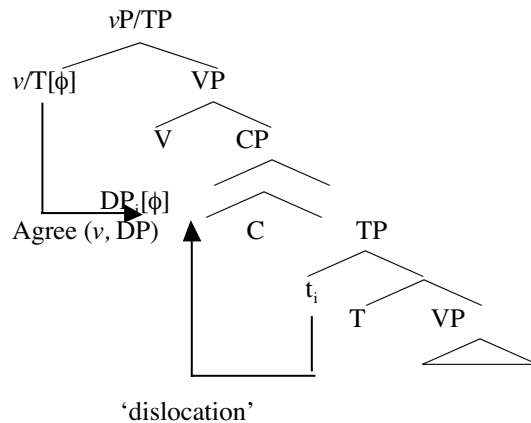
- An overt pronoun can appear in the embedded subject position in an RTO sentence.

(14) Mary-wa John₂-no koto-o [kurasu-no nakade **are**₂-ga itiban
 Mary-TOP John-GEN fact-ACC class-GEN within **the**-NOM most
 baka-da to] omot-te i -ru.
 fool-COP.PRES DEC think-GER be-PRES
 Lit. 'Mary thinks of John that he is the most stupid in the class.'
 (Adapted from Saito 1983:30)

- **SUMMARY:**
 RTO sentences exhibit diagnostics of both raising and non-raising.

3. The Optional Movement Approach in the Minimalist Program - Optionality in RTO?

- (15) RTO as involving optional movement
- Raising is optional** in RTO/ECM in Japanese (Hiraiwa 2002a, following Lasnik 1999; cf. Sells 1990);
 it is obligatory only when required (e.g., to remedy Condition A violation, as discussed in Bruening 2001a, b; see John 2002 for arguments against Bruening 2001a, b.)
 - Agree is sufficient for Case in Japanese; Case is independent of EPP and insensitive to Spec-Head relation. (Hiraiwa 2002a, b)
 - (Cross-clausal) Long-distance Agree is licit in Japanese.** (Ura 1994, Hiraiwa 2001a, b)
 - Apparent improper movement across clausal boundary is accounted for. (Bruening 2001a, b; cf. Bejar and Massam 1999)
- (16) The configuration for Case-checking by Agree without Move (Hiraiwa 2002a; also Massam 1985)



- (17) Empirical evidence for the Optional Raising approach:
 Long-distance licensing of indeterminate pronouns
- (18) Indeterminate pronouns in Japanese:
 Constitute NPIs when followed by *mo* 'all' in the domain of a negative morpheme.
 (Kuroda 1965; see also Nishigauchi 1990, Aoyagi & Ishii 1994, Kishimoto 2001, among many others)

Raising-to-Object: From a Different Plane

- (19) dare-mo ‘who-all’ (‘^’ indicates an accent nucleus)
 a. da^re-mo (with an accent nucleus) ‘everyone’
 b. daremo (without any accent nucleus) ‘anyone’
- (20) Indeterminate pronouns and quantificational particles can be non-contiguous (Kuroda 1965).
 a. Hanako-ga [dare-no e]-mo mi-nakat-ta.
 Hanako-NOM who-GEN drawing-QN see-NEG-PAST
 ‘Hanako didn’t see anyone’s drawing.’ (QN = quantificational particles)
 b. Hanako-ga [nani-o tukuri]-mo si-nakat-ta.
 Hanako-NOM what-ACC make-QN do-NEG-PAST
 ‘Hanako didn’t make anything.’
 c. Hanako-ga [dare-ga kat-ta purezento]-mo kiniir-anakat-ta.
 Hanako-NOM who-NOM buy-PAST gift-QN like-NEG-PAST
 Lit. ‘Hanako didn’t like gifts that anyone bought.’
- (21) The relation between an indeterminate pronoun and its licenser is subject to some formal constraint.
 a. Taroo-ga [dare-ga baka-da to]-mo omow-anakat-ta.
 Taro-NOM who-NOM foolish-COP.PRES DEC-QN think-NEG-PAST
 ‘Taro didn’t consider anyone to be a fool.’
 b. Taroo-ga [dare-o baka-da to]-mo omow-anakat-ta.
 Taro-NOM who-ACC foolish-COP.PRES DEC-QN think-NEG-PAST
 ‘Taro didn’t consider anyone to be a fool.’
 c. *Dare-ga [Taroo-o/-ga baka-da to]-mo omow-anakat-ta.
 who-Nom Taro-ACC/-NOM foolish-COP.PRES DEC-QN think-NEG-PAST
 ‘No one thought that Taro was a fool.’
 (Adapted from Hiraiwa 2002b:7, citing Sakai 1998)
- (22) Indeterminate-Agreement
 An indeterminate NP must be in the c-command domain of the Q-particle in overt syntax.
 (Hiraiwa 2002b)
- (23) Indeterminate Agreement is possible in RTO sentences.
 a. Taroo-ga [dare-ga baka-da to]-mo omow-anakat-ta.
 Taro-NOM who-NOM foolish-COP.PRES DEC-QN think-NEG-PAST
 ‘Taro didn’t consider anyone to be a fool.’
 b. Taroo-ga [dare-o baka-da to]-mo omow-anakat-ta.
 Taro-NOM who-ACC foolish-COP.PRES DEC-QN think-NEG-PAST
 ‘Taro didn’t consider anyone to be a fool.’
 c. *Dare-ga [Taroo-o/-ga baka-da to]-mo omow-anakat-ta.
 who-NOM Taro-ACC/-NOM foolish-COP.PRES DEC-QN think-NEG-PAST
 ‘No one thought that Taro was a fool.’
 (Adapted from Hiraiwa 2002b, citing Sakai 1998)

- (24) Intervening matrix adverb blocks Indeterminate Agreement:
- a. Taroo-ga orokanimo dare-o baka-da to-mo omow-anakat-ta.
 Taro-NOM stupidly who-ACC fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Stupidly, Taro didn’t consider anyone to be a fool.’
- b. *Taroo-ga [_{VP} dare_i-o orokanimo [_{CP} t_i baka-da to]-mo omow]-anakat-ta.
 Taro-NOM who-ACC stupidly fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Stupidly, Taro didn’t consider anyone to be a fool.’

(Adapted from Hiraiwa 2002b:7)

- (25) (24), with (22):
- a. Syntactic raising into the matrix clause in RTO in Japanese is only *optional*; An accusative-marked NP in RTO sentences can remain in the embedded clause.
- b. Case is licensed without displacement.

(Adapted from Hiraiwa 2002b)

4. Problems with the Optional Movement Approach to RTO

- (26) Problems with the Optional Movement Approach:
- a. Reducing optional movement to narrow syntax, which is arguably not desirable for conceptual reasons in the framework of Chomsky 2000, 2001.
- b. The evidence is not decisive. (Section 4)
- c. Does not account for the restricted occurrence of RTO. (Sections 4.3 & 5)

4.1. Long-distance licensing of indeterminate pronouns revisited

- (27) The crucial evidence and assumption for the Optional Movement Approach: (24) and the c-command requirement (22) on the dependency between an indeterminate pronoun and its licenser.

- (28) (=24) Intervening matrix adverb blocks Indeterminate Agreement:
- a. Taroo-ga orokanimo dare-o baka-da to-mo omow-anakat-ta.
 Taro-NOM stupidly who-ACC fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Stupidly, Taro didn’t consider anyone to be a fool.’
- b. *Taroo-ga [_{VP} dare_i-o orokanimo [_{CP} t_i baka-da to]-mo omow]-anakat-ta.
 Taro-NOM who-ACC stupidly fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Stupidly, Taro didn’t consider anyone to be a fool.’

(Adapted from Hiraiwa 2002b:7)

- (29) NPIs in Japanese are sensitive to prosody:
 A sequence of an indeterminate pronoun followed by a quantificational particle should be read with a flat accent pattern in order to be interpreted as an NPI.
 (Aoyagi and Ishii 1994, Hiraiwa 2002a, Harada 2002)

- (30) An overlooked factor:
 Importance of intonation in establishing a configuration for licensing indeterminate pronoun as NPI.

Raising-to-Object: From a Different Plane

- (31) The examples in which the indeterminate pronoun and *mo* are in the same intonational phrase. (closed box highlights intonational phrasing; only the relevant accents are shown):

An indeterminate pronoun and the licensing quantificational particle are in the same intonational phrase.

- a. Hanako-ga **[dare-no e]-mo** mi-nakat-ta.
 Hanako-NOM who-GEN drawing-QN see-NEG-PAST
 ‘Hanako didn’t see anyone’s drawing.’
- b. Hanako-ga **[nani-o tukuri]-mo** si-nakat-ta.
 Hanako-NOM what-ACC make-QN do-NEG-PAST
 ‘Hanako didn’t make anything.’
- c. Hanako-ga **[dare-ga kat-ta kutu]-mo** kiniir-anakat-ta.
 Hanako-NOM who-NOM buy-PAST shoe-QN like-NEG-PAST
 Lit. ‘Hanako didn’t like shoes that anyone bought.’

- (32) In illicit cases, an indeterminate pronoun and the licensing quantificational particle are *NOT* in the same intonational phrase. (Only the relevant accents are shown.)

- a. *Hanako-ga **[da^re-no e]-mo** mi-nakat-ta.
 Hanako-NOM who-GEN drawing-QN see-NEG-PAST
 ‘Hanako didn’t see anyone’s drawing.’
- b. ?*Hanako-ga **[na^ni-o tukuri]^mo** si-nakat-ta.
 Hanako-NOM what-ACC make-QN do-NEG-PAST
 ‘Hanako didn’t make anything.’
- c. ?*Hanako-ga **[da^re-ga kat-ta kutu]^mo** kiniir-anakat-ta.
 Hanako-NOM who-NOM buy-PAST gift-QN like-NEG-PAST
 Lit. ‘Hanako didn’t like gifts that anyone bought.’

- (33) a. (cf. (24)a)
 Ta^roo-ga o^rokanimo **[dare-o ba^ka-da to]-mo** omow-a^nakat-ta.
 Taro-NOM stupidly who-ACC fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Stupidly, Taro didn’t consider anyone to be a fool.’

- b. (cf. (24)b)
 *Ta^roo-ga **[dare-o o^rokanimo ba^ka-da to]-mo** omow-a^nakat-ta.
 Taro-NOM who-ACC stupidly fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Stupidly, Taro didn’t consider anyone to be a fool.’

- (34) a. Ha^nako-ga situyoo-ni **[dare-o ba^ka-da to]-mo** omow-a^nakat-ta.
 Hanako-NOM persistently who-ACC fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Hanako didn’t persistently consider anyone to be a fool.’

- b. ?-??Ha^nako-ga **[dare-o situyoo-ni ba^ka-da to]-mo** omow-a^nakat-ta.
 Hanako-NOM who-ACC persistently fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Hanako didn’t persistently consider anyone to be a fool.’

- (35) a. Ha[^]nako-ga syot[^]tyuu dare-o ba[^]ka-da to-mo omow-a[^]nakat-ta.
 Hanako-NOM frequently who-ACC fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Hanako didn’t persistently consider anyone to be a fool.’
- b. ?*Ha[^]nako-ga dare-o syot[^]tyuu ba[^]ka-da to-mo omow-a[^]nakat-ta.
 Hanako-NOM who-ACC persistently fool-COP.PRES DEC-QN think-NEG-PAST
 ‘Hanako didn’t persistently consider anyone to be a fool.’

- (36) (22) is not an appropriate condition for regulating the dependency between indeterminate pronouns and licensing quantificational particles.

• **SUMMARY**

An indeterminate pronoun and its licensor must be in the same intonational phrase.

4.2. Lack of reconstruction in RTO

- (37) (= (12)) RTO is apparently sensitive to the PBC.

- a. John-wa ik-u-yooni Bill-o settokusi-ta.
 John-TOP go-PRES-to Bill-ACC persuade-PAST
 ‘John persuaded Bill to go.’
- b. *John-wa baka-da to Bill-o omot-ta.
 John-TOP fool-COP.PRES DEC Bill-ACC think-PAST
 ‘John considered Bill to be a fool.’

- (38) In an RTO sentence, the accusative-marked NP does not reconstruct:

→ The accusative-marked NP in RTO appears to be base-generated in the matrix clause.

- a. Keisatu-wa sannin-no otoko-ga hannin-da to danteisi-ta.
 police-TOP three.CL-GEN man-NOM culprit-COP.PRES DEC conclude-PAST
 ‘The police concluded that three men committed the crime.’
 The reading in which the existence of three men is true in the mind of the matrix subject is *possible*.
- b. Keisatu-wa sannin-no otoko-o hannin-da to danteisi-ta.
 police-TOP three.CL-GEN man-ACC culprit-COP.PRES DEC conclude-PAST
 ‘The police concluded that three men committed the crime.’
 The reading in which the existence of three men is true in the mind of the matrix subject is *impossible*.

(Adapted from Takano 2002:14)

- (39) The apparent violations of the PBC in (37) may be due to the impossibility of changing the order of two elements that are subject to the aboutness condition (see (40)). (Takano 2002)

- (40) a. [Sono sin-si-ga [pro e ki-te i-ru]
 that gentleman-NOM wear-GER be-PRES
 yoohuku]-ga yogore-te i-ru.
 clothes-NOM get.dirty-GER be-PRES

Raising-to-Object: From a Different Plane

‘As for the gentleman, his clothes is dirty.’ (Kuno 1973)

- b. *[[*pro e* ki-te i-ru] yoohuku]-ga sono
wear-GER be-PRES clothes-NOM that
sinsi-ga yogore-te i-ru.
gentleman-NOM get.dirty-GER be-PRES

- **SUMMARY**

The status of the example (37) is not clear; it may not be used as a piece of evidence for the raising analysis of RTO. (See also Yoshimura 1993 and Sakai 1994 for the status of apparent PBC violations.)

4.3. Limited occurrences of RTO

- Ordinary biclausal sentences do not allow RTO.

(41) Verbs that allow ECM/RTO:

English: *believe, consider, expect*

Japanese: Non-factive verbs of mental attitude

sinzi- ‘believe’, *omow-* ‘think’, *danteisu-* ‘determine’, *kantigaisu-* ‘mistake’,
kateesu- ‘hypothesize’, *omoikom-* ‘wrongly believe’, *suiteesu-* ‘guess’

(Kuno 1976, Sells 1990)

Roughly: *Verbs with predicative complements* (Levin 1993)

- (42) a. *John-wa Mary-o tensai-da to it-ta.
John-TOP Mary-ACC genius-COP.PRES DEC say-PAST
Lit. ‘John said Mary was a genius.’ (Sells 1990)

- b. *Yamada-wa kono syorui-o humeiryoo-da to tutae-ta.
Yamada-TOP this document-ACC unclear-COP.PRES DEC report-PAST
Lit. ‘Taro reported that this document was unclear.’

- Under the Optional Movement Approach, it is not clear why the underlined NP in (42) cannot undergo raising and be subject to accusative Case-licensing by the matrix *v*.

- **OVERALL SUMMARY**

Empirical evidence assumed in the Optional Movement Approach is not decisive.

5. Restrictions on the embedded predicate in Raising-to-Object

5.1. Semantic restrictions on the embedded predicate in RTO

(43) A strong tendency to favor individual-level predicates in the embedded clause in RTO in English (Richard Larson, p.c.), Japanese (Kuno 1976, Sells 1990), Korean, and Russian (Elena Rudnitskaya, p.c.)

- (44) a. *Linguists sound like they're waiting in the lobby.
b. Linguists seem to be waiting in the lobby.
c. Linguistics sound like they must be very frustrating to talk to.
d. *Linguists seem like they're waiting in the lobby.

(Heycock 1993)

- A categorial restriction on the embedded predicate?
- (45) The embedded predicate in RTO sentences are subject to categorial restrictions in Japanese, Korean, and Russian: It must be *adjectival*. (Harada 2003)
- (46) RTO with an Activity verb (intransitive)
 Yamada-wa **John-ga/*-o** kiyuuzitu-ni gakkoo-e it-ta to omot-te i-ta.
 Yamada-TOP John-NOM/-ACC holiday-on school-to go-PAST DEC think-GER be-PAST
 Lit. ‘Yamada thought that John went to school on a holiday.’
- (47) RTO with an accomplishment verb
 Gakusei-wa mina moo **siken-kikan-ga/*-o** owat-ta/owar-u to
 student-TOP all already exam-period-NOM/-ACC end-PAST/end-PRES DEC
 omot-te i-ta
 think-GER be-PAST
 Lit. ‘All students thought that the exam period had already ended/would end.’
- (48) RTO with an achievement verb
 Yamada-wa **John-ga/?*-o** kekkon-si-ta/kekkon-su-ru to
 Yamada-TOP John-NOM/-ACC marry-do-PAST/marry-do-PRES DEC
 omot-te i-ta.
 think-GER be-PAST
 Lit. ‘Yamada thought that John had been/got married.’
- (49) RTO with a stative verb
 Yamada-wa **John-ga/?*-o** tukare-ta/tukare-ru to omot-te i-ta.
 Yamada-TOP John-NOM/-ACC get.exhausted-PAST/exhaust-PRES DEC think-GER be-PAST
 Lit. ‘Yamada thought that John was exhausted.’
- (50) RTO with a stative, non-verbal (adjectival) predicate
 Mariko-wa **sono kyoku-ga/-o** utukusi-i to omot-te i-ta.
 Mariko-TOP that music-NOM/-ACC beautiful-PRES DEC think-GER be-PAST
 Lit. ‘Mariko thought that that music was beautiful.’
- (51) RTO with an adjectival predicate (= (2))
- a. *ga*-variant:
 Taroo-wa Ziroo-**ga** baka-da to omot-ta.
 Taro-TOP Jiro-NOM fool-COP.PRES DEC think-PAST
 Lit. ‘Taro thought that Jiro was a fool.’
 - b. *o*-variant:
 Taroo-wa Ziroo-**o** baka-da to omot-ta.
 Taro-TOP Jiro-ACC fool-COP.PRES DEC think-PAST
 Lit. ‘Taro thought Jiro to be a fool.’

Raising-to-Object: From a Different Plane

- (52) Characteristics of Raising-to-Object in Japanese (preliminary):
RTO in Japanese is only possible with an adjective or an adjectival noun as its embedded predicate.
- (53) Further examples (Takao Gunji, personal communications):
- a. Mariko-wa **John-ga/-o** *hutot-te i-ru* to omot-te i-ta.
Mariko-TOP John-NOM/-ACC fatten-GER be-PRES DEC think-GER be-PAST
Lit. 'Mariko thought that John was being fattened.'
- b. (cf. (49))
Yamada-wa **John-ga/-o** *tukare-te* i-ru to omot-te i-ta.
Yamada-TOP John-NOM/-ACC get.exhausted-GER be-PRES DEC think-GER be-PAST
Lit. 'Yamada thought that John was exhausted.'
- (54) **A Characteristics of Raising-to-Object in Japanese:**
Individual-level predicates are highly preferred embedded predicates in RTO.
(cf. Sells 1990)

5.2. Relation between the accusative NP and the embedded predicate in RTO

- (57) Lack of theta-relations between NP-*o* and the embedded predicate
- a. Minna-wa Mary_i-o [[α e_i e_j hanas-u] kotoba_j-ga zyoochin-da-to]
everyone-Top Mary-Acc speak-Pres word-Nom elegant-Cop.Pres-Dec
omot-te i-ru.
think-Ger be-Pres
'As for Mary, everyone thinks her speech is elegant.'
- b. John-wa Mary-o [Bill-ga hore-te i-ru to] omot-te i-ru
John-Top Mary-Acc Bill-Nom like-Gerbe-Pres Dec think-Ger be-Pres
'John thinks of Mary as Bill likes her.'
- (55) Predication independent of theta-theoretic factors
Function Saturation Principle
All syntactic and lexical functions must be saturated. (Heycock 1993)

6. RTO on a Different Plane

- RTO may not involve raising of an embedded NP.
- The proleptic NP is on a different derivational phase, without connecting to the phrase-marker.
(Chomsky 2001, Lasnik and Uriagereka 2003)

6.1 Adjuncts/Non-thematic elements in the current phrase structure theory

- (56) $\langle \alpha, \beta \rangle$, spelled out and becomes a simple structure at SEM, by an operation SIMPL at Spell-Out.
(Chomsky 2001)
- (57) SIMPL is optional both in SEM and PHON.
- (58) Within ϕ , α of $\langle \alpha, \beta \rangle$ is integrated into the primary plane. (Chomsky 2001)
- (59) The high-behavior of adjuncts
- a. We say [NP a painting] yesterday [ADJ from the museum]
b. I gave him [NP a painting] yesterday [ADJ from John's collection]

- (60) a. Morphological Case licensing takes place exclusively in PF. (Aoyagi 1998, Harada 2002), in a linear fashion (Yip, Maling, and Jackendoff 1987, San Martin and Uriagereka 2002, among others)
 b. Linear Case Marking (cf. Kuroda 1965, 1978, 1983):
 Nominative Case licensing: /ga/ \leftrightarrow [M] / #NP__ (XP*) T (C) #
 Accusative Case licensing: /o/ \leftrightarrow [M] / _ V#
 (Note: [M] stands for a morphophonological feature)

- (61) a. SIMPL of the proleptic NP with the lower phase
 ↓
Spell-Out of the lower phase
 ↓
In PF/Morphology:
Morphological Case Licensing, Phonological Merger/PF Movement
 ↓
 The embedded subject is marked as nominative; the *ga*-variant
- b. **Spell-Out of the lower phase**
 ↓
SIMPL of the proleptic NP with the upper phase
 ↓
In PF/Morphology:
Morphological Case Licensing, Phonological Merger/PF Movement
 ↓
 RTO (the embedded subject is marked as accusative; the *o*-variant)

6.2 Illustrations

- (62) Case 1:
SIMPL precedes Spell-Out of the lower Phrase → ***ga*-variant**
- a. [CP1 [VP1 Yamada [CP2 [ANP John [AN baka]] [T2 da] to] [V1 omow]] te i [T1 ta]]
 Yamada John fool COP.PRES DEC think GER be PAST
- b. Spell-Out of the lower phase
 ... John [AN baka] [T2 da] to ...
- c. Case-Licensing
 ... John-**ga** [AN baka] [T2 da] to ...
- d. Spell-Out of the Upper Phase
Yamada [John-ga baka-da-to] [V1 omow] **te i** [T1 ta]
- e. Nominative Licensing and PF Movement in the matrix clause;
 [Yamada-**ga** John-ga baka-da-to **omow-te i-ta**]
- *Yamada-ga John-ga baka-da-to omot-te i-ta* (***ga*-variant**)
 ‘Yamada thought that John was a fool.’

Raising-to-Object: From a Different Plane

(63) Case 2:

SIMPL follows Spell-Out of the Lower phase → *o*-variant

a. [CP₁ [VP₁ Yamada [CP₂ [ANP John [AN baka]] [T₂ da] to]
 Yamada John fool COP.PRES DEC
 [V₁ omow]] te i [T₁ ta]]
 think GER be PAST

b. Spell-Out of the lower phase;
 ... **baka-da-to** ...

c. SIMPL, followed by Spell-Out
 [Yamada **John** baka-da-to [V₁ omow] te i [T₁ ta]]

d. Accusative Licensing;
 Yamada-ga John-**o** baka-da-to omot-te i-ta

e. Nominative Licensing;
 Yamada-**ga** John baka-da-to omot-te i-ta

→ *Yamada-ga John-o baka-da-to omot-te i-ta* (*o*-variant)
 ‘Yamada thought that John was a fool.’

(64) → *ga*-variant only; *o*-variant n.a.

a. [CP₁ [VP₁ Yamada [CP₂ [VP₂ sono bin zikokudoorini [V₂ tuk]] [T₂ ru] to]
 Yamada that flight on.time arrive PRES DEC
 [V₁ omow]] te i [T₁ ta]]
 think GER be PAST

b. ... sono bin zikokudoorini [V₂ tuk] [T₂ ru] to ...

c. Nominative Licensing in the embedded clause;
 N.B. (unlike the case of adjectival predicates,
 ... sono bin-**ga** [V₂ tuk] [T₂ ru] to...

d. Yamada [sono bin-ga zikandoorini tuk ru to] [V₁ omow] te i [T₁ ta]

e. Nominative Licensing and PF Movement in the matrix clause;
 [Yamada-**ga** [sono bin-ga zikandoori-ni tuk ru to] **omow-te i-ta**]

→ *Yamada-ga sono bin-ga zikokudoorini tuku-to omot-te i-ta*
 ‘Yamada thought that the flight will arrive on time.’

6.3. Explaining the facts

(65) Raising-like properties (Section 2.1; binding, quantifier interpretation, scrambling)

By the time the syntactic object is sent to LF, reanalysis renders the structure monoclausal (cf. • a), explaining monoclausal properties of the RTO sentences.

- (66) The non-raising symptom (Section 2.2):
 Since RTO does not involve feature-driven displacement of the embedded NP into the matrix NP, an overt pronoun can occupy the subject position of the embedded clause.
- (67) Restricted occurrences of RTO (Sections 4.3 & 5):
 Due to the selectional property of the matrix predicate.

7. Consequences

7.1. Residual Data Accounted for

- A distinction between RTO and Control (Bruening 2001)

- (68) A clause with PRO can be questioned or clefted to the exclusion of the controller.
- a. John-ga Bill-ni [PRO gakkoo-ni ik-u yoo-ni] meizi-ta.
 John-Nom Bill-to school-to go-Pres in.order.to order-Past
 'John ordered Bill to go to school.'
- b. John-ga Bill-ni nani-o meizi-ta. no?
 John-Nom Bill-to what-Acc order-Past Q
 'What did John ordered Bill to do?'
- c. John-ga Bill-ni meizi-ta-no-wa [PRO gakkoo-ni ik-u koto] da.
 John-Nom Bill-to order-Past-NM-Top school-to go-Pres fact Cop.Pres
 'What John ordered Bill is to go to school.'
- (Bruening 2001)

- (69) a. Taroo-wa nani-o kangae-te i-ru no?
 Taro-Top what-Acc think-Ger be-Pres Q
 'What does Taro think?'
- b. *Taroo-wa John-o doo kangae-te i-ru no?
 Taro-Top John-Acc how think-Ger be-Pres Q
 'What does Taro think of John?'
- (Bruening 2001)

- (70) a. [Taroo-ga kangae-te i-ru-no]-wa [John-ga baka-da to] da.
 Taro-Top think-Ger be-Pres-NM-Top John-Nom fool-Cop.Pres Dec Cop.Pres
 'What Taro thinks is that John is a fool.'
- b. *[Taroo-ga John-o kangae-te i-ru-no]-wa [baka-da to] da.
 Taro-Top John-Acc think-Ger be-Pres-NM-Top fool-Cop.Pres Dec Cop.Pres
 'What Taro thinks is that John is a fool.'
- c. *[John-o Taroo-ga kangae-te i-ru-no]-wa [baka-da to] da.
 John-Acc Taro-Top think-Ger be-Pres-NM-Top fool-Cop.Pres Dec Cop.Pres
 'What Taro thinks is that John is a fool.'
- (Bruening 2001)

- (71) Questioning/clefting the clause is still impossible when the raised NP undergoes A-movement in the higher clause.
- ??[Taroo-to Hanako-o otagai-no sensei-ga kangae-te i-ru-no]-wa
 Taro-and Hanako-Acceach.other-Gen teacher-Nom think-Ger be-Pres-NM-Top
 [baka-da to] da.
 fool-Cop.Pres Dec Cop.Pres

Raising-to-Object: From a Different Plane

'What each other's teachers thinks of Taro and Hanako is that they are fools.'

(Bruening 2001)

- (72) The constituency of the NP-*o* and the embedded clause follows straightforwardly from the proposed analysis, where the NP-*o* and the embedded predicate (and its projection) are related via predication.

7.2. Apparent Optionality of English RTO

- (73) Postal 1974, Lasnik and Saito 1991: Raising is obligatory in RTO
- *John believes him_i to be a genius even more fervently than Bob_i does.
 - John believes he_i to be a genius even more fervently than Bob_i does.
- (74) The “high” binding behavior for ECM subjects:
- Condition A satisfaction
the DA proved [two men to have been at the scene of the crime] during each other’s trial.
 - Weak crossover mitigation
The DA proved [no suspect_i to have been at the scene of the crime] during his_i trial.
 - NPI licensing
The DA proved [no one to have been at the scene of the crime] during any of the trials.
(Lasnik 1999; cf. Postal 1974, Lasnik and Saito 1991 for the high behavior of ECM subjects)
- (75) The “low” behavior of ECM subjects:
- I believe everyone not to have arrived yet. (every > not, not > every)
 - I believe every Mersenne number not to be prime. (every > not, not > every)
- (76) (74) ⇒ Obligatory RTO in English (Postal 1974, Lasnik and Saito 1991)
- (77) Pseudogapping and ECM/RTO
Mary proved every Mersenne number not to be prime, and John will every Fibonacci number.
(every > not, *not > every)
- (78) (75), (77) → Raising in RTO is optional (Lasnik 1999)
- (79) Not all quantifiers in subject position can have a wide scope with respect to negation (Richard Larson, personal communication)
- Did a student come to the party?
??No, a student didn't come to the party. (*not > a, a > not)
 - Did each student come to the party?
??No, each student didn't come to the party. (*not > each, each > not)
 - Many doors will not open. (*not > many, many > not)
 - All doors will not open. (not > all, all > not)
- (80) The class of determiners that cannot outscope negation in the subject position roughly corresponds to those that allow determiner sharing (Lin 2000)

Too many Irish setters are named Kelly, ~~too many~~ German shepherds are named Fritz, and ~~too many~~ Huskies are named Nanook.

my/your/her/his, each, every, most, many, no, few, any, whose, which.

- (81) Suppose: The sharable determiners are 'hooked', being in a separate phase from the NP it is associated with.
Then at Spell-Out, they are linearized and being interpreted together with the higher phase.
- (82) The sharable determiners and RTO:
The unexpected high behavior of the quantified NPs (cf. (74)) is explained if this class of determiners can be placed on a distinct derivational phase and associated with the main syntactic object by SIMPL.

8. Concluding Remarks

- RTO involves a non-thematic NP related to the embedded predicate via predication.
- Non-thematic phrases are activated on a derivational phase, without connecting to the phrase-marker.

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Raising-to-Object: From a Different Plane

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