On the Syntactic Position of the Accusative Subject in the ECM Construction

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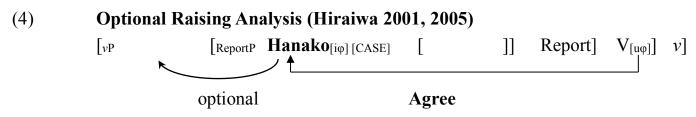
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1 Introduction

- Japanese has the exceptional Case-marking (ECM) construction, where an embedded subject receives accusative Case from a matrix predicate (cf. Kuno 1976):
- (1)a. Mary-ga [ReportP Hanako-ga kasiko-i to] omottei-ru. [ReportP Hanako-NOM Report] Mary-NOM smart-PRS think-PRS to] kasiko-i b. Mary-ga Hanako-o omottei-ru. Mary-NOM Report] ſ Hanako-ACC smart-PRS think-PRS 'Mary thinks that Hanako is smart.'
- The accusative subject can raise into the matrix *v*P/VP (but see Hoji 1991, 2005 and Takano 2003 for an alternative analysis):
- (2) Mary-ga $[_{\nu P}$ <u>Hanako_i-o</u> tuyoku $[_{Report} t_i \text{ kasiko-i} to]$ omottei]-ru. Mary-NOM $[_{\nu P}$ <u>Hanako-ACC</u> strongly $[_{Report}$ smart-PRS Report] think]-PRS 'Mary strongly believes that Hanako is smart.'
- ► <u>It has been debated whether the raising of the accusative subject is obligatory.</u>
- (3) Obligatory Raising Analysis (Kuno 1976, 2007, Sakai 1998, Tanaka 2002) $\begin{bmatrix} vP & Hanako_i & [ReportP & t_i & [Protect] & v \end{bmatrix}$

obligatory

• The accusative subject obligatorily moves into the matrix *v*P/VP (see Postal 1974, Lasnik and Saito 1991, Koizumi 1995, Bošković 2007, Chomsky 2013, 2015, to appear).



• The accusative subject *Hanako* in (4) can stay within the ReportP complement (and receive Case via long-distance Agree). <u>Raising of the accusative subject is optional (cf. Lasnik 1999)</u>.

- I examine two arguments for the optionality of raising (cf. (4)) and show that they can be analyzed under (a particular version of) the obligatory raising analysis (cf. (3)).
- (5)Argument for Optional Raising 1: Indeterminate Accusative SubjectMary-ga[Report dare-okasiko-ito]-moomottei-na-i.Mary-NOM[Report who-ACC smart-PRS Report]-MOthink-NEG-PRS'Mary thinks that no one is smart.'
- The accusative subject *dare* 'who' in (5) is an indeterminate pronoun (Sakai 1998), which is supposed to work as an NPI (i.e. *no one*) when c-commanded by the particle –*mo*. (see Hiraiwa 2005). Negation is in the matrix clause.
- Given that *-mo* in (5) is attached to the Report head *to*, (5) shows that the indeterminate accusative subject must be in the ReportP complement.

(6) Argument for Optional Raising 2: Embedded Adjunct

Mary-ga[Report[gakkyuu-iinkurai]Hanako-omazimedato]Mary-NOM[Report[class-representativeas]Hanako-ACCearnestCOPReport]omottei-ru.think-PRS'Mary thinks that Hanako is as earnest as a class representative.'

(based on Kobayashi and Maki 2002: 218)

- The accusative subject *Hanako* in (6) is preceded by an embedded adjunct *gakkyuu-iin kurai* 'as a class representative'. <u>If the embedded adjunct must be in the ReportP complement</u>, the accusative subject *Hanako* in (6) must also be in the ReportP complement.
- ► If the accusative subjects in (5) and (6) stay within the ReportP complement, (5) and (6) provide evidence for the optionality of raising in the Japanese ECM construction.

(7) Claims of This Presentation

- a. (5) and (6) can be accounted for under the obligatory raising analysis.
- b. (5) is analyzed in terms of a condition on indeterminate pronouns defined on <u>Transfer</u> domains (Section 2) and (6) is analyzed in terms of <u>a "free ride" effect in A-movement</u> (Section 3).

2 Indeterminate Pronoun Licensing and Transfer Domains

2.1 Indeterminate Pronouns and the Japanese ECM Construction

- Indeterminate pronouns such as *dare* 'who' or *nani* 'what' behave as NPIs when they are accompanied by the particle *-mo* (Kuroda 1965; McGloin 1976; Nishigauchi 1990; Kishimoto 2001; D. Takahashi 2002; Hiraiwa 2005, among others):
- dare-mo (8) a. Hanako-ga home-nakat-ta. who-MO Hanako-NOM praise-NEG-PST 'Hanako praised no one.' Dare-mo Hanako-o b. home-nakat-ta. who-MO praise-NEG-PST Hanako-ACC 'No one praised Hanako.'
- (8a): the object indeterminate pronoun *dare* 'who' accompanied by *-mo* behaves as an NPI. (8b): the subject indeterminate pronoun *dare* 'who' accompanied by *-mo* behaves as an NPI.
- The particle *-mo* can be displaced from indeterminate pronouns (Kuroda 1965). However, the displacement is not free and obeys a syntactic condition (Kishimoto 2001, Hiraiwa 2005). We thus observe the following subject/object asymmetry:

(9)	a.		Hanako-ga	dare-o	home-mo-si- nakat -ta.
			Hanako-NO	M who-ACC	praise-MO-do-NEG-PST
			'Hanako prai	ised no one.'	
	b.	*	Dare-ga	Hanako-o	home-mo-si- nakat -ta.
			who-NOM	Hanako-ACC	praise-MO-do-NEG-PST
			'No one prai	sed Hanako.'	

- -*Mo* in (9) is attached to the verb *home* 'praise' and followed by the dummy verb -*si* 'do', which is inserted to morphologically support negation and Tense. The object *dare* 'who' in (9a) behaves as an NPI while the subject *dare* 'who' in (9b) fails to behave as an NPI.
- Hiraiwa (2005) proposes the following condition on the licensing of indeterminate pronouns:
- (10) The head of the chain of the indeterminate must be in the c-command domain of -mo at Transfer (based on Hiraiwa 2005: 164).

- The subject/object asymmetry in (9):
- who-ACC (11) $\begin{bmatrix} TP & Hanako_i - NOM \end{bmatrix}_{vP}$ *t*i [VP V] a. v-mo] Neg T] (= (9a))[VP Hanako-ACC V] * who_i-NOM $\int v P$ Neg TP ti v-mol T] (= (9b))b.
- Hiraiwa (2005) assumes -mo is adjoined to v (cf. Kishimoto 2001). (11a)/(9a): the indeterminate pronoun, which is the accusative object, is c-commanded by -mo. (11b)/(9b): the indeterminate pronoun, which is the nominative subject, fails to be c-commanded by -mo.
- The licensing condition in (10) has an important implication for the analysis of the Japanese ECM construction:¹

(12) Argument for Optional Raising 1: Indeterminate Accusative Subject Mary-ga $[_{Report}$ dare-o kasiko-i to]-mo omottei-na-i. Mary-NOM $[_{Report}$ who-ACC smart-PRS Report]-MO think-NEG-PRS 'Mary thinks that no one is smart.' (= (5))

- The indeterminate accusative subject *dare* 'who' in (12) is associated with *-mo* attached to the Report head *to* (Sakai 1998). As indeterminate pronouns must be c-commanded by *-mo*, the acceptability of (12) shows that the accusative subject can stay within the ReportP complement.
- When the indeterminate accusative subject is located above *-mo*, the former fails to be licensed:

(13) Movement of the Accusative Subject across the Matrix Subject

- kasiko-i to]-mo ReportP dare-o Mary-ga omottei-na-i. a. smart-PRS Report]-MO Mary-NOM [ReportP who-ACC think-NEG-PRS b. * Darei-o Mary-ga to]-mo [ReportP ti kasiko-i omottei-na-i. who-ACC Mary-NOM [ReportP smart-PRS Report]-MO think-NEG-PRS 'Mary thinks that no one is smart.' ((13a) = (12))
- When the indeterminate accusative subject moves to the sentence-initial position (cf. (13b)), the former fails to be c-commanded by *-mo*. (13b) is thus unacceptable.

¹ See Kuno (1976, 2007), Saito (1983, 1985), Kitagawa (1986), Kaneko (1988), Tanaka (1992, 2002), Oka (1988), Hoji (1991, 2005), Ura (1994, 2007), Sakai (1998), Bruening (2001), Hiraiwa (2001, 2005), Kobayashi and Maki (2002), Takano (2003), Harada (2005), Taguchi (2009, 2015), Ogawa (2007), Takeuchi (2010), Akaso (2015), Abe (2016), Goto (2016), and Nakajima (2018), among others.

While Hiraiwa's (2005) analysis is quite insightful, there are reasons to reconsider his analysis. Indeterminate pronouns can be licensed without satisfying the c-command condition (see Takano 2003 and Takahashi 2018).

Dative Argument above ReportP (14)

Mary-ga [VP Taroo-ni [ReportP Hanako-ga kasiko-i to] Taro-DAT [ReportP Hanako-NOM Report] Mary-NOM [VP smart-PRS it]-ta. say]-PST 'Mary told Taro that Hanako was smart.'

- The matrix verb *iw* 'say' in (14) takes the dative argument as well as the ReportP complement.
- When the dative argument is an indeterminate pronoun, the former can be associated with -mo attached to the Report head to (see Takano 2003 and Takahashi 2018).

(15)**Indeterminate Matrix Dative Argument**

dare-ni to]-mo a. ? Mary-ga [VP [ReportP Hanako-ga kasiko-i Report]-MO Mary-NOM [VP who-DAT [ReportP Hanako-NOM] smart-PRS iw]-anakat-ta. say]-NEG-PST b. * Darei-ni Mary-ga Hanako-ga to]-mo kasiko-i VP ti ReportP Mary-NOM [VP smart-PRS Report]-MO who-DAT Hanako-NOM ReportP iw]-anakat-ta.

say]-NEG-PST

'Mary told no one that Hanako was smart.'

- (15a): the indeterminate dative argument dare 'who' is associated with -mo attached to the Report head to. (15b): dare 'who' in the sentence-initial position fails to be associated with -mo.
- The contrast in (15) regarding the indeterminate dative argument seems to be analyzed on a par with the contrast in (13) regarding the indeterminate accusative subject.
- The acceptability of (15a) casts doubts on the c-command condition (cf. (10)): ►

Indeterminate Dative Argument (cf. (15a) (16)

[VP NP who 1 vP ReportP

Report]-mo V[v] • As the dative argument fail to be c-commanded by -mo, the c-command condition predicts (16)/(15a) to be unacceptable, contrary to fact.

(17) **Summary of the Observations**

- a. Indeterminate accusative subjects can be associated with -mo attached to the Report head to (cf. (12)).
- b. Matrix indeterminate dative arguments can also be associated with *-mo* attached to the Report head *to* (cf. (15).

2.2 A New Analysis

• The c-command condition on indeterminate pronouns face some empirical problems (cf. (17b). However, it is true that there is some kind of locality imposed on indeterminate pronouns. Otherwise, we would not expect the subject/object asymmetry in (9):

(18)	a.		Hanako-ga	dare-o	home-mo-si- nakat -ta.	
			Hanako-NO	M who-ACC	praise-MO-do-NEG-PST	
			'Hanako prai	sed no one.'		(= (9a))
	b.	*	Dare-ga	Hanako-o	home-mo-si- nakat -ta.	
			who-NOM	Hanako-ACC	praise-MO-do-NEG-PST	
			'No one prai	sed Hanako.'		(= (9b))

• The object *dare* 'who' in (18a) behaves as an NPI while the subject *dare* 'who' in (18b) fails to behave as an NPI.

(19) **Proposal:**

The head of the chain of the indeterminate and -mo must be in the same Transfer domain.

The subject/object asymmetry in (9)/(18) revisited: Hanako_i-NOM [VP who-ACC V-mo (20)Гтр ti T] (=(18a))a. $\int v P$ v* [тр who_i-NOM (=(18b)) [VP Hanako-ACC V-mo] T] b. v $\int v P$ ti

- I assume that <u>-mo in (20a) and (20b) is adjoined to V and V does not overtly move to v</u>. (20a): the object indeterminate pronoun *dare* 'who' and *-mo* are in the same Transfer domain (i.e. VP).
- (20b): the subject indeterminate pronoun *dare* 'who' and *-mo* are not in the same Transfer domain:
 -mo is transferred within VP, while *dare* 'who' is not transferred until the higher phase (i.e. CP) is completed.

• The matrix dative argument revisited:

(21) Matrix Dative Argument

? Mary-ga $[v_P \ dare-ni \ [ReportP \ Hanako-ga \ kasiko-i \ to]-mo}$ Mary-NOM $[v_P \ who-DAT \ [ReportP \ Hanako-NOM \ smart-PRS \ Report]-MO$ iw]-anakat-ta.say]-NEG-PST'Mary told no one that Hanako is smart.' (= (15))

The indeterminate dative argument in (21) is located above -mo attached to the Report head to.
 (21) is hard to accommodate if the indeterminate pronouns must be c-commanded by -mo (cf. (10)).

(22) Matrix Dative Argument (cf. (21))

a. Step 1: Construction of the ReportP phase:

				[ReportP []	Report]-mo	
b.	Step 2: Merg	er of the	matrix V a	and the dative and	rgument/:		
		[VP	who	[ReportP []	Report]-mo	V]
c.	Step 3: Merg	er of the	matrix v a	nd the matrix su	ubject:		
	[vP Subject	[VP	who	[ReportP []	Report]-mo	V]v]
d.	Step 4: Trans	fer of V	P:				
	[vP Subject	[VP	who	[ReportP []	Report]-mo	V]v]

- (22a): the Report head *to* is a phase head (cf. Takeuchi 2010), which means that when the ReportP complement is constructed, only the complement of the Report head *to* undergoes Transfer: *to* and *-mo* escape Transfer (cf. Chomsky 2000).
- (22b): the matrix V and the indeterminate dative argument are introduced into the derivation.
- (22c): the matrix v and the matrix subject are introduced into the derivation.
- (22d): the matrix VP is transferred.
- The dative argument and *-mo* are in the same Transfer domain. The proposed condition (19) is met here.
- The analysis correctly predicts that when the indeterminate dative argument is moved above the subject, the former fails to be licensed:

(23)			Movemen	t of the Dative	Argu	men	nt / VP-2	Adjunct across	the Matrix S	Subject	
		*	Dare _i -ni	Mary-ga	[VP i	t _i [ReportP	Hanako-ga	kasiko-i	to]-mo	
			who-DAT	Mary-NOM	[VP	[ReportP	Hanako-NOM	smart-PRS	Report]	-MO
			iw] -anaka	it- ta.							
			say]-NEG	-PST							
			'Mary told	l no one that Ha	anako i	is sm	nart.'			(= (1	5b))
(24)			Indeterm	inate Dative A	rgume	nt (i	irreleva	int parts are on	nitted)		
	a.		Step 3: Me	erger of the mat	trix v a	nd tł	he matr	ix subject (= (22	c)):		
			[vP	Subject	[VP	wh	0	ReportP [] Repor	rt]-mo	V]v]
	b.		Step 4: Me	ovement of the	dative	argu	ument/:				
			[vP wł	no _i Subject	[VP	ti	[ReportP [] Repor	rt]-mo	V]v]
	c.		Step 5: Tra	ansfer of VP:							
		*	[vP wh	no _i Subject	[VP	ti	[ReportP [] Repor	rt]-mo	V]v]

- (24a): the matrix *v* and the matrix subject are introduced into the derivation.
- (24b): the dative argument moves to the *v*P edge.
- (24c): *-mo* is transferred within the matrix VP while the dative argument escapes Transfer. The proposed condition (19) is not met here.

2.3 Back to the ECM Construction

• The proposed analysis has an implication for the analysis of the ECM construction:

(25) Indeterminate Accusative Subject

- Mary-ga dare-o kasiko-i to]-mo omottei]-na-i. a. who-ACC Mary-NOM [smart-PRS Report]-MO think-NEG-PRS * Dare_i-o Mary-ga [ReportP ti kasiko-i to]-mo b. omottei]-na-i. who-ACC Mary-NOM [ReportP think-NEG-PRS smart-PRS Report]-MO 'Mary thinks that no one is smart.' (=(13))
- (25a): the indeterminate accusative subject *dare* 'who' is associated with *-mo* attached to the Report head *to*. (25b): *dare* 'who' in the sentence-initial position fails to be associated with *-mo*.
- On the proposed analysis of indeterminate pronouns, the above contrast is accounted for even if the accusative subject obligatorily moves into the matrix VP.

- (26)Movement of the Indeterminate Accusative Subject into the Matrix VP (cf. (25a)) Step 1: Movement to the ReportP edge and Transfer: a.] Report]-mo ReportP who_i $[t_i]$ Step 2: Merger of the matrix V and movement into the matrix VP: b. [vp whoi] Report]-mo $\int t_i$ **V**] ReportP ti Step 3: Merger of the matrix *v* and the matrix subject: c. Subject [vp whoi] Report]-mo V] t_i $\int v P$ ReportP $\mathcal{V}[u\phi]$ ti Step 4: Accusative Case assignment: d. Subject [VP whoi-ACC [ReportP] Report]-mo vP t_i $V_{[uo]} v$ ti Step 5: Transfer of the matrix VP: e. Subject [VP whoi-ACC [ReportP $\int t_i$ Report]-mo $V_{[u\phi]}[v]$ $\int v P$ 1 ti
- (26a): the embedded subject moves to the edge of the ReportP phase. The complement of the Report head *to* undergoes Transfer: *to* and *-mo* escape Transfer.
- (26b): the matrix V is introduced and the embedded subject moves into the matrix VP (cf. Chomsky 2015, to appear).
- (26c): the matrix *v* and the matrix subject are introduced.
- (26d): the embedded subject receives accusative Case from the matrix v/V
- (26e): the accusative subject and *-mo* are transferred together. <u>The proposed condition (19) is met.</u>
- The analysis correctly predicts that when the indeterminate accusative subject precedes the matrix subject, the former fails to be associated with *-mo* attached to the Report head *to* (cf. (25b)).

(27) Movement of the Indeterminate Accusative Subject into the Matrix vP (cf. (25b))

- Step 4: Accusative Case assignment (= (26d)): a. $\begin{bmatrix} t_i \end{bmatrix}$ Report]-mo V_[up] v] [VP whoi-ACC [ReportP Subject vP ti Step 5: Movement into the matrix *v*P: b. $\begin{bmatrix} t_i \end{bmatrix}$ Report]-mo $V_{[u\phi]}$ v] who_i-ACC Subject $\int v P$ $\begin{bmatrix} v_P & t_i \end{bmatrix}$ ReportP ti Step 6: Transfer of the matrix VP: C. who_i-ACC Subject Report]-mo $V_{[u\phi]}$ v] * vP VP ti $\int t_i$ 1 ReportP ti
- (27a): the embedded subject receives accusative Case.
- (27b): the embedded subject moves to the matrix vP edge.
- (27c): the matrix VP is transferred. While *-mo* is transferred here, the accusative subject escapes Transfer. <u>The proposed condition (19) is not met here</u>.

(28) Summary

- a. The availability of indeterminate accusative subjects can be made consistent with a particular version of the obligatory raising analysis.
- b. Indeterminate pronouns are subject to the condition defined on Transfer domains.

3 Embedded Adjuncts: 'Free Ride' Effect in A-movement

3.1 Embedded Adjuncts and the Japanese ECM Construction

• Another set of facts that motivated the optional raising analysis of the Japanese ECM construction concerns the distribution of embedded adjuncts (Hiraiwa 2001, Kobayashi and Maki 2002):

(29) Argument for Optional Raising 2: Embedded Adjunct

Mary-ga[Report [gakkyuu-iin kurai]Hanako-omazime da to]Mary-NOM [Report [class-representative as]Hanako-ACCearnestCOP Report]omottei-ru.think-PRS'Mary thinks that Hanako is as earnest as a class representative.'(= (6))

- The adjunct *gakkyuu-iin kurai* 'as a class representative' in (29) precedes the accusative subject. The accusative subject is claimed to stay within the ReportP complement.
- This analysis (tacitly) assumes that <u>the embedded adjunct cannot be in the matrix clause</u>, the assumption that I examine below.
- The embedded adjunct *gakkyuu-iin kurai* 'as a class representative' and the accusative subject can follow a matrix VP adverb:
- tuyoku [gakkyuu-iin (30)Mary-ga [VP kurai] Hanako-o mazime [vp strongly [class-representative Mary-NOM as Hanako-ACC earnest omottei]-ru. da to COP think]-PRS Report 'Mary strongly believes that Hanako is as earnest as a class representative.'

- The embedded adjunct *gakkyuu-iin kurai* 'as a class representative' can precede the matrix VP adverb *tuyoku* 'strongly' <u>only when the accusative subject *Hanako* also precedes *tuyoku* 'strongly'.</u>
- (31) Embedded Adjunct and Accusative Subject across the Matrix VP Adverb
 - a. *Mary-ga[vp[gakkyuu-iinkurai]tuyokuHanako-omazimeMary-NOM[vp[class-representativeas]stronglyHanako-ACCearnestdatoomottei]-ru.COPReportthink]-PRSthink]-PRSthink]-PRSthink]-PRS
 - b. (?)Mary-ga [vP [gakkyuu-iin kurai] Hanako-o tuyoku mazime Mary-NOM [vP [class-representative as] Hanako-ACC strongly earnest da to omottei]-ru.
 COP Report think]-PRS
 'Mary strongly believes that Hanako is as correct as a class representative '

'Mary strongly believes that Hanako is as earnest as a class representative.'

• (31a): *gakkyuu-iin kurai* 'as a class representative' alone precedes *tuyoku* 'strongly'. (31b): both *gakkyuu-iin kurai* 'as a class representative' and the accusative subject *Hanako* precedes *tuyoku* 'strongly'.

(32) **Summary of the Observations**

- a. Embedded adjuncts can precede accusative subjects (cf. (29)).
- b. Embedded adjuncts can precede matrix adverbs when accompanied by accusative subjects (cf. (31)).

3.2 A New Analysis

- Adjuncts can undergo otherwise illicit long-distance A'-movement when moved together with arguments (i.e., A'-movement of arguments allows a "free ride" of adjuncts) (see Saito 1994, Sohn 1994, Kitahara 1997, Boeckx and Sugisaki 1999, and Koizumi 2000, among others).
- (33) **Proposal**: A-movement also allows a free ride of adjuncts.

(34) Movement of the Adjunct across the Matrix VP Adverb

 Mary-ga [vp [gakkyuu-iin kurai] tuyoku Hanako-o mazime Mary-NOM [vp [class-representative as] strongly Hanako-ACC earnest da to omottei]-ru.
 COP Report think]-PRS

'Mary strongly believes that Hanako is as earnest as a class representative.' (= (31a))

(35) a. Step 1: Constructing the embedded TP:	nbedded TP:
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[TP NP_{Hanako} Adjunct]

]]

b. Step 2: Movement of the subject and the adjunct to the edge of the ReportP phase:

[ReportP NP _{iHanako} Adju	nct _j [_{TP}	ti	ťj
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- c. Step 3: Merger of the matrix V and Movement of the accusative subject: $\begin{bmatrix} VP & NP_{iHanako} & [ReportP & t_i & Adjunct_j & [TP & t_i & t_j &]] V \end{bmatrix}$ d. Step 4: Merger of the matrix VP adverb:
- Adverb]] V] VP NP_{iHanako} ReportP Adjunct_i [TP ti ti ti Step 5: Movement of the embedded adjunct into the matrix VP: e. * [VP Adjunct_i Adverb NP_{iHanako} [TP]] V] ReportP ti tj ti ti
- (35a): the adjunct and the embedded subject are introduced into the derivation.
- (35b): they both move to the edge of the ReportP phase.
- (35c): the matrix V is introduced and the embedded subject moves into the matrix VP.
- (35d): the matrix VP adverb *tuyoku* 'strongly' is introduced.
- (35e): the embedded adjunct moves across the matrix VP adverb *tuyoku* 'strongly'.
- <u>The embedded adjunct and the embedded subject move into the matrix clause independently</u>. I assume that the unacceptability of (34)/(31a) is subsumed under the ban on long-distance movement of adjuncts (cf. Saito 1985, Bošković and Takahashi 1998).

(36)	(Movement of the Adjunct and the Accusative Subject across the Matrix VP Adverb?)Mary-ga[vP[gakkyuu-iin kurai] Hanako-otuyoku mazimeMary-NOM[vP[class-representative as]Hanako-ACCstronglydatoomottei]-ru.COPReportthink]-PRS'Mary strongly believes that Hanako is as earnest as a class representative.' (= (31b))
(37)	a.	Step 1: Constructing the embedded TP:
		[TP NP _{Hanako} Adjunct]
	b.	Step 2: Merger of the adjunct and the embedded subject (i.e. free ride):
		$\begin{bmatrix} TP [NP Adjunct_i NP_{Hanako}] & t_i \end{bmatrix}$
	c.	Step 3: Movement of the embedded subject to the edge of the ReportP phase
		$\begin{bmatrix} ReportP & [NP Adjunct_i NP_{Hanako}]_j & [TP & t_j & t_i \end{bmatrix}$
	d.	Step 4: Merger of the matrix V and the matrix VP adverb:
		$\begin{bmatrix} VP & Adverb & \begin{bmatrix} ReportP & [NP Adjunct_i & NP_{Hanako} \end{bmatrix}_j & \begin{bmatrix} TP & t_j & t_i \end{bmatrix} \end{bmatrix} V$
	e.	Step 5: Movement of the embedded subject into the matrix VP:
		$\begin{bmatrix} VP & [NP & Adjunct_i NP_{Hanako}]_j & Adverb & [ReportP & t_j & [TP & t_j & t_i]] V \end{bmatrix}$

• (37a): the embedded adjunct and the embedded subject are introduced into the derivation.

- (37b): the adjunct is merged with the subject (i.e. free ride. cf. Sohn 1994, Takano 2002, 2017). I assume that the resulting syntactic object is an NP (i.e. the adjunct is invisible).
- (37c): the embedded subject with the adjunct moves to the edge of the ReportP phase.
- (37d): the matrix V and the matrix VP adverb *tuyoku* 'strongly' are introduced.
- (37e): the embedded subject with the adjunct moves across the matrix VP adverb *tuyoku* 'strongly'.
- The embedded adjunct can move into the matrix VP without long-distance movement of adjuncts.
- ► The above analysis therefore shows that the embedded adjunct can move into the matrix VP, contrary to the (tacit) assumption adopted in the optional raising analysis.

3.3 Back to the Argument for the Optional Raising Analysis

► The above analysis leads us to reconsider the example that motivated the optional raising analysis:

(38) Argument for Optional Raising 2: Embedded Adjunct Mary-ga [Report [gakkyuu-iin kurai] <u>Hanako-o</u> mazime da to] Mary-NOM [Report [class-representative as] <u>Hanako-ACC</u> earnest COP Report] omottei-ru. think-PRS 'Mary thinks that Hanako is as earnest as a class representative.' (= (29))

- If the adjunct *gakkyuu-iin kurai* 'as a class representative' must be within the ReportP complement, the accusative subject must also be within the ReportP complement.
- <u>The adjunct and the accusative subject are adjacent</u>. (38) can be analyzed under the obligatory raising analysis once we assume that A-movement allows a free ride of adjuncts:

(39) **Reanalyzing (38) under the Obligatory Raising Analysis**

a. Step 1: Constructing the embedded TP:

b. Step 2: <u>Merger of the adjunct and the embedded subject (i.e. "free ride")</u> :]
]
$\begin{bmatrix} TP & [NP Adjunct_i & NP_{Hanako}] & t_i \end{bmatrix}$	
c. Step 3: Movement of the embedded subject to the edge of the ReportP phase:	
[ReportP [NP Adjuncti NP _{Hanako}]j [TP tj ti]]
d. Step 4: Merger of the matrix V:	
[VP [ReportP [NP Adjuncti NP _{Hanako}]j [TP tj ti]]V]
e. Step 5: Movement of the embedded subject into the matrix VP:	
$\begin{bmatrix} VP & [NP Adjunct_i NP_{Hanako}]_j & [ReportP t_j & [TP t_j t_i] \end{bmatrix}$]]V]

- (39a): the embedded adjunct and the embedded subject are introduced into the derivation.
- (39b): the embedded adjunct is merged with the embedded subject (i.e. free ride).
- (39c): the embedded subject with the adjunct moves to the edge of the ReportP phase.
- (39d)/(39e): the matrix V is introduced and the embedded subject with the adjunct moves into the matrix VP.

► The distribution of embedded adjuncts is consistent with the obligatory raising analysis.

4 Conclusion and Remaining Issues

(40) Summary

- a. The two observations that are claimed to support the optionality of raising in the Japanese ECM construction can be accounted for under the obligatory raising analysis.
- b. The distribution of indeterminate pronouns is analyzed in terms of <u>a condition</u> <u>defined on Transfer domains</u> and the distribution of embedded adjuncts is analyzed in terms of <u>a free ride effect in A-movement</u>.

One remaining question concerns the status of Agree in Japanese. The optional raising analysis crucially relies on long-distance Agree for Case-licensing of the accusative subjects.



• When the accusative subject stays within the ReportP complement, the former must receive accusative Case via long-distance Agree (but see Taguchi 2015 and Abe 2016a).

- As (two of the) major arguments for the optional raising analysis/long-distance Agree can be reanalyzed without assuming the optionality of raising/long-distance Agree, it is worth considering if (long-distance) Agree is really operative for Case-licensing in Japanese (cf. Fuki 1986, 2017, Kuroda 1988, Hiraiwa 2001, 2005, Nomura 2005, Ura 2007, Abe 2016b, Saito 2016, Zushi 2016, Takahashi 2011, 2017, 2018, Kitahara 2017).
- Another question concerns the distribution of embedded indeterminate pronouns. The proposed analysis of indeterminate pronouns based on transfer domains requires *-mo* and indeterminate pronouns to be 'close enough':



-Mo in (42) is attached to the Report head to. The indeterminate pronoun must be either in the matrix VP or on the edge of the ReportP complement so that -mo and the indeterminate are transferred together. Indeterminate pronouns within the embedded TP cannot be associated with -mo here. However, this prediction does not seem to be borne out:

- (43) Embedded Indeterminate Nominative Subject (cf. Kishimoto 2001)
 Mary-ga [Report [TP dare-ga sigoto-o yame-ru] to]-mo omottei-na-i.
 Mary-NOM [Report [TP who-NOM job-ACC quit-PRS] Report]-MO think-NEG-PRS
 'Mary thinks that no one will quit the job.'
- The indeterminate pronoun in (43) is the embedded nominative subject, which is often assumed to be in TP Spec. I tentatively suggest that the embedded subject in (43) moves to the edge of the ReportP complement (cf. Saito 2011, Kato 2016):

(44) Embedded Indeterminate Nominative Subject (cf. Kishimoto 2001)

Mary-ga $[Report dare_i]$ -ga $[TP t_i sigoto-o yame-ru]$ to]-mo Mary-NOM [Report who]-NOM [TP job-ACC quit-PRS] Report]-MO omottei-**na**-i. think-**NEG-**PRS 'Mary thinks that no one will quit the job.'

- It remains to be seen if this string-vacuous movement is justified on independent grounds.
- Yet another question concerns the status of "free ride" (see also Takano 2017). Details of 'free ride' (how clausal adjuncts merged with NPs become 'invisible' etc.) need to be worked out.

Acknowledgements: I would like to thank Koji Hoshi, Satoshi Oku, and Hisako Takahashi for very helpful discussion and suggestions. I am also grateful to participants of the 2nd Workshop of the NINJAL Collaborative Research Project (Generative Perspectives on the Syntax and Acquisition of Japanese). I am solely responsible for any errors. This work was supported by JSPS KAKENHI Grant Number 18K12358.

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