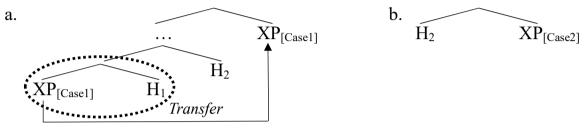
## Multiple Case Valuation and Its Implications

永盛貴一(明治学院大学・獨協大学)

## 3. Multiple Case Valuation via Merge: Japanese

#### **3.1 Introduction**

(1) The system of multiple Case valuation via Merge is schematically illustrated below.



Internal Merge

(2) (i) XP is merged with H<sub>1</sub> (a lexical head) and it undergoes IM into the edge of H<sub>2</sub> (a phase head) at Transfer. (When the complement of H<sub>2</sub> undergoes Transfer, the lower XP receives a Case value.)

(ii) The higher XP becomes a sister of  $H_2$  (a phase head) when its "complement(s)" undergo(es) Transfer. (Since the higher XP is still in narrow syntax, it remains active and retains the ability to receive another Case value.)

(iii) The higher XP receives another Case value (when it undergoes Transfer).

(3) I will argue that Japanese instantiates all the three possibilities shown below.

(i) Case<sub>2</sub>+Case<sub>1</sub>: The *last* Case value received is realized morphologically.
(ii) Case<sub>2</sub>+Case<sub>1</sub>: The *first* Case value received is realized morphologically.

(iii) Case<sub>2</sub>+Case<sub>1</sub>: All the Case values received are realized morphologically.

## 3.2 Japanese Tough-Constructions

## 3.2.1 Inoue (1978, 2004)

(4) Inoue (1978, 2004) classifies Japanese Tough-Constructions (TCs) into four types.

a. Gakusei-ni-wa kono zisyo- ga tukai-yasu-i. (Type I) students for-TOP this dictionary-NOM use-easy-PRES 'This dictionary is easy for students to use.'

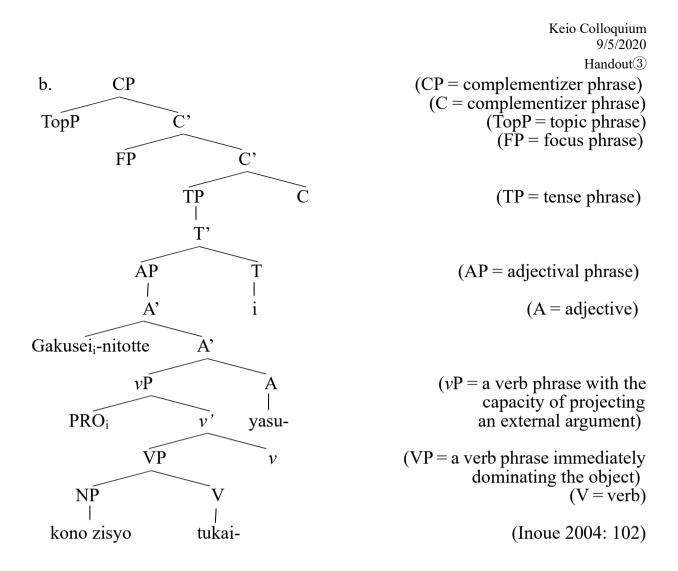
b. Watasi-	wa	kega-o	site-ite,	aruki-niku-i.	(Type II)
I	ГОР	hurt-ACC	get	walk-hard-PRES	

'I hurt my leg, and it is hard for me to walk.'

- c. Nuno-ga atukute, hari-ga toori-niku-i. (Type III) cloth-NOM thick needle-NOM pierce-hard-PRES (Lit.) \*'The cloth is thick, and the needle is hard to pierce it through.'
- d. Eriito-wa tuyoi zasetukan- o aziwai-yasu-i. (Type IV) elites-TOP strong sense of frustratioin-ACC feel tend to-PRES 'Members of the elite tend to have a strong sense of frustration.'

(Inoue 2004:76-86)

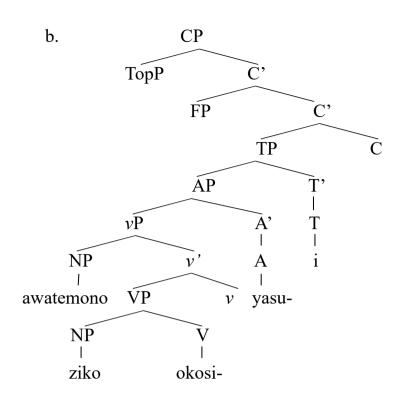
- Type I: The embedded verb is [+self-controllable]. Expresses the speaker's judgment.
  - **<u>Type II</u>**: The embedded verb is [+self-controllable]. Expresses the subject's judgment or feeling.
  - **Type III**: The embedded verb is [-self-controllable]. Expresses the speaker's judgment.
  - **<u>Type IV</u>**: The embedded verb is [-self-controllable]. Expresses the speaker's judgment. Carries the meaning of 'tend to'.
- (5) Let me focus on Type I and Type IV. As for Type I, Inoue (2004) proposes the following syntactic structure.
  - a. Gakusei-nitotte-wa kono zisyo-ga tukai-yasu-i. pupil for-TOP this dictionary-NOM use-easy-PRES 'For pupils, this dictionary is easy to use.'



(6) (i) The embedded verb *tukai*- 'use' is first raised to v and then raised and incorporated with the adjective *yasu*- 'easy'. The result is the complex adjective *tukai-yasu*- 'use-easy'.
(ii) The complex adjective *tukai-yasu*- 'use-easy', being a stative predicate, assigns nominative Case to its object *kono zisyo* 'this dictionary' (cf. Kuno 1973).

(iii) The *nitotte* phrase is raised to the topic position and marked with wa.

- (7) As for Type IV, Inoue (2004) proposes the following syntactic structure.
  - a. Awatemono-wa ziko-o okosi-yasu-i. hasty people-TOP accident-ACC cause tend to-PRES 'Hasty people tend to cause accidents.'



```
(Inoue 2004: 106)
```

(8) (i) The complement verb is raised and incorporated with the *tough* morpheme *in morphology*.) That is, verb-raising does not take place in syntax.
(ii) Since verb-raising does not take place in syntax, the embedded verb assigns accusative Case to its object.

## (9) <u>Two problems:</u>

(i) Under Inoue's (2004) analysis, the object in Type I can never be assigned accusative Case since the embedded verb is *first* raised to v and then raised and incorporated with the adjective *yasu*- 'easy'.

However, the object in Type I can be assigned accusative Case.

a. Kono pen-ga	kodomo-nitotte	kyappu-o	hazusi-yasu-i.
this pen-NOM	child-for	cap-ACC	pull off-easy-PRES
'It is this pen v	whose cap is easy	for children	to pull off.'

b. Taro-ga (Hanako-nitotte) **okane-o** watasi-niku-i. Taro-NOM Hanako-for money-ACC hand-difficult-PRES (Lit.) 'Taro is difficult (for Hanako) to hand some money.'

(ii) Under Inoue's (2004) analysis, the object in Type IV can never be assigned nominative Case since the embedded verb does not raise in syntax.

However, the object in Type IV can be assigned nominative Case.<sup>1</sup>

- a. ?Awatemono-wa ziko-**ga** okosi-yasu-i. hasty people-TOP accident-NOM cause tend to-PRES 'Hasty people tend to cause accidents.'
- b. Awatemono-wa kooitta ziko-**ga** okosi-yasu-i. hasty people-TOP this kind of accident-NOM cause tend to-PRES 'Hasty people tend to cause this kind of accident.'

#### 3.2.2 Saito (1982)

(10) Saito (1982) argues that "focus" is freely base-generated with nominative Case in Japanese and that the nominative element in Type I serves as the "focus" element based on the following configurations.<sup>2</sup>



- (11) Saito (1982) observes that the nominative element in Type I does not "scramble" with the object of the sentence.
  - a. Suzuki<sub>i</sub>-ga Tanaka<sub>j</sub>-nitotte [PRO<sub>j</sub> [e<sub>i</sub>] wairo-o tukam-ase-yasu-i] Suzuki-NOM Tanaka-for bribe-ACC take-cause-easy-PRES 'For Tanaka, Suzuki is easy to bribe.'
  - b. Tanaka-nitotte Suzuki-ga wairo-o tukam-ase-yasu-i
  - c. ??Suzuki-ga wairo-o Tanaka-nitotte tukam-ase-yasu-i
  - d. ?\*Tanaka-nitotte wairo-o Suzuki-ga tukam-ase-yasu-i
  - e. ?\*Wairo-o Tanaka-nitotte Suzuki-ga tukam-ase-yasu-i
  - f. ?\*Wairo-o Suzuki-ga Tanaka-nitotte tukam-ase-yasu-i (Saito 1982: 37)
- (12) The following examples show that the "focus" element *John* cannot be scrambled with the arguments of S<sub>2</sub>. In this respect, the nominative element in Type I behaves like the "focus" element.

<sup>&</sup>lt;sup>1</sup> Although Inoue (1976) regards examples like (9iia) as unacceptable, a slight lexical adjustment improves the acceptability as shown in (9iib).

<sup>&</sup>lt;sup>2</sup> Saito (1982), somewhat tentatively, calls elements such as *nihon-ga* in (i) 'focus with nominative Case' and does not give any clear definition of it.

<sup>(</sup>i) Nihon-ga dansei-ga tanmei desu.

Japan-NOM male-NOM short-life-span copula 'It is in Japan that men have a short life span.'

- a. [s1 John-ga [s2 otooto-ga buturi-o benkyosite-iru]] John-NOM brother-NOM physics-ACC studying 'It is John whose brother is studying physics.'
- b. ?John-ga buturi-o otooto-ga benkyosite-iru
  c. ?\*Buturi-o John-ga otooto-ga benkyosite-iru
  d. \*Otooto-ga John-ga buturi-o benkyosite-iru
- (13) Saito (1982) insightfully observes that there is a marked contrast between Type I and Type III=IV with respect to the possibility of scrambling.<sup>3</sup>

#### **Type III=IV: Scrambling is quite free**:

a. Eriito-ga	soosita	zasetukan-o	aziwai-yasu-i.		
elite-NOM	that kind o	of frustration-ACC	feel-easy-PRES		
'Elites easily feel that kind of frustration.'					

b. ??Soosita zasetukan-o eriito-ga aziwai-yasu-i.<sup>4</sup> (Saito 1982: 37)

- (14) Saito (1982) concludes from this that the nominative constituent in Type III=IV is not the "focus" element but the subject of S (i.e., (10b)) and conjectures that at least Type III=IV does not require the "focus" element.
- (15) Saito (1982) further argues that in Type I the "focus" element is *obligatory*, as the unacceptability of (15b) indicates.
  - a. Kono hon-ga<sub>i</sub> John<sub>j</sub>-nitotte [PRO<sub>j</sub> [e<sub>i</sub>] yomi-yasu-i]. this book-NOM John-for read-easy-PRES 'This book is easy for John to read.'
  - b. \*John<sub>j</sub>-nitotte [PRO<sub>j</sub> kono hon-o yomi-yasu-i]. -ACC (Saito 1982: 43)
- (16) Saito (1982) speculates that when the complement predicate is [+self-controllable], the TC requires the "focus" constituent with nominative Case and that it is, for

<sup>&</sup>lt;sup>3</sup> Saito (1982) argues that it is unnecessary to distinguish between Type III and Type IV because the relevant distinction is pragmatic.

<sup>&</sup>lt;sup>4</sup> The judgment is Saito's (1982). However, to my ear, (13b) is perfectly acceptable.

some reason, interpreted to be a "property statement" about the required element.<sup>5</sup>

## (17) Saito's (1982) observations:

**Type I**: The "focus" element with nominative Case is obligatory (for some reason).

**Type III=IV**: The "focus" element with nominative Case is not obligatory.

#### 3.2.3 External Arguments and Accusative Case

- (18) I would like to show that the embedded transitive verb in Japanese TCs projects an external argument and assigns accusative Case.
- (19) Since Kuno (1973), it has been widely known that the reflexive *zibun* 'self' is "subject-oriented."<sup>6</sup>

Ken<sub>i</sub>-ga Hanako<sub>j</sub>-ni zibun<sub>i/\*j</sub>-no hon-o age-ta. Ken-NOM Hanako-DAT self-GEN book-ACC give-PAST (Lit.) 'Ken gave Hanako self's book.'

(20) Given the subject-orientation property of the reflexive *zibun* 'self', consider the following example (cf. Saito 1982, Montalbetti et al. 1982).

Ken<sub>i</sub>-ga Hanako<sub>j</sub>-nitotte zibun<sub>\*i/j</sub>-no himitu-o hanasi-niku-i. Ken-NOM Hanako-for self-GEN secret-ACC talk to-difficult-PRES (Lit.) 'Ken is difficult for Hanako to talk to about self's secret.'

(21) The reflexive *zibun* 'self' refers to the complement of *nitotte* 'for' (i.e., *Hanako*).<sup>7</sup> That is, the complement of *nitotte* qualifies as a "subject" in the relevant sense. In

(ii) ?\*John-ga musuko-ga odoroi-ta. John-NOM son-NOM surprise-PAST 'John is such that his son was surprised.'

(Saito 1982: 9)

<sup>&</sup>lt;sup>5</sup> Saito's (1982) explanation for the "property reading" goes as follows. Consider (i) and (ii).

<sup>(</sup>i) John-ga musuko-ga gakusei-desu. John-NOM son-NOM student-copula

<sup>&#</sup>x27;John is such that this son is a student.'

When the "focus" element (i.e., the first nominative-marked phrase) appears in a sentence, it is usually the case that some kind of "property reading" is imposed on it. Saito (1982) states that what constitutes a "property reading" about John is any sentence that can be a reply to a request for information about John and that when someone says that he wants to know about John, we may tell him that John's son is a student, but we would normally not say that John's son was surprised yesterday.

<sup>&</sup>lt;sup>6</sup> I tentatively assume that the relevant notion of "subject" is related to an external argument of v (cf. Saito 2009).

<sup>&</sup>lt;sup>7</sup> Toru Ishii reports that the reflexive *zibun* 'self' in this example can also refer to *Ken*. But the important point here is that *zibun* 'self' refers to the complement of *nitotte* 'for'.

order to account for this, <u>I assume, following Inoue (2004)</u>, that the complement of *nitotte* 'for', which belongs to the matrix sentence, obligatorily controls PRO in the embedded "SpecvP."

(22) I will further show that the external argument of the embedded transitive verb is always projected. Taguchi and Niinuma (2009) present three pieces of evidence.

# (i) The reflexive *zibun* 'self' can properly be licensed by the missing subject of the embedded verb.

Zibun-no hon-ga yomi-yasu-i. Self-GEN book-NOM read-easy-PRES (Lit.) 'Self's book is easy to read.' (Taguchi and Niinuma 2009: 1878)

## (ii) Subject honorification is applicable.

Kono hon-gao-yomi-ni-nari-yasu-i.this book-NOMSH-read-SH-easy-PRES'This book is easy to read.'(Taguchi and Niinuma 2009: 1879)

# (iii) The subject of the *nagara* 'while' clause is controlled by the "subject" of the matrix clause (cf. Ura 1999, 2000).

- a. [PRO<sub>i</sub> Tanosimi-nagara (demo)], kono hon-ga PRO<sub>i</sub> yomi-yasu-i. enjoying-while (even) this book NOM read-easy-PRES (Lit.) 'While enjoying, this book is easy to read.' (slightly modified from Taguchi and Niinuma 2009: 1879)
- b. [PRO<sub>k/\*i</sub> ongaku-o kiki-nagara], John<sub>k</sub>-ga Mary<sub>i</sub>-o damasi-ta. PRO music-ACC listen.to-while John-NOM Mary-ACC cheat-PAST 'While PRO<sub>k/\*i</sub> listening to music, John<sub>k</sub> cheated Mary<sub>i</sub>. (Ura 2000: 99)
- (23) We can conclude that the external argument (i.e., PRO) is projected even though it appears to be missing.
- (24) We have already seen that in Type I the embedded transitive verb can assign accusative Case.
  - a. Kono pen-ga kodomo-nitotte kyappu-o hazusi-yasu-i.
    this pen-NOM child-for cap-ACC pull off-easy-PRES
    'It is this pen whose cap is easy for children to pull off.'

b. Taro-ga (Hanako-nitotte) **okane-o** watasi-niku-i. Taro-NOM Hanako-for money-ACC hand-difficult-PRES (Lit.) 'Taro is difficult (for Hanako) to hand some money.'

(25) We can further show that the embedded transitive verb assigns an external argument and assigns accusative Case at the same time.

## (i) The reflexive *zibun* 'self' + accusative Case

Kono-kaizyoo-(de)-ga Guurudo-nitotte **zibun**-no **sonata-o** ensousi-yasu-i. this concert hall-(at)-NOM Gould-for self-GEN sonata-ACC play-easy-PRES (Lit.) 'It is at this concert hall that it is easy for Gould to play self's sonatas.'

#### (ii) Subject honorification + accusative Case

Sono yuubinkyoku-kara-ga Yamada-sensei-nitotte **kozutumi-o** that post office-from-NOM Yamada-Professor-for package-ACC o-okuri-**ni-nari**-yasu-i. SH-send-SH-easy-PRES (Lit.) 'It is from that post office that it is easy for Prof. Yamada to send packages.'

#### (iii) The nagara 'while' clause + accusative Case

Me-o toji-nagara (demo), kono-hon-ga peeji-o mekuri-yasu-i.
eye-ACC close-while (even) this book-NOM page-ACC flip through-PRES (Lit.) 'While closing (your) eyes, this book is such that it is easy to flip through the pages (of it).'

#### 3.2.4 O-Ga/Ni-Ga Stacking

(26) Now I show that accusative Case (-o) and nominative Case (-ga) can be stacked in Japanese TCs (see section 3.2.6).<sup>8,9</sup>

Atarasii ryuukoo-**o**-dake-**ga** wakamono-nitotte oikake-yasu-i. new fashion-ACC-only-NOM young people-for follow-easy-PRES 'Only the new fashion is easy for young people to follow.'

(27) I also show that dative Case (-ni) and nominative Case (-ga) can be stacked in

<sup>&</sup>lt;sup>8</sup> I would like to thank Ryoichiro Kobayashi for bringing this kind of example to my attention.

<sup>&</sup>lt;sup>9</sup> I will not enter into the detailed syntactic structure of nominal phrases like NP-Acc-*dake*-Nom, for want of better understanding of nominal-internal syntax. For some relevant discussion, see Aoyagi (2006).

Japanese TCs (see section 3.3.3).<sup>10</sup>

Hanako-**ni**-dake-**ga** Taro-nitotte hon-o age-yasu-i. Hanako-DAT-only-NOM Taro-for book-ACC give-easy-PRES 'Only Hanako is easy for Taro to give some books.'

(28) It is worth pointing out here that multiple Case valuation is also found in Korean TCs (cf. Gerdts and Yoon 1989, Yoon 1996).

a. [IP e [VP Chelswui- eykey [PROi New York-eyse Seoul-lo ka-ki]-ka Chelswu-DAT New York-from Seoul-to go-NML-NOM Sangtanghi elyep-ta]]
very difficult-DECL
'It is very difficult for Chelswu to go to Seoul from New York.'

- b. [IP NY-(eyse)-ka<sub>j</sub> [VP Chelswu<sub>i</sub>-eykey [PRO<sub>i</sub> t<sub>j</sub> Seoul-lo ka-ki]-ka NY-(from)-NOM Chelswu-DAT Seoul-to go-NML-NOM sangtanghi elyepta]]
  very difficult
  'It is from New York that going to Seoul is very difficult for Chelswu.'
- c. [IP Chelswu-eykey-(man)-i<sub>i</sub> [VP t<sub>i</sub> PRO<sub>i</sub> New York-eyse Seoul-lo ka-ki]-ka Chelswu-DAT-(only)-NOM New York-from Seoul-to go-NML-NOM sangtanghi elyepta]] very difficult
   'It is (only) Chelswu for whom it is very difficult to go from New York to Seoul.'

## (Yoon 1996: 113)

#### 3.2.6 Derivations

(29) Now I discuss the derivations of Japanese TCs.

#### To sum up the properties:

(i) The embedded transitive verb projects an external argument and assigns accusative Case.

(ii) The *nitotte* phrase belongs to the matrix clause and controls PRO merged at "SpecvP." (cf. Inoue 2004).

(iii) In Type I, "focus with nominative Case" is obligatory (for some reason), while in Type III=IV, it is not obligatory (cf. Saito 1982).

(iv) Japanese TCs exhibit multiple Case valuation.

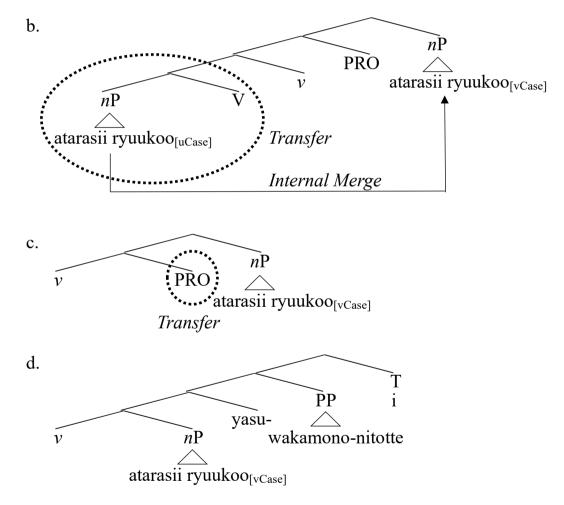
<sup>&</sup>lt;sup>10</sup> Following Sadakane and Koizumi (1995), I assume that *ni* in (27) is a structural Case marker.

## **Case Valuation Rules:**

- a. When a nominal is merged with a lexical head, its case feature is valued as accusative.
- b. When a nominal is merged with a phase head (v or n), its case feature is valued as nominative or genitive.
- c. Otherwise, the case feature of a nominal is valued as dative. (Zushi 2016: 48)

(30) The derivation of Type I proceeds as follows.

a. Atarasii ryuukoo-ga wakamono-nitotte oikake-yasu-i.
new fashion-NOM young people-for follow-easy-PRES
'Only the new fashion is easy for young people to follow.'



#### > <u>Derivation</u>:

(i) At Transfer of VP, the nP undergoes IM into the edge of v. (It gets valued as accusative.)

(ii) The "complement" PRO undergoes Transfer. ({atarasii ryuukoo, {PRO, v}}  $\Rightarrow$ 

{atarasii ryuukoo,  $\{v\}$ }  $\Rightarrow$  {atarasii ryuukoo, v})

(iii) At the end of the derivation (i.e., when all the constituents undergo Transfer), *atarasii ryuukoo* 'new fashion' is *revalued* as nominative.

## > Labeling:

 $\overline{(i)} \{V, a \text{ tarasii ryuukoo}\}: label = V$ 

(ii)  $\{v, \{V, \text{ atarasii ryuukoo}\}\}$ : label = v

(iv) {atarasii ryuukoo, v}: label = v ({atarasii ryuukoo, {PRO, v}}  $\Rightarrow$  {atarasii

ryuukoo,  $\{v\}\} \Rightarrow \{atarasii ryuukoo, v\}$ )

- (v) {yasu-, {atarasii ryuukoo, v}}: label = A
- (vi) {wakamono-nitotte, {yasu-, {atarasii ryuukoo, v}}: label = A (Adjuncts are invisible to LA) (cf. Hornstein 2009, Oseki 2015)
- (vii) {T, {wakamono-nitotte, {yasu-, {atarasii ryuukoo, v}}}: label = T
- (31) The nP receives two Case values in the course of the derivation. The question is which to choose. But Saito (1982) observes:

**<u>Type I</u>**: "Focus with nominative Case" is obligatory (cf. Saito 1982).

- > Thus, if nominative Case is realized morphologically, the result is fine.
  - a. Atarasii ryuukoo-**ga** wakamono-nitotte oikake-yasu-i. new fashion-NOM young people-for follow-easy-PRES 'The new fashion is easy for young people to follow.'
  - b. \*Atarasii ryuukoo-o wakamono-nitotte oikake-yasu-i. new fashion-ACC young people-for follow-easy-PRES 'The new fashion is easy for young people to follow.'
- (32) Note that if the *n*P does not undergo IM into the edge of v (30b), it receives only accusative Case. Then, the result is unacceptable due to the lack of "focus with nominative Case," just as in (31b).
- (33) Since the *n*P receives two Case values, it is possible to realize both of them provided that they are not adjacent to each other.

- a. \*Atarasii ryuukoo-o-ga wakamono-nitotte okikake-yasu-i.
  new fashion-ACC-NOM young people-for follow-easy-PRES
  'Only the new fashion is easy for young people to follow.'
- b. Atarasii ryuukoo-**o**-dake-**ga** wakamono-nitotte oikake-yasu-i. new fashion-ACC-only-NOM young people-for follow-easy-PRES 'Only the new fashion is easy for young people to follow.'
- A focus particle like *dake* 'only' breaks the adjacency between the stacked Case values.
- (34) Recall here that in Korean and Cuzco Quechua, stacked Case particles can appear adjacent to each other.

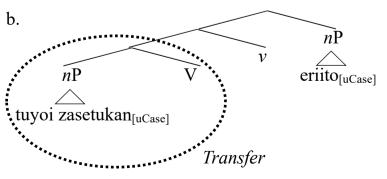
a. Cheli- <b>hanthey-ka</b> Cheli-DAT-NOM		ton-i money-NO	isse. M have	
'Cheli ha	as money.'	·		(Levin 2017: 448)
b. Mariya	Xwancha-	<b>q-ta-</b> n <sub>i</sub> m	una-n [ t <sub>i</sub>	platanu ranti-mu-na-n-ta]
Maria	Juan-GEN-	ACC-AF W	vant-2	bananas buy-NML-3-ACC
'Maria w	ants Juan to	buy banan	as.'	(Lefebvre and Muysken 1988: 144)

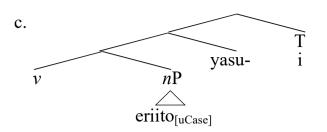
(35) Thus, I would like to hypothesize that Japanese (but not Korean and Cuzco Quechua) has the following constraint (cf. Hiraiwa 2014).

#### A Morphological Constraint in Japanese:

Case particles cannot appear adjacent to each other.

- (36) The derivation of Type IV proceeds as follows.
  - a. Eriito-ga tuyoi zasetukan- o aziwai-yasu-i. elites-NOM strong sense of frustratioin-ACC feel tend to-PRES 'Members of the elite tend to have a strong sense of frustration.'



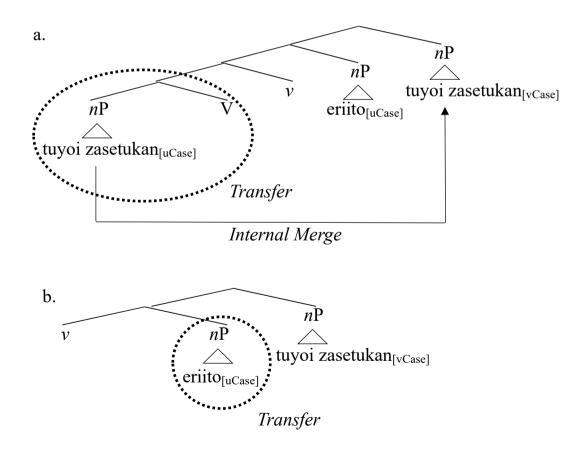


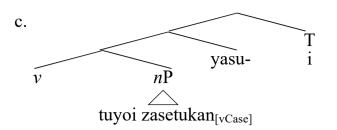
(i) The object undergoes Transfer. (It gets valued as accusative.)

(ii) The subject is valued as nominative (at the end of the derivation).

## ➢ <u>Labeling:</u>

- (i) {V, tuyoi zasetukan}: label = V (ii) {V, tuyoi zasetukan}: label = v(iii) {eriio, {V, {V, tuyoi zasetukan}}}: label = v ({eriito, {V, {V, tuyoi zasetukan}}} zasetukan}})  $\Rightarrow$  {eriito, {V}}  $\Rightarrow$  {eriito, v}) (iv) {yasu-, {eriito, v}}: label = A (v) {T, {yasu-, {eriito, v}}: label = T
- (37) If *tuyoi zasetukan* 'strong sense of frustration' undergoes IM into the edge of v in (36b), the result is also fine. Consider the derivation.





(i) At Transfer of VP, *tuyoi zasetukan* 'strong sense of frustration' undergoes IM into the edge of *v*. (It gets valued as accusative.)

(ii) The "complement" *eriito* 'elites' undergoes Transfer. ({tuyoi zasetukan, {eriito, v}} $\Rightarrow$ {tuyoi zasetukan, {v}} $\Rightarrow$ {tuyoi zasetukan, v})

(iii) At the end of the derivation (i.e., when all the constituents undergo Transfer), *tuyoi zasetukan* 'strong sense of frustration' gets *revalued* as nominative.

## > <u>Labeling</u>:

- (i) {V, tuyoi zasetukan}: label =  $\mathbf{V}$
- (ii)  $\{v, \{V, \text{tuyoi zasetukan}\}\}$ : label = v

(iii) {eriito, {v, {V, tuyoi zasetukan}}}: label = v (At Transfer of VP, *tuyoi zasetukan* 'strong sense of frustration' undergoes IM into the edge of v. Transfer reduces the set {tuyoi zasetukan, {eriito, {v, {V, { $t_{tuyoi zasetukan}$ }}} into the set {tuyoi zasetukan, {eriito, {v, {V, t<sub>tuyoi zasetukan</sub>}}} into the set {tuyoi zasetukan, {eriito, {v}}}. If a singleton set is equivalent to its member, the set {tuyoi zasetukan, {eriito, {v}}} will be regarded as the set {tuyoi zasetukan, {eriito, v}}. Thus, the label of the set {eriito, v} will be determined to v.

(iv) {tuyoi zasetukan, v}: label = v ({tuyoi zasetukan, {eriito, v}}  $\Rightarrow$  {tuyoi

zasetukan,  $\{v\}\} \Rightarrow \{tuyoi zasetukan, v\})$ 

- (v) {yasu-, {tuyoi zasetukan, v}: label = A
- (vi) {T, {yasu-, {tuyoi zasetukan, v}}: label = T
- (38) The object receives two Case values in the course of the derivation. The question is which to choose. But Saito (1982) observes:

**Type III=IV**: "Focus with nominative Case is *not obligatory* (cf. Saito 1982).

- (39) If Saito's (1982) observation is correct, we expect that in Type IV, either accusative Case or nominative Case can be realized morphologically. This expectation is borne out.
  - a. Tuyoi zasetukan-**o** eriito-ga aziwai-yasu-i. strong sense of frustration-ACC elite-NOM feel tend to-PRES 'Members of the elite tend to have a strong sense of frustration.'

b. Tuyoi zasetukan-**ga** eriito-ga aziwai-yasu-i.<sup>11</sup> strong sense of frustration-NOM elite-NOM feel tend to-PRES 'It is a strong sense of frustration that members of the elite tend to feel.'

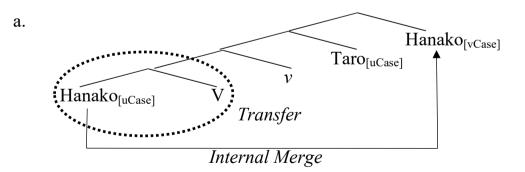
(40) Note that since the nP receives two Case values, it is possible to realize both of them provided that the adjacency between them is broken by a focus particle.

Tuyoi zasetukan-o-dake-gaeriito-gaaziwai-yasu-i.strong sense of frustration-ACC-only-NOMelite-NOMfeel tend to-PRES'It is only a strong sense of frustration that members of the elite tend to feel.'

#### **3.3 Implications**

## 3.3.1 Scrambling as Multiple Case Valuation

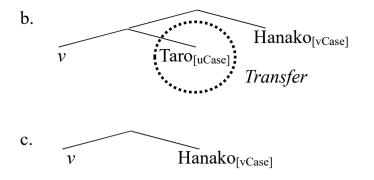
- (41) The proposed theory implies that scrambling in Japanese can be seen as an instance of multiple Case valuation where the *first* Case value received is realized/retained morphologically.<sup>12</sup>
  - a. Taro-ga Hanako-o sikat-ta. Taro-NOM Hanako-ACC scold-PAST 'Taro scolded Hanako.'
  - b. Hanako<sub>i</sub>-o Taro-ga *t*<sub>i</sub> sikat-ta. Hanako-ACC Taro-NOM scold-PAST 'Taro scolded Hanako.'
- (42) If we assume that scrambling is an instance of IM and that vP constitutes a phase, the object *Hanako* in (41b) must undergo IM into the edge of v.<sup>13</sup>



<sup>&</sup>lt;sup>11</sup> Takaomi Kato points out that in order for (39b) to be (marginally) acceptable, a heavy stress must be put on *tuyoi zasetukan-ga* 'strong sense of frustration'.

<sup>&</sup>lt;sup>12</sup> I would like to thank Naoki Fukui for suggesting this possibility.

<sup>&</sup>lt;sup>13</sup> Whether the final landing site is "SpecTP" or "SpecvP," the object must undergo IM into the edge of v. Otherwise, it would be trapped inside the Transfer domain.



(i) The object *Hanako* undergoes IM into the edge of v at Transfer of VP. (It gets valued as accusative.)

(ii) The "complement" *Taro* undergoes Transfer. (It gets valued as nominative.)(iii) The object *Hanako* gets *revalued* as nominative (at the end of the overall derivation).

- (43) The object receives two Case values. The question is which to choose. If the first Case value (i.e., accusative Case) is realized, the result is fine. But if the last Case value (i.e., nominative Case) is realized, the result is marginal.
  - a. Hanako<sub>i</sub>-**o** Taro-ga  $t_i$  sikat-ta. Hanako-ACC Taro-NOM scold-PAST 'Taro scolded Hanako.'
  - b. ??Hanako-**ga** Taro-ga  $t_i$  sikat-ta. Hanako-NOM Taro-NOM scold-PAST 'It is Hanako who Taro scolded.'
- (44) However, there are numerous examples where the objects can be marked with either accusative Case or nominative Case.

a. Kono tosyokan this library-ACC 'Many students	5 5	t <sub>i</sub>	riyou-su-ru. use-do-PRES		
b. Kono tosyokan <sub>i</sub> - <b>ga</b> ookuno-gakusei-ga $t_i$ riyou-su-ru. this library-NOM many-students-NOM use-do-PRES 'Many students use this library.'					
c. Sono-toori <sub>i</sub> - <b>o</b> the road-ACC	takusan-no torakku-ga many-GEN truck-NOM	t <sub>i</sub>	too-ru. drive-PRES		

'A lot of trucks are driven on the road.'

- d. Sono-toori<sub>i</sub>-**ga** takusan-no torakku-ga  $t_i$  too-ru. the road-NOM many-GEN-truck-NON drive-PRES 'A lot of trucks are driven on the road.'
- e. Anoyouna taipu-no jyosei<sub>i</sub>- $\mathbf{0}$  daremo-ga  $t_i$  konom-u. that kind-GEN woman-ACC everyone-NOM like-PRES 'Everyone likes that kind of woman.'
- f. Anoyouna taipu-no jyosei<sub>i</sub>-**ga** daremo-ga  $t_i$  konom-u. that kind-GEN woman-NOM everyone-NOM like-PRES 'Everyone likes that kind of woman.'
- (45) Thus, it seems certain that the awkwardness of (43b) is not due to syntax but rather due to semantics.
- (46) It has been reported in the literature that when an object is marked with nominative Case, it receives a "focus" interpretation (cf. Saito 1982, Takano 2003, Miyagawa 2010, Nambu et al. 2018). Furthermore, as Saito (1982) points out, when a "focus" element (i.e., focus with nominative Case) appears in a sentence, it is usually the case that some kind of "property reading" is imposed on it.
- (47) Thus, the interpretation of (43b) will be something like "Hanako has an (intrinsic) property such that Taro hit her," which is anomalous (cf. Saito 1982). In contrast, the interpretation of the acceptable sentence (44b), for instance, will be something like "This library has an (intrinsic) property such that many students use it," which is felicitous.

## <u>To sum up</u>:

(i) The object can undergo IM into the edge of v at Transfer of VP and receive two Case values.

(ii) If the first Case value (i.e., accusative Case) is realized, the result is fine (i.e., an instance of scrambling). In contrast, if the last Case value (i.e., nominative Case) is realized, it is interpreted to be "focused" and some kind of "property interpretation" is imposed on the resulting sentence (cf. Saito 1982).

#### 3.3.2 O-Ni Stacking vs. Ni-Ga Stacking

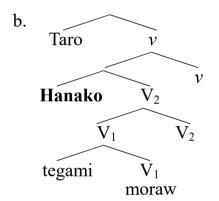
(48) The proposed theory correctly predicts the presence of *ni-ga* (i.e., dative-nominative) stacking and the absence of *o-ni* (i.e., accusative-dative) stacking in

Japanese.<sup>14</sup>

## Zushi's (2014, 2016) Case Valuation Rules:

- a. When a nominal is merged with a lexical head, its case feature is valued as accusative.
- b. When a nominal is merged with a phase head (v or n), its case feature is valued as nominative or genitive.
- c. Otherwise, the case feature of a nominal is valued as dative. (Zushi 2016: 48)
- (49) Zushi (2014, 2016) argues that dative *ni* in Japanese is a default Case and assigned to a nominal phrase which lacks a Case value. That is, dative Case valuation applies *as a last resort*.

a. Taro-ga	Hanako-ni	tegami-o	morat-ta.
Taro-NOM	Hanako-DAT	letter-ACC	receive-PAST
'Taro receiv	ved a letter from	n Hanako.'	

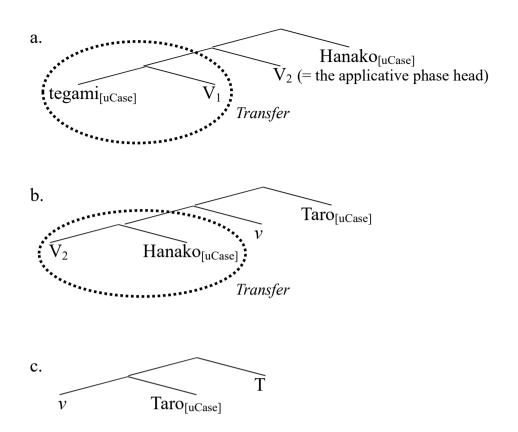


(Zushi 2014: 87)

## (50) **Derivation:**

- (i) *Tegami* 'letter' is valued as accusative since it is merged with V.
- (ii)  $V_2$  does not value accusative because it is an applicative head, not a lexical head. Therefore, (48c) is applied *as a last resort* and *Hanako* is valued as dative.
- (iii) *Taro* is valued as nominative since it is merged with v.
- (51) When Hanako is merged into "SpecV<sub>2</sub>P," an XP-YP configuration is formed. Following McGinnis (2001), I assume that the applicative head in structures like (49b) is a phase head. If so, when Hanako is merged into the structure, the applicative head is created, and hence, the complement (i.e., V<sub>1</sub>P) undergoes Transfer. Thus, the label of the set {V<sub>2</sub>, Hanako} will be determined to V<sub>2</sub>.

<sup>&</sup>lt;sup>14</sup> I would like to thank Toru Ishii for helpful discussion.

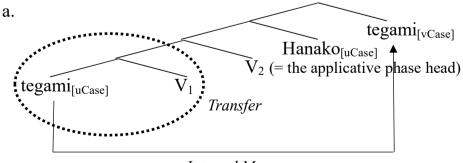


(i) Upon completion of the applicative phase, the complement (i.e.,  $V_1P$ ) undergoes Transfer. ({*Hanako*, { $V_2$ , {V, *tegami*}}}  $\Rightarrow$  {*Hanako*, { $V_2$ }}  $\Rightarrow$  {*Hanako*,  $V_2$ })

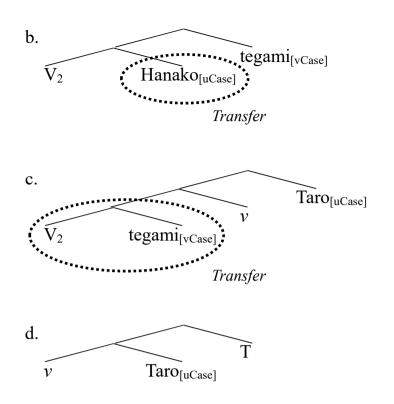
(ii) Upon completion of the vP phase, the complement (i.e., {*Hanako*, V<sub>2</sub>}) undergoes Transfer. The Case valuation rule (48c) is applied as a last resort and *Hanako* is valued as dative.

(iii) At the end of the overall derivation (i.e., at the point of TP), all the constituents undergo Transfer. *Taro* is valued as nominative.

(52) What if tegami 'letter' in (51a) undergoes IM into the edge of the applicative head?



Internal Merge



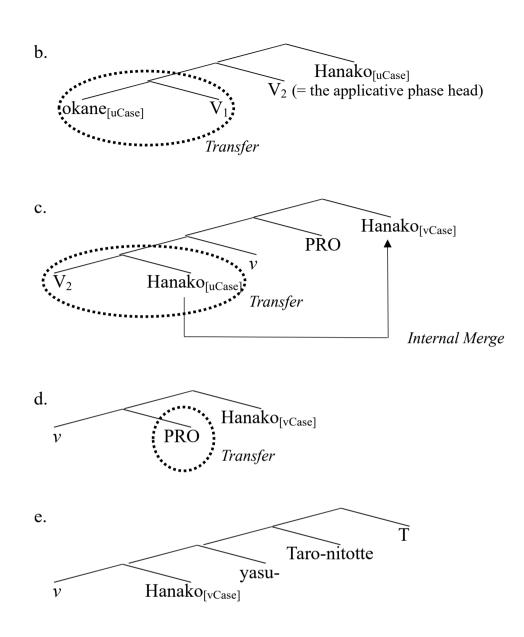
(i) *Tegami* 'letter' undergoes IM into the edge of the applicative phase at Transfer.
(ii) The "complement" *Hanako* undergoes Transfer. It is valued as dative as a last resort since neither (48a) nor (48b) can be applied.

(iii) Upon completion of the vP phase, the complement (i.e.,  $\{V_2, tegami\}$ ) undergoes Transfer. But *tegami* 'letter' has already been assigned accusative Case. Therefore, it will not receive dative Case since (48c) is a last-resort rule. (iv) At the end of the overall derivation (i.e., at the point of TP), all the constituents undergo Transfer. *Taro* gets valued as nominative.

(53) This correctly predicts that o-ni stacking (i.e., accusative-dative stacking) is absent.

*Taro-ga	tegami- <b>o</b> -dake- <b>ni</b> i	Hanako-ni	ti	morat-ta.	
Taro-NOM	letter-ACC-only-DAT	Hanako-DAT		receive-PAST	
'Taro received only a letter from Hanako.'					

- (54) The proposed theory can also correctly predict the presence of *ni-ga* (i.e., dative-nominative stacking) stacking.
  - a. Hanako-**ni**-dake-**ga**<sub>i</sub> (Taro-nitotte) t<sub>i</sub> okane-o age-niku-i. Hanako-DAT-only-NOM Taro-for money-ACC give-hard-PRES 'Only Hanako is hard (for Taro) to give some money.'



(i) Upon completion of the applicative phase, the complement (i.e.,  $\{V, okane\}$ ) undergoes Transfer. (The nominal phrase *okane* 'money' gets valued as accusative.) (ii) Upon completion of the *vP*, *Hanako* undergoes IM into the edge of *v* at Transfer. *Hanako* at the edge of V<sub>2</sub> gets valued as dative since it lacks a Case value at this point.

(iii) The "complement" PRO undergoes Transfer.

(iv) At the end of the overall derivation (i.e., at the point of TP), all the constituents undergo Transfer. *Hanako* at the edge of v gets *revalued* as nominative because nominative Case valuation is not a last-resort rule. (Nominative Case is assigned to *Hanako* regardless of whether it has received a Case value or not.)

(55) The above derivation correctly predicts the presence of ni-ga stacking (i.e., dative-

nominative stacking). The above discussion confirms the view that dative Case valuation is applied only as a last-resort.

#### **3.4 Conclusion**

(56) I have argued that Japanese instantiates all the three possibilities shown below.

- (i) Case<sub>2</sub>+Case<sub>1</sub>: The *last* Case value received is realized morphologically.
- (ii) Case<sub>2</sub>+Case<sub>1</sub>: The *first* Case value received is realized morphologically.
- (iii) Case<sub>2</sub>+Case<sub>1</sub>: *All* the Case values received are realized morphologically.
- (57) Type I TCs instantiate (i) and (iii), while Type IV TCs instantiate (i), (ii), and (iii). Scrambling can be seen as (ii).

#### References

- Aoyagi, Hiroshi. 2006. *Nihongo no zyoshi to kinoohantyuu* (Particles and functional categories in Japanese). Tokyo: Hituzi Shobo.
- Fukui, Naoki. 1995. The principles-and-parameters approach: A comparative syntax of English and Japanese. In *Approaches to language typology*, ed. Masayoshi Shibatani and Theodora Byron, 327-371. Oxford: Oxford University Press.
- Fukui, Naoki, and Taisuke Nishigauchi. 1992. Head-movement and Case-marking in Japanese. *Journal of Japanese Linguistics* 14: 1-35.
- Gerdts, Donna, and Cheong Youn. 1988. An inversion analysis of Korean tough constructions. In *Harvard studies in Korean linguistics-II*, ed. Susumu Kuno, Ik-Hwan Lee, John Whitman, Joan Maling, Young-Se Kang, and Young-Joo Kim, 57-66. Seoul: Hanshin Publishing Company.
- Hiraiwa, Ken. 2014. Constraining doubling. In Identity relations in grammar, ed. Kuniya Nasukawa and Henk van Riemsdijk, 225-254. Berlin: Mouton de Gruyter.
- Inoue, Kazuko. 1976. *Henkei bunpoo to nihongo* (Transformational grammar and Japanese). Tokyo: Taishukan.
- Inoue, Kazuko 1978. Tough sentences in Japanese. In *Problems in Japanese syntax and semantics*, ed. John Hinds and Irwin Howard, 122-154. Tokyo: Kaitakusha.
- Inoue, Kazuko 2004. Japanese 'tough' sentences revisited. *Scientific Approaches to Language* 3: 75-112.
- Kuno, Susumu. 1973. *The structure of the Japanese language*. Cambridge, MA: MIT Press.
- Lefebvre, Claire, and Peter Muysken. 1988. *Mixed categories: Nominalizations in Quechua*. Dordrecht: Kluwer.
- Levin, Theodore. 2017. Successive-cyclic Case assignment: Korean nominativenominative Case-stacking. *Natural Language & Linguistic Theory* 35: 1-52.
- Miyagawa, Shigeru. 2010. Why agree? Why move? Unifying agreement-based and discourse-configurational languages. Cambridge MA: MIT Press.
- Montalbetti, Mario, Mamoru Saito, and Lisa Travis. 1982. Three ways to get tough. *Proceedings of the 18th Annual Meeting of the Chicago Linguistic Society*, 348-366.
- Murasugi, Keiko. 1991. Noun phrases in Japanese and English: A study in syntax, learnability, and acquisition. Doctoral dissertation, University of Connecticut.
- Nambu, Satoshi, Hyun Kyung Hwang, David Yoshikazu Oshima, and Masashi Nomura. 2018. The nominative/accusative alternation in Japanese and information structure. *Journal of East Asian Linguistics* 27: 141-171.
- Ochi, Masao. 2001. Move F and ga/no conversion in Japanese. *Journal of East Asian Linguistics* 10: 247-286.
- Ochi, Masao. 2005. Ga-no conversion and overt object shift in Japanese. Nanzan Linguistics 2: 61-80.

- Oseki, Yohei. 2015. Eliminating pair-Merge. Proceedings of the 32nd West Coast Conference on Formal Linguistics, 303-312.
- Sadakane, Kumi, and Masatoshi Koizumi. 1995. On the nature of the "dative" particle *ni* in Japanese. *Linguistics* 33: 5-33.
- Saito, Mamoru. 1982. Case-marking in Japanese: A preliminary study. Ms., MIT.
- Saito, Mamoru. 1985. *Some asymmetries in Japanese and their theoretical implications*. Doctoral dissertation, MIT.
- Taguchi, Shigeki, and Fumikazu Niinuma. 2009. On the subject of the Japanese middle and *tough* constructions. *Proceedings of the 18th International Congress of Linguistics*, 1875-1886.
- Takano, Yuji. 2003. Nominative objects in Japanese complex predicate constructions: A prolepsis analysis. *Natural Language & Linguistic Theory* 21: 779-834.
- Ura, Hiroyuki. 1999. Checking theory and dative subject constructions in Japanese and Korean. *Journal of East Asian Linguistics* 8: 223-254.
- Ura, Hiroyuki. 2000. *Checking theory and grammatical functions in universal grammar*. Oxford: Oxford University Press.
- Watanabe, Akira. 1996. Nominative-genitive conversion and agreement in Japanese. Journal of East Asian Linguistics 4: 373-410.
- Zushi, Mihoko. 2014. Kaku to heigoo (Case and Merge). In Gengo no sekkei, hattatu, sinka (The design, development and evolution of language: Explorations in biolinguistics), ed. Koji Fujita, Naoki Fukui, Yusa Noriaki, and Masayuki Ikeuchi, 66-96. Tokyo: Kaitakusha.
- Zushi, Mihoko. 2016. Case and predicate-argument relations. In Advances in biolinguistics: The human language faculty and its biological basis, ed. Koji Fujita and Cedric Boeckx, 46-66. New York: Routledge.