## How High Is High Applicative in Japanese and Korean?

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## 1 Introduction

Although the typological relation between Japanese and Korean is yet to be established,<sup>1</sup> it is quite obvious that the two languages are similar in morphosyntactic terms. However, it is the case that grammaticalization is generally more advanced in Japanese than in Korean. For instance, while causative and passive by *-sase* and *-rare*, respectively, are highly productive in Japanese, the productivity of morphological causative and passive by *-i*, *-hi*, *-li*, *-li*, *-ki*, *-wu*, *-kwu* and *-chwu* in Korean is more limited. Moreover, Japanese allows multiple verbal suffixation, as in the causative-passive *-sase-rare*, but Korean generally prohibits the co-occurrence of more than one causative/passive morpheme per verb stem.<sup>2</sup>

In this paper, I will discuss Applicatives in the two languages. More precisely, I will address a question as to how high High Applicative is in each language. Focusing on the auxiliary uses of the verbs of giving *yar* in

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According to Hattori (1999), if the two languages have a common root, they split off more than 5,000–6,000 years ago.

<sup>&</sup>lt;sup>3</sup> This does not necessarily mean that Korean did not undergo a similar grammaticalization process to Japanese. Indeed, I have suggested elsewhere (Aoyagi 2017, 2019) that the low productivity of multiple verbal suffixation in present-day Seoul Korean is the result of some degenerative process that the language has undergone in its history, and the reminiscence of multiple suffixation is found at some point of time and place. If this is on the right track, it might be the case that both languages have developed the possibility of multiple verbal suffixation at some point of time, but only Japanese preserves it to date.

Japanese and *cwu* in Korean, I will argue that High Applicative is structurally higher in Japanese than in Korean.

The organization of this paper is as follows. In section 2, we will observe some basic facts of the verbs of giving and receiving in Japanese and Korean. Section 3 will lay out the theoretical foundation on which our later analyses will be built. In section 4, we will make a proposal that the verb of giving *yar* as High Applicative in Japanese is higher than its Korean counterpart *cwu*. Toward the end of this section, we will suggest that *yar* and *cwu* may instantiate Low Applicative as well; as a result, dyadic verbs may introduce a third (goal) argument. Section 5 is a brief conclusion.

## 2 Verbs of giving and receiving in Japanese and Korean

## 2.1 Verbs of giving as main verbs

Both Japanese and Korean have verbs of giving, yar and cwu, respectively.

(1)	a.	John-ga	Mary-ni	hon-o	yar-ta	(J)
		John-NOM	Mary-DAT	book-ACC	give-PST	
		'John gave	a book to M	ary.'		
	b.	John-i	Mary-eykey	, chayk-ul	cwu-ess-ta	(K)
		John-NOM	Mary-DAT	book-AC	C give-PST-DCL	

As shown in (1), yar and cwu as main verbs behave exactly the same way.<sup>3</sup>

#### 2.2 Verbs of giving as auxiliary verbs

The two languages have developed an auxiliary use of their verbs of giving, as shown in (2) and (3).

(2)	a.	?*John-ga	Mary-ni	hon-o	yom-ta	(J)
		John-NOM	Mary-DAT	book-ACC	read-PST	
		'(int.) John r	read a book	aloud to M	ary.'	
	b.	John-ga	Mary-ni	hon-o	yom-te <b>yar</b> -ta	
		John-NOM	Mary-DAT	book-ACC	read-INF give-PS	Г
		'John read	a book alo	ud to Mary.	, -	
(3)	a.	?*John-i	Mary-eyk	ey chayk-	ul ilk-ess-ta	(K)
		John-NOM	Mary-DA1	r book-A	ACC read-PST-DC	L
		'(int.) John	read a boo	k aloud to N	Mary.'	

<sup>&</sup>lt;sup>4</sup> Japanese has another verb of giving, *kure*, which would be used in (1a) if the recipient Mary is closer to the speaker in his/her personal sphere (e.g. family, friends, etc.) than the giver John. In what follows, I will focus on *yar* as the default verb of giving in Japanese.

b. John-i Mary-eykey chayk-ul ilk-e cwu-ess-ta John-NOM Mary-DAT book-ACC read-INF give-PST-DCL 'John read a book aloud to Mary.'

The occurrence of Mary in the dative is only marginal with the bare verbs of reading in Japanese and Korean, as shown in (2a) and (3a). This is because the verbs of reading, i.e. *yom* in Japanese and *ilk* in Korean, are paradigmatically dyadic, taking Actor (John) and Theme (a book) only. However, if we add the verb of giving after the main verb, as in (2b) and (3b), the degree of acceptability increases remarkably. As the result of a grammaticalization process, referred to as **functionalization** by Aoyagi (2017), the main verbs of giving in both languages have become auxiliary verbs. Although grammaticalization is widely discussed from different perspectives (e.g. Keenan and Dryer 1985; Haspelmath 1990; Roberts and Roussou 2003, among many others), they all seem to agree that its general direction is from a lexical category to a functional category.

#### 2.3 Verbs of receiving

As main verbs, the Japanese verb of receiving *moraw* in (4a) and its Korean counterpart *pat* in (4b) behave in the same way as shown below.

(4)	a.	John-ga	Mary-ni	hon-o	moraw-ta	(J)	
		John-NOM	Mary-DAT	book-ACC	receive-PST		
		'John received a book from Mary.'					
	b.	John-i	Mary-eykey	v chayk-ul	pat-ass-ta	(K)	
		John-NOM	Mary-DAT	book-ACC	receive-PST-DECL		

However, as noted by Shibatani (1994), the use of the Korean *pat* as an auxiliary is highly limited in contrast to its Japanese equivalent, as shown in (5).

- (5) a. John-ga Mary-ni hon-o yom-te moraw-ta (J) John-NOM Mary-DAT book-acc read-INF receive-PST 'John had Mary read a book for him.'
  b. \*John-i Mary-eykey chayk-ul ilk-e pat-ass-ta (K)
  - b. *\*John-i Mary-eykey chayk-ul ilk-e pat-ass-ta* (K) John-NOM Mary-DAT book-acc read-INF receive-PST-DECL

In (4a) from Japanese, the verb *yom* 'read' which is embedded under *moraw* is transitive with Mary being the subject (Actor) and a book the object (Theme), and John is interpreted as the beneficiary of the event of Mary's reading a book. However, its Korean counterpart in (5b) is totally ungram-

<sup>&</sup>lt;sup>4</sup> We will come back to this point in section 4.4.

matical. In this respect, Japanese diverges from Korean.

## **3** Theoretical assumptions

#### 3.1 Layered VP hypothesis

Since the seminal work by Cinque (1999), it has widely been recognized that the structure under T, as well as that in the C-area (Rizzi 1997), is much richer than conventionally assumed. Following Pylkkänen (2008), McGinnis (2001), Borer (2005), Travis (2010), and Fukuda (2012), among others, I will assume that the fully articulated phrase structure under T may contain functional heads above and below Voice (Krazter 1996) and V, i.e. X, Y, and Z, as shown in (6).

(6)  $[_{TP} \dots [_{XP} EA [_{VoiceP} EA [_{YP} EA [_{VP} [_{ZP} IA \dots Z] V] Y] Voice] X] T]$ 

For instance, according to Borer (2005), Travis (2010), and Fukuda (2012), inter alia, X is recognized as High/Outer Aspect, and Y is recognized as Low/Inner Aspect. Furthermore, Y and Z are identified as High and Low Applicative, respectively, by Pylkkänen (2008) and McGinnis (2001). In section 4, I will argue that High Applicative in Japanese is higher than Voice, i.e. X in (6), whereas its Korean counterpart instantiated by *cwu* is no higher than Y in (6).

#### 3.2 Voice, Applicative and Cause

Among the three functional heads under T that I am proposing, i.e. Voice, Cause, and Applicative, only Voice is obligatory. This is because the type of voice of a sentence must be determined anyway. Furthermore, Applicative, if present, may appear either above or below VP (Pylkkänen 2008; McGinnis 2001). Furthermore, I will take Cause for a functional head with the [+cause change] feature in the sense of Reinhart (2016). Thus, Cause is involved not only in typical causative sentences (e.g. those with *-sase* in Japanese) but also in change-of-state predicates (Wurnbrand and Shimoyama 2017). According to Pylkkänen (2008: 85), Cause is classified into three types depending on its selectional properties, as shown in (7).

- (7) a. Root-selecting Cause:  $\sqrt{R^{Cause}}$ 
  - b. V-selecting Cause: V^Cause
  - c. Phase-selecting Cause:  $[\alpha P EA \dots \alpha]^{A}$ Cause

All three types of Cause are attested in both Japanese and Korean.<sup>5</sup> Among the three, what matters in the present discussion is the phase-selecting

<sup>&</sup>lt;sup>s</sup> See Aoyagi (2019, 2021) for arguments.

Cause in (7c), and it is instantiated by causatives formed on transitive verbs like *yom* 'read' in Japanese and its Korean counterpart *ilk* in (8) and (9).

- (8) a. *Mary2-ga zibun2-no hon-o oogoe-de2 yom-ta* (J) Mary-NOM self-GEN book-ACC aloud read-PST 'Mary read a book aloud.'
  - b. John<sub>1</sub>-ga [αP Mary<sub>2</sub>-ni zibun<sub>1,2</sub>-no hon-o oogoe-de<sub>1,2</sub> John-NOM Mary-DAT self -GEN book-ACC aloud yom]-ase-ta read-CAUS-PST
    - (i) 'John made Mary read his/her book aloud.'
    - (ii) 'John loudly ordered Mary to read his/her book.'
- (9) a. Mary<sub>2</sub>-ka caki<sub>2</sub> chayk-ul khu-key<sub>2</sub> ilk-ess-ta
   Mary-NOM self book-ACC aloud read-PST-DECL
   'Mary read her book aloud.'
  - b. John<sub>1</sub>-i [αP Mary<sub>2</sub>-eykey caki<sub>1,2</sub> chayk-ul khu-key<sub>1,2</sub> ilk]-John-NOM Mary-DAT self book-ACC aloud readhi-ess-ta
    - CAUS-PST-DCL
    - (i) 'John made Mary read his/her book aloud.'
    - (ii) 'John loudly ordered Mary to read his/her book.'
    - ((9b) from Kim 1998: 453, with slight modification)

I will assume with Pylkkänen (2008: 85) that an EA-introducing head is defined as a phase head. The verbs of reading in (8a) and (9a) are transitive, and Mary is interpreted as Actor of the event depicted by the verb and may antecede the subject-oriented reflexive anaphor *zibun* in Japanese and *caki* in Korean and may be modified by the manner adverb like 'aloud/loudly', so that it qualifies as EA in either case. This state of affairs does not change if each transitive clause is embedded under Cause, as in (8b) and (9b). Hence,  $\alpha P$  in (8b) and (9b) is identified as VoiceP with EA. Thus, *-sase* in (8b) and *-hi* in (9b) each instantiate the phase-selecting Cause in (7c).

#### 4 Proposals

In this section, I will, first, argue that High Applicative in Japanese is even higher than is proposed by Pylkkänen (2008) and McGinnis (2001), and it is located above Voice, i.e. X in (6). Then, I will claim that the auxiliary *cwu* in Korean as High Applicative is lower than its Japanese counterpart.

<sup>&</sup>lt;sup>•</sup> The higher subject John, which is introduced by the phase-selecting Cause, is also qualified as EA. However, this is irrelevant to the discussion here.

#### 4.1 High Applicative in Japanese

My claim that High Applicative in Japanese is located higher than Voice is not unwarranted. I will recapitulate the arguments presented by Aoyagi (2010). First of all, as seen in section 2.3 above, the Japanese verb of receiving *moraw*, unlike its Korean counterpart, has an auxiliary use, as shown in the following (see also (5a)).

(10) John-wa [αP Mary<sub>2</sub>-ni zibun<sub>2</sub>-no heya-de wazato<sub>2</sub> nak]-te John-TOP Mary-DAT self-GEN room-in on.purpose cry-INF moraw-ta receive-PST

'John had Mary cry on purpose in her own room on behalf of him.'

In (10), Mary is interpreted as Actor of the event of crying, and it may antecede *zibun* 'self' and may be modified by the subject-oriented adverb *wazato* 'on purpose'.<sup>7</sup> This strongly indicates that  $\alpha P$  is VoiceP, and Mary is EA introduced by Voice. On the other hand, the subject of *moraw* John is construed as the beneficiary.

Furthermore, unlike Korean, Japanese allows indirect exclusive passive, where the subject of *-rare* is excluded from the rest of the event, as shown in (11) (Washio 1993).

 (11) John-wa [αP Mary<sub>2</sub>-ni zibun<sub>2</sub>-no heya-de wazato<sub>2</sub> nak]-John-TOP Mary-DAT self -GEN room-in on.purpose cryare-ta PASS-PST
 'John was adversely affected by Mary's crying on purpose in her own room.'

In (11) as well, Mary is interpreted as Actor of the crying event, and may antecede *zibun* and be modified by *wazato*. Thus,  $\alpha P$  in (11) is also identified as VoiceP.

Based on these observations, Aoyagi (2010) claims that High Applicative in Japanese is higher than Voice as shown below.

- (12) [<sub>H-ApplP</sub> John<sub>[Sentient]</sub> [<sub>VoiceP</sub> Mary<sub>[Actor]</sub> [<sub>VP</sub> [in her own room] [on purpose] cry] Voice] receive/rare]
- In (12), while Mary is introduced by active Voice, which assigns Actor to

<sup>&</sup>lt;sup>7</sup> Again, John has the same properties, which is irrelevant here.

its Spec, John is introduced by High Applicative, which assigns Sentient (or [+mental state] in the sense of Reinhart 2016) to its Spec. High Applicative may further be specified with either [benefactive] or [malefactive]. If it is [benefactive], it is spelled out as *moraw*, and if it is [malefactive], it is spelled out as *-rare*, as indicated in (13).

(13) a. {H-Appl, Sentient, [benefactive]} <--> /moraw/
b. {H-Appl, Sentient, [malefactive]} <--> /rare/

In contrast, Korean allows neither the auxiliary use of *pat* 'receive' nor the indirect exclusive passive, as shown in (14).

(14)	a.	*John-un	Mary-eykey	wul-e	pat-ass-ta
		John-TOP	Mary-DAT	cry-INF	receive-PST-DCL
		'(int.) Johr	n had Mary cr	y on beh	alf of him.'
	b.	*John-un	Mary-eykey	v wul-li-	ess-ta
		John-TOP	Mary-DAT	cry-PA	SS-PST-DCL
		'(int.) Johr	n was adverse	ly affecte	ed by Mary's crying.'
		((14b) fro	m Washio 19	93: 48 w	ith modification)

Neither (14a) nor (14b) is acceptable under the intended sense. From this fact, Aoyagi (2010) draws a conclusion that High Applicative above Voice is available in Japanese but not in Korean.

Recent diachronic and synchronic studies of Japanese further support this view. First, Yamaguchi (2018) notes that the development of the benefactive auxiliary use of *moraw* and that of the malefactive exclusive passive *-rare* were in tandem; i.e. the two came into the division of labor as today in the late Edo period (circa late 18th century). Furthermore, although it is still controversial as to when Ryukyuan branched off from the proto-Japonic language, it was no earlier than the 7th century and no later than the 16th (Pellard 2012). Toyama (2014) reports that Shuri, which is spoken in the main island of Okinawa, has neither the benefactive auxiliary use of the verb of receiving, as in (10), nor the malefactive exclusive passive, as in (11).<sup>s</sup> In this respect, Shuri is just like Korean. After all, it seems to be the case that Japanese has developed High Applicative higher than Voice as shown in (12) only in the main islands.

#### 4.2 Divergence of the auxiliary verbs of giving in Japanese and Korean

The fact that Korean does not allow either the auxiliary use of pat or the

<sup>&</sup>lt;sup>4</sup> According to Michinori Shimoji (p.c.), the same holds for Miyako, another Ryukyuan language.

exclusive passive does not mean that it does not have High Applicative at all. Although the verbs of receiving can be used as auxiliaries only in Japanese (section 2.3), the verbs of giving can be so used in both languages (section 2.2). Then, we have to decide the location of the auxiliary verbs of giving in the two languages.

Interestingly, while causativized verbs can productively be suffixed with (*-te*) yar in Japanese, some morphologically causativized verbs in Korean allow it, but others do not. First, the class of causativized verbs of eating (meals) and putting on (clothes) (call it the feed/dress class) may be embedded under *cwu* in Korean as well as *yar* in Japanese, as shown in (15)–(18).

(15) a.	John-ga	Mary-ni	gohan-o	tabe-sase-ta	(J)
	John-NOM	Mary-DAT	meal-ACC	eat-CAUS-PST	
	'John made	e/let Mary ea	at a meal.'		
b.	John-ga	Mary-ni	gohan-o	tabe-sase-te	<b>yar</b> -ta
	John-NOM	Mary-DAT	gohan-ACC	eat-CAUS-INF	give-PST
	'John made	e/let Mary ea	at a meal on	behalf of her.'	
(16) a.	John-ga	Mary-ni	huku-o	ki-sase-ta	(J)
	John-NOM	Mary-DAT	clothes-ACC	c put.on-CAUS	S-PST
	'John made	e/let Mary p	ut on clothes		
b.	John-ga	Mary-ni	huku-o	ki-sase-te	<b>yar-</b> ta
	John-NOM	Mary-DAT	clothes-A	CC put.on-cau	s-INF give-PST
	'John made	e/let Mary p	ut on clothes	on behalf of he	er.'
(17) a.	John-i	Mary-eykey	v pap-ul	mek-i-ess-ta	(K)
	John-NOM	Mary-DAT	meal-ACC	eat-CAUS-PST	-DCL
	'John made	e/let Mary ea	at a meal.'		
b.	John-i	Mary-eykey	v pap-ul	mek-ye c	w <b>u</b> -ess-ta
	John-NOM	Mary-DAT	meal-ACC	eat-CAUS g	ive-PST-DCL
	'John made	e/let Mary ea	at a meal on	behalf of her.'	
(18) a.	John-i	Mary-eykey	v os-ul	ip-hi-ess-ta	(K)
	John-NOM	Mary-DAT	clothes-A	CC put.on-CAUS	S-PST-DCL
	'John made	e Mary put o	on clothes.'		
b.			v os-ul		cwu-ess-ta
				CC put.on-CAUS	s give-PST-DCL
	'John made	e Mary put o	on clothes on	behalf of her.'	

It looks as if the Korean cwu in (17) and (18) behaves exactly in the same way as the Japanese yar in (15) and (16). However, if causativized transitive verbs of some other class are to be embedded under yar and cwu, they diverge. In (19)–(22), the verbs of reading and grabbing are causativized in the a-examples, and, in each b-example, they are embedded under yar and cwu.

(19)a.	John-ga	Mary-ni	manga-o	yom-ase-ta	(J)
	John-NOM	Mary-DAT	comic book-ACC	read-CAUS-P	ST
	'John made	e/let Mary re	ad a comic book.'		
b.	John-ga	Mary-ni n	nanga-o y	om-ase-te	yar-ta
	John-NOM	Mary-DATC	omic book-ACC r	ead-CAUS-INF	give-PST
	'John made	e/let Mary re	ad a comic book o	on behalf of her	.'
(20) a.	John-ga	Mary-ni	enpitu-o tuka	am-ase-ta	(J)
	John-NOM	Mary-DAT	pencil-ACC gral	D-CAUS-PST	
	'John made	e/let Mary w	rite doodles.'		
b.	John-ga	Mary-ni	enpitu-o tukan	n-ase-te yar-	-ta
	John-NOM	Mary-DAT	pencil-ACC grab-	CAUS-INF give	e-PST
	'John made	e/let Mary gr	ab a pencil on bel	nalf of her.'	
(21) a.	John-i		y manhwa chayk-		
			comic book-AC		S-PST
	'John made	e/let Mary re	ad a comic book.'		
b.			y manhwa chayk-		сжи-
	John-NOM	Mary-DAT	comic book-AC	c read-CAUS	s give-
	ess-ta				
	PST-DCL				
			ary read a book or		,
(22) a.	John-i		yenphil-ul cap		(K)
			pencil-ACC gral	D-CAUS-PST-DC	L
			ab a pencil.'		
b.	*John-i		yenphil-ul cap	•	
			pencil-ACC gral		
			ary grab a pencil o		
	((21b) and	(22b) from H	Kim 1998: 454 wi	th modification	)

As shown in (19b) and (20b), the causativized forms of *yom* 'read' and *tukam* 'grab' can further be embedded under *yar* in Japanese. On the other hand, although the Korean equivalents *ilk* and *cap* can be causativized as shown in (21a) and (22a), neither can further be embedded under *cwu*, as shown in (21b) and (22b). The contrast between (19b) and (20b), on the one hand, and (21b) and (22b), on the other, calls for a principled account.

Recall that both Japanese and Korean instantiate the phase-selecting Cause in (7c), i.e. that which selects VoiceP with EA (Actor) (see section 3.2 above). If the Korean High Applicative whose exponent is *cwu* were able to appear as high as the Japanese counterpart, (21b) and (22b) would be no worse than (19b) and (20b), contrary to fact.

#### 4.3 How high are the verbs of giving in Japanese and Korean?

#### 4.3.1 How high is yar in Japanese?

Since Japanese has developed High Applicative above Voice (see section 4.1), the most plausible location of the auxiliary *yar* is there. If this is on the right track, the causativized transitive verb embedded under *yar* in (19b), for instance, can be represented in the following way.

# (23) [H-ApplP John<sub>1</sub>[Sentient] [CauseP e<sub>1</sub>[Cause] [VoiceP Mary<sub>[Actor]</sub> [VP comic book read] Voice] sase] **yar**]

In (23), the transitive verb *yom* 'read' takes a comic book as its IA (Theme), and active Voice introduces Mary as EA (Actor). Furthermore, VoiceP with EA is embedded under *-sase* as an instance of the phase-selecting Cause in (7c). Finally, CauseP is embedded under *yar* as High Applicative, which is specified with [benefactor].

Under normal circumstances, Mary is taken for the beneficiary of the event of John's letting her read a comic book depicted in (19b). However, this is not necessarily the case. For instance, if a third person, say, Bill, incessantly asked John to let Mary read a comic book, the event depicted in (23) may be exercised on behalf of Bill. Now compare (24a, b) and (24c).

(24)	a.	John-wa Mary-ni hasir-te moraw-ta
		John-TOP Mary-DAT run-INF receive-PST
		'John had Mary run on behalf of him.'
	b.	John-wa Mary-ni hasir-are-ta
		John-TOP Mary-DAT run-PASS-PST
		'John was adversely affected by Mary's running.'
	c.	John-wa (*Mary-ni) hasir-te yar-ta
		John-TOP Mary-DAT run-INF give-PST
		'(int.) John ran on behalf of Mary'

It is obvious that John in (24a) is the beneficiary, and in (24b) is the one who is adversely affected. However, in (24c) with *yar*, the beneficiary cannot be expressed.<sup>9</sup> Although (24c) without *Mary-ni* 'Mary-DAT' is perfectly acceptable, and it can mean that John ran on behalf of somebody, and that

<sup>&</sup>lt;sup>1</sup> If the speaker intends to express the beneficiary, he or she will use *moraw* instead of *yar*, as in the following:

Mary-wa John-ni hasir-te moraw-ta Mary-TOP John-DAT run-INF receive-PST 'Mary had John run on behalf of her.'

somebody can be Mary if Mary had asked him to run for her.<sup>10</sup> As a result, *yar* as High Applicative specifies the benefactor, but not the beneficiary of the event depicted by the sentence. At this point, we may propose another spell-out rule in (25) in addition to (13a, b).

(25) {H-Appl, Sentient, [benefactor]} <--> /yar/

#### 4.3.2 How high is cwu in Korean?

Recall that, among morphologically causativized verbs, verbs of the feed/dress class (i.e. *mek-i* 'eat-caus' and *ip-hi* 'put.on-caus') may further be embedded under *cwu*, but others (e.g. *ilk-hi* 'read-caus' and *cap-hi* 'grab-caus') may not (see section 4.2). This contrast can be accounted for if the following assumptions are made.

- (26) a. High Applicative in Korean is lower than Voice but higher than VP (i.e. as high as proposed by Pylkkänen 2008 and McGinnis 2001).
  - b. The Root-selecting or Verb-selecting Cause in (7a, b) may license Low Applicative.

While the causative morpheme attached to verbs of reading and grabbing as in (21) and (22) is unambiguously an instance of the phase-selecting Cause, the causative morpheme attached to verbs of eating and putting on as in (17) and (18) may select for a Root or V as well as a phase.

According to Pylkkänen (2008) and McGinnis (2001), while Low Applicative is below VP, High Applicative is higher than VP (but lower than VoiceP); furthermore, they claim that the core semantics of Low Applicative is transfer of possession, but that of High Applicative has wider possibilities, including beneficiary, instrument, etc. Given (26), (17b), for instance, may be schematically represented as follows.

(27) [<sub>VoiceP</sub> John<sub>[Actor]</sub> [<sub>H-ApplP</sub> Mary<sub>2[Sentient]</sub> [<sub>VP</sub> [<sub>L-ApplP</sub> e<sub>2[Goal]</sub> meal L-Appl] eat<sup>^</sup>Cause] **cwu**] Voice]

In (27), the verb stem *mek* 'eat' together with the causative morpheme i licenses Low Applicative, whose semantics is transfer of possession. Actually, Mary can be taken for a passive, rather than active, participant of

<sup>\*</sup>According to Shibatani (1996), the beneficiary argument in the dative case is licensed if the verb meaning meets the *give*-schema. Hence, he argues that his cognitive account is preferred over a structural account. However, his *give*-schema can be interpreted as the semantics of Low Applicative in the sense of Pylkkänen (2008) and McGinnis (2001), to which we will turn in section 4.4.

John's feeding event. This is supported by the existence of sentences like the following.

(28) a.	John-un	ayki-eykey	wuywu-lul	mek-i-ess-ta
	John-TOP	baby-DAT	milk-ACC	eat-CAUS-PST-DCL
	'John fed	a baby with r	nilk.'	
1	* 1			

b. John-un inhyeng-ey os-ul ip-hi-ess-ta John-TOP doll-DAT clothes-ACC put.on-CAUS-PST-DCL 'John dressed a doll (with some clothes).'

Usually, neither newborn babies nor dolls are taken to be active agents of events. The causativized verbs in (28a, b) allow the participants in the dative case to be interpreted as goals of milk and clothes, respectively, transferred by John.

Our claim is further evidenced by *caki*-binding. It is generally agreed that the antecedent of *caki* in Korean (and, for that matter, that of *zibun* in Japanese as well) should be EA, i.e. outside of VP (Aoyagi 2020).<sup>10</sup> Consider the following pairs of examples.

				<i>swukalak-ulo</i> spoon-with					
	сжи	5							
-	CAUS give-PST-DCL								
	-		eal with hi	is/her spoon.'					
		•		swukalak-ulo	nan ul	mek-			
		5	sen	spoon-with	meal-ACC	eat-			
-	сти-е								
	0	PST-DCL							
'Joh	n had a	baby eat a r	neal with l	his/??its spoon.	,				
(30) a. John	ı <sub>1</sub> -un M	<i>Aary</i> <sub>1</sub> -eykey	caki <sub>1,2</sub>	os-ul	ip-hye				
Johi	I-TOP N	/lary-DAT	self	clothes-ACC	put.on-CAU	S			
сwu	-ess-ta	-			-				
give	-PST-DC	CL							
U		fary put on l	his/her ow	n clothes.'					
				os-ul	in-hve				
				clothes-ACC		S			
	-ess-ta	OII-DAI	5011	ciotiles-Acc	put.on-cao	5			
		T							
U	-PST-DC		l. :/₩:						
Joh	n had a	doll put on	nis/~its ow	in clothes.					

In (29a) and (30a), Mary as well as John may antecede caki. On the other

<sup>&</sup>quot; See Aoyagi (2020) for relevant discussions.

hand, neither *ayki* 'baby' in (29b) nor *inhyeng* 'doll' in (30b) is a sound antecedent. Although *ayki* and *inhyeng* as well as Mary can be a goal of transfer of possession licensed in Spec of Low Applicative, only Mary can be raised to Spec of High Applicative because High Applicative assigns Sentient to its Spec.

(31) [VoiceP John[Actor] [H-ApplP Mary<sub>2</sub>[Sentient] [VP [L-ApplP e<sub>2</sub>/doll<sub>3</sub>[Goal] self<sub>2,\*3</sub> clothes L-Appl] put.on^Cause] **cwu**] Voice]

In (31), Mary in (30a) as a mental state holder may raise to Spec of High Applicative, but *inhyeng* may not.<sup>12</sup> Since Mary in Spec of High Applicative counts as EA, it may bind *caki*. However, since *inhyeng* stays within VP, it may not be qualified as a possible antecedent of it.

## 4.4 Verbs of giving as Low Applicative

Finally, we will go back to our earlier examples in (2) and (3). Recall that the bare verbs of reading in Japanese and Korean do not well accommodate an argument in the dative case (Mary), as shown in (2a) and (3a) above; however, their marginal status is resolved if the auxiliary verbs of giving are added, as in (2b) and (3b).

One might be tempted to extend the analysis in (31) to these cases. However, (30a) is crucially different from (2b) or (3b) at least in two independent respects. First of all, the complex verb *ip-hi* 'put on-caus' in (30a) (and *mek-i* in (29a) as well) is triadic; hence, it may license Low Applicative. On the other hand, the simple verbs of reading *yom* in (2) and *ilk* in (3) are dyadic, and they may not license Low Applicative on their own.

Secondly, while the reflexive anaphor *caki* may be anteceded by Mary in (30a), neither *caki* nor *zibun* may be anteceded by Mary in (2b) or (3b), as illustrated in the following examples.

Mary<sub>2</sub>-ni zibun<sub>1,\*2</sub>-no heya-de hon-o (32)a. John<sub>1</sub>-ga yom-te (J) John-NOM Mary-DATself-GEN room-in book-ACC read-INF var-ta give-PST 'John read a book aloud to Mary in his/\*her room.' b. John<sub>1</sub>-i Mary<sub>2</sub>-eykey caki<sub>1,\*2</sub> pang-eyse chayk-ul ilk-e (K) John-NOM Mary-DAT self room-in book-ACC read-INF cwu-ess-ta give-PST-DCL

<sup>&</sup>lt;sup>a</sup> One Korean-speaking informant reports that *ayki* 'baby' can more or less be taken for a mental state holder, probably to a lesser degree than an adult, hence, (29b) is better than (30b).

Although Mary can be an antecedent of *caki* in (29a) and (30a) above, it can antecede neither *zibun* in (32a) nor *caki* in (32b). This suggests that the analysis in (31) cannot be applied to (2b) or (3b).

At a closer look, we will, furthermore, notice that the interpretation of Mary in (2b) and (3b) is not exactly equal to that of a beneficiary per se. Imagine a scenario such that Mary has an ambition to become a professional writer, she has recently published her first book, and she has incessantly asked John, a well-known writer, to read the book and give her feedback. Under such a scenario, one may not utter (2b) or (3b), but (33a, b).

- (33) a. John-wa Mary-no tame-ni hon-o yom-te yar-ta (J) John-TOP Mary-GEN benefit-for book-ACC read-INF give-PST 'John read the book for the benefit of Mary.'
  - b. John-un Mary-lul wuyhay(se) chayk-ul ilk-e cwu-ess-ta (K) John-TOPMary-ACC benefiting book-ACC read-INF give-PST-DCL

What (2b) and (3b) exactly mean is that John read a book aloud so that Mary would listen. In other words, Mary is the goal of the content of the book that John recited. This is an instance of transfer of possession that the semantics of Low Applicative induces.

Based on these observations, I will propose that the verbs of giving in (2b) and (3b) are adjoined to (or base-Merged with) the main verb, so that Low Applicative is licensed as shown below.

(34) [VoiceP John[Actor] [VP [L-ApplP Mary[Goal] book L-Appl]^read^give] Voice

In (34), Mary is introduced by Low Applicative licensed by the auxiliary verbs of giving,<sup>13</sup> i.e. *yar* in Japanese and *cwu* in Korean, together with the main verb of reading, and assigned a goal role, but not a beneficiary role. Since Mary stays within VP, it may not antecede a reflexive anaphor.

## 5 Conclusion

In this paper, I have provided further support for Aoyagi's (2010) claim that High Applicative in Japanese is higher than Voice. In addition to the auxiliary use of the verb of giving *moraw* and the exclusive passive *-rare*, the auxiliary use of the verb of giving *yar* also instantiates High Applicative. On the other hand, the auxiliary use of the verb of giving in Korean *cwu* 

<sup>&</sup>lt;sup>10</sup> The semantics of V itself plays a crucial role in licensing Low Applicative. Although we have to leave the exact nature for future research, it seems to be the case that verbs of creation, including those of reading (aloud), making, baking, etc., have such a potential, but verbs of consumption, including those of eating, drinking, burning, etc., do not.

appears lower than Voice but higher than V. Furthermore, I have suggested that both *yar* and *cwu* may license Low Applicative as well. As a result, dyadic verbs will be able to introduce a third argument (Goal).

## References

- Aoyagi, H. 2010. On the asymmetry in passives between Japanese and Korean. *JELS* 7:11–20.
- Aoyagi, H. 2017. On verb-stem expansion in Japanese and Korean. Japanese/ Korean Linguistics 24: 1–14.
- Aoyagi, H. 2019. On the syntax of causatives in Korean. Proceedings of GLOW in Asia XII and Seoul International Conference in Generative Grammar 24. 21–39.
- Aoyagi, H. 2020. On the peculiar nature of double complement unaccusatives in Japanese. *Journal of Japanese Linguistics* 36: 1–45.
- Aoyagi, H. 2021. On the causative and passive morphology in Japanese and Korean. *Open Linguistics* 7: 87–110.
- Borer, H. 2005. *The Normal Course of Events (Structuring Sense, Vol II)*. London: Oxford University Press.
- Cinque, G. 1999. Adverbs and Functional Heads: A Cross-Linguistic Perspective. New York: Oxford University Press.
- Fukuda, S. 2012. Aspectual verbs as functional heads: Evidence form Japanese aspectual verbs. *Natural Language and Linguistic Theory* 30: 965–1026.
- Haspelmath, M. 1990. The grammaticization of passive morphology. *Studies in Language* 14 (1). 25–72.
- Hattori, S. 1999. The Origin of Japanese. Tokyo: Iwanami.
- Keenan, E. L. and M. S. Dryer. 1985. Passive in the world's languages. Language Typology and Syntactic Description (Vol. I: Clause Structure), ed. T. Shopen, 325–361. Cambridge: Cambridge University Press.
- Kim, A. R. 1998. VP complement of HI-passives. Japanese/Korean Linguistics 8: 445–458.
- Kratzer, A. 1996. Severing the external argument from its verb. *Phrase Structure and the Lexicon*, ed. J. Rooryck and L. Zaring, 109–137. Dordrecht: Kluwer.
- McGinnis, M. 2001. Variation in the phrase structure of Applicatives. *Linguistic Variation Yearbook* 1: 105–146.
- Pellard, T. 2012. Period of split off of the Ryukyuan languages. Paper presented at the *Workshop on Comparative Studies of the Ryukyuan Languages and the Ancient Japanese*, Kyoto University.
- Pylkkänen, L. 2008. Introducing Arguments. Cambridge, MA: MIT Press.
- Reinhart, T. 2016. Concepts, Syntax, and Their Interface. Cambridge, MA: MIT Press.

- Rizzi, L. 1997. The fine structure of left periphery. *Elements of Grammar*, ed. L. Haegeman, 281–337. Dordrecht: Foris.
- Roberts, I. and A. Roussou. 2003. *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge: Cambridge University Press.
- Shibatani, M. 1994. Benefactive constructions: A Japanese–Korean comparative perspective. *Japanese/Korean Linguistics* 4: 39–74.
- Shibatani, M. 1996. Applicatives and benefactives: A cognitive account. Grammatical Constructions: Their Form and Meaning, ed. M. Shibatani and S. A. Thompson, 157–194. Oxford: Oxford University Press.
- Toyama, N. 2014. The semantic structure of the passive in the Syuri dialect and benefactives. *International Review of Ryukyuan and Okinawan Studies* 3: 11–25.
- Travis, L. 2010. Inner Aspect: The Articulation of VP. Berlin: Springer.
- Washio, R. 1993. When causatives mean passive: A cross-linguistic perspective. *Journal of East Asian Linguistics* 2: 45–90.
- Wurnbrand, S. and K. Shimoyama. 2017. The features of the voice domain: Actives, passives, and restructuring. *The Verbal Domain*, ed. R. D'Alessandro, I. Franco, and Á. J. Galleco, 153–178. Oxford: Oxford University Press.
- Yamaguchi, K. 2018. A historical study of the passive in the Edo period. *Nihongo Bunpō* 18: 93–109.