## **Double-***v***P** structures in Japanese "Category: (3) Formal syntax"

**Introduction**: Causative constructions in Japanese have a long tradition in the generative syntactic literature (Kuroda 1965, Shibatani 1972, Inoue 1976, Marantz 1984, Miyagawa 1999; 2010, Harley 2008, a.o.). One of the important issues is the fact that causative transitive verbs (e.g., *tabes-ase-ru* 'make-eat') are not compatible with a multiple accusative construction (Harada 1973; 1975, Hiraiwa 2010, a.o.) as in (1a), marking a sharp contrast with its Korean counterpart (Maling and Kim 1992, Jung and Miyagawa 2004, a.o.), as in (1b). However, causative motion verbs in Japanese (e.g., *aruk-ase-ru* 'make-walk') allow for multiple accusatives as given in (1c). Despite the fact that this peculiar case array has been recognized in the literature (Miyagawa 1999), no serious attempt has been made to clarify its property. This paper argues that (i) the case similarity of (1b) and (1c) is only superficial and the structure of (1b) and (1c) are clearly different; and (ii) (1c) has the same structure as the V-V compound with motion verbs in Japanese.

(1) a. *	*Taro-ga	Hanako-o	1	tabes-ase-ta
	Taro- <sub>NOM</sub>	Hanako- <sub>ACC</sub>	pizza- <sub>ACC</sub>	eat- <sub>CAUSE-PAST</sub>
	'Taro made	e Hanako eat a	few slices of	`pizza'
b.	John-i	Mary-lul	pica-lul	mek-i-ess-ta
	John- <sub>NOM</sub>	Mary- <sub>ACC</sub>	pizza- <sub>ACC</sub>	eat- <sub>CAUSE-PAST-DECL</sub>
	'John caus	ed Mary eat p	izza'	(Jung and Miyagawa 2004, (19), modified)
с.	Taro-ga	Hanako-o	hamabe-o	aruk-ase-ta
	Taro- <sub>NOM</sub>	Hanako- <sub>ACC</sub>	beach-ACC	walk-cause-past
	'Taro made	Hanako walk	on the beach	i' (Miyagawa 1999: 262, (73))

**Jung and Miyagawa (2004)**: Jung and Miyagawa (2004: (35)) propose a single vP like (2) for the Korean double accusative construction, where v is a causative verb assigns the structural accusative case to both the causee and the theme.

(2) [ $_{\nu P}$  DP(causer/agent) [ $_{PP}$  DP(causee/possessor) DP(theme) P<sub>HAVE</sub> ]  $v_{CAUSE}$ ] {ACC...} {ACC...} {ACC...}

They take the existence of multiple passive, as in (3b), as evidence. This is because when a passive morpheme absorbs the case-assigning ability of v and the agent is suppressed (Burzio 1986), both the causee and the theme become case-less. Hence, they are visible for T to probe.

(3) a. Mary-ka	John-ul	os-ul	ip-hi-ess-ta
Mary- <sub>NOM</sub>	John-ACC	clothes-ACC	put.on- <sub>CAUSE-PAST-DECL</sub>
'Mary made	John put o	n clothes'	
b. John-i	os-i	ip-hie-	-ci-ess-ta
John- <sub>NOM</sub>	clothes-	NOM put.or	<b>D-</b> CAUSE-PASS-PAST-DECL
'John was	made put o		(Jung and Miyagawa 2004, (33))

Jung and Miyagawa further argue that the *lul*-marked goal represents a possessor/affected goal, which is captured by the prepositional head  $P_{HAVE}$  in the PP that associates the causee with the theme.

The syntax and semantics of causative motion verbs: It is well-known that the *o*-causative (or the direct causative) (Kuroda 1965, a.o.) in Japanese includes the causee affected. Thus, we say that both Korean and Japanese causative construction share the same thematic information. What is crucially different is their syntax. As given in (4), a multiple passive with causative motion verbs is disallowed, in contrast to (3b).

(4) *Hanako-ga	(Taro-niyotte)	hasigo-ga	nobor-ase-rare-ta		
Hanako- <sub>NOM</sub>	(Taro-by)	ladder- <sub>NOM</sub>	climb- <sub>CAUSE-PASS-PAST</sub>		
'Hanako <sub>{NOM}</sub> was made to climb the ladder <sub>{NOM}</sub> (by Taro)'					

This may indicate that the path accusative is not assigned structural case by v; thus, it may be inherently-marked by a postposition o. However, the fact that it licenses a floating of NQ (Numeral Quantifier) as in (5) indicates that o is a case marker, not a postposition (Miyagawa 1989, Ura 2000, a.o.).

(5)	a.	Taro-wa	Kenji-o	fu-tatsu-no	hasigo-o	nobor-ase-ta		
		Taro- <sub>TOP</sub>	Kenji- <sub>ACC</sub>	2-nq-gen	ladder-ACC	climb- <sub>CAUSE-PAST</sub>		
	b.	Taro-wa	Kenji-o	hashigo-o	o fu-tatsu	nobor-ase-ta <sub>( vNQF)</sub>		
		Taro- <sub>TOP</sub>	Kenji-ACC	ladder-AG	<sub>CC</sub> 2- <sub>NQ</sub>	climb- <sub>CAUSE</sub> -PAST		
	'Taro made Kenji climb two ladders'							

Furthermore, the path accusative patterns on a par with transitive objects with respect to the *soo-su* 'do so' substitution. It is widely assumed that *soo-su* is a pro-form for a VP or V' (Shibatani 1990, a.o.). Thus, if a DP is a sister of  $V^0$  it must be replaced by *soo-su* in conjunction with  $V^0$ . As in (6b), the path cannot be outside of this pro-form, which in turn means that it is a complement of  $V^0$ .

(6) a.		aro-wa Hanako-o		,			
	Taro- <sub>TOP</sub>	Hanako- <sub>ACC</sub>	ladder-ACC	climb- <sub>CAUSE</sub>	Jiro-also	so-do- <sub>PAST</sub>	
	'Taro mad	e Hanako climb	the ladder.	Jiro did so, too	'		
b.	*Taro-wa	Hanako-o	hasigo-o	nobor-ase,	Jiro-mo	kaidan-o	soo-si-ta
	Taro- <sub>TOP</sub>	Hanako- <sub>ACC</sub>	ladder-ACC	climb- <sub>CAUSE</sub>	Jiro-also	stair-ACC	SO-SO-PAST
	'Taro mad	e Hanako climł	the ladder.	(lit.) Jiro did so	o the stairs,	too'	

The structure for causative motion verbs: Although the path accusative patterns with the run-of-the-mill object, it cannot be passivized with the causee. I argue that this is because causative motion verbs exhibit a layered vP like (7), in contrast to a single vP like (2), following the previous literature for the *ni*-causative with transitive verbs (Marantz 1984, Harley 2008, a.o.). When the passive morpheme absorbs the case ability of the higher v, the outer DP (causee) becomes case-less. However, because the lower v constitutes another verbal projection, the inner DP (path) is intact by this operation.

(7) [ $_{\nu P}$ DP(causer)	$[_{\nu P} DP(causee)$	$[_{VP} DP(path) V]$	v]	$v_{\text{CAUSE}}$ ]
	{ACC}	{ACC}	{ACC	} { <del>ACC</del> }

This proposal is supported by the fact that V-V compounds with motion verbs (e.g., *tabe-aruku* 'to make an eating tour'). Although they allow a multiple accusative case array on a surface as (8a) shows, they are incompatible with a multiple nominative structure as in (8b), patterning with causative motion verbs.

(8) a.	Ken-wa [	[ <sub>vP1</sub> z	enkokukakuchi-o	vP2	raamen	-0	tabe] -arui] -ta
	Ken- <sub>TOP</sub>		all.over.Japan-ACC		ramen	noodle-ACC	eat-walk-PAST
	'Ken visited	l vario	us cities in Japan to	o eat r	amen no	odle'	(Hiraiwa (2010:747, (79))
b.	*Zenkokuka	kuchi-	ga (Ken-niyotte)	raai	nen-ga	tabe-aruk-ar	re-ta
	all.over.Japa	an- <sub>NOM</sub>	(Ken-by)	ram	en- <sub>NOM</sub>	eat-walk-PA	SS-PAST
	'Various cit	ies in	$Japan \{NOM\}$ was vi	sited (	by Ken)	to eat ramen	$n noodle \{NOM\}$

**Conclusion/Implications**: I have demonstrated that Japanese causative motion verb construction involves the double-*v*P structure, as well as the V-V compound with motion verbs. The structure is sharply different from Korean double accusative construction that has the single *v*P structure.

## **Selected references**

Harley, H. 2008. On the causative construction. In Oxford handbook of Japanese linguistics, eds. S. Miyagawa and M. Saito, 20-53. Oxford: Oxford University Press.
Lung, Y. L. and S. Miyagawa. 2004. Decomposing dimensitive works. In Proceedings of SIGCC.

Jung, Y-J., and S. Miyagawa. 2004. Decomposing ditransitive verbs. In Proceedings of SICGG.