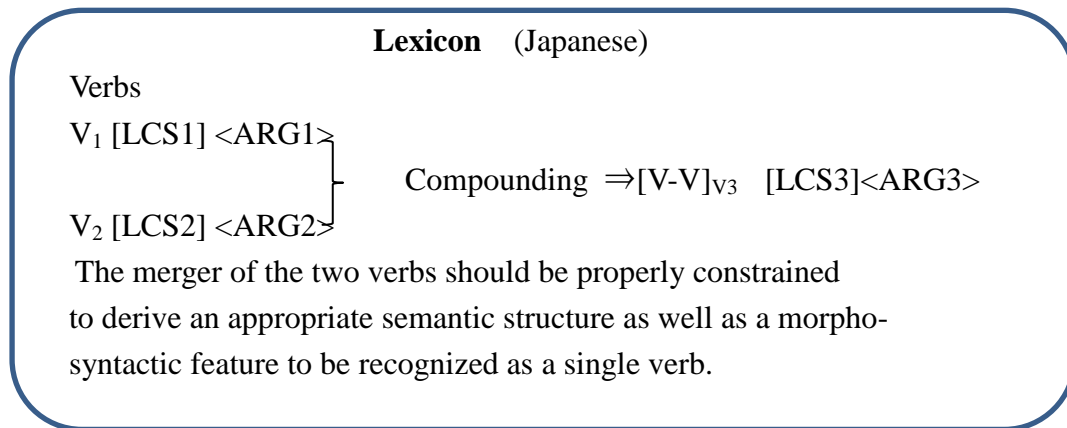


Motivations and Restrictions of Lexical V-V Compounding in Japanese

Yoko Yumoto (Osaka University)

1. Introduction

If we follow the assumption of modularity of word formation (cf. Kageyama 1993, Yumoto 2005) and if there exist such things as the well-formedness conditions on a semantic structure as well as a morpho-syntactic structure of a single predicate, the output of Japanese lexical V-V compounding which belongs to the lexicon should conform to such conditions. For example, lexical V-V compounds would not deviate from the ordinary event structures of verbs represented as in (1). Thus a variety of semantic functions or meanings of the V2's described in the literature as in Figure1 should be reduced to a few limited patterns of semantic merger of the two verbs which explain both the productive mechanism and the constraints of V-V compounds.



- (1) a. [_{STATE} x BE AT/IN/ON y] (stative)
- b. [_{EVENT} y BECOME [y BE AT-z]] (achievement)
- c. [_{EVENT} [x ACT ON-y]] (activity)
- d. [_{EVENT} [x ACT ON-y]] CAUSE [_{EVENT} y BECOME [y BE AT-z]] (accomplishment)
- e. [_{EVENT} x GO_{manner} [_{PATH} FROM y TO z]] (motion)

Assumptions

1. Japanese V-V compounds are right-hand headed in principle.
2. The semantic arguments (variables) of the predicate should be fully interpreted either by syntactic realization or by lexicalization.
3. In the productive lexical V-V compounding the semantic relation between the two verbs is either modification (attributive) or predication (subordinate) which are the major relations observed in the complex word in general (cf. Spencer 1991, Kageyama 1993, Lieber 2009, Scalise & Bisetto 2009).

c. *hai-agaru* ('climb+go up'=climb up)

LCS: $v_2[x \text{ GO}_{\text{manner}} \text{ UP}]$

↑ $v_1 [x \text{ ACT}_{\text{crawling}}]$

or

LCS : $v_2[[x \text{ ACT}] \text{ CAUSE } [x \text{ MOVE TO-}y]]$

↑ $v_1 [x \text{ ACT}_{\text{crawling}}]$

Cf. *climb* : $\left(\begin{array}{l} x \text{ GO } ([\text{PATH} \text{ UPWARD}]) \\ ([\text{Manner} \text{ CLAMBERING}]) \end{array} \right)$

(Jackendoff 1985)

2.2 Satisfaction of the argument of the V2 by an eventive argument

(A-②a) V2 keeps its original meaning

e.g. *tukai-hatasu* (=use+achieve 'use up'), *naki-yamu* (=cry+stop 'stop crying')

(TYPE 1)

(A-②b) V2 undergoes semantic shift or bleaching so that it can select an event represented by the V1 (it might appear to serve as an auxiliary)

(TYPE 2)

e.g. *sasoi-kakeru* (=invite+pour 'tempt'), *tukuri-ageru* (=make+ raise 'complete'), *yobi-kawasu* (=call+exchange 'call to each other')

(4) a. *nomi-wasureru* (=drink+forget), *tabe-sokonau* (=eat+fail), *utai-hazimeru*

(=sing+begin), *aruki-tuzukeru* (=walk+continue), *kaki-oweru* (=write+finish)

b. *kaki-morasu* (=write+forget), *uti-hatasu* (=defeat-accomplish), *sasoi-kakeru* (=invite+pour), *kiki-otosu* (=hear+miss)

c. *kusuri o nomi-wasureru* = [*kusuri o nomu no*] *o wasureru*
 medicine ACC drink-forget medicine ACC drink Nom. ACC forget

('forget to take medicine')

(5) a. *hukushuu o hatasu* 'carry out revenge' / ***tukai-hatasu*** 'use up'
 revenge ACC accomplish / use-accomplish

b. {*shakkuri/ame*} *ga yamu* 'the {hiccups/rain} has stopped'

/ ***naki-yamu*** 'stop crying'

hiccup / rain NOM stop / cry-stop

(6) a. *taki-bi ni mizu o kakeru* 'to pour water over fire'
 fire on water ACC pour

b. *onnna ni saiminjutu o kakeru* 'to practice hypnotism on a woman'
 woman to hypnotism ACC direct

c. *onnna ni sasoi o kakeru* 'to tempt a woman'
 woman to temptation ACC direct

d. *onnna ni sasoi-kakete sake o nomi-ni itta*. 'tempt a woman to go for a drink'
 woman to tempt-direct sake ACC drink go-PAST

2.3 Semantic shift and bleaching of the V2

Once the use of a verb in a V-V compound as the V2 gets established, it undergoes semantic shift (or conversion) and serves as an auxiliary verb which specifies Aktionsart of the V1 (TYPE 2).

However we don't have to consider such verbs to have two lexical entries, one with the original meanings and one used as the V2 in V-V compounds. Rather there is continuity between two usages. If we assume a dynamic mechanism in interpretation of a lexical item proposed by Generative Lexicon (Pustejovsky 1995), most V-V compounds where the V2's are used as TYPE 2 can be interpreted based on the original meaning of the V2.

(7) a. (VI) *kake*('run')-komu, *donari*('roar')-komu, *tobi*('jump')-komu

(VT) *naguri*('hit')-komu, *moti*('have')-komu, *nui*('sew')-komu

b. (VT) *kari*('trim')-komu, *ni*('stew')-komu, *yomi*('read')-komu

(VI) *nemuri*('sleep')-komu, *suwari*('sit')-komu, *hie*('get cold')-komu,

c. *komu* $\left[\begin{array}{l} \text{constitutive : } [[x \text{ ACT ON } y] \text{ CAUSE } [[y] \text{ BECOME } [y \text{ BE } [\text{IN-}z]]]] \\ \text{formal : in } (e_2, y, z) \\ \text{agentive : move_act}_{\langle \text{MANNER} \rangle} (e_1, x, y) \end{array} \right]$

(8) a. *kakeru* 'run' $\left[\begin{array}{l} \text{constitutive : } [x \text{ move}_{\langle \text{running manner} \rangle}] \\ \text{telic : at } (e_2, y, z) \end{array} \right]$

b. *kake-komu* 'run into'

$\left[\begin{array}{l} \text{constitutive : } v_2 [[x_i \text{ ACT ON } y_i] \text{ CAUSE } [y \text{ BECOME } [y \text{ BE } [\text{IN-}z]]] \\ \quad \quad \quad \swarrow v_1 [x_i \text{ ACT}_{\text{running}}] \\ \text{formal : in } (e_2, y_i, z) \\ \text{agentive : move_act}_{\langle \text{MANNER} \rangle} (e_1, x = y_i) : \underline{\text{run}} (e_1, x_i) \end{array} \right]$

(9) a. *nageru* 'throw' $\left[\begin{array}{l} \text{constitutive : } [[x \text{ ACT ON } y] \text{ CAUSE } [y \text{ MOVE}]] \\ \text{telic : at } (e, y, z) \end{array} \right]$

b. *nage-komu* 'throw into'

$\left[\begin{array}{l} \text{constitutive : } v_2 [[x_i \text{ ACT ON } y_j] \text{ CAUSE } [[y_j \text{ BECOME } [y_j \text{ BE } [\text{IN-}z]]]] \\ \quad \quad \quad \swarrow v_1 [[x_i \text{ ACT ON } y_j] \text{ CAUSE } [y_j \text{ MOVE}]] \\ \text{formal : in } (e_2, y_j, z) \\ \text{agentive : move_act } (e_1, x_i, y_j) \end{array} \right]$

(10) a. *karu* 'trim' $\left[\begin{array}{l} \text{constitutive : } [x \text{ ACT}_{\text{cutting}} \text{ ON } y] \\ \text{telic : at } (e_2, y, z: \underline{\text{SHORT}} [+gradable]) \end{array} \right]$

b. *kari-komu* 'prune'

$$\left(\begin{array}{l} \text{constitutive : } v_2 [x_i \text{ ACT ON } y_j] \text{ CAUSE}_{\text{Ident}} [[y_j] \text{ BECOME } [y_j \text{ BE } [\text{IN-}z]]]] \\ \text{formal : in } (e_2, y_i, z: \text{SHORT}) \end{array} \right)$$

$v_1 [x_i \text{ ACT}_{\text{cutting}} \text{ ON } y_j]$

- (11) a. *nemuru* ‘sleep’ $\left(\begin{array}{l} \text{constitutive : } [x \text{ ACT}] \\ \text{formal : at } (e, x, \text{asleep}) \end{array} \right)$
- b. *nemuri-komu* ‘fall asleep’ $\left(\begin{array}{l} \text{constitutive : } v_2 [[y_j] \text{ BECOME}_{\text{Ident}} [y \text{ BE } [\text{IN-}z]]] \\ \text{formal : in } (e_2, y_j, z: \text{ASLEEP}) \\ \text{agentive : } [x \text{ ACT}] \end{array} \right)$
- cf. (12)

When the V1 does not represent a motion in spatial field, the agentive role of *komu* is abstracted and the formal role is converted into another semantic field to match with the V1 (in the cases above Identificational). As a result the telic role or the formal role of the V1 can be composed into the formal role of the compound.

3. Unproductive but interpretable combination

(A-①) Specification of the cause or the presupposed event in the qualia structure of the V2 (Agentive role)

- Unproductive because the event represented by the V1 is not inserted in the LCS (or constitutive role); agentive role (and telic role) does not constitute a lexical meaning which is relevant to truth conditions. (cf. Hidaka 2012)

(12) a. *obore-sinu* ‘get drowned’

$$\left(\begin{array}{l} \text{constitutive : } v_2 [y \text{ BECOME } [y \text{ BE AT-DEAD}]] \\ \text{agentive : } v_1 [y \text{ BECOME } [y \text{ BE AT-DROWNED}]] \end{array} \right)$$

b. *nomi-tubureru*

$$\left(\begin{array}{l} \text{constitutive : } v_2 [y \text{ BECOME } [y \text{ BE AT-INSENSIBLE}]] \\ \text{agentive : } v_1 [y \text{ DRINK ALCOHOL}] \end{array} \right)$$

c. *ne-sizumaru* (=sleep + become quite ‘fall asleep’), *nige-useru* (=fly+disappear ‘run away’), *nuke-otiru* (=fall out+drop), *huri-tumoru* (=snow+pile up)

4. How the combination is restricted?

4.1 Restrictions attributed to proper argument realization and linking

- The identification of the subjects is a MUST in any type of V-V compounding including syntactic compounds with the proviso that the event represented by the V1 can be the subject of the V2.

(13) a. Taro ga uma ni nori-tukare-ta.

NOM horse on ride-tired-PAST.

‘Taro rode the horse (and as a result he got) tired.’

- b. *Inu ga doroboo o hoe-nige-ta.
 dog NOM robber ACC bark-run away-PAST
 ‘The dog barked the robber away.’
- c. Baoyu qi-lei-le ma
 ride-tired-asp horse
 ‘Baoyu rode the horse (and as a result he got) tired.’
 ‘Baoyu rode the horse (and as a result the horse got) tired.’ (Li 1990:187)

BUT there are a few exceptions...

- (14) a. Taro ga Ken kara kuruma o yuzuri-uke-ta.
 NOM fromcar ACC hand over-receive-PAST
 ‘Taro received a car from Ken who yielded it to him.’
- b. Yakata wa yatto ne-sizumat-ta.
 manor house TOP at last sleep-become calm-PAST
 ‘At last people in the manor house fell fast asleep’
- (15) a. VT+ VI: uti-agaru, turi-sagaru, tuki-sasaru, hari-tuku, yaki-agaru
 b. VT+VT: uti-ageru, turi-sageru, tuki-sasu, hari-tukeru, yaki-ageru
- (16) a. VI+VT: mai-ageru, tobi-tirasu, korogari-otosu
 b. VI+VI: mai-agaru, tobi-tiru, korogari-otiru
- All the arguments should be realized syntactically or lexically satisfied

- (17) a. Shorui o ie ni moti-kaeru.
 document ACC home to have-go back
- V1 motu : [x BE WITH y]
 V2 kaeru : [x GO BACK TO z] } moti-kaeru : [x GO_{manner} BACK TO z]
 } [x BE WITH y]
- ↓
 ARG : < x, y, z >

- b. Ken wa sensei o ii-makasi-ta.
 TOP teacher ACC say-defeat-PAST
 ‘Ken made the teacher lose an argument’
- V1 iu : [x SAY y to z]
 V2 makasu : [[x ACT ON y] CAUSE [y BECOME DEFEATED]] } ⇒
 ii-makasu : [[x SAY OPINION to z] CAUSE [z BECOME DEFEATED]]

↓
 ARG : < x, z >

- c. nomi-tubureru(=drink ALCOHOL-collapse ‘drink oneself into a stupor’),
 kui-tubusu(=eat SOMETHING-destroy ‘waste away (a fortune)’),
 ii-nogareru (=say SOMETHING-escape ‘dodge the issue’)

Not all the arguments of the two verbs should be coindexed

5. Concluding remarks

Lexical V-Vcompounding in Japanese is highly productive.

← Semantic shift and semantic bleaching of the V2

Cf. Tsukamoto (2012:228-242)

Only a small number of V2's have lost their original meanings and undergone grammaticalization to represent aspectual meanings.

On the other hand, it is restricted in the way of argument identification between the argument structures of the two verbs.

Cf. Chinese V-V compounds (Li 1990)

References

- Fukushima, K. 2008. On the type-wise productivity of lexical V-V compounds in Japanese: A thematic proto-role approach. *Gengokenkyu* 134:119-140.
- Hidaka, T. 2012. Word formation of Japanese V-V compounds. Ph.D. dissertation. Kobe Shoin Women's University.
- Himeno, M. 1999. *Hukugoo doosi no kooozoo to imi-yoohoo*. Tokyo: Hituzi shobo.
- Jackendoff, R. 1985. Multiple subcategorizations and the θ -criterion: The case of *climb*. *NLLT* 3:271-295.
- Kageyama, T. 1993. *Bunpoo to gokeisei*. Tokyo: Hituzi shobo.
- Li, Y. 1990. On V-V compounds in Chinese. *NLLT* 8:177-207.
- Lieber, R. 2009. A lexical semantic approach to compounding. In Lieber, Rochelle and Pavol Štekauer (eds.), *The Oxford handbook of compounding*, 78-104. Oxford: Oxford University Press.
- Matsumoto, Y. 1998. Nihongo no goiteki hukugoodoosi ni okeru doosi no kumiawase. *Gengokenkyu* 114:37-83.
- Nisio, T. 1988. *Gendai goi no kenkyu*. Tokyo: Meiji shoin.
- Pustejovsky, J. 1995. *The generative lexicon*. Cambridge, MA: MIT Press.
- Spencer, A. 1991. *Morphological theory: an introduction to word structure in generative grammar*. Oxford: Blackwell.
- Tsukamoto, H. 2012. *Keitairon to togoron no soogo-sayoo*. Tokyo: Hituzi shobo.
- Yumoto, Y. 2005. *Hukugoodoosi to haseidoosi no imi to toogo*. Tokyo: Hituzi shobo.

Figure 1 (Himeno 1999)

王な後項動詞の意味 先行研究の比較

	山本 (1983)	寺村 (1984)	城田 (1998)	影山 (93)	国研 (87)
合う	様態 : 複数主体	空間的相: 目標への動き	相互態	相互行為	273
上がる	アスペクト: 終了	空間的相: 上への動き	段階相: 終わり 完成		71
上げる	方向 : 上方 様態 : 程度 アスペクト: 終了 方向 : 上方	空間的相: 上への動き 密度、強度の相: 完成	段階相: 終わり 完成		129
飽きる			状態相: 倦厭	習慣	9
あぐねる			状態相: 渋滞	未遂	5
焦る			状態相: 躁急		1
誤る	錯誤: 失敗		状態相: 不首尾	未遂	1
改める			状態相: 再行・修正		5
歩く			状態相: 旺盛・強化		33
急ぐ			状態相: 躁急		5
入る	方向: 内部				58
得る			可能態	可能	432
終える	アスペクト: 終了	時間的相: 終了	段階相: 終わり 終結	完了	18
終わる	アスペクト: 終了	時間的相: 終了	段階相: 終わり 終結	完了	62
遅れる			状態相: 不首尾	未遂	12
借しむ			状態相: 渋滞		3
落ちる		空間的相: 下への動き			27
落とす	錯誤: 残存		状態相: 不首尾		46
下ろす	方向: 下方	空間的相: 下への動き			23
返す		空間的相: 目標への動き	状態相: 再行・修正		73
返る	様態: 程度		状態相: 旺盛・強化		47
かかる	アスペクト: 始発	時間的相: 開始	段階相: 始まり		90
かける	アスペクト: 始発	空間的相: 目標への動き	不完全起動		
かねる	錯誤: 躊躇	時間的相: 開始	段階相:	始動	236
交わす	様態: 複数主体	空間的相: 目標への動き	始まり 不完全起動		
興じる			可能態	未遂	110
切る			状態相: 旺盛・強化		14
くだす	アスペクト: 完遂	密度、強度の相: 程度、完成	段階相: 終わり 完成	完了	207
くたびれる		空間的相: 下への動き			8
加える			状態相: 充足・倦厭		4
こくる			状態相: 添加		4
込む	方向: 内部 様態: 程度	空間的相: 内への方向 密度、強度の相: 程度、密度	状態相: 旺盛・強化		4
込める		空間的相: 内への方向			231
下がる		空間的相: 下への動き			24
下げる	方向: 下方	空間的相: 下への動き			12
締める			状態相: 旺盛・強化		15
渋る			状態相: 渋滞		11
過ぎる	様態: 程度		過剰相	過剰行為	5
据える			状態相: 旺盛・強化		173
捨てる	様態: 態度				5
添える			状態相: 添加		38
損なう			状態相: 不首尾	未遂	8
損じる	様態: 失敗		状態相: 不首尾	未遂	21
そびれる			状態相: 不首尾	未遂	7
そめる			段階相: 始まり 開始	未遂	5
					16

出す	アスペクト：始発	時間的相：開始	状態相：添加		8
立つ	方向：外部	空間的相：外への動き	段階相：始まり 開始	始動	432
立てる	様態：程度		状態相：旺盛・強化		57
足りる			状態相：旺盛・強化		72
達する	錯誤：失敗		状態相：充足		13
散らす	様態：態度		状態相：不首尾		15
疲れる			状態相：旺盛・強化		29
尽くす		密度、強度の相：程度、強さ	状態相：倦厭		16
つく			段階相：終わり 完成	完了	76
			段階相：始まり 開始		75
つける	アスペクト：習慣	空間的相：目標への動き	状態相：習慣	習慣	143
続く	アスペクト：継続	時間的相：継続	状態相：旺盛・強化		10
続ける	アスペクト：継続	時間的相：継続	段階相：継続		169
つぶす	様態：程度		段階相：継続継続	継続	21
詰める		密度、強度の相：程度、強さ	状態相：旺盛・強化		28
出る	方向：外部				48
通す	アスペクト：完遂	密度、強度の相：程度、完成	段階相：終わり 完成	完了	49
通る		密度、強度の相：強さ			12
直す	錯誤：修正		状態相：再行・修正	再試行	72
直る	錯誤：修正				6
流す	様態：態度				10
慣らわす			状態相：習慣		2
慣れる			状態相：習慣	習慣	29
悩む			状態相：渋滞		6
抜く	アスペクト：完遂	密度、強度の相：完成	段階相：終わり 完成	完了	50
残す	錯誤：残存		状態相：不首尾	未遂	26
残る	錯誤：残存				16
はぐれる			状態相：不首尾		4
始まる			段階相：始まり 開始		0
始める	アスペクト：始発	時間的相：開始	段階相：始まり 開始	始動	399
果たす			状態相：終わり 完成		3
果てる	様態：程度		状態相：旺盛・強化		43
古す	様態：程度				7
まくる	様態：程度		状態相：旺盛・強化	継続	15
間違う	錯誤：失敗		状態相：不首尾		3
間違える	錯誤：失敗		状態相：不首尾		1
回す	方向：周囲	空間的相：周囲への方向	状態相：旺盛・強化		43
回る	方向：周囲	空間的相：周囲への方向	状態相：旺盛・強化		45
漏らす	錯誤：残存		状態相：不首尾		4
やむ	アスペクト：終了	時間的相：終了	段階相：終わり 停止		9
やめる			段階相：終わり 停止		2
忘れる			状態相：不首尾	未遂	12
渡す		空間的相：周囲への方向			14
渡る		空間的相：周囲への方向			39
計89語	46語 (51種)	31語 (37種)	71語 (72種)	27語	4716