

Mysteries of V-V Complexes in Japanese

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1. Introduction: Lexical vs. Syntactic V-V Complexes

Table 1: Major classes of Japanese V-V complexes

| LEXICAL (MORPHOLOGICAL) V2 directly attaches to V1, without the mediation of a syntactic complement clause. | | SYNTACTIC V2 selects a syntactic complement clause headed by V1, as in “[complement V1] V2”, and the two verbs are later combined into a verb in the case of Type 3. | |
|---|--|---|---|
| TYPE 1: Lexical thematic compound verbs <u>osi-akeru</u> 押し開ける push-open(tr.) = ‘to push (a door) open’ <u>suberi-otiru</u> 滑り落ちる slip-fall (intr.) = ‘slip off, slide down’ <u>naki-sakebu</u> 泣き叫ぶ cry-shout = ‘cry and scream’ <u>nagare-komu</u> 流れ込む flow-go.in = ‘flow in’ <u>aruki-tukareru</u> 歩き疲れる walk-get.tired = ‘get tired from walking’ | TYPE 2: Lexical aspectual compound verbs <u>ami-ageru</u> 編み上げる knit-accomplish = ‘finish knitting’ <u>saki-hokoru</u> 咲き誇る bloom-boast = ‘(flowers) be in full bloom’ <u>hare-wataru</u> 晴れ渡る be.clear-go.across = ‘(sky) clear up all over’ <u>huri-sikiru</u> 降りしきる fall-repeat = ‘rain continually’ | TYPE 3: Syntactic compound verbs <u>hataraki-tuzukeru</u> 働き続ける work-continue = ‘keep on working’ <u>kaeri-kakeru</u> 帰りかける leave-hang = ‘be about to leave’ <u>tabe-sokonau</u> 食べそこねる eat-harm = ‘miss eating’ <u>syaberi-makuru</u> 喋りまくる talk-do.on.and.on = ‘talk on and on’ <u>tuka-tukusu</u> 使い尽く use-exhaust = ‘use up’ | TYPE 4: Syntactic complex verbs (N.B. GER=gerundive) 1. Broadly aspectual <u>tabe-te miru</u> 食べてみる eat-GER see = ‘try and eat’ <u>yon-de ageru</u> 読んであげる read-GER give.fao. = ‘read aloud for someone’ <u>sodat-te iku</u> 育てていく grow-GER go = ‘grow gradually’ <u>yon-de simau</u> 読んでしまう read-GER put.away = ‘finish reading’ 2. Manner of motion <u>arui-te iku</u> walk-GER go = ‘go on foot’ |

My conclusion for today

I will propose to fine-tune the four-way classification into a more neat system where the lexical and the syntactic components make up a parallel organization, as follows. (Type 3 in Table 3 will be divided into 3A and 3B.)

| LEXICAL V-V compound verbs | SYNTACTIC V-V complexes |
|-------------------------------|--------------------------------|
| aspectual (Type 2) | aspectual (Type 3B and Type 4) |
| thematic (Type 1) | thematic (Type 3A) |

How to distinguish between lexical and syntactic complexes

(1) Lexical Integrity Principle

Syntactic elements cannot show up inside a word.

(2) Criteria for the lexical/syntactic distinction

Check whether or not syntactically motivated elements such as passive, causative, honorific, anaphoric pro-forms, light verb constructions, and idioms can occur inside a verb complex, especially in its first position (V1).

(i) If the first verb (V1) can be directly associated with a syntactic element, then the V1-V2 complex is syntactic.

[_{V1} syntactic elements] V2

(ii) Otherwise, it is lexical (or morphological).

*[_{V1} syntactic elements] V2

Table 2: Criteria for distinguishing syntactic from lexical V-V complexes

| | Lexical (or morphological) | | Syntactic | |
|-----------------------------------|----------------------------|--------|-----------|--------|
| | Type 1 | Type 2 | Type 3 | Type 4 |
| A. Passive in V1 | OUT | OUT | OK | OK |
| B. Honorific in V1 | OUT | OUT | OK | OK |
| C. Verbal anaphora in V1 | OUT | OUT | OK | OK |
| D. Light verb constructions in V1 | OUT | OUT | OK | OK |
| E. Idioms in V1 | OUT | OUT | OK | OK |

Illustration with passive in V1

LEXICAL

Type 1: *[os-**are**]-aku *ドアが押され開いた。

 *[push-**PASS**]-open(vi.)

Type 2: *[am-**are**]-ageru *セーターが編まれ上がった。

 *[knit-**PASS**]-finish

SYNTACTIC

Type 3: [ais-**are**]-tuzukeru 愛され続ける。

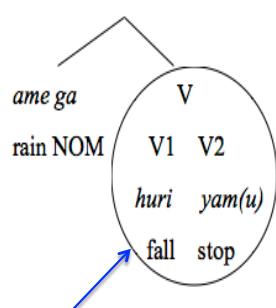
 [love-**PASS**]-continue

Type 4: damas-**are**-te miru だまされて みる

 deceive-**PASS**-GER see

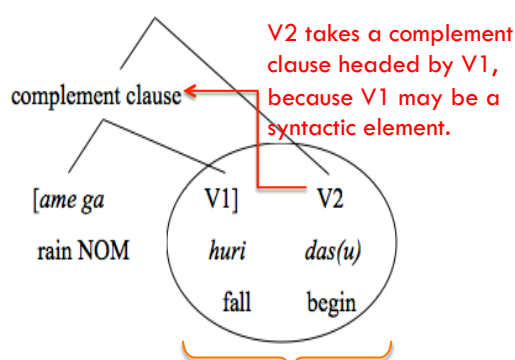
Morphological/syntactic structures

(3) a. Lexical V-V complexes



V1 and V2 are directly compounded, because V1 cannot accommodate any syntactic element.

b. Syntactic V-V complexes



V1 and V2 are fused together at a later stage by a certain mechanism such as Incorporation.

Apart from structures, lexical and syntactic complexes differ in lexical idiosyncrasies and morphological productivity.

(4) Lexical idiosyncrasies

Syntactic V-V complexes (Type 3 and Type 4)

Only the head verbs in V2 are lexically specified.

No idiosyncratic restrictions on the verbs in V1. Dictionaries do not list the whole combinations of V1 and V2, hence unlimited productivity.

Lexical V-V compounds (Type 1 and Type 2)

Not only the head verbs in V2 but also **the whole combinations of V1 and V2 are specified in dictionaries** [i.e. memorized], with limited productivity in individual V2s.

Dual membership:

Some V2s are ambiguous between lexical and syntactic compounds.

(5) a. *oki-wasureru* (put-forget) 置き忘れる

(i) lexical: 'leave something somewhere and forget to bring it' (どこかに置いて、持ってくるのを忘れる)

(ii) syntactic: 'forget to put something on a designated place' (しかるべき場所に置くのを忘れる)

b. *hanasi-kakeru* (speak-hang) 話しかける

(i) lexical: 'talk to' (人に声をかける)

(ii) syntactic: 'be about to speak' (もう少しでしゃべりそうになる)

c. *nori-tukeru* (ride-attach) 乗り付ける

(i) lexical: 'drive up to' (車を玄関に乗り付ける)

(ii) syntactic: 'be used to driving' (乗り物に乗るのに慣れる)

Ordering restriction:**Lexical complex precedes syntactic complex.**

(6) a. OK [[lexical] - syntactic]

[[huri-yami]-kakeru] 雨が降り止みかける

[[rain-stop]-be.about.to]

b. *[[syntactic] - lexical]

*[[huri-kake]-yamu] *雨が降りかけ止む

[[rain-be.about.to]-stop]

2. Two Forms of Verb Concatenation and Their Morphological Status

(7) Clause concatenation 節の接続

a. *Ren'yō verb base* (called “adverbal”, “infinitive”, or “neutral 中立形”)Ani wa susi o *tabe*, ototo wa sake o non-da.

elder.brother TOP sushi ACC eat, younger.brother TOP sake ACC drink-PAST

b. *Gerundive -te*Ani wa susi o *tabe-te*, ototo wa sake o non-da.

elder.brother TOP sushi ACC eat-GER, younger.brother TOP sake ACC drink-PAST

‘The elder brother ate sushi, and the younger brother drank sake.’

Morphological concatenation

形態的な(語内部の)接続

(8) *Ren'yō* verb bases can, but *-te* gerundive forms cannot occur inside a word, because *-te* is a functional category (conjunction or inflection).

- a. *tabe-mono* (eat-thing) 'food' 食べ物
**tabe-te mono* (eat-GER thing) *食べて物
- b. *tabe-kata* (eat-way) 'how to eat' 食べ方
**tabe-te kata* (eat-GER way) *食べて方

Gerundive *-te* can appear only on the right-hand edge of a verb. テ形が現れるのは動詞の右端(外側)のみ。

- c. *tabe-kake-te* (eat-be.about.to-GER) 食べかけて
'be about to eat (and then ...)'

Versatility of *ren'yō* verb bases in word formation

- (9) a. The first element (V1) in V-V compound verbs V+V複合動詞の前項
tataki-tubusu 叩きつぶす (strike-smash) 'knock to pieces'
- b. The first element in V-N compound nouns V+N複合名詞
yaki-niku 焼肉 (broil-meat) 'broiled meat',
- c. The first element in V-A compound adjectives V+A複合形容詞
musi-atui 蒸し暑い (steam-hot) 'steaming hot'
- d. The first element in deverbal nouns 動詞からの派生名詞
utai-te 歌い手 (sing-suffix) 'singer'
- e. Conversion to a noun 動詞からの転成名詞
tasuke 助け 'help'
- f. Compounds of converted nouns 転成名詞を含む複合語
kasi-kari 貸し借り (lending-borrowing) 'borrowing and lending',
hito-dasuke 人助け (person-help) 'a help'

Division of labor

- *Ren'yō* (or neutral) verb bases participate in all kinds of word formation involving verbs (and can also be used in clausal coordination).
- Gerundive *-te* is used only at a phrasal or clausal level.

Table 4 shows a fairly comprehensive list of auxiliary-like verbs that make up verb complexes with -te gerundive verbs.

→ Yo Matsumoto's talk

| | | original meanings | aspectual meanings |
|----------------------|--------------------------------------|----------------------------|-----------------------------|
| putting | (<i>tabe-te</i>) <i>oku</i> おく | put | have eaten (as anticipated) |
| | (<i>tabe-te</i>) <i>simau</i> しまう | put away | have eaten (unwittingly) |
| seeing | (<i>tabe-te</i>) <i>miru</i> みる | see | try eating/tasting |
| | (<i>tabe-te</i>) <i>miseru</i> みせる | show | eat (and show off) |
| giving and receiving | (<i>tabe-te</i>) <i>yarū</i> やる | I give to someone [plain] | do someone a favor |
| | (<i>tabe-te</i>) <i>ageru</i> あげる | I give to someone [polite] | do someone a favor |
| | (<i>tabe-te</i>) <i>kureru</i> くれる | Someone gives me | do (me) a favor |
| | (<i>tabe-te</i>) <i>morau</i> もらう | I receive from someone | (I) receive a favor |
| coming and going | <i>Hana ga (sai-te) kuru</i> くる | come | change gradually |
| | <i>Hana ga (sai-te) iku</i> いく | go | change gradually |
| being | (<i>tabe-te</i>) <i>iru</i> いる | (animate) be | is eating, have eaten |
| | (<i>tabe-te</i>) <i>aru</i> ある | (inanimate) be | have eaten |

Morphological wordhood 語としての資格

(11) **Insertion of focus particles is often used as a test to identify the word status of a V-V complex.**

a. Gerundive complex verb:

tabe-te wa mi-ta 食べてはみた
eat-GER PARTICLE try-PAST

b. Compound verb:

**tabe wa kake-ta* *食べは掛けた
eat PARTICLE be.about.to-PAST

However, participle insertion is not effective in dividing an agglutinated verbal sequence into words.

(12)

$\begin{array}{ccccccccc} & *wa & & *wa & & *wa & & *wa & & *wa & & \\ & \swarrow & \searrow & \swarrow & \searrow & \swarrow & \searrow & \swarrow & \searrow & \swarrow & \searrow & \\ \text{tabe} & \text{hazime} & \text{hari} & \text{soo} & \text{daroo} & & \text{ka} \\ \text{食べ} & \text{始め} & \text{はり} & \text{そう} & \text{やろ} & & \text{か} \\ \text{eat} & \text{begin} & \text{HONORIFIC} & \text{AUX(it appear)} & \text{MODAL(I wonder)} & & \text{QUESTION} \end{array}$

‘Is he going to start eating?’

Particles cannot be inserted between any two elements above. It is counterintuitive to conclude from this that the long stretch of elements in blue constitutes a morphological word.

Nominalization by the suffix *-kata* ‘way’

(cf. Kageyama 1993, Kishimoto 2006)

-*Kata* nominalizes a whole vP, regardless of whether its verb is simplex or compound.

岩の 落ち方
iwa no [oti]-kata
 boulder GEN [fall]-way

(15) a. *Iwa no* [_N [_V *kuzure-oti*]-*kata*] (lexical V-V)
 boulder GEN [collapse-fall]-way
 ‘the way the boulder fell down’

b. *ame no* [_N [_V *huri-dasi*]-*kata*] (syntactic V-V)
 rain GEN [fall-start]-way
 ‘the way it started raining’

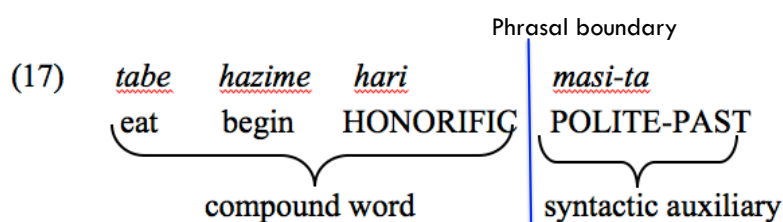
However, the suffix *-kata* does not attach to syntactic clauses.

(15) c. **iwa no* [_N [_{VP} *kuzure, dosunto oti*]-*kata*]
 boulder GEN [collapse with.a.thud fall]-way
 ‘the way the boulder collapsed and fell down with a thud’

d. Gerundive-te complexes
 ?**okane no* [*tukat-te simai*]-*kata*
 money GEN [use-GER put.away]-way
 ‘the way you have spent all your money’

Honorific vs. polite verbs

- (16) a. Honorific verbs 尊敬
tabe-hari-kata (Osaka-Kyoto dialect)
 eat-HONORIFIC-way 'the way (he) eats'
- b. Polite verbs 丁寧
 **tabe-masi-kata*
 eat-POLITE-way



3. Lexical V-V Compounds: Thematic (Type 1) vs. Aspectual (Type 2)

- The term thematic means “thematic (or semantic) roles” in argument structure.
- In my database of over 2,700 lexical compound verbs, thematic compounds (Type 1) account for about 60%, and aspectual compounds (Type 2) about 30%, with the remaining 10% being lexicalized or grammaticalized as one words.



Online database
 複合動詞レキシコン
 Compound Verb Lexicon

- Online database of more than 2,700 V-V compound verbs at NINJAL's website.
 - English, Chinese, and Korean translations are forthcoming in January or February next year.
- <http://vvlexicon.ninjal.ac.jp/db/>

● **Heuristic guideline**

Try to see if a given lexical compound verb can be paraphrased by using the formula “V1-te V2”.

Type 1とType 2を区別する目安
「V1テV2」と言い換えられるかどうか。

(18) a. **Type 1: Thematic V-V compound verbs can be paraphrased with “V1-te V2”.**

osi-akeru (push-open [vt.]) \rightleftharpoons *osi-te akeru* ‘push and open, push open’ 押し開ける～押して開ける

nage-ireru (throw-put.in) \rightleftharpoons *nage-te ireru* ‘throw and put in, throw in’ 投げ入れる～投げて入れる

(18) b. **Aspectual V-V compound verbs cannot be paraphrased with “V1-te V2”.**

雨が降りしきる *huri-sikiru* (fall-continue) ‘(rain or snow) fall incessantly’ \neq しきって降る **huti-te sikiru*.

Instead, it is paraphrasable as 頻りに降る *sikiri ni huru* (do-repeatedly DAT fall) ‘fall incessantly’ **by reversing the order**.

花が咲き競う (*hana ga saki-kisou*) (bloom-compete) ‘(flowers) be in full blossom’ \neq 咲いて競う **sai-te kisou*.

Instead, it can be plausibly paraphrased plausibly as 競って咲く or 競うように咲く *kisot-te saku* ‘bloom competitively’ by reversing the order of V1 and V2.

晴れ渡る *hare-wataru* (be.cloudless-go.over) ‘(sky) be clear all over’ \neq 晴れて渡る **hare-te wataru*

Instead, plausibly paraphrased as 隅々にまで渡って晴れる *sumizumi ni watai-te hareru* (go.through.the.sky be.cloudless) ‘be clear all over the sky’.

The paraphrasability with V1-*te* V2 is attributed to how the argument structure of a compound verb is composed.

(19) In Type 1 (thematic compound verbs), the argument structure of a clause is determined jointly by V1 and V2, with V1 modifying the head V2.

□ 呼び集める *yobi-atumeru* (call-gather) ‘call together’
yobi (call) + *atumeru* (gather)

Arg. Str. <agent1, theme1> <agent2, theme2 [pl.], goal>
 argument structure unification →
yobi-atumeru <agent1=2, theme1=2 [pl.], goal>

(20) Semantic subclasses of Type 1 compound verbs

(Kageyama 1993, Matsumoto 1996, Yumoto 2005)

- a. Means of action: V2 BY V1-*ing* [common]
- b. Manner of motion or change: V2 WHILE V1-*ing* [common]
- c. Cause-result: V2 FROM V1-*ing* [limited]
- d. Purpose: V2 WITH A VIEW TO V1-*ing* [rare]
- e. Coordination (dvandva): V1 and V2 [limited]

The peculiar semantic interpretation of Type 2 compound verbs

(21) 花が咲き乱れる

Hana ga **saki-midareru**.

flowers NOM bloom-be.confused

'Flowers are blooming in great (lit. confused) profusion.'

≡ 花が入り乱れて咲く

Hana ga **iri-midare-te saku**.

flowers NOM be.confused-GER bloom

(22) Form-meaning mismatch in Type 2 (aspectual) compound verbs Type 2における形と意味のミスマッチ

The argument structure of Type 2 compound verbs is determined by the first verb (V1), contrary to the morphological head in V2. The second verb (V2) does not have argument structure but only supplies a variety of aspectual meanings that depict how the event in V1 unfolds. As a result, these compounds deviate from the ordinary form-meaning iconicity and call for reversed semantic interpretation.

Form-meaning mismatch

morphology:

saki midareru
bloom'(e, flowers) be_confused'(e)

semantic interpretation: (iri-)midarete saku
'in a confused state' bloom'(e, flowers)

Table 4 shows representative semantic classes of lexical aspectual compound verbs.

| | |
|--------------------------------------|---|
| Temporal aspect | <i>huri-yamu</i> (intr.) 'stop falling, said of snow and rain', <i>kaki-ageru</i> (vt.) 'finish writing', <i>kaki-agaru</i> (vi) 'Writing is finished', <i>ni-tumeru</i> (vt.) 'boil down', <i>kesi-saru</i> 'wipe out' |
| a. completive | |
| b. <u>incompletive</u> | <i>ii-sasu</i> 'stop speaking halfway' |
| c. result intensive | <i>ne-komu</i> 'fall sound asleep', <i>komari-hateru</i> 'be completely at a loss', <i>sizumari-kaeru</i> 'become completely silent', <i>saki-midareru</i> 'bloom in profusion', <i>otituki-harau</i> 'be perfectly composed' |
| d. inceptive | <i>ake-someru</i> 'begin to dawn', <i>kaki-okosu</i> 'start writing' |
| e. continuative | <i>huri-sikiru</i> '(rain) fall incessantly', <i>naki-kurasu</i> 'cry all day' |
| f. iterative | <i>hozikuri-kaesu</i> 'dig again', <i>tukai-komu</i> 'use repeatedly', <i>tate-kaeru</i> 'rebuild', <i>ii-narawasu</i> 'commonly say' |
| g. intensive action | <i>sawagi-tateru</i> 'fuss about', <i>izikuri-mawasu</i> 'fumble about', <i>waki-kaeru</i> 'boil violently', <i>waki-tatu</i> 'boil hard', <i>home-tigiru</i> 'praise highly' |
| h. ineffective | <i>kasi-siburu</i> 'hesitate to lend', <i>nobi-nayamu</i> 'do not make expected progress', <i>sagasi-agumeru</i> 'be unable to find', <i>kiki-tigau</i> 'hear wrongly', <i>haki-tigaeru</i> 'put on the wrong shoes' |
| i. reciprocal | <i>i-awaseru</i> 'happen to be at the same place', <i>kiki-kaesu</i> 'ask back', <i>tukai-wakeru</i> 'use different things according to the needs' |
| Spatial aspect | <i>naguri-kakaru</i> 'strike at', <i>donari-tukeru</i> 'yell at', <i>mi-ageru</i> 'look up', <i>mi-mawasu</i> 'look round', <i>hare-wataru</i> 'be clear all over the sky', <i>tobi-dasu</i> 'dash out' |
| Social (interpersonal) aspect | <i>moosi-ageru</i> 'say to a respectable person', <i>mi-kudasu</i> 'look down upon', <i>moosi-tukeru</i> 'say to a person of lower status', <i>kasi-sageru</i> '(public institution) lend to private sector' |

(23) Semantic and morphological characteristics of the second verbs (V2) in Type 2 aspectual compounds

- To add to the conceptual meanings of V1 a wide variety of meanings related to lexical aspect or *Aktionsarten*;
- To have a broad semantic coverage of not only temporal aspect but also spatial aspect (as in *hare-wataru* (be.cloudless-extend.all.over) 'The clear state extends all over the sky') and interpersonal aspect (as in *moosi-ageru* (say-give.to.a.person.of.higher.status) 'say deferentially');
- To have developed peculiar abstract and metaphorical meanings that are not found in their usage as independent verbs;
- To have no argument structure or case (perhaps except for social and spatial aspect);
- To be highly selective about the verbs in V1 with which they occur;
- (In many cases) to have been grammaticalized to bound suffixes and have no independent usage.

Dual membership: Some head verbs are ambiguous between thematic and aspectual compounds.

(24) a. (Type 1) Thematic -komu ~ 込む: <goal> 二格を取る

Booru o gooru ni keri-komu
ball ACC goal DAT kick-<goal>

'kick a ball into the goal'

Gunsyuu ga mise ni abare-kon-da.

mob NOM shop DAT rage-<goal>-PAST

'The mob stormed into the shop.'

b. (Type 2) Aspectual -komu ~ 込む: 'do the act of V1
amply' 十分に行うという意味

Sensyu wa mainiti hasiri-kon-da.

athlete TOP everyday run-do.amply-PAST

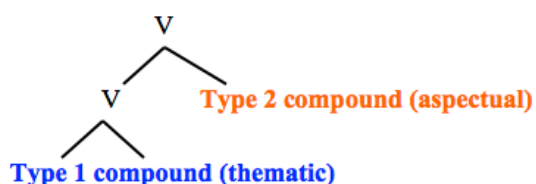
'The athletes get ample running practice every day.'

Ordering relation between Type 1 and Type 2

(27)

c. ^{OK}[[Type 1] - Type 2]
[[ne-sizumari]-kaeru]
[[sleep-get.silent]-completely]

d. *[[Type 2] - Type 1]
*[[ne-kaeri]-sizumaru]
[[sleep-completely]-get.silent]



This hierarchical restriction falls out naturally from the organization of semantic/cognitive structure where aspect is supposed to add semantic embellishment to thematic content, but not vice versa.

4. Subtypes of Type 3 Syntactic V-V Compounds: Aspectual and Thematic

Table 5: Aspectual compound verbs in syntax

| Aspectual notions | Examples |
|-------------------------|---|
| Inception | <i>V-kakeru</i> (hang, vt.) 'be about to V', <i>V-dasu</i> (take out, vt.) 'begin to V', <i>V-hazimeru</i> (begin, vt.) 'begin to V', <i>V-kakaru</i> (set about, vi.) 'set about V-ing' |
| duration, repetition | <i>V-tuzukeru</i> (continue, vt.) 'continue to V', <i>V-makuru</i> (roll up, vt.) 'V on and on' |
| completion | <i>V-oeru</i> (finish, vt.) 'finish V-ing', <i>V-owaru</i> (end, vi.) 'stop V-ing', <i>V-tukusu</i> (exhaust, vt.) 'V exhaustively', <i>V-kiru</i> (cut, vt.) 'V completely', <i>V-tōsu</i> (let through, vt.) 'V to the end', <i>V-nuku</i> (pull out, vt.) 'V to the end', <i>V-hateru</i> (come to an end, vi.) 'V utterly' |
| incompletion, failure | <i>V-sokonau</i> (harm, vt.) 'miss V-ing', <i>V-sokoneru</i> (harm, vt.) 'fail to V', <i>V-sonziru</i> (damage, vt.) 'fail to V', <i>V-sobireru</i> (auxiliary use only) 'fail to V', <i>V-kaneru</i> (serve a dual function, vt.) 'be unable to V', <i>V-wasureru</i> (forget) 'forget to V', <i>V-nokosu</i> (leave undone) 'leave something without V-ing completely', <i>V-ayamaru</i> (err, vt.) 'make a mistake in V-ing', <i>V-okureru</i> (be late, vi.) 'be delayed in V-ing', <i>V-aguneru</i> (Classical Japanese 'be satiated') 'hesitate to V' |
| excessiveness | <i>V-sugiru</i> (go past, vi.) 'V excessively' |
| Retrial | <i>V-naosu</i> (repair, vt.) 'V again (to obtain a desired result)' |
| repetition, habituation | <i>V-tukeru</i> (attach, vt.) 'be used to V-ing', <i>V-nareru</i> (get accustomed, vi.) 'be accustomed to V-ing', <i>V-akiru</i> (get weary, vi.) 'get weary of V-ing' |
| reciprocity | <i>V-au</i> (meet, vi.) 'V reciprocally' |
| likelihood | <i>V-eru</i> or <i>V-uru</i> (obtain) 'be likely to V' |
| social aspect | (dialectal) <i>V-haru</i> 'A respectable person does an action.' |

Not all syntactic compound verbs are aspectual. Some head verbs influence the determination of the objects in complement clauses.

Table 6: Examples of thematic compound verbs in syntax

| | literal meaning | derived aspectual meaning |
|---------------------|--------------------|---|
| V1- <i>oeru</i> | 'finish, complete' | 'finish doing V1, so that the object is done' |
| V1- <i>naosu</i> | 'fix, repair' | 'do V1 again, so that the object is in a fixed state' |
| V1- <i>wasureru</i> | 'forget' | 'forget to do V1, so that the object is left forgotten' |
| V1- <i>tukusu</i> | 'exhaust' | 'do V1 thoroughly, so that the object is exhausted' |

Kageyama (1993)

V2 *tukusu* 'exhaust' contribute to locative alternation.

- (28) a. *Masao wa kabe ni posutaa o hat-ta.*
 Masao TOP wall DAT poster ACC paste-PAST
 'Masao pasted the posters onto the wall.'
- b. **Masao wa posutaa de kabe o hat-ta.*
 Masao TOP poster WITH wall ACC paste-PAST
 'Masao pasted the wall with posters.'
- (29) a. *Masao wa kabe ni posutaa o hari-tukusi-ta.*
 Masao TOP wall DAT poster ACC paste-exhaust-PSAT
 'Masao pasted all the posters onto the wall.'
 → *The posters were used up.*
- b. *Masao wa posutaa de kabe o hari-tukusi-ta.*
 Masao TOP poster WITH wall ACC paste-exhaust-PAST
 'Masao pasted the entire wall with posters.'
 → *The walls were covered up.*
- (Fukui, Naoki, Shigeru Miyagawa, and Carol Tenny. 1985)

Passive on V2

● Aspectual verbs do not normally passivize.

- (30) a. *Watasi wa siranai otoko ni damas-are-kake-ta.* (passive on V1)
 I TOP strange man by deceive-PASS-be.about.to-PST
 'I was about to be deceived by a stranger.'
- b. **Watasi wa siranai otoko ni damasi-kake-rare-ta.* (passive on V2)
 I TOP strange man DAT deceive-be.about.to-PASS-PST
- (31) a. *Watasi wa titi ni sikar-are-nare-te i-ru.* (passive on V1)
 I TOP father by scold-PASS-be.used-GRD be-NONPST
 'I am used to being scolded by my father.'
- b. **Watasi wa titi ni sikari-nare-rare-te i-ru.* (passive on V2)
 I TOP father by scold-be.used-PASS-GRD be-NONPST


However, the head verbs in Table 6 can be passivized (long distance passive).

- (32) a. 鉱山が掘り尽くされた
Koozan ga hori-tukus-are-ta.
 mine NOM dig-exhaust-PASS-PAST
 'The mine was dug up and exhausted.'
- b. 契約書が書き直された
Keiyakusyo ga kaki-naos-are-ta.
 contract NOM write-do.again-PASS-PAST
 'The contract was rewritten and fixed.'
- c. 出し忘れられた手紙が机の上にある
Dasi-wasure-rare-ta tegami ga tukue no ue ni aru.
 post-forget-PASS-PAST letter NOM desk GEN top DAT be
 'There is a letter left on the desk that he forgot to post.'

(Kageyama 1993)

This means that the object somehow serves as the object of V2.

a la Baker's (1989) double theta-role assignment.

- (33) Double theta marking
[koozan o hori] tukusu
 mine ACC dig exhaust
- 

Double theta-marking is supported by unexpected examples of double passives actually attested on the Internet.

- (34) a. 鉱脈が掘られ尽くされた。
koomyaku ga hor-are-tukus-are-ta
 lode NOM dig-PASS-exhaust-PASS-PAST
 'The lode has been dug up exhaustively.'
<http://fukinya.blog117.fc2.com/blog-entry-94.html>
- b. この問題はあちこちで語られ尽くされている。
Kono mondai wa ati-koti de kata-rare-tukus-are-te iru.
 this issue TOP here-there LOC discuss-PASS-exhaust-PASS-GER be
 'This issue has been discussed exhaustively.'
<http://www1.cncm.ne.jp/~nackham7/fujii.html>
- c. 使われ切られる *tukaw-are-kir-are-ru* (use-PASS-finish-PASS) 'be used up'
- d. 避けられ始められる *sake-rare-hazime-rare-ru* (shun-PASS-begin-PASS) 'begin to be shunned'
- e. 責められ続けられる *seme-rare-tuduke-rare-ru* (blame-PASS-continue-PASS) 'continue to be blamed'

(35) SUMMARY:

Syntactic V-V compound verbs, like lexical ones, fall into two types: **thematic (Type 3B)** and **aspectual (Type 3 B)**.

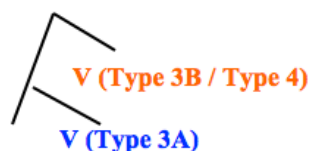
Interestingly, these two classes also obey the same stacking restriction as the two classes in the lexical domain. (Examples omitted.)

- (36) Stacking constraint on Type 3A and Type 3B (cf. (27) for lexical compounds)

OK [Type 3A (thematic)]-Type 3B (aspectual)

* [Type 3B (aspectual)]-Type 3A (thematic)

Again, this hierarchical restriction is a natural reflection of the organization of semantic/cognitive structure.



5. Parallel Organization in the Lexicon and Syntax

(37) Parallel organization

| LEXICAL | SYNTACTIC |
|--------------------|--------------------------------|
| aspectual (Type 2) | aspectual (Type 3B and Type 4) |
| thematic (Type 1) | thematic (Type 3A) |

☞ **To summarize**, Lexical and syntactic V-V complexes, taken together, are hierarchically ordered as follows:

(38)

| | | |
|-----------|--------------------------------|--|
| SYNTACTIC | aspectual (Type 3B and Type 4) | |
| | thematic-aspectual (Type 3A) | |
| LEXICAL | aspectual (Type 2) | |
| | thematic (Type 1) | |

In this organization, Type 2 poses a puzzle to solve: Why should an aspectual class of compounds intervene between Type 1 and Type 3A?

6. Where Do Type 2 Compound Verbs Come from?

Type 2 complexes (though not morphological compounds) already existed in Old Japanese.

(Frellesvig et al. 2010)

(39) b. OJ auxiliary verbs corresponding to current lexical aspectual compound verbs

-*watar*- 渡る 'go across', -*some*- 初める 'begin', -*tat*- 立つ 'stand', -*yam*- 止む 'stop', -*ir*- 入る 'go in', -*tuk*- 付く 'stick', -*tug*- 繼ぐ 'continue', -*sugus*- 過ごす 'put beyond', -*pate*- 果てる 'end', -*sik*- しきる 'spread, (occur frequently)'

How Type 1 and Type 2 compound verbs are translated in natural English (according to the compound verb database)

(40) Typical English translations for Type 1 compound verbs: Word-by-word translation generally works.

- a. *korogari-otiru* (roll-fall) 岩が崖を転がり落ちた。
Iwa ga gake o korogari-oti-ta.
 boulder NOM cliff ACC **tumble-fall**-PAST
 'The boulder **tumbled down** the cliff.'
- b. *arai-nagasu* (wash-let.flow) 彼女はシャワーで髪の毛の汚れを洗い流した。
Kano wa kami no yogore o arai-nagasi-ta.
 she TOP hair GEN grime ACC **wash-let.flow**-PAST
 'She **washed away** the grime from her hair.'

(41) On the other hand, Type 2 compound verbs, which express a given situation descriptively and rhetorically in a step-by-step manner, tend to be translated in English in such a way that only a resulting state is specified, omitting the detailed manner of action that accompanies it.

- a. *are-kuruu* 荒れ狂う
Umi ga are-kurut-ta.
 sea NOM **act.violently-be.crazed**-PAST 'The sea was **very stormy**.'
- b. *sae-wataru* 冴え渡る
Kyoo wa atama ga sae-watat-te iru.
 today TOP head NOM **be.clear-go.across**-GER be
 'My mind is **especially sharp** today.'
- c. *kiki-nareru* 聞き慣れる
kiki-nare-ta merodii
listen-be.used.to-PAST melody 'A **familiar** melody'
- d. *kiki-hurusu* 聞き古す
kiki-hurusi-ta zyooku
hear-make.old-PAST joke 'A **corny** joke'
- f. *sitate-agaru* 仕立て上がる
Suutu ga sitate-agat-ta.
 suit NOM **tailor-finish**-PAST 'The suit is **ready**.'

This might be attributed to different ways of expression between English and Japanese.

► **Preferred ways of expression**

- Yoshihiko Ikegami: Japanese is a BECOME-type language and English a DO-type language.
- Kageyama: Japanese is a PROCESS-FOCUS language and English a RESULT-FOCUS language.

But this cannot explain why Japanese uses compound verbs instead of adverbial phrases or some other ways of expression.

► **Talmy's typology of verb-framed vs. satellite-framed languages, might be a contributory factor, but it alone would predict the wrong order of two verbs, as in (42).**

- (42) a. **tate-naraberu* *立て並べる (cf. 並べ立てる *narabe-tateru* 'list one by one')
give.one.by.one-list
- b. **watari-hareru* *渡り晴れる (cf. 晴れ渡る *hare-wataru* 'be clear all over')
go.across-be.clear
- c. **sikiri-huru* *頻り降る (cf. 降り頻る *huri-sikiru* 'fall incessantly')
occur.frequently-fall

Reversed order

- (43) 頻く "Siku" in classical Japanese was used in the modifier position of compound words. (*Kadokawa Old Japanese Dictionary* 角川古語辞典)
- siki-huru* 頻き降る (occur.frequently-fall) cf. *huri-sikiru* 降り頻る
- siki-naku* 頻き鳴く (occur.frequently-sing) cf. *naki-sikiru* 鳴き頻る

Predicate realization: How to realize semantic predicates in syntax.

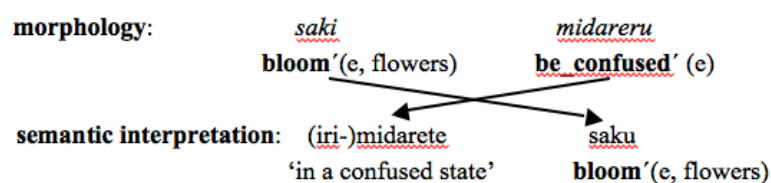
(44) For example, how can the semantic concepts, **fuss'**(e, agent) & **violently** (e), be realized in syntax?

- Normal realization of **violently**(e) as an adverb 'violently'.
 激しく騒ぐ *hagesiku sawagu* (violently fuss) 'fuss about'
- Iconic realization of **violently**(e) as the first member and **fuss** as the head verb of a compound verb. Because the predicate that is equipped with argument structure is normally realized as the main verb.
 *立て騒ぐ **tate-sawagu* (do.violently-fuss)
- Aberrant realization of **fuss** in the V1 position and **violently**(e) in the head (V2) position of a compound verb.
 騒ぎ立てる *sawagi-tateru* (fuss-do.violently)

(45) Reversal of Figure-Ground alignment in Type 2 compound formation

An adverbial notion (semantic Ground) is realized as the head in V2 (morphological Figure) in a Type 2 compound verb, whereas the main semantic predicate (semantic Figure) is realized as a modifier verb in V1 (morphological Ground).

This gives rise to the **form-meaning mismatch**:



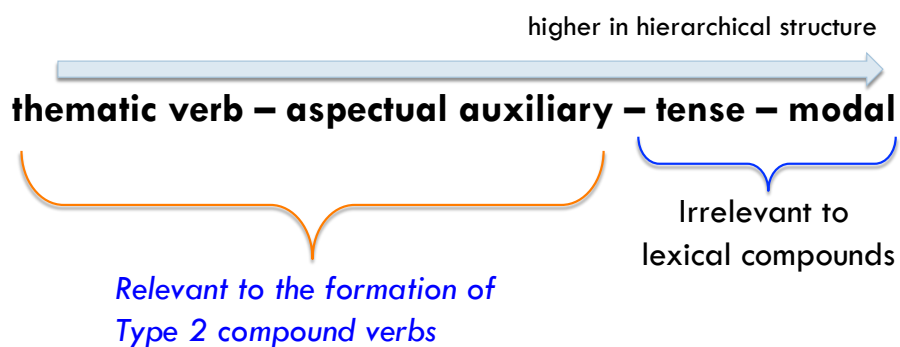
(46) Such a reversal is a rather common phenomenon in Japanese morphology.

- a. phonological reversal
種 *tane* 'seed' → ネタ *neta* 'material for a talk'
- b. semantic reversal
置き手紙 *oki-tegami* (leave-letter) 'a memo left by someone'
→ 'leaving a memo'
- c. morphological reversal
太っ腹 *huto-ppara* (fat-heart) 'big-hearted, generous' =
Hara ga hutoi. (heart NOM fat)
無関心 *mu-kansin* (null-interest) 'uninterested' =
Kansin ga nai. (interest NOM be.null)

□ (Kageyama 2010)

The reversal in Type 2 compound verbs is presumably aided by the agglutination schema.

(47) Agglutination schema:



Hypothesis and conclusion

Hypothesis: The agglutination schema in syntax was extended to the lexical domain in and after the Heian period, presumably motivated by a rhetorical need to produce expressive and powerful literary work. Under this hypothesis, [the parallel organizations of the compounding system in the lexicon and in syntax emerged from the fortified agglutinative character of Japanese in syntax and its extension to the lexical domain.](#)

Conclusion:

The compounding systems in the lexical and syntactic domains have a parallel organization. This observation could not be easily handled either by “strong lexicalism” or by “strong syntacticism”. Rather, the Japanese facts are in line with a theory of [parallel architecture](#) grammar like Jackendoff (2010) or Kageyama (1996).