Verb Semantics and Argument Realization in Pre–modern Japanese: A preliminary study of verbal compounds

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VSARPJ: People

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Background
Funding: Arts & Humanities Research Council (AHRC)

Goals
Create a tool for linguistic analysis
Morphological and syntactic tagging
Investigate argument realization
Argument realization

In any given instance of occurrence, a predicate selects a combination of arguments.

(1) kabe ni penki o nuru
   wall DAT paint ACC spread
   ‘smear paint on the wall’

(2) penki de kabe o nuru
    paint with wall ACC spread
    ‘smear the wall with paint’

The argument realization of a verb is the full set of all possible combinations.
Features of the VSARPJ Corpus

XML mark–up following the internationally recognized standards of the Text Encoding Initiative (TEI)

Phonemic transcription

Orthography
Part of speech
Morphology
Lexeme and morpheme ID; Lexicon
Syntax

Searches: topics, right dislocated elements, focused elements, noun phrase heads, particle scope, analytic predicates, arguments, topicalized elements, relative order of case marked and zero marked arguments, clause types
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<tr>
<th>Text</th>
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<tr>
<td>Kojiki kayō</td>
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<td>仏足石歌</td>
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<td>Engishiki Norito</td>
<td>祝詞</td>
<td>(compiled 927)</td>
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Auxiliary Verbs in Old Japanese

(3) iya topo.naga–ku sinwopi–yuka–mu extremely far.long–ACOP.INF long.for–go–CONJ.CONCL ‘I shall go on longing for (this place) for an extremely long time’ (MYS.1.196)

OJ auxiliary verbs appear as V2 in V1+V2 compounds. They typically attach directly to the stem of V1, similar to V2s in lexical compound verbs (in contrast to many NJ auxiliary verbs which follow the gerund form of V1).

Background:
• Descriptions of the class of auxiliary verbs
• Grammaticalization among members of the class
• Changes in the class over time
Research question:

What is the defining set of characteristics of the class of auxiliary verbs in Old Japanese?
Working hypothesis: Auxiliary verbs will have one or more of the following properties

1. overall frequency (number of occurrences as V2)

2. semantic lightness (i.e., V2s denoting spatial deixis, social deixis, aspect, polarity, potential, degree, etc.)

3. free combination with V1s of all transitivity types
Overall frequency

-tamap- ‘give (respect)’ (650)
-matur- ‘offer up (humble)’ (403)
-ko- ‘come’ (314)
-myes- ‘see (respect)’ (179)
-tamape- ‘receive (humble)’ (159)
-imas- ‘exist (respect)’ (182)
-watar- ‘go across’ (134)
-yuk- ‘go’ (115)
-mi- ‘see’ (93)
-tat- ‘stand’ (85)

-kanep- ‘fail’ (77)
-ide- ‘go out, put out’ (69)
-tug- ‘continue, convey’ (47)
-sugwi- ‘go beyond’ (42)
-kose- ‘do for me’ (38)
-kate- ‘prevail’ (38)
-sake- ‘separate’ (33)
-ok- ‘put, land’ (30)
-watas- ‘put across’ (25)
-sik- ‘spread’ (25)
Semantic lightness


Freely combining V2s

With a transitive V1:
(4) yama.kapa wo ipane sakumite pumi-topori
   mountain.river ACCrock split.GER tread–go.through.INF
   ‘he goes through mountains and rivers, splitting rocks’ (MYS.4465)

With an unergative V1:
(5) ipapo sura yuki-toporu be–ki
   boulder even go–go.through.CONCL NEC–ACOP.ADN
   ‘(who) should even go through boulders’ (MYS.2386)

With an unaccusative V1:
(6) sigure no ame ni nure-topori
   ten.month.rain COP.ADN rain DAT get.wet–go.through.INF
   ‘getting soaked through by the autumn rain’ (MYS.2180)
V2s combining with V1s of all transitivities

V2s in non-lexical verb compounds (44)

-ape- ‘join’; -e- ‘be able’; -idas- ‘remove’; -ide- ‘exit, remove’;
imas- ‘exist (respect)’; -ir- ‘go in’; -ire- ‘put in’; -itadak- ‘receive’;
kake- ‘hang’; -kane- ‘fail’; -kapyer- ‘come back’;
kapyes- ‘put back’; -kate- ‘prevail’; -ko- ‘come’; -kose- ‘do for me’;
kwos- ‘put over’; -kwoye- ‘go over’; -masar- ‘exceed’;
matur- ‘serve (humble)’; -mi- ‘see’; -myes- ‘see (respect)’; -ok- ‘put’;
pate- ‘end’; -sake- ‘separate’; -sik- ‘spread’; -some- ‘begin’;
sugus- ‘put beyond’; -sugwi- ‘go beyond’; -tamap- ‘give (respect)’;
tamape- ‘receive (humble)’; -tar- ‘suffice’; -tat- ‘stand’;
tate- ‘make stand’; -topor- ‘go through’; -topos- ‘put through’;
tug- ‘continue, convey’; -tuge- ‘continue, convey’; -tuk- ‘stick’;
tuke- ‘affix’; -watar- ‘go across’; -watas- ‘put across’; -yam- ‘stop’;
yame- ‘make stop’; -yuk- ‘go’
Lexical integrity

Do non-lexical compound verbs have lower lexical integrity?

According to the Lexical Integrity Hypothesis, (Siegel 1974, Williams 1981, etc.) syntactic processes can’t operate on the internal constituents of words.

Insertion of non-case particles between V1 and V2.

Auxiliaries that attach to V1

1. Respect -(a)s-
2. Causative -(a)sime-
3. Passive -(a)ye-
[V1 + non–case particle + V2]

(7) yononaka wo somuki si e–neba
this.world ACC turn.away EMPH can–NEG.PROV
‘because (I) can’t turn away from this world’ (MYS 2.210)

(8) wagimokwo ni kwopwi pa masaredo
my.beloved DAT yearn TOP exceed.CONC
‘although my yearning for my beloved increases’ (MYS 11.2597)

V2s in [V1 + non–case particle + V2] (13):
[V1 –passive–V2]

(9) momoyo pete sinwopa-ye-yuka-mu
    hundred.age transpire.GER admire-PASS–go–CONJ.CONCL
    ‘(it) will go on being admired for one hundred ages’  (MYS 6.1065)

V2s in [V1 –passive–V2] (7):
   -kose– ‘do for me’; -tug– ‘convey’; -yuk– ‘go’
[V1 -respect- V2]

(10) ame.no.sita sira-si-myesi-turu sumyeramikoto
  heaven.GEN.under know.RESP-see-PERF.ADN emperor
  ‘the emperor, who rules the world’ (SM 3)

V2s in [V1 -respect- V2] (5):
  -imas- ‘be’; -itadak- ‘receive’; -matur- ‘serve’; -myes- ‘see’;
  -tamap- ‘give’
[V1 –causative– V2]

(11) ko no opo–kimi wo tukape–matura–sime–tamape ba
this GEN HON–lord ACC serve–offer–CAUS–give.PROV
‘because he allows this lord to serve’ (SM 10)

V2s in [V1 –causative– V2]:

–imas– ‘be’; –tamap– ‘give’
Lexical integrity of non-lexical compounds

V2s in [V1 + non-case particle + V2] (13):
- *ape*– ‘join’; - *e*– ‘be able’; - *imas*– ‘be’; - *kane*– ‘fail’; - *ko*– ‘come’;
- *masar*– ‘exceed’; - *mi*– ‘see’; - *sugwi*– ‘go beyond’; - *tamap*– ‘give’;

V2s in [V1 + auxiliary+ V2] (11):
- *imas*– ‘be’; - *itadak*– ‘receive’; - *kane*– ‘fail’; - *kapyer*– ‘go back’;
- *ko*– ‘come’; - *kose*– ‘do for me’; - *matur*– ‘serve’; - *myes*– ‘see’;
- *tamap*– ‘give’; - *tug*– ‘convey’; - *yuk*– ‘go’

Total of Vs in compounds with low lexical integrity: 18 out of 44

Both patterns [V1 + particle + V2] and pattern [V1–auxiliary–V2] (6):
- *imas*– ‘be’; - *kane*– ‘fail’; - *ko*– ‘come’; - *tamap*– ‘give’;
- *tug*– ‘convey’; - *yuk*– ‘bo’
Transitivity Harmony in Modern Japanese

Kageyama (1996, 1999) proposes that V1 and V2 in NJ **lexical compounds** have to agree on the presence or absence of an external argument:

a. transitive verbs: (x <y>)
b. unergative intransitive verbs: (x<>)
c. unaccusative intransitive verbs: <y>   (Kageyama 1999: 309, #15)

transitive+transitive
unergative+unergative
unaccusative+unaccusative
unergative+transitive
transitive+unergative
*transitive+unaccusative
*unaccusative+transitive
*unergative+unaccusative
*unaccusative+unergative
Transitivity Harmony in Old Japanese

V1 and V2 in lexical compound verbs have to agree on
1) the presence or absence of an external argument,
or on
2) the presence or absence of an internal argument:

transitive+transitive  
unergative+unergative  
unaccusative+unaccusative  
?transitive+unergative  
?unergative+transitive  
?transitive+unaccusative  
?unaccusative+transitive  
*unergative+unaccusative  
*unaccusative+unergative
V2s that combine with V1s of maximally different argument structure

V2s that are unergative when appearing as isolated verbs (10):

Unergative V2s that combine with unaccusative V1s (8):

Almost all of the V2s that combine with V1s of maximally different argument structure appear in compounds that have low lexical integrity (i.e., compounds that allow either non-case particles or auxiliaries to attach to V1).
Exceptions: -tat– ‘stand’; -topor– ‘go through’
Selection of perfective auxiliaries

Perfective auxiliary –(i)te–

(12) puna.kwi kiri kwi ni kiri–yuki–tu
boat.tree cut.INF lumber COP.INF cut–go–PERF.CONCL
‘felling a tree for making boats, we cut it into lumber’ (MYS.3. 391)

Perfective auxiliary –(i)n–

(13) ywo pa ake–yuki–nu
night TOP dawn–go–PERF.CONCL
‘the night, it dawned’(MYS.13.3312)

V2s selecting either type of perfective auxiliary, depending on the transitivity of V1:
–tug– ‘convey’; –yuk– ‘go’;
Summary of results

1. All of the V2s that vary in perfective auxiliary type appear in the pattern \([V1 \ + \ \text{particle} \ + \ V2]\) and in the pattern \([V1-\text{auxiliary}-V2]\), with the exception of \(-\text{some}-\) ‘begin’.
Summary of results

2. All of the V2s appearing in both pattern [V1 + particle + V2] and pattern [V1–auxiliary–V2] vary in selection of perfective auxiliary according to the transitivity of V1, with the exception of –kane– ‘fail’.
Summary of results

3. Of the 14 V2s which appear in the pattern \([V1 + \text{particle} + V2]\), 12 combine freely with V1s of any transitivity, the exceptions being \(-\text{masar}-\) ‘exceed’ and \(-\text{tamap}-\) ‘give’.
Summary of results

4. The V2s that show free combination, particles, auxiliaries, and perfective variation are:

- *kane*– ‘fail’; *ko*– ‘come’; *tug*– ‘convey’; *yuk*– ‘go’.

They are also among the 13 most frequent V2s examined in this study.
Summary of results

5. The V2s which appear in the pattern [V1–passive– V2] are a subset of the V2s that combine freely with V1s of any transitivity.

With the exception of the V2 –kapyer– ‘go back’, they are also a subset of V2s that appear in the pattern [V1 + particle + V2].
Summary of results

6. Almost all of the V2s that combine with V1s of maximally different transitivity appear in compounds that have low lexical integrity (i.e., compounds that allow either non-case particles or auxiliaries to attach to V1).

Summary of results

7. The V2s that both vary in perfective auxiliary selection and combine with V1s of maximally different transitivity are


These all appear both in the pattern [V1 + particle + V2] and in the pattern [V1–auxiliary–V2].
Conclusion

- V2s that combine with V1s of maximally different argument structure correspond with low lexical integrity.

- V2s that vary in perfective auxiliary type correspond with low lexical integrity.

**Generalization:** The weaker the semantic relationship between V1 and V2, the lower the lexical integrity of the compound that they comprise.

Forming compounds with low lexical integrity is not by itself a sufficient defining characteristic of the class of auxiliary verbs, but it may be a characteristic common to prototypical auxiliary verbs.
References


Kageyama, Taro. (1993), *Dousi imi-ron: Gengo to ninti no setten*, Tokyo, Kurosio Syuppan

Questions and comments welcome