

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

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VSARPJ: People

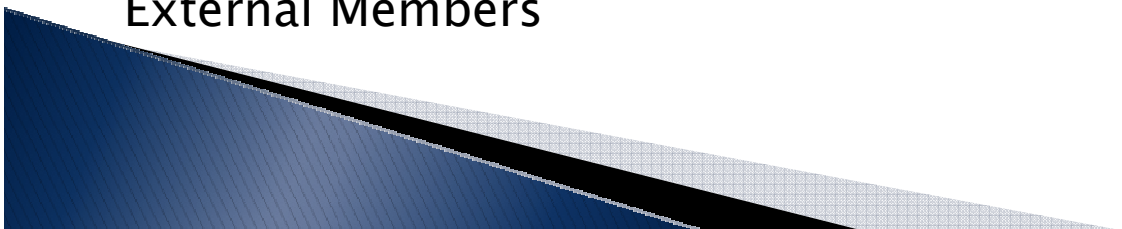
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The VSARPJ Project

Background

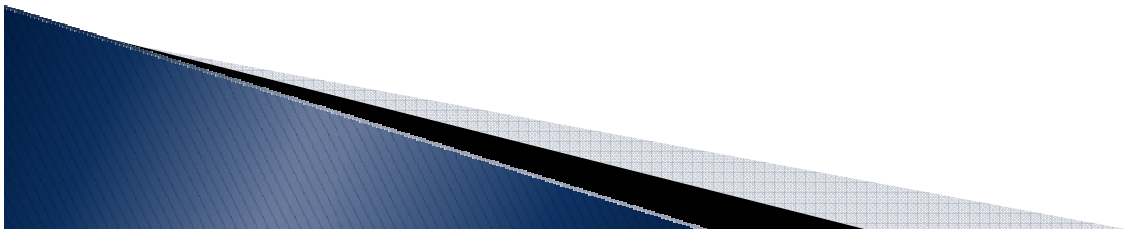
Funding: **Arts & Humanities Research Council (AHRC)**

Goals

Create a tool for linguistic analysis

Morphological and syntactic tagging

Investigate argument realization



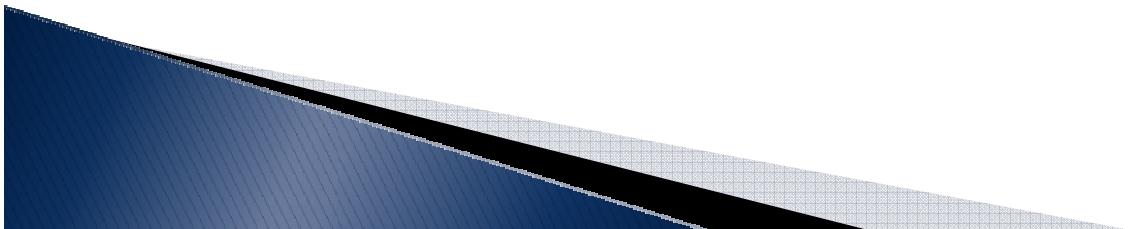
Argument realization

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*

Texts used in the Old Japanese (8th Century) component

<i>Kojiki kayō</i>	古事記歌謡	712
<i>Nihon shoki kayō</i>	本書紀歌謡	720
<i>Fudoki kayō</i>	風土記歌謡	730s
<i>Bussokuseki-ka</i>	仏足石歌	after 753
<i>Man'yōshū</i>	万葉集	after 759
<i>Shoku nihongi Senmyō</i>	宣命	697–791
<i>Shoku nihongi kayō</i>	続日本紀歌謡	797
<i>Engishiki Norito</i>	祝詞	(compiled 927)

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)

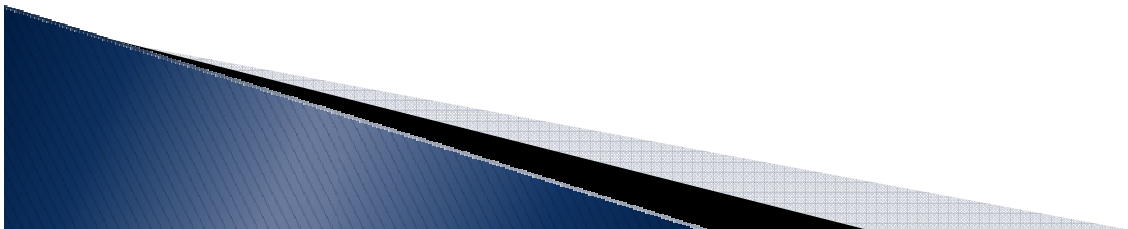
OJ auxiliary verbs appear as V2 in V1+V2 compounds. They typically attach directly to the stem of V1, similar to V2s in lexical compound verbs (in contrast to many NJ auxiliary verbs which follow the gerund form of V1).

Background:

- Descriptions of the class of auxiliary verbs
- Grammaticalization among members of the class
- Changes in the class over time

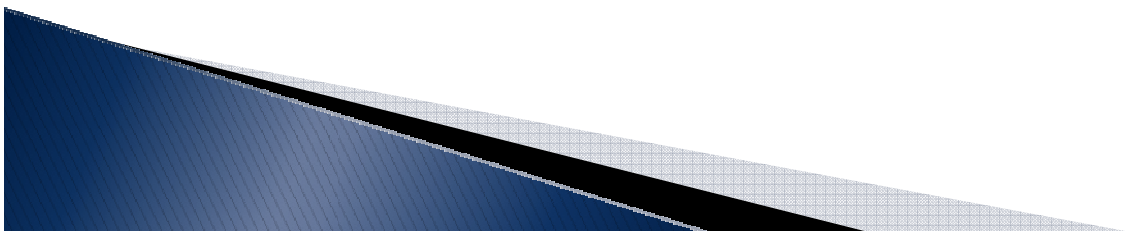
Research question:

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

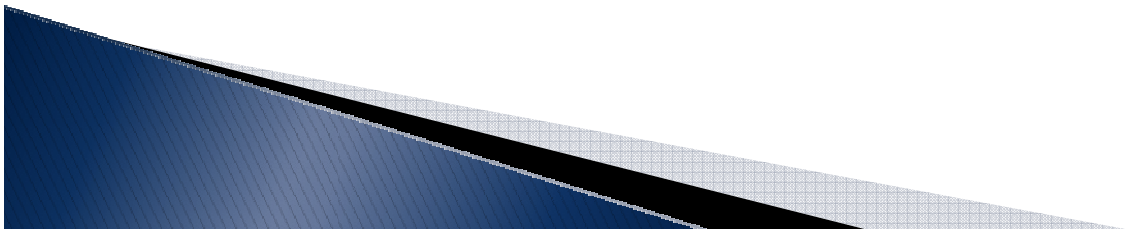
1. overall frequency (number of occurrences as V2)
2. semantic lightness (i.e., V2s denoting spatial deixis, social deixis, aspect, polarity, potential, degree, etc.)
3. free combination with V1s of all transitivity types



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)

–*kane*– ‘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

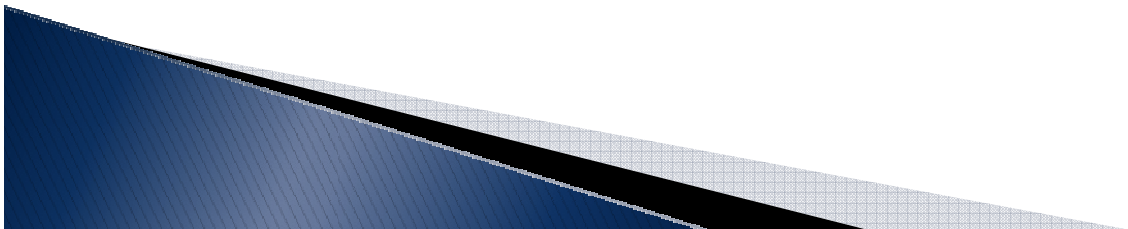
Inceptive: *-some-* ‘begin’; *-ide-* ‘go out’; *-kake-* ‘hang up’

Potential: *-ape-* ‘join’; *-e-* ‘be able’; *-kane-* ‘fail’; *-kate-* ‘prevail’

Continuative: *-yuk-* ‘go’; *-tug-* ‘convey’; *-topor-* ‘pass through’;
-watar- ‘go across’

Social deixis: *-imas-* ‘be’; *-itadak-* ‘receive’; *-matur-* ‘offer’;
-myes- ‘see’; *-tamap-* ‘give’; *-tamape-* ‘receive’

Degree: *-kwos-* ‘put over’; *-kwoye-* ‘go over’; *-masar-* ‘exceed’;
-sugus- ‘put beyond’; *-sugwi-* ‘go beyond’; *-tar-* ‘suffice’



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:

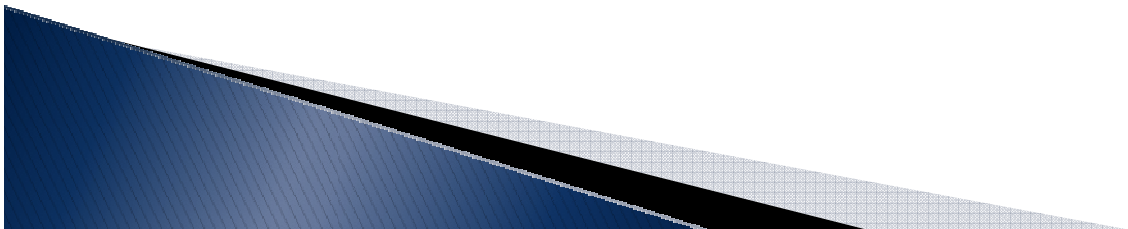
(5) ipapo sura *yuki*-toporu be-*ki*
boulder even go-go.through.CONCL NEC-ACOP.ADN
'(who) should even go through boulders' (MYS.2386)

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

19 V2s: *-ape-* 'join', *-e-* 'be able', *-ide-* 'go out', *-imas-* 'be',
-kane- 'fail', *-kapyer-* 'go back', *-ko-* 'come', *-kose-* 'do for me',
-matur- 'serve', *-mi-* 'see', *-ok-* 'put', *-sik-* 'spread',
-some- 'begin', *-sugwi-* 'go beyond', *-topor-* 'go through',
-tug- 'convey', *-tuk-* 'stick', *-watar-* 'go across', *-yuk-* 'go'



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

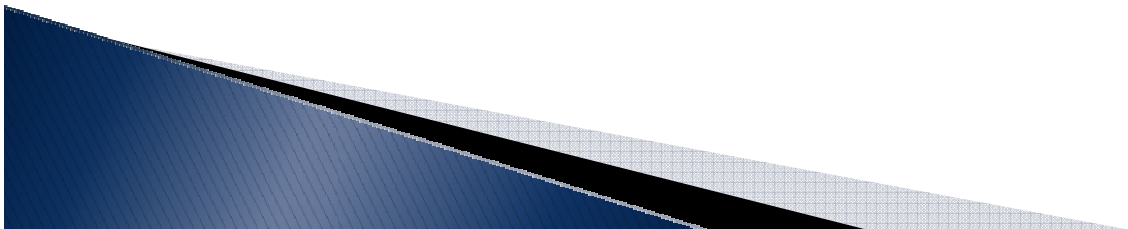
Do non-lexical compound verbs have lower lexical integrity?

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):

-*ape*- 'join'; -*e*- 'be able'; -*imas*- 'be'; -*kane*- 'fail'; -*ko*- 'come';
-*masar*- 'exceed'; -*mi*- 'see'; -*sugwi*- 'go beyond'; -*tamap*- 'give';
-*tug*- 'convey'; -*tuge*- 'convey'; -*watar*- 'go across'; -*yuk*- 'go'

[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):

-*imas*- 'be'; -*kane*- 'fail'; -*kapyer*- 'go back'; -*ko*- 'come';
-*kose*- 'do for me'; -*tug*- 'convey'; -*yuk*- 'go'

[V1 -respect- V2]

(10) ame.no.sita sira-**si**-myesi-*туру* *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’;
–*tug*– ‘convey’; –*tuge*– ‘convey’; –*watar*– ‘go across’; –*yuk*– ‘go’;

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):

-imas- ‘be’; *-ir-*, ‘go in’; *-ko-* ‘come’; *-kapyer-* ‘go back’; *-kwoye-* ‘go over’; *-sugwi-* ‘go beyond’; *-tat-* ‘stand’; *-topor-* ‘go through’; *-watar-* ‘go across’; *-yuk-* ‘go’

Unergative V2s that combine with unaccusative V1s (8):

-kapyer- ‘go back’; *-ko-* ‘come’; *-imas-* ‘be’; *-sugwi-* ‘go beyond’; *-tat-* ‘stand’; *-topor-* ‘go through’; *-watar-* ‘go across’; *-yuk-* ‘go’

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-*

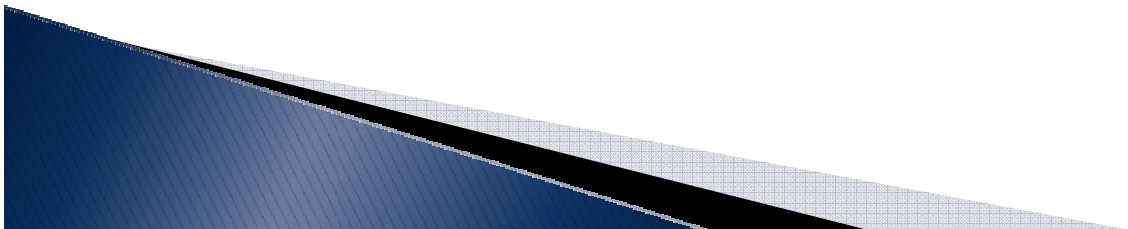
- (13) ywo pa ake-yuki-*nu*
night TOP dawn-go-PERF.CONCL
'the night, it dawned' (MYS.13.3312)

V2s selecting either type of perfective auxiliary, depending on the transitivity of V1:

-ko- 'come'; *-imas-* 'be'; *-some-* 'begin'; *-tamap-* 'receive';
-tug- 'convey'; *-yuk-* 'go';

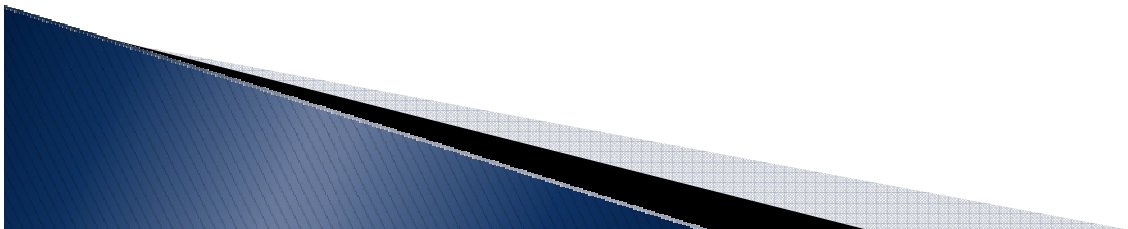
Summary of results

1. All of the V2s that vary in perfective auxiliary type appear in the pattern [V1 + particle + V2] and in the pattern [V1 –auxiliary–V2], with the exception of ~~–some–~~ ‘begin’.



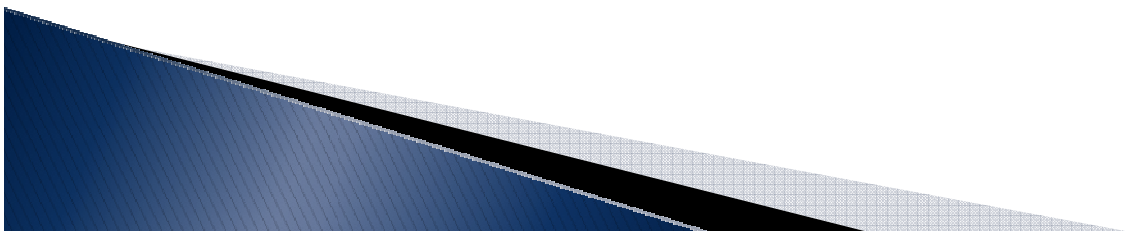
Summary of results

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 + particle + V2], 12 combine freely with V1s of any transitivity, the exceptions being *-masar-* 'exceed' and *-tamaḡ-* 'give'.

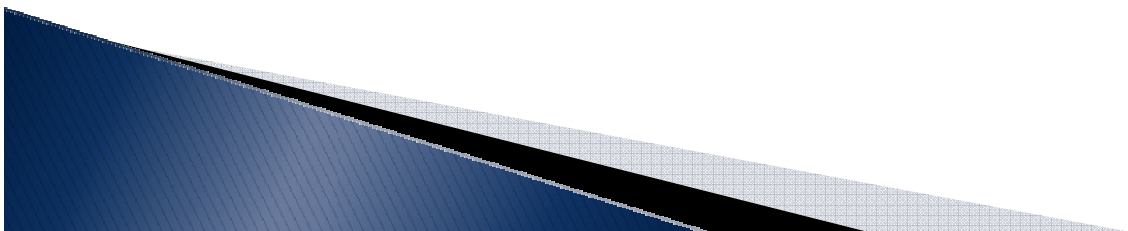


Summary of results

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

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

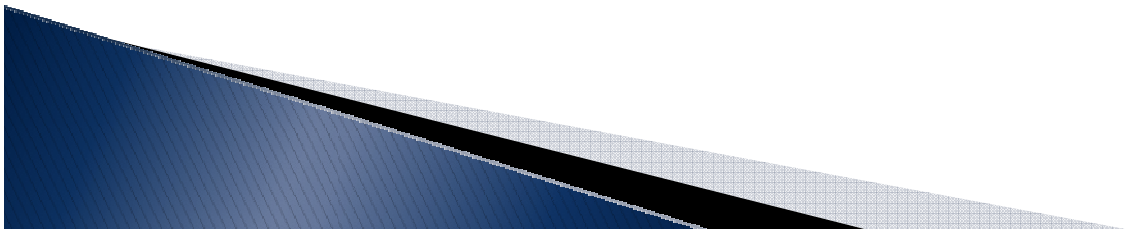
They are also among the 13 most frequent V2s examined in this study.



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.

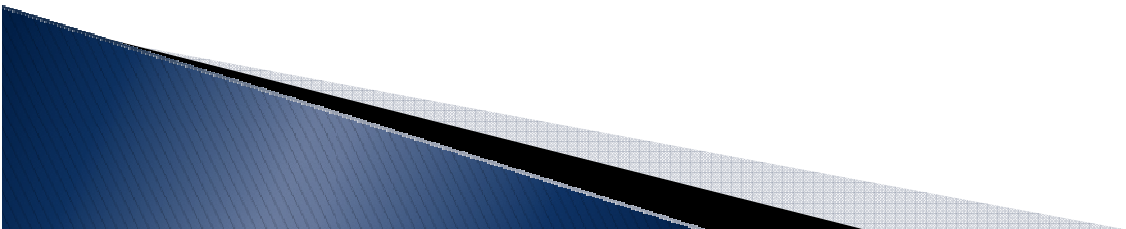
With the exception of the V2 *-kapyer-* ‘go back’, they are also a subset of V2s that appear in the pattern [V1 + particle + V2].



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).

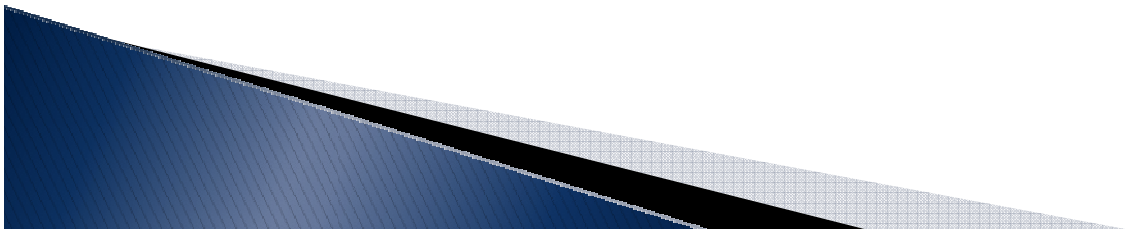
Exceptions: *-tat-* ‘stand’; *-topor-* ‘go through’.



Summary of results

7. The V2s that both vary in perfective auxiliary selection and combine with V1s of maximally different transitivity are
-imas- ‘be’; *-ko-* ‘come’; *-yuk-* ‘go’.

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

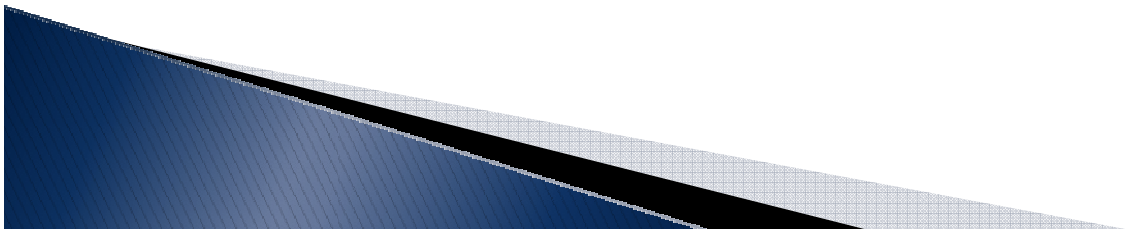


Conclusion

- 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.

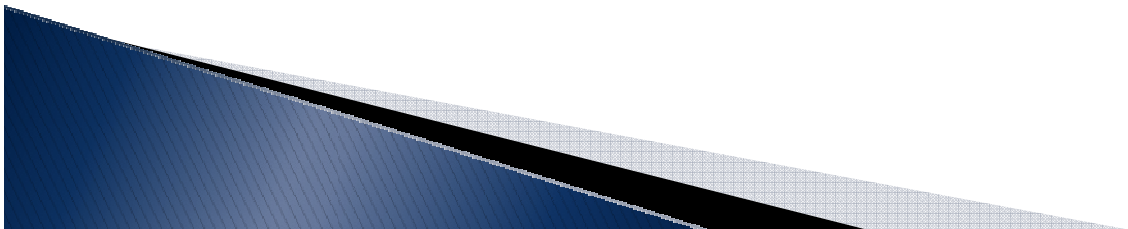
Generalization: The weaker the semantic relationship between V1 and V2, the lower the lexical integrity of the compound that they comprise.

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

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Questions and comments welcome

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