

Redefining Verbal Nouns in Japanese: From the Perspective of Polycategoriality

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Abstract

Japanese has a grammatical class commonly referred to as “verbal nouns (VN)”, whose members form a phrasal verb in combination with the light verb *SURU*. While most VNs can be used as the head of a complement nominal (subject, object, etc.) of a predicate, some lack this use and are used only as part of a phrasal verb. Also, some lexemes that may function as a VN also may function as an adjectival noun, an adverb, etc. We report the results of a corpus-based survey on what patterns of polycategoriality are exhibited by those high-frequency lexemes that may function as a VN, and put forth some proposals as to how to classify and taxonomize “noun-like” categories in Japanese.

1 Introduction

In studies on the Japanese grammar, those lexemes (words) that form a phrasal verb in combination with the light verb *SURU*¹ ‘do’ have been referred to as verbal nouns (VNs) (Martin 1988, Kageyama 1993, Uchida and Nakayama 1993).

(Lexemes that may function as) a VN typically may function as a regular noun and serve as a complement nominal, but there are some exceptional items, which may be called “pure” or monocategorial VNs. Also, some VNs allow a use as an adjectival noun, an adnominal (nominal modifier), or an adverb. This work reports the results of a corpus-based survey inquiring the patterns of (mono- and) polycategoriality exhibited by high-frequency VNs,

¹Expressions in small capitals refer to lexemes.

and puts forth some proposals as to how to classify and taxonomize “noun-like” categories in Japanese.

2 What are verbal nouns?

Lexemes like *CHOOSA* (調査)² ‘investigation’, *JANPU* (< *jump*) ‘jump’, and *UKETSUKE* ‘acceptance’, can be used either as a component of a phrasal verb with *SURU*, as in (1a), or as the head of a complement nominal (often accompanied by a case particle such as nominative *GA* and accusative *O*), as in (1b,c).³

- (1) a. Iseki o **choosa** shita.
ruins Acc investigation do.Pst
‘(They) investigated the ruins.’
b. Iseki no **choosa** ga hajimatta.
ruins Gen investigation Nom begin.Pst
‘The investigation of the ruins began.’
c. Iseki no **choosa** o yameta.
ruins Gen investigation Acc stop.Pst
‘(They) canceled the investigation of the ruins.’

There are, on the other hand, lexemes that form a phrasal verb with *SURU* but are not used—or are used only marginally—as the head of a complement nominal.⁴ Such words include: *KYOTSUU*

²Japanese scripts are provided for Sino-Japanese lexical items (but not for native and Western ones).

³The abbreviations in glosses are: Acc = accusative, Attr = attributive, Cop = copula, Dat = dative, Neg = negation, Nom = nominative, Prs = present, Pst = past, Th = thematic *wa* (topic/ground-marker)

⁴To our knowledge, this type of lexemes has attracted rather scarce attention in the literature. Mizutani and Hoshino (1994), Mizutani (2001), and Nonaka (2009), however, make some rel-

(共通) ‘commonality’, NETCHUU (熱中) ‘enthusiasm’, DOOTEN (動転) ‘perturbation’, IPPEN (一変) ‘drastic change’, UROURO ‘strolling’, ENJOI (< *enjoy*) ‘enjoying’, and FITTO (< *fit*) ‘fitting’.

- (2) a. **Kyootsuu** suru ten ga sonzai
common do.Prns point Nom exist
shinai.
do.Neg.Prns
‘There are no common features.’
b. ??**Kyootsuu** {ga/o} ...
common Nom/Acc

For convenience, we will say that “Lexeme α has a complement-nominal use” to mean that α has the potential to head a complement nominal of a wide range of predicates. The qualification with “a wide range of” (which admittedly is somewhat fuzzy and slippery) is needed to exclude items that serve as the head of a complement nominal only (i) with some exceptional predicates that select for clearly non-nominal words/phrases as case-marked complements, such as YOI ‘good’, as in (3), or (ii) with some predicates that form idioms with them, as in (4).

- (3) {Nonbiri/shinsen/pikapika/chikara o
laid-back/fresh/spick-and-span/force Acc
awasete} ga ichiban **yoi**.
join.Ger Nom the.most good.Prns
‘{(Doing it) in a laid-back way/(its being)
fresh/(its being) spick-and-span/(doing it) join-
ing (our) forces} is the best.’
- (4) a. **Monogokoro** ga tsuku.
thing.sensation(lit.) Nom adhere.Prns
‘(They) will reach the age of discretion.’
b. **Shinchoo** o kishita.
cautious Acc determine.Pst
‘(They) were cautious.’

Whether a given word has a complement-nominal use undoubtedly has to do with its semantic nature (e.g., whether it refers to a concrete entity); at the same time, it is to a good extent a feature conventionalized on the lexeme-by-lexeme basis. The contrasts presented in (5b) and (6b), for example, are hard to explain in terms of semantic factors alone.

evant remarks.

- (5) a. **Watashi wa {konran/dooten}** shita.
I Th confusion/perturbation do.Pst
‘I got {confused/upset}.’
b. {**Konran/??dooten**} ga osamaranai.
confusion/perturbation Nom settle.Neg.Prns
‘(My) confusion won’t settle down.’ / ((My)
perturbation won’t settle down.)
- (6) a. **Jookyoo ga {(hageshiku)**
situation Nom intense.Inf
henka/ippen} shita.
change/drastic.change do.Pst
‘The situation {changed (drasti-
cally)/changed drastically}.’
b. {(Hageshii) **henka/??ippen**} o
intense.Prns change/drastic.change Acc
hikiokoshita.
cause.Pst
‘(It) caused a (drastic) change.’ / ((It) caused
a drastic change.)

It is debatable whether lexemes like KYOOT-SUU (共通) and NETCHUU (熱中), which lack a complement-nominal use, are to be subsumed under the noun category, though we believe that it is by and large a matter of terminology. A similar issue has been raised with respect to so-called adjectival nouns (ANs), which come in two major varieties: (i) the *na*-type (or “AN-*na*” for short), such as ZENRYOO (善良) ‘good’, and (ii) the *no*-type (or “AN-*no*”), such as MURYOO (無料) ‘free of charge’ (Oshima *et al.* 2019). The *na*- and *no*-types have almost identical grammatical distributions, but are combined with different attributive copula forms, *na* and *no*, when occurring in some environments including relative clauses.

- (7) a. **zenryoo na** hito
good Cop.Attr person
‘(a) good person’
b. **muryoo no** hon
free Cop.Attr book
‘(a) free book’

ANs are noun-like in forming stative predicates combined with a copula, but are not noun-like in lacking a complement-nominal use. In line with Martin (1988), we adopt a broad definition of Japanese nouns, and take them to be those content

words that form a predicate with the aid of a copula or a light verb.

VNs generally are understood as those content words that can be used to form a phrasal verb *in addition to* being used as the head of a complement nominal. This criterion, however, fails to cover words like KYOOTSUU (共通), NETCHUU (熱中), and DOOTEN (動転).

We propose to treat regular nouns (RNs) and verbal nouns as distinct categories, defining them as in the following:

- (8) **Regular Nouns:** Those lexemes that have a complement-nominal use (i.e., can be used as the head of a complement nominal of a wide range of predicates).
- (9) **Verbal Nouns:** Those lexemes that form a phrasal verb combined with the light verb SURU.

Lexemes like CHOOSA and JANPU, accordingly, are regarded as being polycategorical, having the potential to be used either as an RN or a VN. KYOOTSUU, NETCHUU, etc., on the other hand, have a use as a VN but lack one as an RN.

Many other types of polycategoriality (that involve “nouns” broadly understood) can be found in the Japanese lexicon. TOOMEI (透明) ‘transparent’ and DOKUTOKU (独特) ‘peculiar’ for example, can be combined with either of the copula forms *na* and *no*, and can be taken to be polycategorical across the *na*-type and *no*-type ANs, for which we assume the following definitions.⁵

⁵Under some limited conditions, SURU in a VN phrasal verb allows alternation with DA, as in (i) (Sato 2014, Kubota 2018).

- (i) a. Ano hito wa ni-ji ni shuppatsu {a. **suru** /
that person Th two.o'clock Dat depature do.Prs
b. **da** }.
Cop.Prs
'That person will leave at two o'clock.'
- b. ni-ji ni shuppatsu {a. **suru** / b. **no** }
two.o'clock Dat depature do.Prs Cop.Attr
hito
person
'the person who will leave at two o'clock'

We take the potential to participate in the construction instantiated by (ib) and (iib)—the “VN+DA” construction, to give it a tentative label—not to count as the potential to “form a predicate combined with the copula DA”, part of the qualifying conditions of ANs. That is, lexemes like NETCHUU, DOOTEN, and

(10) **Adjectival Nouns:** Those lexemes that lack a complement-nominal use but can form a predicate combined with the copula DA.

- a. **Na-Type:** Those adjectival nouns that select for the attributive copula form *na*.
- b. **No-Type:** Those adjectival nouns that select for the attributive copula form *no*.

To give some other examples, (i) KENKOO (健康) ‘health(y)’ is polycategorical across the RN and the AN-*na*, (ii) CHOKKAKU (直角) ‘right angle, perpendicular’ is polycategorical across the RN and the AN-*no*, and (iii) SHINPAI (心配) ‘worry, worrisome’ is polycategorical across the RN, the AN-*na*, and the VN.

The major features of the four nominal categories discussed so far are summarized in Table 1.

3 A lexical survey

We probed the patterns of polycategoriality exhibited by high-frequency lexemes that may function as a VN, utilizing the Tsukuba Web Corpus⁶ (TWC; approximately 1.1 billion words) and the frequency list of words associated with the Balanced Corpus of Contemporary Written Japanese⁷ (BCCWJ; approximately 100 million words).

The target of the survey was the 1,820 lexemes that (i) are in or higher than the 10,000th place in the aforementioned frequency list, or in other words are among the 10,008 lexical items occurring at least 555 times in the BCCWJ (henceforth, these 10,008 items will be referred to as the “top tier”), and (ii) meet the criterion specified in (11).

(11) **The working criterion for identifying VNs:** Those lexemes α such that the form

IPPEN may participate in the “VN+DA” construction, but this does not entail that they may function as ANs.

⁶International Student Center, Tsukuba University (2013–2019); <http://nlt.tsukuba.lagoinst.info/>. NINJAL-LWP (National Institute for Japanese Language and Linguistics & Lago Institute of Language 2012–2019) was used as the search tool.

⁷National Institute for Japanese Language and Linguistics (2011–); http://www.ninjal.ac.jp/corpus_center/bccwj/. The utilized frequency list, available at https://pj.ninjal.ac.jp/corpus_center/bccwj/bcc-chu.html, is based on “short unit words (SUWs)” (one of the units of expressions in the corpus) and is associated with Version 1.1 of the corpus.

	RN	VN	AN- <i>no</i>	AN- <i>na</i>
has a complement-nominal use	+	–	–	–
forms a phrasal verb with SURU	–	+	–	–
forms a predicate with DA	+	–*	+	+
co-occurs with the attributive copula form:	<i>no</i>	(<i>no</i>)	<i>no</i>	<i>na</i>

*But see Note 5.

Table 1: The distributional properties of RNs, VNs, and the two types of ANs

“ α +SURU” occurs more than 50 times in the TWC.

Most of the 1,820 lexemes (“the target VNs”) belong to one of the two BCCWJ tag groups: (A) [名詞-普通名詞-サ変可能] (common nouns that may function as a VN) and (B) [名詞-普通名詞-サ変形状詞可能] (common nouns that may function as a VN and as an AN-*na*); however, two of them, IRAIRA ‘irritat{ion/edly}’ and UKKARI ‘careless{ness/ly}’, belong to (C) [名詞-普通名詞-副詞可能] (common nouns that may function as an adverb), and 25, including YUKKURI ‘rest, slowly’ and IKIHIKI ‘vivid{ness/ly}’, belong to (D) [副詞] (adverbs).

Some items, including ZEHI (是非) ‘right-and-wrong, no matter what’, SOOTOO (相当) ‘considerabl{e/y}’, and IKKEN (一見) ‘(at first) glance’, are listed twice in the frequency list, assigned either (i) tags (A) and (C) or (ii) tags (B) and (C), as if they each corresponded to two homophonous lexemes. In our survey, such items were treated as single lexemes, their instances lumped together.

Among the top-tier lexemes tagged either as (A) or (B), 50 do not meet criterion (11) and were excluded from the target VNs; they include CHOKUSETSU (直接) ‘direct(ly)’, TEKITOO (適當) ‘suitable’, KENSATSU (検察) ‘prosecute(r)’, TONNERU (< *tunnel*) ‘(in baseball, etc.) failure to field a grounder’, and DATOO (妥当) ‘appropriate’.

Also, the items listed in (12) were not identified as a lexeme that may function as a VN, despite meeting criterion (11).

(12) a. (tag group (A))

(i) HANASHI ‘speech, story’⁸

⁸Many hits of “HANASHI+SURU” in the TWC are actually misparses of forms of the verb HANASU ‘speak’ (e.g., *hanashite* (話して) being misparsed as *hanashi shite*). Also, HANASHI is not regarded as having a use as a VN in most contemporary

(ii) MONO ‘thing’, KOKORO ‘sensation’, NAMIDA ‘tear’, ATAI ‘value’, EKI (益) ‘benefit’, KOI ‘love’⁹

b. (tag group (D))

CHANTO ‘properly’, KICHINTO ‘neatly’, JITTO ‘fixedly’, HOTTO ‘with a feeling of relief’, HYOTTO ‘by chance’, HATTO ‘gaspingly’, BOOTTO ‘dimly’, KATTO ‘ill-temperedly’¹⁰

4 Polycategoriality that involve the VN category

Most lexemes that may function as a VN also may function as a RN. Also, some lexemes are polycategorial across the VN and such other categories as the AN and the adverb. In this section, we will examine the patterns and tendencies as to polycategoriality involving the VN, referencing the results of the lexical survey.

4.1 VN/RN polycategoriality

Oftentimes, whether a given lexeme has a use as an RN (as defined in (8)), cannot be determined with crisp judgements. Accordingly, identifying lexemes that are used as a VN {as well as/but not} as a RN in a consistent and objective manner is not a straightforward task.

As a tentative measure of how easily a lexeme that has a use as a VN can be used as a complement monolingual dictionaries.

⁹We take MONOSURU, KOKOROSURU, etc. to be compound lexemes, rather than consisting of a VN and a light verb, in line with the treatment in most contemporary monolingual dictionaries.

¹⁰We consider a structure like “CHANTO+SURU” or “KICHINTO+SURU” to consist of an adverb, rather than a VN, and a light verb. One piece of evidence for this is that SURU participating in this structure never undergoes alternation with DA (a phenomenon explained in Note 5).

nominal, we introduce the “R/V index” defined as follows (α is a lexeme, and # is to be read as “the number of occurrences”; GA and O are nominative and accusative case markers, respectively):

$$\alpha\text{'s R/V index} = \frac{(\# \text{ of “}\alpha\text{+GA”}) + (\# \text{ of “}\alpha\text{+O”})}{\# \text{ of “}\alpha\text{+SURU”}}$$

An extremely low R/V index suggests that the RN use is not allowed, or at least is marginal in comparison to the VN use. An extremely high index, in contrast, indicates that the VN use is marginal, if existent at all. The R/N index admittedly is not an immaculate measure for detecting VN/RN polycategoriality; an obvious shortcoming is that it may be heavily affected by some frequently occurring idioms or set phrases. Nevertheless, we believe that it helps us obtain good ideas about how common it is for a lexeme that may function as a VN to lack a use as a RN.

We calculated the R/V indices of the 1,820 target VNs, using the TWC as sample data.¹¹ To exemplify, the R/N indices of CHOOSA (調査) ‘investigation, survey’, JANPU ‘jump’, and UKETSUKE ‘acceptance’ were 2.032, .292, and 3.355, respectively, while those of KYOOTSUU (共通) ‘commonality’, NETCHUU (熱中) ‘enthusiasm’, IPPEN (一変) ‘drastic change’, and UROURO ‘strolling’, which were mentioned in §2 as examples of lexemes lacking a complement-nominal use, were .001, .003, .002,

¹¹In the TWC, VN phrasal verbs are often treated as words distinct from the corresponding (regular) nouns. CHOOSA (調査) ‘investigation’, for example, corresponds to two lemmas (lexical entries) in the TWC: (i) the “verb” $\langle choosa\ suru \rangle$ and (ii) the “noun” $\langle choosa \rangle$. (For convenience, angle brackets are used to refer to TWC lemmas.) The occurrences of “ $\alpha\text{+}\{GA/O\}$ ” correspond to the cases where $\langle \alpha \rangle$ is regarded as a “noun” or as an “adverb” and immediately precedes GA/O. The occurrences of “ $\alpha\text{+SURU}$ ” consist of (i) the occurrences (including various conjugated forms) of $\langle \alpha\ suru \rangle$ treated as a “verb”, and (ii) the cases where $\langle \alpha \rangle$ is regarded as a “noun” or as an “adverb” and immediately precedes $\langle suru \rangle$. More generally, when (what we consider to be) a single lexeme corresponds to multiple TWC lemmas, their occurrences were lumped for the purpose of the calculation of R/V indices. The following six pairs of lemmas too were treated as single lexemes: (i) $\langle kooyoo \text{ (紅葉)}\ suru \rangle / \langle momiji\ suru \rangle$, (ii) $\langle yakedo\ suru \rangle / \langle kashoo \text{ (火傷)}\ suru \rangle$, (iii) $\langle tannoo \text{ (堪能)} \rangle / \langle kannoo \text{ (堪能)} \rangle$, (iv) $\langle meeku \text{ (メーカー)} \rangle / \langle meiku \text{ (メイク)} \rangle$, (v) $\langle meeku\ suru \text{ (メーカーする)} \rangle / \langle meiku \text{ (メイクする)} \rangle$, and (vi) $\langle ofu\ suru \text{ (オフする)} \rangle / \langle OFF\ suru \text{ (OFFする)} \rangle$. The first three pairs are considered by the TWC to be homographic but heterophonic, but the pronunciation intended in the sources are in many cases unclear.

and .002, respectively.¹² Note that the adopted criterion (11) guarantees that every target VN has at least 50 occurrences in the TWC; the target VN with the fewest occurrences was ZENSHUTSU (前出) ‘previous mentioning, aforementioned’, with 69 occurrences in total and the R/V index 6.154.

The threshold value (of the R/V index) for acknowledging/dismissing the VN/RN polycategoriality of a given lexeme cannot be set without a certain degree of arbitrariness. The target VNs with a value smaller than .01 (Tier A) are listed in (13), and the ones with a value in the range of: $.01 \leq x < .03$ (Tier B) are listed in (14), in the ascending order of the index.

(13) (Tier A; $n = 52$)

SHIMIJIMI ‘keen{ness/ly}’, MANKITSU (満喫) ‘satisfaction’, KUSHI (駆使) ‘full use’, UNZARI ‘boredom’, ATTOO (圧倒) ‘overpowering’, HAKKIRI ‘cl{arity/early}’, SHIKKARI ‘secur{ity/ely}’, KYOOTSUU (共通) ‘common(ality)’, KYOOSHUKU (恐縮) ‘embarrassment’, KITCHIRI ‘precis{ion/ely}’, TSUUYOO (通用) ‘validity’, RINSETSU (隣接) ‘adjacency’, BIKKURI ‘astonishment’, IPPEN (一変) ‘drastic change’, ZENJUTSU (前述) ‘previous mentioning, aforementioned’, UROURO ‘strolling, aimlessly’, TANNOO (堪能) ‘satisfaction, skilled’, CHOKKETSU (直結) ‘direct connection’, HANMEI (判明) ‘ascertainment’, IKKEN (一見) ‘(at first) glance’, NETCHUU (熱中) ‘enthusiasm’, HEIKOO (並行) ‘simultane{ity/ous}’, GAITOO (該当) ‘correspond{ence/ing}’, GAKKARI ‘disappointment’, KOOJUTSU (後述) ‘subsequent mentioning, to be mentioned later’, IKKAN (一貫) ‘consistency’, NONBIRI ‘rest, slowly’, KI’IN (起因) ‘cause’, BATABATA ‘bustling, noisily’, BON’YARI ‘vague{ness/ly}’, KANSHIN (感心) ‘admira{tion/ble}’, KAN’AN (勘案) ‘consideration’, CHOKUMEN (直面) ‘confrontation’, BURABURA ‘idl{ing/y}’, SUKKIRI ‘cl{arity/early}’, JUUJI ‘engagement’, YUTTARI ‘rest, slowly’, IKIKI ‘vivid{ness/ly}’, SAPPARI ‘plain{ness/ly}’, HAIKEN (拝見) ‘look’, HISSORI ‘silen{ce/tly}’, AIYOO (愛

¹²The other examples like DOOTEN (動転) ‘perturbation’ were not part of the top tier.

用) ‘regular use, regularly used’, IKKATSU (一括) ‘consolidat{ion/ed}’, SHIHAN (市販) ‘(on) public sale’, TSUUKAN (痛感) ‘acute realization’, KYOOCHOO (強調) ‘emphasis’, HIREI (比例) ‘proportion’, JUN’YOO (準用) ‘mutatis mutandis application’, AS-SARI ‘plain{ness/ly}’, JUUSHI (重視) ‘serious consideration’, CHOODAI (頂戴) ‘receiving’, GOROGORO ‘loafing around, with rumbling’

(14) (Tier B; $n = 54$)

SENNEN (專念) ‘devotion’, MOKUGEKI (目撃) ‘witnessing’, KAGOO (化合) ‘combination’, GATCHI (合致) ‘consistency’, SENZAI (潜在) ‘latency’, ZAISEKI (在籍) ‘regist{ration/ered}’, FUZOKU (付属) ‘attach{ment/ed}’, HOOCHI (放置) ‘neglect’, YUUSEN (優先) ‘priority’, TEISHOO (提唱) ‘advocacy’, KURIKKU (< *click*) ‘clicking’, HAKKI (発揮) ‘manifestation’, GENSON (現存) ‘existence’, SHUTSUDO (出土) ‘unearthing’, HOOKATSU (包括) ‘inclusion’, CHAKUMOKU (着目) ‘attention’, TOOMEN (当面) ‘immedia{cy/te}, for the time being’, SHITTORI ‘moisture, mellowly’, SOOGUU (遭遇) ‘encounter’, TAIKOO (对抗) ‘competition’, SOOTOO (相当) ‘correspondence, considerable’, KOORYO (考慮) ‘consideration’, ZENKI (前記) ‘previous note, previously noted’, HEIKOO (平行) ‘parallel(ism)’, SENKOO (先行) ‘precedence’, SOO’OO (相応) ‘correspondence, suitable’, KEIYU (經由) ‘passage’, HAN’EI (反映) ‘reflection’, TOOJOO (登場) ‘appearance’, ISSHO (一緒) ‘company, same’, JISAN (持参) ‘bringing’, GETTO (< *get*) ‘acquisition’, SHUSAI (主催) ‘hosting (of an event)’, TOOSAI (搭載) ‘loading’, MEIKI (明記) ‘specification’, KY-OYOO (許容) ‘allowance’, TOOTATSU (到達) ‘attainment’, TEKIGOO (適合) ‘conformance’, HIROO (披露) ‘announcement’, RYUUI (留意) ‘attention’, DANGEN (断言) ‘assertion’, SEISHI (静止) ‘stillness’, SENREN (洗練) ‘elaboration’, ZAIGAKU (在学) ‘enrollment in school’, SANSHUTSU (算出) ‘calculation’, MITCHAKU (密着) ‘adherence’, DANNEN (断念) ‘abandonment’, AIKOO (愛好) ‘love’, HAKKAKU (発覚) ‘revelation’, FUKA (付加)

‘addition’, KOOAN (考案) ‘invention’, FUJOO (浮上) ‘surfacing’, TAHATSU (多発) ‘frequent occurrence’, KOOFU (公布) ‘proclamation’

We suggest that the items in these two tiers can safely be taken to lack the use as an RN or allow it only marginally.

4.2 VN/AN-*na* polycategoriality

Among the 1,820 target VNs, the 34 listed in (15) are noted to have a use as an AN-*na* in Nishio *et al.* (eds.) (2019), an acclaimed monolingual dictionary of Japanese with approximately 67,000 entries.¹³

(15) SHINPAI (心配) ‘worr{y/isome}’, ANTEI (安定) ‘stab{ility/le}’, HANTAI (反对) ‘opposi{tion/ng}’, ANSHIN (安心) ‘relie{f/ving}’, KYOOTSUU (共通) ‘common(ality)’, FUSOKU (不足) ‘insufficien{cy/t}’, MANZOKU (満足) ‘satisfact{ion/ory}’, SAIWAI (邪魔) ‘fortun{e/ate(ly)}’, KUROO (苦劳) ‘trouble(some)’, OOPUN (< *open*) ‘open(ness)’, MEIWAKU (迷惑) ‘annoy{ance/ing}’, JAMA (邪魔) ‘obst{acle/ructive}’, SHITSUREI (失礼) ‘rude(ness)’, HETA (unskilled(ness)’, PIT-TARI ‘tight(ness/ly)’, OSHARE ‘stylish(ness)’, KURIA (< *clear*) ‘clear(ing)’, KANSHIN (感心) ‘admira{tion/ble}’, ZEITAKU (贅沢) ‘luxur{y/ious}’, ETCHI (< *H*) ‘sex, obscene’, UWAKI (浮気) ‘(prone to) adultery’, BINBOO (貧乏) ‘po{verty/or}’, OOBAA (< *over*) ‘exceed, exaggerated’, BOODAI (膨大) ‘swell up, huge’, GOODOO (合同) ‘combin{ation/ed}’, ITAZURA ‘mischie{f/vous}’, FURIN (不倫) ‘immoral(ity)’, TAIKUTSU (退屈) ‘bor{edom/ing}’, RANBOO (乱暴) ‘viololen{ce/t}’, HEIKOO (平行) ‘parallel(ness)’, HEIKOO (並行) ‘simultane{ity/ous}’, POPPU (< *pop*) ‘popping, popular’, SOO’OO (相応) ‘suitab{ility/le}’, TANNOO¹⁴ (堪能) ‘satisfaction, skilled’

¹³The potential for a lexeme to be used as an AN-*na* is reflected in the BCCWJ tag information, but there are some cases of discrepancies between it and the treatment in Nishio *et al.* (eds.) (2019).

¹⁴It is said that TANNOO (堪能) in the sense of ‘satisfaction’ and TANNOO in the sense of ‘skilled’ used to be distinct lexemes, the latter being a variant form of KANNOO (堪能) (Nishio *et al.* (eds.), 2019:964).

PITTARI is also used as an adverb (see below).

4.3 Polycategoriality across verbal nouns and *no*-type adjectival nouns and adnominals

In the literature, a clear consensus is yet to established as to which lexemes are to be regarded as (having a use as) an AN-*no* (Oshima *et al.* 2019).

The same holds true for the category subsuming KISSUI (生粋) ‘native, pure’ and KAISHIN (会心) ‘satisfactory’, which has a distribution similar to that of the AN-*no* but occurs only in a noun-modifying construction (relative clause). We refer to this category as the *no*-type adnominal, or “Adn-*no*”.¹⁵

(16) **No-Type Adnominals:** Those lexemes that form a noun-modifying clause being accompanied by the attributive copula form *no*, but cannot be accompanied by other copula forms such as *da* and *de*.

We do not attempt here to exhaustively identify which target VNs have a use as an AN-*no* or Adn-*no*, and will merely point out a few examples. ISSHO (一緒) ‘company, same’, KIRAKIRA ‘glitter(ingly)’, GIZOO (偽造) ‘forge{ry/d}’, KIN’EN (禁煙) ‘smoking cessation, nonsmoking’, and HIGAERI (going and returning) in one day’ can be regarded as having a use as an AN-*no*.¹⁶

AIYOO (愛用) ‘regular use, regularly used’, TOKUTEI (特定) ‘specifi{cation/ed}’, DAIYOO (代用) ‘substitut{ion/e}’, KYODOO (共同) ‘cooperat{ion/ed}’, and TOOMEN (当面) ‘immedia{cy/te}, for the time being’ can be regarded as having a use as an Adn-*no*.¹⁷

4.4 VN/adverb polycategoriality

We adopt (17) as the definition of the Japanese adverb category.

(17) **Adverbs:** Those lexemes that meet at least one of conditions (a)–(c).

¹⁵Other types of adnominals include (i) the *taru*-type, such as KENRAN (絢爛) ‘gorgeous’ and YUUZEN (悠然) ‘calm(ly)’, and (ii) the *naru*-type, such as SETSU (切) ‘eager(ly)’ and TAE ‘exquisite(ly)’.

¹⁶KIRAKIRA additionally has a use as an adverb (§4.4), and GIZOO, KIN’EN and HIGAERI have a use as a RN.

¹⁷TOOMEN additionally has a use as an adverb (§4.4).

- a. **Null Type:** Those lexemes that are used to modify a predicate or a clause by themselves (e.g., KANARI ‘considerably’, TOTEMO ‘very’).
- b. **To-Type:** Those lexemes that are used to modify a predicate or a clause being accompanied by *to* (e.g., DOODOO (堂堂) ‘majestic(ally)’ and YUUZEN (悠然) ‘calm(ly)’).
- c. **Ni-Type:** Those lexemes that (i) are used to modify a predicate or a clause being accompanied by *ni*, but (ii) do not meet the definition of ANs (e.g., OMOMURO ‘slowly’, TOMI ‘suddenly’).

Among the target VNs, we consider the 32 listed in (18) to meet the definition above (the judgments may well fluctuate to some extent among speakers). All of them may function as a null type adverb, and some may function as a *to*-type and/or a *ni*-type as well.

- (18) HAKKIRI ‘cl{arity/early}’, SHIKKARI ‘secur{ity/ely}’, YUKKURI ‘rest, slowly’, ZEHI (是非) ‘right-and-wrong, no matter what’, SOOTOO (相当) ‘correspondence, considerabl{e/y}’, GOOKEI (合計) ‘(in) total’, SAIWAI ‘fortun{e/ate(ly)}’, IKKEN (一見) ‘(at first) glance’, PITTARI ‘tight(ness/ly)’, SUKKIRI ‘cl{arity/early}’, NONBIRI ‘rest, slowly’, SAPPARI ‘plain{ness/ly}’, BON’YARI ‘vague{ness/ly}’, IRAIRA ‘irrita{tion/edly}’, TOOMEN (当面) ‘immedia{cy/te}, for the time being’, ASSARI ‘plain{ness/ly}’, IKIKI ‘vivid{ness/ly}’, YUTTARI ‘rest, slowly’, DOKIDOKI ‘pit-a-pat’, KITCHIRI ‘precis{ion/ely}’, KIRAKIRA ‘glitter(ingly)’, NIKKORI ‘smil{e/ingly}’, WAKUWAKU ‘excite{ment/dly}’, UKKARI ‘careless{ness/ly}’, KIPPARI ‘decisive{ness/ly}’, SHITTORI ‘moisture, mellowly’, GOROGORO ‘loafing around, with rumbling’, HISSORI ‘silen{ce/tly}’, UROURO ‘strolling, aimlessly’, BATABATA ‘bustling, noisily’, BURABURA ‘idl{ing/y}’, SHIMIJIMI ‘keen{ness/ly}’

5 Discussions and conclusion

Tier A (§4.1) accounts for 2.86% (52/1,820) of the target VNs, and Tiers A and B together account for

5.82% (106/1,820). It seems fair to say that lexemes that have a use as a VN but lack a use as an RN are not uncommon (though much less common than lexemes that have a use as an RN but lack a use as an VN).

Among the Tier A lexemes, the ones in (19) (and possibly some others) can be regarded as monocategorical or “pure” VNs.¹⁸

- (19) MANKITSU (満喫) ‘satisfaction’, KUSHI (駆使) ‘full use’, UNZARI ‘boredom’, ATTOO (压倒) ‘overpowering’, KYOOSHUKU (恐縮) ‘embarrassment’, TSUUYOO (通用) ‘validity’, BIKKURI ‘astonishment’, IPPEN (一変) ‘drastic change’, HANMEI (判明) ‘ascertainment’, NETCHUU (熱中) ‘enthusiasm’, GAKKARI ‘disappointment’, IKKAN (一貫) ‘consistency’, KIIN (起因) ‘cause’, KAN’AN (勘案) ‘consideration’, CHOKUMEN (直面) ‘confrontation’, JUUJI ‘engagement’, HAIKEN (拝見) ‘look’, TSUUKAN (痛感) ‘acute realization’, KYOOSHOO (強調) ‘emphasis’, HIREI (比例) ‘proportion’, JUN’YOO (準用) ‘mutatis mutandis application’, JUUSHI (重視) ‘serious consideration’

Lexemes with a low R/V index include many ideophones, most of which may function as an adverb. The following items in Tiers A and B are ideophones that can be used as an adverb:

- (20) (Tier A) SHIMIJIMI ‘keen{ness/ly}’, HAKKIRI ‘cl{arity/early}’, SHIKKARI ‘secur{ity/ely}’, KITCHIRI ‘precis{ion/ely}’, UROURO ‘strolling, aimlessly’, NONBIRI ‘rest, slowly’, BATABATA ‘bustling, noisily’, BURABURA ‘idl{ing/y}’, IKIKI ‘vivid{ness/ly}’, HISSORI ‘silen{ce/tly}’, ASSARI ‘plain{ness/ly}’, GOROGORO ‘loafing around, with rumbling’; (Tier B) SHITTORI ‘moisture, mellowly’

It is plausible that for many (if not all) such lexemes, the use as an adverb is basic, and the use as a VN was derived from it.

¹⁸(19) exclude those lexemes that can be reasonably suspected to have a use as an AN-*no* or Adn-*no*, as well as CHOODAI (頂戴) ‘receiving’, which is used in the idiomatic construction: “X (*o*) *choodai*” ‘Give me X’.

Phrasal verbs with a VN with a low R/V index value appear to tend to be stative.¹⁹ The members of Tiers A and B listed in (21) form a stative verb with SURU.

- (21) (Tier A) HAKKIRI ‘cl{arity/early}’, SHIKKARI ‘secur{ity/ely}’, RINSETSU (隣接) ‘adjacency’, CHOKKETSU (直結) ‘direct connection’, HEIKOO (並行) ‘simultane{ity/ous}’, GAITOO (該当) ‘correspond{ence/ing}’, IKKAN (一貫) ‘consistency’, KIIN (起因) ‘cause’, CHOKUMEN (直面) ‘confrontation’, SUKKIRI ‘cl{arity/early}’, YUTTARI ‘rest, slowly’, IKIKI ‘vivid{ness/ly}’, HISSORI ‘silen{ce/tly}’, HIREI (比例) ‘proportion’, ASSARI ‘plain{ness/ly}’, GOROGORO ‘loafing around, with rumbling’; (Tier B) GATCHI (合致) ‘coincidence’, SENZAI (潜在) ‘latency’, ZAISEKI (在籍) ‘regist{ration/ered}’, FUZOKU (付属) ‘attach{ment/ed}’, GENSON (現存) ‘existence’, SHITTORI ‘moisture, mellowly’, HEIKOO (平行) ‘parallel(ism)’

Lexemes that may function as a VN but not as an RN have attracted scarce attention in the literature, and the contrast between “VNs” like CHOOSA (調査) ‘investigation’ and SHUPPATSU (出発) ‘departure’ on the one hand and ones like MANKITSU (満喫) ‘satisfaction’ and KUSHI (駆使) ‘full use’ on the other—the information that only the former can be used as a complement nominal—have tended to be ignored in existing dictionaries, reference grammars, etc. This is unfortunate from perspectives of both theoretical research and language education; it should be recognized VNs and RNs are distinct categories, essentially in the same way as, say, adverbs and RNs are.

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¹⁹Here, stative verbs are taken to subsume (i) Kindaichi’s (1950) Type I verbs and Type IV verbs and (ii) verbs that may function either as a Type I or Type IV verb (Kinsui’s 1994 “Type V”).

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