

Lexical Periphrastics*

a Third Periphrastic Construction in Japanese

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Two periphrastic constructions, combining a verbal noun and *suru* “do”, are generally recognized in Japanese. In one, the so-called “unincorporated” construction, the verbal noun is marked accusative and the object, if any, appears as a genitive complement within the full NP headed by the verbal noun. This construction is on all accounts unequivocally phrasal. In the other, the so-called “incorporated” construction, the verbal noun is not case-marked and the direct object, if any, is marked accusative. Although this construction has often been taken to involve lexical incorporation of the verbal noun into *suru*, there is considerable evidence that no incorporation takes place and that the construction is actually phrasal (Poser to appear). The “incorporated” construction actually conflates two subtypes: in addition to the periphrastics that exhibit phrasal behaviour, there is a subset that exhibit truly lexical behaviour. These fail all eight tests for phrasal status discussed by Poser (to appear), and differ from phrasal “incorporated” periphrastics in another eleven properties. Recognizing this third construction eliminates a number of hitherto mysterious irregularities. Which nouns form lexical periphrastics and which phrasal is predictable phonologically: those verbal nouns that are underlyingly monosyllabic form lexical periphrastics. No explanation for this restriction is known.

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1. Introduction

Periphrastic verbs, consisting of a verbal noun and a form of the verb *suru* ‘do’ have been extensively studied in Japanese. Two subtypes of the periphrastic construction are generally recognized. In one, the so-called “incorporated” construction, illustrated in (1), the verbal noun is not case-marked and the direct object, if any, is marked accusative. In the other, the so-called “unincorporated” construction, illustrated in (2), the verbal noun is marked accusative and the object, if any, appears as a genitive complement.¹

- (1) Hanako-wa eigo-o benkyoo site-iru.
Hanako-T English-A study doing-be
Hanako is studying English.
- (2) Hanako-wa eigo-no benkyoo-o site-iru.
Hanako-T English-G study-A doing-be
Hanako is studying English.

The “unincorporated” construction is on all accounts phrasal. The “incorporated” construction, on the other hand, has generally been taken to involve incorporation, either lexical (Inoue 1976, Poser 1980, Miyagawa 1987, 1989, and Grimshaw & Mester 1988) or syntactic (Kageyama 1977ab, 1982), of the verbal noun into the verb *suru*, among other reasons because the verbal noun is not case-marked and must appear unmodified.

Not all incorporated periphrastics have unincorporated counterparts. As Miyagawa (1987) and Tsujimura (1990) point out, unergative periphrastics, that is, those that have an agent thematic role, have both incorporated and unincorporated forms, while unaccusative periphrastics, that is, those that have only a patient or theme role, do not have unincorporated forms.

¹ The following abbreviations are used in glosses on the examples:

A	accusative	N	nominative
AD	adessive	NEG	negative
D	dative	Q	interrogative particle
G	genitive	T	topic

2. The Two Types of Incorporated Periphrastic

Both the linguistic literature on the periphrastic construction and less theoretically oriented grammars and dictionaries treat all of the verbs containing *suru* the same. Virtually the only exception is Kageyama (1977ab, 1982), who refers to a “suffix” *su* distinct from the verb *suru* and mentions a few differences between the two classes. It turns out that there are two quite distinct classes of “incorporated” *suru*-verbs. One class, by far the larger, exhibits the behaviour familiar from the literature, including the phrasal properties discussed by Poser (to appear). Members of the other class show clear signs of lexical status.

These lexical periphrastics are historically derived from the combination of *suru* with a noun, and they reflect this synchronically in the fact that in most cases the nominal part is still available as an independent noun and in the fact that they exhibit some of the morphological irregularities of the verb *suru*.

Lexical periphrastics look superficially like “incorporated” phrasal periphrastics. As illustrated in (3), the nominal part is not case marked, and if the verb is transitive, it may assign accusative case to its object.

- (3) Taroo-wa Hanako-o ai site iru.
Taroo-T Hanako-A love do-ing-be
Taroo loves Hanako.

Lexical periphrastics fall into three subtypes with different phonological and morphological behaviour. Some lexical periphrastics give no overt clues to their lexical status. These include such examples as *aisuru* ‘love’, *taisuru* ‘confront’, *wasuru* ‘harmonize’, *zasuru* ‘sit’, and *baisuru* ‘double, increase’, which appear to be the concatenations of the nouns *ai* ‘love’, *tai* ‘opposite’, *wa* ‘harmony’, *za* ‘seat’ and *bai* ‘multiplication’ with *suru*.

The lexical periphrastics that wear their lexicality on their sleeve fall into two subgroups. One consists of such items as *nessuru* ‘heat’, *assuru* ‘oppress’, and *bassuru* ‘punish’ where the final vowel of the corresponding nouns *netu* ‘heat’, *atu* ‘pressure’, and *batu* ‘punishment’ is absent and the /t/ of the stem assimilates to the /s/ of *suru*. The other consists of forms like *anzuru* ‘be anxious’ and *sinzuru* ‘believe’, in which the /s/ of *suru* becomes voiced, presumably as a result of assimilation to the final nasal of the noun.

2.1. Failure of Tests for Phrasal Status

Poser (to appear) discusses eight phenomena, one phonological, two morphological, and five syntactic, that argue against treating “incorporated” periphrastics as incorporated and in favor of treating them as phrasal. Lexical periphrastics fail all eight tests for phrasal status.²

2.1.1. Pitch Accent

Phrasal incorporated periphrastics differ from ordinary verbs in that, if the verbal noun is accented, they are accented on the verbal noun, even if a dominant suffix like the politeness-to-addressee suffix *mas*, which attracts the accent to itself, is attached to *suru*. For example, the non-periphrastic verb *yómu* ‘read’ is accented on the stem *yom-*, but *mas* attracts the accent, yielding *yomimásu*. In contrast, the periphrastic verb *séiri suru* ‘put in order’ is accented on the verbal noun, not on the penult where a simplex accented verb would be accented. The dominant suffix *mas* does not succeed in attracting the accent: *séiri simasu*.

The lexical periphrastics behave in this respect just like ordinary simplex verbs, not like their phrasal periphrastic counterparts. Even if the nominal part is accented, as it is in all of the examples in (4), the accent appears on *suru* in the position to which the morphological rules of accent placement for ordinary verbs would assign it. The forms in the second column of (4) show that the dominant suffix *mas* succeeds in attracting the accent. If these verbs behaved like phrasal periphrastics, they would be accented as indicated in the third and fourth columns.

(4) Accentuation of Lexical Periphrastics

aisúru	aisimásu	*áisuru	*áisimasu	love
anzúru	anzimásu	*ánzuru	*ánzimasu	be anxious
nessúru	nessimásu	*néssuru	*néssimasu	heat
sinzúru	sinzimásu	*sínzuru	*sínzimasu	believe
taisúru	taisimásu	*táisuru	*táisimasu	oppose

² Since these phenomena are discussed in detail in Poser (to appear), we present here only sufficient information to make clear the contrast.

2.1.2. Reduplication

When phrasal periphrastics are reduplicated, it is possible for either the entire periphrastic to reduplicate or just the *suru* part. In contrast, lexical periphrastics must reduplicate the verbal noun and *suru* as a unit, as illustrated in (5). Reduplication of the *suru* part alone is ungrammatical.³

- (5)
- | | | | |
|---------|------------|--------------|--------|
| nessuru | nessinessi | *ne sii sii | heat |
| taisuru | taisitaisi | *tai sii sii | oppose |
| tosuru | tositosi | *to sii sii | wager |

2.1.3. Lexical Nominalizations

Phrasal periphrastics do not undergo lexical nominalizations. In contrast, lexical nominalizations of lexical periphrastics are formed without difficulty. For example, the manner nominalization with suffix *-kata* that is impossible with phrasal periphrastics (e.g. **aibusikata* ‘manner of carressing’) is fully productive for lexical periphrastics, as illustrated by such examples as those in (6).

- (6)
- | | |
|-----------|----------------------|
| aisikata | manner of loving |
| assikata | manner of oppressing |
| ronzikata | manner of reasoning |
| tosikata | manner of betting |

2.1.4. Whether Constructions

When a phrasal periphrastic is used in a whether-construction, the verbal noun may optionally be omitted from the second occurrence of the verb. This is not true of lexical periphrastics. Thus, (7), in which both the verbal noun and *suru* occur twice, is grammatical just as (8) is, but (9), in which the second copy of the verbal noun *ai* is omitted, is ungrammatical, in contrast to the fully acceptable (10).

³ The vowel of the *renyookei* of *suru* is lengthened in both halves of the reduplication in the third column because this is the expected behaviour when the *renyookei* is monomoraic. cf. *dokusyo sii sii* from the phrasal periphrastic *dokusyo suru* ‘read’. Shortening these vowels does not improve the examples.

- (7) ai suru ka ai sanai ka o siranai
love do Q love do-NEG Q A know-NEG
I don't know whether or not I love her
- (8) seikoo suru ka seikoo sinai ka o siranai
success do Q success do-NEG Q A know-NEG
I don't know whether or not I will succeed.
- (9) *ai suru ka ϕ sanai/sinai ka o siranai
love do Q ϕ do-NEG Q A know-NEG
I don't know whether or not I love her
- (10) seikoo suru ka ϕ sinai ka o siranai
success do Q ϕ do-NEG Q A know-NEG
I don't know whether or not I will succeed.

2.1.5. Right Node Raising

Phrasal periphrastics permit Right Node Raising of the *suru* part alone. In contrast it is not possible to raise the *suru* part of a lexical periphrastic, leaving the verbal noun stranded, as exemplified by (11). The entire periphrastic verb must be raised, as in (12).

- (11) *Hanako-wa Ziroo-o ai
Hanako-T Ziroo-A love
Makiko-wa Yoosuke-o ai sita.
Makiko-T Yoosuke-A love did
Hanako loved Ziroo and Makiko loved Yoosuke.
- (12) Hanako-wa Ziroo-o
Hanako-T Ziroo-A
Makiko-wa Yoosuke-o ai sita.
Makiko-T Yoosuke-A love did
Hanako loved Ziroo and Makiko loved Yoosuke.

2.1.6. Simple Conjunction

Simple conjunctions of phrasal periphrastics permit the verbal noun to be elided. In simple conjunctions of lexical periphrastics the nominal part may not be omitted, as illustrated by (13).

- (13) *Taroo-wa itumo to suru ga
 Taroo-TOP always wager does but
 Hanako-wa tokidoki-sika ϕ sinai.
 Hanako-TOP sometimes-only ϕ do-NEG
 Taroo always bets but Hanako only sometimes does.

2.1.7. Too-clauses

Phrasal periphrastics are analyzable across clause boundaries, so that in a sequence like (14) the verbal noun may be omitted in the second clause, yielding (15). If the phrasal periphrastic is replaced with a lexical periphrastic, as in (16), omission of the verbal noun in the second clause is ungrammatical, as in (17).

- (14) Taroo-wa seikoo sita. Ziroo-mo seikoo sita
 Taroo-T success did Ziroo-too success did
 Taroo succeeded. Ziroo too succeeded.
- (15) Taroo-wa seikoo sita. Ziroo-mo ϕ sita
 Taroo-T success did Ziroo-too ϕ did
 Taroo succeeded. Ziroo did too.
- (16) Taroo-wa tai sita. Ziroo-mo tai sita
 Taroo-T opposition did Ziroo-too opposition did
 Taroo opposed (it). Ziroo too opposed (it).
- (17) *Taroo-wa tai sita. Ziroo-mo ϕ sita
 Taroo-T opposition did Ziroo-too ϕ did
 Taroo opposed (it). Ziroo too opposed (it).

2.1.8. Responses to Yes-No Questions

The answer to a yes-no question normally requires repetition of the verb, in the affirmative or negative form as appropriate. Substitution of a form of *suru* is not permissible as there is no Do-Support in Japanese. However, when the verb used in the question is a phrasal periphrastic, the verbal noun need not be repeated. In contrast, when lexical periphrastics are used in yes-no questions, the entire verb must be repeated, not just the *suru* part. Thus, in response to the question ‘Did he love her?’ in (18), the response in which the whole verb ‘love’ is repeated, in (19), is acceptable but the response in which only ‘do’ is repeated, in (20), is unacceptable. Lexical periphrastics thus pattern with simplex verbs rather than with the phrasal periphrastics.

- (18) Kanozyo-o ai simasita ka?
her-A love did Q
Did he love her?
- (19) Hai, ai simasita.
yes love did
Yes, he loved (her).
- (20) *Hai, simasita.
yes did
Yes, he did.

2.2. Non-Diagnostic Differences

We have seen that lexical periphrastics lack the properties diagnostic of phrasal status. In addition, lexical periphrastics differ systematically from their phrasal counterparts in a number of other properties.

2.2.1. Existence of Unincorporated Form

Unlike phrasal incorporated periphrastics, lexical periphrastics have no corresponding unincorporated form. As the examples in (21) illustrate, it is not possible to mark the nominal part of a lexical periphrastic accusative, nor is it possible to modify the verbal noun in any way.

- (21)
- | | |
|--------------|------------|
| *ai-o suru | love |
| *an-o suru | be anxious |
| *netu-o suru | heat |
| *sin-o suru | believe |
| *tai-o suru | oppose |

2.2.2. Lexical Segmental Phonology

Phrasal periphrastics exhibit no segmental alternations as a result of the concatenation of the verbal noun and *suru*, but as noted above, two of the three types of lexical periphrastic exhibit such alternations. The voicing assimilation seen in forms like *anzuru* occurs only internal to words. Similarly, the alternation between /tu/ and /s/ seen in forms like *nessuru* is one found only inside of words. As discussed

below in greater detail, the underlying representation of /netu/ is probably /net/, with the /u/ the result of epenthesis. In environments in which epenthesis does not occur, the /t/ assimilates to the following consonant. Assimilation rather than epenthesis is found only in the morpheme-boundary morphophonology of Japanese, never across word-boundary or even compound boundary.

2.2.3. Morphology Distinct from *suru*

The main verb *suru* is irregular in that in several parts of its paradigm its stem is suppletive. The suppletive stems are *deki-* for the potential in place of the regular **se-*, *nasar-* for the subject honorific, in place of the regular **o-si-ni-nar-*, and *itas-* for the subject humilific in place of the regular **o-si-s-*.

Phrasal incorporated periphrastics have exactly the same paradigm as the main verb *suru*, including the suppletive forms. In contrast, the periphrastics that I argue to be lexical lack the suppletive forms of *suru* and behave in most respects like regular *s-stem* or *i-stem* verbs. For example, the phrasal periphrastic *aikoo suru* ‘be fond of’ has the potential form *aikoo dekiru*, not **aikoo seru* and the subject honorific *go-aikoo nasaru*, not **o-aikoo-si-ni-naru*. In contrast, the lexical periphrastic *aisuru* ‘love’ has the potential form *aiseru*, not **ai dekiru*, and the subject honorific *o-aisi-ni-naru*, not **go-ai-nasaru*.

In addition to lacking the grossly suppletive forms of the main verb *suru* many lexical periphrastics do not form the negative adverbial in the same way as *suru*. The negative adverbial form of *suru* (meaning ‘without doing’) is *sezu*, which is the form invariably found in phrasal periphrastics, e.g. *benkyoo sezu* ‘without studying’. Many lexical periphrastics form their negative adverbial in *sazu*, e.g. *aisazu* ‘without loving’. This is the regular form for *s-stem* verbs, e.g. *sasazu* ‘without indicating’ from the non-periphrastic verb whose stem is *sas-*. In this respect these lexical periphrastics have lost another idiosyncrasy of *suru* and have begun to behave like regular verbs.

The lexical periphrastics of the *anzuru* type have also begun to regularize, in that every verb of this type has an alternative form as a regular *i-stem*. In the case of *anzuru* the regular counterpart is *anziru*, whose stem is *anzi-*. The *-zuru* forms are more formal and literary, the *-ziru* forms colloquial. Phrasal periphrastics lack such *i-stem* alternants.

In sum, although lexical periphrastics retain to varying degrees the irregularities of the main verb *suru*, their morphology differs systematically from that of *suru*,

and hence, from that of the phrasal periphrastics. The differences all make them behave more like regular verbs.

2.2.4. Temporal Suffixes

There are several morphemes that may be suffixed to verbal nouns to indicate their tense or aspect, including *zen* ‘before’, *mae* ‘before’, *go* ‘after’, *tyuu* ‘while’, and *gatera* ‘while’. Any nominal from which a phrasal periphrastic may be formed can take these suffixes, provided that the result be semantically well-formed, but the nominal parts of lexical periphrastics may not. Thus, we have *aikoomae* ‘before being fond of’ but not **aimae* ‘before loving’.

2.2.5. Direct Case-Marking of Objects

In certain circumstances, namely in purpose clauses and when the temporal suffixes discussed in section 2.2.5 have been attached, the verbal noun of a phrasal periphrastic may assign case to its object without *suru* being present.⁴

An example is (22), where *aizyoo* assigns accusative case to *Zyun*. In contrast, the nominal part of lexical periphrastics cannot assign case in the absence of *suru*, as illustrated by (23).

(22) Takeo-wa Zyun-o aizyoomae-ni takusan hihan sita.
 Takeo-T Zyun-A before-loving-D much criticized
 Before Takeo came to love Zyun, he criticized her a lot.

(23) *Takeo-wa Zyun-o aimae-ni takusan hihan sita.
 Takeo-T Zyun-A before-loving-D much criticized
 Before Takeo came to love Zyun, he criticized her a lot.

Of course, (23) is independently predicted to be ungrammatical by the fact that the nominals of lexical periphrastics do not take temporal suffixes, but this is not sufficient to explain the ungrammaticality of direct case-marking by bare nominals in purpose clauses like (24), where no temporal suffix is involved. In contrast, if *yaku* is replaced with *honyaku*, which forms a phrasal periphrastic, as in (25), the sentence is grammatical.

⁴ Case assignment in the absence of *suru* is noted by Kageyama (1982). The discovery of the relationship between tense/aspect and the ability to assign case is due to Iida (1987).

- (24) *Tanaka-san-wa yaku-ni kita.
Tanaka-Mr.-T translating-D came
Mr. Tanaka came in order to translate.
- (25) Tanaka-san-wa honyaku-ni kita.
Tanaka-Mr.-T translating-D came
Mr. Tanaka came in order to translate.

2.2.6. Dummy Case-Marking of Objects

Iida (1987) has observed that the verbal nouns that appear in phrasal periphrastics may take multiple genitive-marked arguments when used as nouns, as in (26), while lexical periphrastics take only a single genitive argument, as in seen in (27) and (28).⁵

- (26) John-no Ainugo-no kenkyuu
John-G Ainu-G research
John's research on Ainu.
- (27) *John-no Hamlet-no yaku
John-G Hamlet-G translation
John's translation of Hamlet
- (28) John-no yaku
John-G translation
John's translation

2.2.7. Truncation

In the abbreviated style used in newspaper headlines, telegrams, notes and the like the verb *suru* may be omitted from phrasal periphrastics (Uyeno 1974, Uyeno & Fujimura 1973). This is exemplified by the headline in (29), taken from the Digital Equipment Corporation Japan newsletter for December 1982. The sentence ends in the verbal noun *rainiti* 'come to Japan', from which *suru* has been truncated.

- (29) zinkootinoo-no kengen Eric Ostrom hakusi rainiti.
AI-copula authority Eric Ostrom Dr. come-to-Japan
Artificial Intelligence authority Dr. Eric Ostrom comes to Japan.

⁵ The examples here are different from Iida's in not having the suffix *tyuu* 'while' on the verbal nouns in order to show that this effect does not follow simply from the inability of *tyuu* to attach to the verbal nouns of lexical periphrastics pointed out above.

This sort of truncation is impossible with lexical periphrastics. For example, we might find a headline like (30), in which the phrasal periphrastic *hantai suru* is truncated, but never one like (31), with truncation of the lexical periphrastic *taisuru*. A similar minimal pair is (32) and (33), where truncation of the phrasal periphrastic *baika suru* is possible but truncation of the lexical periphrastic *baisuru* is not.

(30) syakaitoo teikokusyugi-ni hantai
 Socialist Party imperialism-D opposition
 Socialist Party opposes imperialism

(31) *syakaitoo teikokusyugi-ni tai
 Socialist Party imperialism-D opposition
 Socialist Party opposes imperialism

(32) komugi-no bukka baika
 wheat-G price double
 Price of wheat doubles.

(33) *komugi-no bukka bai
 wheat-G price double
 Price of wheat doubles.

(31) and (33) contrast with their untruncated counterparts (34) and (35), which are grammatical.

(34) syakaitoo teikokusyugi-ni taisuru
 Socialist Party imperialism-D opposition
 Socialist Party opposes imperialism

(35) komugi-no bukka baisuru
 wheat-G price double
 Price of wheat doubles.

2.2.8. Omission of *suru* in Imperatives

Phrasal periphrastics do not require *suru* to be present in imperatives formed with *kudasai*, the bare imperative of the verb *kudasaru* ‘give/lower toward ego’. An example commonly found on signs in Japanese parks is (36), in which the imperative of *kyooryoku suru* ‘cooperate’ is formed by prefixing the honorific prefix *go* to the verbal noun and appending *kudasai*. This is not possible with lexical periphrastics. (37) shows that it is not possible to make an imperative of *kisuru* ‘note down, record’

in the same manner as *kyooryoku suru* — rather, we must use the gerund of the full verb as in (38).

- (36) gomimotikaeri-ni go-kyooryoku kudasai
trash-carrying-out-D cooperation please give
Please cooperate in carrying out your trash.
- (37) *kore-o go-ki kudasai.
this-A recording please
Please note this down.
- (38) kore-o kisite kudasai.
this-A note down-ing please
Please note this down.

2.2.9. Replacement of *suru* with *da*

Phrasal periphrastics in certain circumstances permit *suru* to be replaced with the copula *da*, as in (39). Lexical periphrastics do not permit this replacement, as (40) illustrates.

- (39) Sayaka-wa Takeo-o aizyoo da.
Sayaka-T Takeo love be
Sayaka loves Takeo.
- (40) *Sayaka-wa Takeo-o ai da.
Sayaka-T Takeo love be
Sayaka loves Takeo.

2.2.10. Intervening Morphemes

The morphemes *bakari* ‘only’, *dake* ‘only’, *mo* ‘even, also’, *sae* ‘even’, *sika* ‘only (negative polarity)’, and *wa* ‘topic’ may intervene between the verbal noun and *suru* in phrasal periphrastics, as in (41), but they may not intervene between the verbal noun of a lexical periphrastic and *suru*, as in (42).

- (41) Eigo-o kenkyuu sinaide benkyoo bakari site imasu.
English-A research do-NEG-ing study only do-ing be
I am not doing research on English, only studying it.
- (42) *to bakari site-iru
betting only doing-be
He is only betting.

3. Predicting Which are Which

Which nouns form lexical periphrastics and which phrasal is not arbitrary; the nominals that form lexical periphrastics are invariably short and of Chinese origin. Indeed, to a first approximation we may say that they are the nominals that were monosyllabic in Chinese.

The fact that the nominals that form lexical periphrastics are all of Chinese origin may be reduced to the phonological criterion of monosyllabicity, for it happens that there are virtually no candidate verbal nouns either native to Japanese or in the Western European languages from which so many are borrowed that are as short as a single syllable.

The other hedge in this first approximation is that the lexical periphrastics are formed from nominals that *were* monosyllabic, which we would like to be able to state synchronically instead. The problematic cases are disyllabic nouns like *netu* ‘heat’, *atu* ‘pressure’ and *yaku* ‘translation’, whose Chinese sources were closed monosyllables. The final /u/ of these forms has long been recognized to be the result of a historical epenthesis, but the epenthetic vowel has generally been assumed to have entered the underlying representation and the vowel-zero alternations to be due to syncope (McCawley 1968:115-120). If, however, we assume that the /u/ is epenthetic even synchronically, we can state simply that monosyllabic nominals form lexical periphrastics, while longer nominals form phrasal periphrastics. Since this epenthesis analysis is motivated by other purely phonological considerations related to accentuation, syllabification, and assimilation (Tateishi 1986, Itô 1986) this generalization is plausible. This adds one to the very small number of rules of Japanese that refer to the syllable rather than the mora.⁶

That it should be polysyllabic verbal nouns that form phrasal periphrastics is a curious fact, for which the proposal of Itô (1990) that the minimal word in Japanese must be longer than one syllable seems at first to offer an explanation. If the verbal noun is to stand on its own as a word, as it must in the phrasal construction, it must constitute a minimal word and hence be at least disyllabic.

The appeal to the minimal word here is problematic, however. Although it explains why the nominal part of a phrasal periphrastic must be polysyllabic, it does

⁶ There are a very small number of exceptions to this generalization, all of them potentially phrasal forms that in fact behave lexically. Examples are *monosuru* ‘perform (a song)’, and *gaenzuru* ‘comply with’.

not explain why the nominal part of a lexical periphrastic may not be polysyllabic. This cannot be a blocking effect as it would have to be the phrasal construct that blocked the lexical construct, which is not possible under current approaches to blocking.

Moreover, in Japanese the minimal word requirement must be restricted to derived words, since monosyllabic and indeed monomoraic words like *ki* ‘tree’ and *te* ‘hand’ are permitted and undergo no lengthening. It is not clear in what sense non-native verbal nouns are derived, and hence why they should be subject to the minimal word requirement.

An alternative is the proposal that it is morphological complexity that is relevant, that is, that morphologically complex nominals form phrasal periphrastics while morphologically simplex nominals form lexical periphrastics (Sansom 1928:35, Iida 1987).⁷ In the case of the loans from Chinese, these two proposals are very difficult to distinguish, since most Chinese morphemes are monosyllabic. But this proposal founders on the recent loans from Western languages, all of which form phrasal periphrastics. The morphological complexity criterion falsely predicts that these will form lexical periphrastics since they are generally monomorphemic in Japanese, either because they are monomorphemic in English (e.g. *doraibu* ‘driving’ < English *drive*) or because, even if they are morphologically complex in English, their morphological structure is not known to most Japanese speakers. On the other hand, since these forms are all polysyllabic, the phonological criterion correctly predicts the formation of phrasal periphrastics.

4. Conclusion

Japanese turns out to have not two but three periphrastic constructions: (a) the unequivocally phrasal “unincorporated” construction, in which the verbal noun heads a full NP; (b) the “incorporated” periphrastics argued to be phrasal by Poser (to appear); (c) the truly lexical periphrastics described in detail here.

Recognizing the existence of the third, lexical, class of periphrastic eliminates a number of hitherto mysterious irregularities. For example, it explains why some periphrastic verbs are accented like phrases and others like ordinary verbs, which for McCawley (1968:144) was an inexplicable irregularity. Similarly, it explains the

⁷ Sansom mentions only the morphological differences between lexical periphrastics and *suru*.

observation of Martin (1975) that some periphrastic verbs are conjugated like regular verbs rather than like *suru*. The behaviour of the truly lexical periphrastics also serves to highlight the phrasal status of the phrasal “incorporated” construction.

The nouns that form lexical periphrastics do not appear in either of the phrasal constructions. Which nouns these are is predictable phonologically: those verbal nouns that are underlyingly monosyllabic form lexical periphrastics. No explanation for this restriction is known. Insofar as the restriction is synchronically valid, it supports recent proposals for treating certain nouns as underlyingly consonant-final with the final vowel that appears in the citation form due to *u*-epenthesis.

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