

ON THE MULTIFUNCTIONAL *-rare-* AND THE POTENTIAL *-re-* IN JAPANESE:
THE DISTRIBUTED-MORPHOLOGICAL APPROACH*

Tohru Uchiumi
McGill University

ABSTRACT

On the basis of one specific Japanese phenomenon, this paper provides an argument for Distributed Morphology, in particular for notions like default, underspecification, late vocabulary insertion, impoverishment. In Japanese there is a multifunctional auxiliary/affix *-rare-*, which is employed for the passive, spontaneous, honorific, and potential. Meanwhile, for the potential there are cases where its morphology is realized as *-re-* rather than *-rare-*. According to one analysis the potential morpheme is distinct from the multifunctional *-rare-*, and one of the allomorphs for the former just happens to be homophonous with the latter. In this view the alternation between the two forms of the potential is ultimately reduced to a phonological condition. In this paper I indicate that, though phonology is partly responsible for the alternation, there are a couple of problems with such an analysis. I show that an approach based upon Distributed Morphology not only accounts for the basic facts but also evades those problems.

1. INTRODUCTION

It is frequently observed in various languages that one linguistic form¹ bears two or more seemingly unrelated functions. For example, in Spanish the pronominal clitic *se* is used as a reflexive, reciprocal, mediopassive, and impersonal pronoun. Some authors try to find underlying common properties behind those functions (e.g. Shibatani 1985). Yet others admit that some forms actually have an unnatural distribution and assign a default status to them (e.g. Halle & Marantz 1994).

* The first draft of this paper was written as part of the requirements for Morphology II offered in Winter 2000 at McGill University. I am grateful to Jonathan D. Bobaljik for helpful comments and discussions. All the errors and misanalyses that might be found in the paper are, of course, entirely my responsibility. This research was in part funded by a one-year J.W. McConnell McGill Major Fellowship, SSHRC 410-98-0452 'The Role of Roots in the Determination of Event Structure and Phrase Structure' [PI=Travis], SSHRC 410-99-0902 'Morphosyntactic Theory of Complex Agreement System' [PI=Bobaljik], FCAR 99-ER-0578 'On Syntactic Categories' [PI=Bobaljik, Lefebvre, and Travis], and FCAR 2002-ER-75657 'On Syntactic Categories' [PI=Bobaljik, Lefebvre, Travis].

1 By 'linguistic forms' I mean roughly the equivalent of what is referred to as 'morphemes' in many theories or as 'vocabulary items' in Distributed Morphology and later in this paper. The rationale of the use of this term here is that different theories sometimes disagree as to which items are decomposable. For instance, in most analyses the Spanish pronominal clitic *se* is a minimal meaningful unit, thus a morpheme, but in Distributed Morphology (e.g. Halle and Marantz 1994) it is decomposable and not a vocabulary item itself.

In Japanese it has been claimed for a long time by traditional grammarians that the auxiliary *-rare-* is exploited for four functions: passive, spontaneous, honorific and potential.² On the other hand, there are certain cases in which for the potential takes the form *-re-* instead of *-rare-*. This paper attempts to explain this alternation, using the second strategy mentioned above. That is, by giving a default status or an underspecified representation to *-rare-*, the puzzling behavior of the Japanese potential construction makes perfect sense.

The rest of the paper is organized in the following fashion. In Section 2 I briefly touch upon the four functions of *-rare-* in Japanese and summarize the questions with respect to the occurrence of the potential *-re-*. In section 3 I introduce the idea that the potential morpheme is distinct from the one used for the other functions, and it just happens that one of its allomorphs is homophonous with the latter. I then spell out a few problems with this analysis. In section 4 I propose an alternative approach based upon Distributed Morphology and show that not only does it explain all the primary data covered by the other theory but that it is superior in several respects. The conclusion is contained in section 5.

2. THE MULTIFUNCTIONAL *-RARE-* AND THE POTENTIAL *-RE-* IN JAPANESE

According to traditional grammar of Japanese, the auxiliary *-rare-* carries four functions: passive, spontaneous, honorific and potential.^{3,4} These are given in (1) below.

-
- 2 Although traditional grammarians call *-rare-* an auxiliary, its exact morphosyntactic category is still unclear. Actually, Shibatani (1985) treats it as a suffix. In the subsequent section I will argue that *-rare-* and *-re-* are modals, which are categorially distinct from other auxiliaries such as the causative *-sase-*.
- 3 Albeit I believe that *-ta* is a perfective affix in Japanese as opposed to nonperfective $-(r)u$, based on such data as below, I gloss the two morphemes as 'past' and 'present' respectively in the paper, following convention.

- | | | | | | |
|-------|----|---|-----------|---------------------|-----------|
| (i) | a. | Kinou | gakkou-ni | ik-u/*it-ta | mae, ... |
| | | yesterday | school-to | go-NONPERF/*go-PERF | before |
| | | 'Before he went to school yesterday, ...' | | | |
| | b. | Kinou | gakkou-ni | *ik-u/it-ta | ato, ... |
| | | yesterday | school-to | *go-NONPERF/go-PERF | after |
| | | 'After he went to school yesterday, ...' | | | |
| (ii) | a. | Asita | gakkou-ni | ik-u/*it-ta | mae, .. |
| | | tomorrow | school-to | go-NONPERF/*go-PERF | before |
| | | 'Before he goes to school tomorrow, ...' | | | |
| | b. | Asita | gakkou-ni | *ik-u/it-ta | ato, ... |
| | | tomorrow | school-to | *go-NONPERF/go-PERF | after |
| | | 'After he goes to school tomorrow, ...' | | | |
| (iii) | a. | Kinou | gakkou-ni | ik-u | toki, ... |
| | | yesterday | school-to | go-NONPERF | when |
| | | 'when he went to school yesterday (before reaching there), ...' | | | |
| | b. | Kinou | gakkou-ni | it-ta | toki, ... |
| | | yesterday | school-to | go-PERF | when |
| | | 'when he went to school yesterday (after reaching there), ...' | | | |

- (1) a. **Passive**
 Sono eiga-ga yuumeina hyouronka-ni mi-rare-ta.
 that movie-NOM famous critic-by see-PASS-PAST
 'That movie was seen by a famous critic.'
- b. **Spontaneous**
 Keiki-ni izyou-ga mi-rare-ta.
 instrument-in trouble-NOM see-SPON-PAST
 'A sign of trouble was observed in the nautical instruments.'
- c. **Honorific**
 Heika-ga fujisan-o mi-rare-ta.
 His-Majesty-NOM Mt.-Fuji-ACC see-HON-PAST
 'His Majesty watched Mt. Fuji (honorific).'
- d. **Potential**
 Tarou-ga kinou terebi-o mi-rare-nakat-ta.
 Tarou-NOM yesterday TV-ACC see-POTEN-NEG-PAST
 'Tarou wasn't able to watch television yesterday.'

Sentence (1a) is a typical example of passive. It is well known that there are two types of passives in Japanese; the direct passive or pure passive and the indirect passive, also referred to as adversity passive.⁵ The direct passive only works with transitive verbs as in (1a). The indirect passive, on the other hand, is operable on any sort of verb, even on unaccusatives as in (2).

- (2) **Indirect Passive with an Unaccusative Verb**
 John-ga ame-ni hur-are-ta.⁶
 John-NOM rain-by fall-PASS-PAST⁷
 'John was adversely affected by the rain's falling.' (Hasegawa 1988: 100)

The minute difference between the two sorts of passives is not my concern here. Rather, what is important is that the same morpheme *-rare-* turns up in both contexts.

An example like (1b) is generally thought of as the spontaneous manifestation of *-rare-*. This expresses a spontaneous occurrence of an event without external agency. It seems closely related to the passive just discussed and may be regarded as a kind of passive. The only crucial distinction is that the spontaneous construction completely lacks an external argument, even implicitly. Hence, it corresponds to what is often called the

4 Unless otherwise specified, the Japanese examples in this paper are based upon my judgment as a native speaker with occasional references to other people. The Hindi examples are from Shibatani (1985) quoting from Jain (1981).

5 Some researchers (e.g. Hoshi 1991 and 1994) suggest that there should also be a distinction between the *ni*-passive and the *niyotte*-passive.

6 Due to a phonological restriction in Japanese whereby CC-clusters are only permitted in limited environments, the initial consonant /r/ in *-rare-* gets deleted following another consonant. The same thing happens to other morphemes like *-re-* and *-sase-*.

7 For cited examples I have taken the liberty to make minor changes to the glosses and translations where deemed appropriate.

adjectival or stative passive.⁸

The honorific use of *-rare-* is seen in sentence (1c)⁹. It expresses mild respect, and when we wish to intensify it, another auxiliary, *-sase-*,¹⁰ can be added, though this is considered extremely old-fashioned, as shown in (3).

- (3) Shizukana bishou-o tatae-sase-rare-ta mikata
 quiet smile-ACC wear-HON-HON-PAST statue
 'A statue who wears a gentle smile (honorific).' (from *Kojien* 4th ed.)

According to one of the most prestigious Japanese dictionaries, *Kojien 4th ed.*, published by Iwanami Shoten, this function emerged historically the latest of the four. It was not until the ninth century that the old form *-rar-* took on the honorific meaning.

Finally, in sentence (1d) *-rare-* is employed as the potential auxiliary.¹¹ Up until modern times this usage was usually restricted to negative contexts (Kojien and Shibatani 1985). Shibatani insists that this has to do with the diachronic development of the morpheme. That is to say, he suspects that the potential historically comes from the spontaneous — an impotential construal has been obtained by negating spontaneous happening of events.

So far, we have looked at the multifunctional *-rare-* and its four actual functions. However, the situation is a little more complicated than just described. As can be seen in (4), there are occasions where in the potential reading the verb *-re-* fuses to take *-rare-*, rather demanding another form, *-re-*.

8 Marantz (1997), identifying that the head which projects an agent as the boundary for the domain of special meanings, makes the interesting prediction that adjectival passives can form an idiom while verbal passives never can. If he is on the right track, we should find a difference between the passive and spontaneous uses of *-rare-* in this respect. Unfortunately, I have not confirmed or disconfirmed this point yet.

9 For some reason, which I do not understand, Hasegawa (1988) considers sentences such as (1c) to be a kind of passive, referring to them as 'honorific passive'.

10 I believe that this *-sase-* is the same auxiliary as the causative one, but the precise connection between the two is rather unknown.

11 The Japanese potential, unlike English *can*, does not have an epistemic usage to signify 'possibility'. Hence, it is fairly difficult for this construction to take an inanimate subject as indicated in (i).

- (i) a. Omotya-ga koware-ru.
 toy-NOM break-PRES
 'The toy breaks.'
 b. *Omotya-ga koware-rare-ru.
 toy-NOM break-POTEN-PRES
 'The toy can break.'

- (4) a. **Passive**
 Kanozyo-no koe-ga Zirou-ni kik-are-ta.
 her-GEN voice-NOM Zirou-by hear-PASS-PAST
 'Her voice was heard by Zirou.'
- b. **Spontaneous**
 Saikin Hanako-no warui uwasa-ga kik-are-ru.
 recently Hanako-GEN bad rumor-NOM hear-SPON-PRES
 'Recently a bad rumor about Hanako has been heard.'
- c. **Honorific**
 Sensei-ga watasi-tati-no hanasi-o kik-are-ta.
 teacher-NOM me-PL-GEN story-ACC hear-HON-PAST
 'The teacher listened to what we said (honorific).'
- d. **Potential**
 Bill-ga bando-no ensou-o *kik-are-ta/kik-e-ta.
 Bill-NOM band-GEN rendering-ACC hear-POTEN-PAST
 'Bill was able to hear the performance of the band.'

Note that simple phonology cannot account for this phenomenon. Since for the other three functions *-rare-* is, as (4a), (4b), and (4c) indicate, quite free to occur in the same context, there is no sensible phonological reason why it cannot appear as the potential. Thus, the challenge here is to come up with a reasonable answer to the following two questions:

- (5) a. Why in some cases does the potential *-rare-* need to be replaced by *-re-* while the identical morpheme can occur in the same environment for the passive, spontaneous, and honorific uses?
- b. Why in other cases can *-rare-* freely occur irrespective of its function?

In the subsequent sections I will go over two alternative approaches in detail.

3. THE POTENTIAL-AS-A-DISTINCT-MORPHEME HYPOTHESIS

In one analysis the morpheme for the potential is given a status independent of that for the other three functions.¹² I will tentatively call it the potential-as-a-distinctmorpheme hypothesis (hereafter, the PDM hypothesis) for want of a better term. This theory basically claims that there are two distinct morphemes. One signifies the passive, spontaneous, or honorific and always appears in a fixed form *-rare-*. The other is underlyingly *-re-*, but turns up as homophonous *-rare-* depending on the condition. In other words, the PDM hypothesis says that traditional grammarians, Shibatani (1985), and many others have just been confusing two separate morphemes owing to their occasional overlap in phonology. In fact, the idea makes intuitive sense because descriptively it is

¹² To the best of my knowledge, this view was first held by Kazuko Yatsushiro. Yet as far as I know, she has not published anything on this matter.

the potential *-rare-* that displays strange behavior, while *-re-* for the other functions occurs just as expected. So the problem has successfully been reduced from *-rare-* in general to the potential *-rare-*.

Now, the question is whether it is at all possible to predict from the environment which of the two forms will occur for the potential meaning. Fortunately, here, it does seem to be possible to appeal to phonology. Consider the examples below. The verbs in sentences (6) contain a vowel stem-finally, and those in (7) have a consonant at the end.

- (6) a. *ki* 'put on'
 Masao-ga akai huku-o ki-rare-ta/ki-re-ta.¹³
 Masao-NOM red clothes-ACC put-on-POTEN-PAST
 'Masao was able to put on the red clothes.'
- b. *tome* 'stop'
 Tom-ga 3-pun iki-o tome-rare-ta/tome-re-ta.
 Tom-NOM 3-minute breath-ACC stop-POTEN-PAST
 'Tom was able to hold his breath for 3 minutes.'
- c. *ku* 'come'
 Sarah-ga paatii-ni ko-rare-ta/ko-re-ta¹⁴.
 Sarah-NOM party-to come-POTEN-PAST
 'Sarah was able to come to the party.'
- (7) a. *tok* 'solve'
 Seito-tati-ga muzukasii mondai-o *tok-are-ta/tok-e-ta.
 student-PL-NOM difficult problem-ACC solve-POTEN-PAST
 'The students were able to solve a difficult problem.'
- b. *ut* 'hit'
 Ano dasya-ga kaabu-o *ut-are-ta/ut-e-ta.
 that batter-NOM curveball-ACC hit-POTEN-PAST
 'That batter was able to hit a curveball well.'
- c. *tor* 'take'
 Jane-ga McGill-de gakui-o *tor-are-ta/tor-e-ta.
 Jane-NOM McGill-at degree-ACC take-POTEN-PAST
 'Jane was able to get a degree at McGill.'

As the above data indicate, it seems that while *-re-* can attach to virtually any verb stem, *-rare-* takes stems ending with a vowel but not ones ending with a consonant.¹⁵ The observation that *-re-* has a wider distribution makes us determine that it is the

13 In cases where a certain verb accepts both *-rare-* and *-re-* as the potential morpheme, though the prescriptive grammar contends that the former is the right form, it is usually the latter which sounds more natural. This is especially true when the morpheme is followed by the past-tense *-ta*.

14 The verb root meaning 'come' is underlyingly *ku* but shows up as *ko* preceding *-rare-* and *-re-*. This is an example to indicate that roots are sensitive to morphosyntactic features outwardly (Bobaljik 1999)

15 As I will discuss later, this is not quite true though it is an overwhelmingly general tendency.

underlying form for the potential. It is worth noting that the relation between *-re-* and *-rare-* is not complementary distribution but partial free variation. This suggests that whatever rule may be responsible for the phenomenon, it should be rather optional. Accordingly, I might propose a morphological rule as given in (8).

- (8) $-re- \rightarrow -rare- / V V_{stem}] \text{ _____ } : (\text{optional})$

The essence of the rule is that if the potential morpheme *-re-* is preceded by a verb stem which ends with a vowel, it can optionally be replaced with its allomorph *-rare-*.

It appears that everything is fine in the present analysis thus far. However, upon close examination we will discover that the PDM hypothesis is not free from problems. First of all, in this framework the potential and the passive have nothing to do with each other. The fact that the potential occasionally takes advantage of *-rare-*, which is phonologically identical with the morpheme for the passive and other functions, is at most just an accident. Yet the connection between the potential and the passive can be found in some other languages (Shibatani 1985). For example, in Hindi the passive morpheme *ga-* is exploited for the potential use as seen in (9).¹⁶

- (9) a. Mazduurō ko bhojan di-yaa ga-yaa.
workers DAT food give-PPLE PASS-PAST
'The workers were given the food.'
(from Shibatani 1985: 834 quoting from Jain 1981: 217)
- b. Larke se cal-aa nahī ga-yaa.
boy INST walk-PPLE not PASS-PAST
'The boy was not able to walk.'
(from Shibatani 1985: 828 quoting from Jain 1981: 221)

The PDM hypothesis has no way to capture this crosslinguistic phenomenon which relates the potential with the passive.

Perhaps a more serious problem is that, as Hasegawa (1988) correctly points out in fn. 1, the multifunctional *-rare-* can never show up with the potential in any of its functions. Refer to the examples in (10).

¹⁶ Currently in Hindi, it seems that use of the passive morpheme in the potential is restricted to negative circumstances (Shibatani 1985). As mentioned in section 2, a similar restriction was found in premodern Japanese.

- (10) a. **Passive+Potential:**
 *Tanaka-san-ga home-rare-rare-ta¹⁷.
 Tanaka-Mr.-NOM praise-PASS-POTEN-PAST
 'Mr. Tanaka could be praised.'
- b. **Spontaneous+Potential:**
 *Aki-no kehai-ga kanzi-rare-rare-ta.
 autumn-GEN indication-NOM feel-SPON-POTEN-PAST
 'The sign of autumn could be felt.'
- c. **Honorific+Potential:**
 *Souri-ga soko-de hanas-are-rare-ta.
 Prime Minister-NOM there-at speak-HON-POTEN-PAST
 'The Prime Minister was able to speak there (honorific).'

Even if *-re-* is used instead of *-rare-* in order to avoid a phonological repetition, it does not help very much as can be seen in (11).

- (11) a. Tanaka-san-ga ?home-rare-re-ta/**home-re-rare-ta.¹⁸
 b. Aki-no kehai-ga *kanzi-rare-re-ta/**kanzi-re-rare-ta.
 c. Souri-ga soko-de *hanas-are-re-ta/**hanas-e-rare-ta.

There are two important facts which we should know about this matter. First, it is impossible to employ *-rare-* twice for two functions other than potential as illustrated in (12).¹⁹

- (12) a. **Passive+Honorific:**
 *Rooma-houou-ga mosuku-ni syoutai-s-are-rare-ta.
 Rome-pope-NOM mosque-to invitation-do-PASS-HON-PAST
 'The Pope was invited to mosque (honorific).'
- b. **Spontaneous+Honorific:**
 *Ima-demo nakunat-ta Diana-hi-no koto-ga
 now-even pass.away-PAST Diana-princess-GEN thing-NOM
 sinob-are-rare-ru.
 remember-SPON-HON-PRES
 'The late Princess Diana is still remembered (honorific).'

It seems that the same functional morpheme cannot be reiterated even for different uses.²⁰

17 Provided that the PDM hypothesis is right, it is not all clear which morpheme is which due to the phonological identity of the two. In the glosses in (10) I expediently treat the second one as the potential.

18 For some reason, which I do not know, the passive *-rare-* plus the potential *-re-* does not sound so dreadful. Also, the potential *-re-* followed by *-rare-* in any of the other three functions is much worse than the other way around or by doubling *-rare-*.

19 Since passive and spontaneous are both operationally suppressing the agent, they cannot cooccur for semantic reasons.

20 Some might challenge this conclusion on the grounds of double causativization in Japanese as in (i).

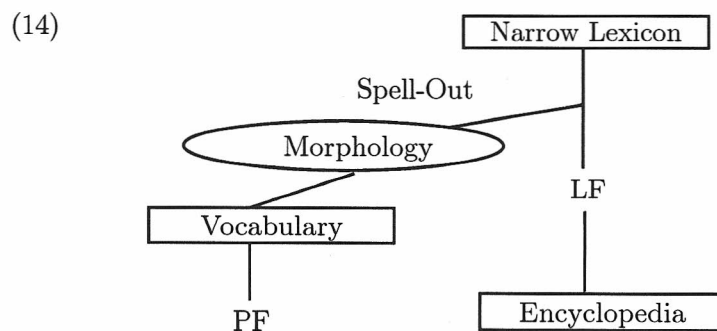
Second, in Japanese functional morphemes can be combined with relative freedom unless semantically anomalous (see also example (3)). For instance, in sentence (13) the passive *-rare-* is further added to the causativized verb, generating an adversity passive.

- (13) **Causative+Passive:**
 Yosie-ga tomodati-ni henna mono-o tabe-sase-rare-ta.
 Yosie-NOM friend-by strange thing-ACC eat-CAUS-PASS-PAST
 'Yosie was made by her friend to eat something strange.'

The fact that the potential morpheme cannot cooccur with *-rare-* for the other functions strongly suggests that the two should be different manifestations of the same morpheme. The PDM hypothesis can by no means exclude such sentences as (10) and (11) without stipulating it.

4. THE DISTRIBUTED-MORPHOLOGICAL APPROACH

In this section I will explore an alternative analysis to the problem. The grammatical architecture adopted here is Distributed Morphology (Halle & Marantz 1994). As shown in (14), in Distributed Morphology the morphological component is placed between syntax and PF, and the so-called lexicon is split into three pieces; a presyntactic one and two post-syntactic ones (Marantz 1997).



-
- (i) Reiko-ga Hanako-ni youhuku-o aw-ase-sase-ta.
 Reiko-NOM Hanako-DAT clothes-ACC fit-CAUS-CAUS-PAST
 'Reiko made Hanako adjust the clothes (to herself).' (Miyagawa 1998: 88)

However, in double causatives the first causative is lexical (Miyagawa 1998). Lexical causatives are formed from intransitive verbs which lack a transitive counterpart. Crucially, for syntactically-causativized verbs, the double causative is blocked, as **agar-ase-sase-* 'rise-causcaus' is ill-formed by virtue of the existence of a transitive counterpart *age-* 'raise'.

In Japanese such things as lexical honorifics also exist. Some of them are morphologically simple like *ossyar-* 'say (honorific)', and others are complex like *goran-ni-nar-* (sight-to-become) 'see (honorific)'. Interestingly enough, regardless of their morphological complexity they can freely appear with *-rare-*, yielding a somewhat intense but not old-fashioned honorific; e.g. *ossyar-are-*, *goran-ni-nar-are-*.

The pre-syntactic one, which Marantz calls the Narrow Lexicon, contains atomic roots of a particular language and atomic bundles of morphosyntactic/semantic features without phonological features.²¹ Also, there is something called the Vocabulary, namely a post-syntactic lexicon on the sound side, which includes vocabulary items. Vocabulary items are relations between sets of morphosyntactic/semantic features and phonological features. Late vocabulary insertion or post-syntactic insertion makes it possible for the terminal nodes of the syntactic trees to have morphosyntactic/semantic features independent of lexical entries. Phonological manifestations are supplied from the vocabulary with morphosyntactic/semantic features as indices. Items are often underspecified with respect to the terminal nodes from the syntax and compete for insertion. The most highly specified item which does not contradict the features in the terminal node wins the competition.

Furthermore, another kind of post-syntactic lexicon is present at the meaning side, which he refers to as the Encyclopedia. It is roughly a list of special meanings of the roots relative to the syntactic contexts where they appear.

Returning to the question of *-rare-/-re-* in Japanese: What sort of system is Distributed Morphology able to provide that not only explains all the facts the PDM hypothesis does but also avoids those problems it faces? To begin with, I assume that, for the four functions at issue, features are bundled up as follows:

- (15) a. passive/spontaneous: [Γ]
 b. honorific: [Γ , Honorific]
 c. potential: [Γ , Potential]

As depicted in (15a), I presume that the passive and spontaneous have exactly the same set of features. This is because, as discussed in section 2, the only difference between the two is that the former contains an agent implicitly or explicitly; whereas the latter does not. In terms of feature specification nothing is different. Also, it is highly plausible that features such as [Honorific] and [Potential] are in fact decomposable into finer features, which is not my real interest in this paper.

The Greek letter Γ represents a set of common features that the four functions share. Whatever features may be involved, for my present purpose it is not important. But this set of features expresses the generalization that the potential-passive connection is found as a crosslinguistic phenomenon, which we saw in section 3.

Meanwhile, there are two vocabulary items relevant to the discussion, which are featurally specified as in (16).

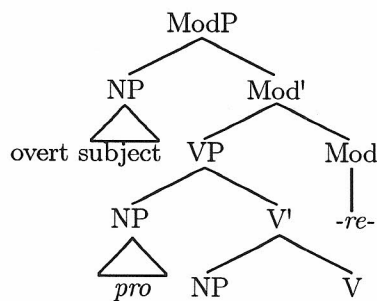
- (16) a. /re/: [Γ , Potential]
 b. /rare/: [Γ]

21 Though Marantz is very clear that, with respect to functional items, phonological information is missing from the narrow lexicon, for roots he does not take the same position so strongly.

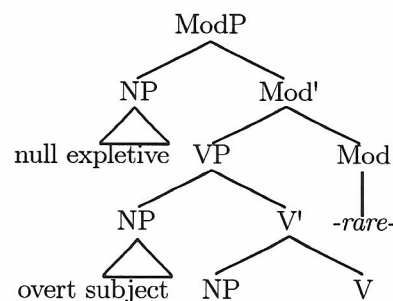
The two vocabulary items compete for insertion at a terminal node, which I provisionally call Modal. The term 'modal' here should not be taken to be similar to be English modals. Rather, these two items are freely combined with verbs and auxiliaries just like affixes but appear in biclausal constructions like some verbs do. As for the passive and spontaneous, the terminal node comes with just [Γ], and thus /rare/ is inserted since /re/ includes [Poten], which does not exist in the node. The same item is selected for the honorific virtually for the same reason. This is a classical example of underspecification because here [Γ , Honorific] is phonologically realized as /rare/, which is just [Γ].

Yet for the potential the situation is a bit different. Both /rare/ and /re/ are eligible candidates for insertion since neither contains a feature contradictory to those in the terminal node. The two being in the competition, /re/ wins out because it is more highly specified. It should be realized that in this system a natural explanation is given to the co-occurrence restriction as observed in (10) and (11) just by excluding the successive projection of modals.

(17) a. *Re*-Potential:



b. *Rare*-Potential:



At this point, some readers may notice a fatal flaw in the system. Namely, it predicts that the potential should invariably turn up as *-re-*, which is obviously not the case (cf. (1d) and (6)). However, Distributed Morphology has tools to manipulate feature representations in the morphological component, i.e. merger, fusion, fission, addition, and impoverishment. Suppose that impoverishment takes place in this case, namely that [Potential] sometimes deletes from the potential representation. Recall that in this framework, morphology is somewhere between syntax and PF. Hence at vocabulary insertion, /re/, which contains the questionable feature, is now out of the competition, and /rare/ is the only possible candidate for insertion.

But on what condition does [Potential] get deleted? In cases where both *-re-* and *-rare-* are permitted for the potential, as a native speaker of Japanese, I feel there is a subtle difference in meaning between the two.²² It seems that *-rare-* involves the lesser

²² The difference is so subtle that some people cannot get it at all.

degree of 'conscious attempt'. Thus, *ori-rare-* 'can descend', as opposed to *ori-re-*, more or less suggests that the state of things allows descending. If those nuances are systematic as I suspect, then I might propose structures for the two potential constructions as given in (17a) and (17b)²³ respectively.²⁴ In the *re*-potential, the overt subject is in Spec of ModP, which is coindexed with *pro* in Spec of VP. In the *rare*-potential, on the other hand, Spec of ModP is filled with a null expletive, and the overt subject is in Spec of VP. That is, my intuition that the *rare*-potential involves the weaker 'conscious attempt' is syntactically coded here. Then I make a further assumption that Japanese has a rule which deletes [Potential] when its Spec position contains no morphosyntactic features.

Now, we still have the last piece of the puzzle. As evidenced in (7), there is a clear tendency that verb stems which end with a consonant repel *-rare-* as the potential. If the alternation between *-re-* and *-rare-* is conditioned by the syntax as just proposed, why do we observe such a phonological restriction? In fact, my answer to the question is quite simple — there indeed exists such a phonological restriction. Thus, Japanese has two rules which work antagonistically in the case of the *rare*-potential with a consonant-final stem. If the phonology wins, the derivation will be blocked, and the resulting sentence will be ungrammatical. If the syntax wins, the restriction will be overridden, and the sentence will be fine. The idea makes a clear prediction that verb stems ending with a consonant should be able to occur with the *rare*-potential if the meaning of the sentence is strongly biased toward the lack of 'conscious attempt'. This appears to be exactly the case. Consider the examples below.²⁵

- (18) a. *Kare-wa zisatu-o hakar-u-ga dousitemo sin-are-nai.
 him-TOP suicide-ACC plan-PRES-but anyhow die-POTEN-NEG-PRES
 'He attempts suicide but cannot die anyhow.'
 b. Watasi-wa konna tokoro-de sin-are-nai.
 I-TOP such place-at die-POTEN-NEG
 'I can't die here.'
- (19) a. *Watasi-wa musume-no tame-nara zigoku-ni-demo ik-are-ru.
 I-TOP daughter-GEN sake-if hell-to-even go-POTEN-PRES
 'I can go to hell for my daughter.'
 b. Eki-e-wa 5-hun-de ik-are-ru.
 station-to-TOP 5-minute-in go-POTEN-PRES
 'To the station, we can get in 5 minutes.' (from Kojien 4th ed.)

23 Jonathan Bobaljik (pc) pointed out to me that these structures suggest that the *re*-potential and the *rare*-potential have a different interpretation with respect to scope. That is, in the former the subject should take scope over the potential, whereas in the latter the scope relation ought to be the other way around. Unfortunately, I do not find such a difference between the two potential constructions.

24 I suppose that the other three constructions hold basically the same syntactic configuration as the two potentials. For the passive, Spec of ModP is occupied by the theme and Spec of VP by the agent. For the spontaneous, the theme is also in Spec of ModP without Spec of VP being projected. For the honorific, the overt subject is in Spec of ModP, and *pro* is in Spec of VP just like the *re*-potential.

25 For a few speakers, sentences (18b) and (19b) are as bad as (18a) and (19a).

As (18a) and (19a) show, *sin* 'die' and *ik* 'go' generally cannot take *-rare-* as the potential for the obvious phonological reason. Yet if the sentence strongly suggests the lack of 'conscious attempt' as in (18b) and (19b), the same verbs actually can cooccur with *-rare-*. Crucially, sentence (18b) does not mean: "I try to die here but I can't," but rather: "The situation doesn't allow me to die here (e.g. I have a family to support, etc.)." A similar thing is true of (19b). It is very difficult for the PDM hypothesis to account for this kind of phenomenon.

5. CONCLUSION

In this paper I have discussed the multifunctional *-rare-* and the potential *-re-* in Japanese. According to traditional grammarians the former has four functions; passive, spontaneous, honorific, and potential. Now the question is why for the potential *-rare-* must sometimes be replaced by *-re-* while for the other three functions the invariable form *-rare-* always occurs. The PDM hypothesis claims that we are actually dealing with two different morphemes; *-rare-* for the passive, spontaneous, and honorific and *-re-* for the potential, whose allomorph happens to be homophonous with the first. In the latter part of the paper I have provided an alternative approach based upon Distributed Morphology.

Although both theories account for the primary data, I think that the analysis I present is superior for the following reasons.

- (20) a. There is no need to invoke the notion of 'accidental homophony'.
 b. By assuming that the potential and the passive (and probably the other two functions also) share a certain set of features, which I have represented as Γ , a crosslinguistic phenomenon of relating the potential and the passive is accurately captured.
 c. The co-occurrence restriction of the potential with *-rare-* in other functions can easily be captured by simply assuming a ban on the successive projection of modals.
 d. If there is a subtle difference between the *re*-potential and the *rare*-potential as I suspect, it too is correctly captured.

REFERENCES

- Bobaljik, Jonathan David. 2000. The ins and outs of contextual allomorphy. *University of Maryland Working Papers in Linguistics* 10: 35-71.
 Halle, Moris and Alec Marantz. 1994. Some key features of Distributed Morphology and the pieces of inflection. *MIT Working Papers in Linguistics* 21: 275 -288.
 Hasegawa, Nobuko. 1988. Passives, verb raising, and the affectedness condition. *Proceedings of the 7th West Coast Conference on Formal Linguistics*: 99- 113.

- Hoshi, Hiroto. 1991. The generalized projection principle and its implications for passive constructions. *Journal of Japanese Linguistics* 13: 53-89.
- Hoshi, Hiroto. 1994. Theta-role assignment, passivization, and exorporation. *Journal of East Asian Linguistics* 3: 147-178.
- Jain, Jagdish. 1981. The Hindi passive. *Papers in Linguistics* 14: 217-232.
- Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *UPenn Working Papers in Linguistics* 4: 201-225.
- Miyagawa, Shigeru. 1998. *-(s)ase* as an elsewhere causative and the syntactic nature of words. *Journal of Japanese Linguistics* 16: 67-110.
- Shibatani, Masayoshi. 1985. Passives and related constructions: A prototype analysis. *Language* 61: 821-848.

RÉSUMÉ

Sur la base d'un phénomène japonais précis, ce papier offre un argument en faveur de la morphologie distribuée, en particulier pour les notions telles que défaut, sous-spécification, insertion tardive du vocabulaire et apauvrissement. En japonais, il y a un auxiliaire/affixe multifonctionnel *-rare-* qui s'emploie pour le passif, le spontané, l'honorifique, et le potentiel. Par ailleurs, pour le potentiel, il y a des cas dans lesquels la morphologie se réalise en *-re-* plutôt que *-rare-*. Selon une certaine analyse, le *-re-* potentiel est distinct du multifonctionnel *-rare-*, et un des allomorphes de *-re-* se trouve être un homophone de *-rare-*. Dans cette perspective, l'alternance entre les deux formes du potentiel est finalement réduite à une condition phonologique. Dans ce papier, j'indique que bien que la phonologie soit partiellement responsable de l'alternance, il y a deux problèmes inhérents à une telle analyse. Je montre qu'une approche fondée sur la morphologie distribuée non seulement rend compte des faits de base mais également évite ces problèmes.