

## The Syntax of Potential Verbs in Japanese

**Background:** The syntax of Japanese sentences with the potential *(r)are/(r)e* has been the topic of numerous previous studies, most of which have been concentrated on their peculiar Case patterns. Conversely, there have never been any attempts in the literature to try to distinguish between the two morphologically distinct forms, *(r)are* and *(r)e*. Moreover, it has long been assumed in traditional Japanese linguistics as well as in generative approaches that *(r)are* is a single morpheme taken either as a suffix or a verb. This situation is rather surprising given the recent derivational approach to the agglutinative aspect of the verbal morphology in Japanese under the conceptions of Distributed Morphology (Marantz 1997, 2001) whose central claims are that the syntax is root-based and that each suffix is an instance of little *v* attached to Root.

**Goals:** This study puts forward a novel approach to potential constructions with *(r)are/(r)e*, which argues (i) that *(r)are* is not a single morpheme and must be decomposed into *(r)ar* and *(r)e* and (ii) that the degree of Radicalization (Aoyagi 2017) varies among dialects which leads to the (un)acceptability of "ra-dropped" or "re-added" patterns in potentials.

**Data:** It is well known that the potential construction in Japanese exhibits different patterns in its morphological form as dialectal variations, as shown below (potential morpheme underlined).

- (1) Dialect A (including Tokyo area):
  - a. five-grade conjugation class: ik-e-ru / ik-are-ru ('being able to go')
  - b. lower one-tier conjugation class: \*tabe-re-ru / tabe-rare-ru ('being able to eat')
- (2) Dialect B (including Nagoya area):
  - a. five-grade conjugation class: ik-e-ru / \*ik-are-ru ('being able to go')
  - b. lower one-tier conjugation class: tabe-re-ru / tabe-rare-ru ('being able to eat')

The contrast between the two dialects concerning the correlation of the conjugation type, on the one hand, and the choice of the potential morpheme, on the other, should not arise under previous approaches where *(r)are* and *(r)e* are not syntactically distinguished. Even though predicates such as *tabe-re-ru*, called "ra-dropped" expressions, have been widely assumed to be phonetically reduced from forms such as *tabe-rare-ru* with the *ra* part omitted in PF, facts from so-called the "re-added" expression, a dialectal pattern of potentials in Dialect B, cast doubts on this prevailing view. While most speakers in dialect B allow such "re-added" expressions as (3a) mainly in colloquial styles, (3b) are totally unacceptable: *(r)e* can be doubled, while *(r)are* can never be followed by the additional *(r)e*.

- (3) a. tabe-re-re-ru ('being able to eat') / ne-re-re-ru ('being able to sleep')
- b. \*tabe-rare-re-ru ('being able to eat') / \*ne-rare-re-ru ('being able to sleep')

Let us next look at the following data, which have never been pointed out in the literature as far as we know:

- (4) a. ag-e-re-ru/\*ag-e-re-re-ru ('being able to raise') b. maw-as-e-ru/\*maw-as-e-re-ru ('being able to turn': v.t.)
- (5) a. ag-ar-e-ru/\*ag-ar-re-re-ru ('being able to rise') b. maw-ar-e-ru/\*maw-ar-e-re-ru ('being able to turn': v.i.)

The unacceptable status of "re-added" expressions in (4) and (5) comes from the presence of (in)transitive morphemes *e*, *as*, or *ar*. This is indeed clearly in contrast with the cases in (3a), in which either *tabe-ru* 'eat' or *ne-ru* 'sleep' has no (in)transitive counterpart, respectively. As expected, verbs from the five-grade conjugation class such as *ik-u* 'go' or *yom-u* 'read' do not resist the doubled *(r)e* in their potential forms.

- (6) a. ik-e-re-ru (cf. ik-e-ru) b. yom-e-re-ru (cf. yom-e-ru)

To sum up, there are no simple processes of deleting *ra* and adding *(r)e* in PF: an array of facts shown above strongly suggests that they are governed by the morphosyntactic environment in which they occur. Now we are in a position to abandon previous approaches to potentials where *(r)are/(r)e* are treated uniformly and to explore a novel approach to "*ra*-dropped" and "*re*-added" expressions.

**Theoretical Assumptions:** Following Marantz (1997, 2001), a.o., we will assume DM's basic tenets. We will also assume that the structure of "VP" in the traditional sense is layered as shown in (7), where (i) external and internal arguments of the predicate are licensed by Voice and *v*, respectively (Kratzer 1996, Borer 2005), (ii) (in)transitivising suffixes appear as Cause (Pylkkänen 2002), and (iii) the top of the VP-layer is optionally occupied by GET which licenses Experiencer or Benefactive in its Spec (Nakajima 2010).

(7) [GETP ... [VoiceP ... [CauseP ... [vP ... √Root v] Cause] Voice] Get]

**Proposals:** The partial structures proposed for potential forms, *tabe-rare-ru* and *tabe-re-ru*, are in (8).

(8) a. [GETP ... [VoiceP ... [CauseP ... [vP ... √*tabe* v] Cause] (*r*)*ar*] *e*] (*tabe-rar-e-ru*)  
 b. [GETP ... [VoiceP ... [CauseP ... [vP ... √*tabe* v] Cause] Voice] (*r*)*e*] (*tabe-ϕ-re-ru*)

Our crucial idea is that *(r)are* is decomposed into *(r)ar* and *(r)e*: the former is the realization of Voice when the external argument is suppressed or deleted (cf. Kageyama 1996), and the latter the grammaticalized verb *e-ru* 'get' which appears as the head of GET. We assume that the contribution of GET to the semantics of potentials is stated in notions such as completion or achievement: we can admit someone's ability if we see the activity in question by that person completed successfully or some resultant state achieved on that person at the end of the activity. Next, as seen in (8b), "*ra*-dropped" expression is not just regarded as a reduced form but will be analyzed in parallel with the case with *(r)are* in (8a) except that *(r)ar* does not occur at Voice. This suggests that the difference between Dialect A and Dialect B concerning the (im)possibility of "*ra*-dropped" phenomenon will be reduced to the nature of Voice: the suppression of external argument with the aid of *(r)ar* in potentials is not required in Dialect B. Interesting enough, there are speakers from Dialect B who report that *(r)e* is used exclusively for potentials with the ability reading, while the morpheme *(r)are* is preferred in external cause reading, a situation similar to the difference in use between *can* and *may* in English. Finally, concerning "*re*-added" expressions, our proposal is that in Dialect B, the potential *(r)e* is reanalyzed as Cause, a case of Radicalization (Aoyagi 2017), whereby categorical changes of items can proceed downward contra the general upward direction of grammaticalization (Roberts & Roussou 2003).

(9) [GETP... [VoiceP ... [CauseP ... [vP... √*tabe* v] (*r*)*e*<sub>1</sub>] Voice] *e*<sub>2</sub>] (*tabe-re-ru/tabere-re-ru*)

(10) a. [GETP... [VoiceP ... [CauseP ... [vP... √*ag* v] *e*] Voice] (*r*)*e*<sub>1</sub>] (*ag-e-re-ru/\*ag-e-re-re-ru*)  
 b. [GETP... [VoiceP ... [CauseP ... [vP ... √*ag* v] Cause] *ar*] (*r*)*e*<sub>1</sub>] (*ag-ar-re-ru/\*ag-ar-re-re-ru*)

A "*re*-added" expression *tabe-re-re-ru* is successfully derived from (8b) by reanalyzing *e* at GET as Cause and the insertion of *e*<sub>2</sub> into GET, as in (9). This story, however, does not save the derivations of *\*ag-e-re-re-ru* and *\*ag-ar-e-re-ru*: given that the application of reanalysis obeys some locality condition, "doubly-filled" Cause should be impossible as in (10a) or *(r)e*<sub>1</sub> at GET cannot skip over *(r)ar* at Voice in (10b). In both cases, the insertion of *e*<sub>2</sub> is structurally unavailable. Furthermore, our proposal concerning reanalysis of *(r)e* is compatible with observations in the fields of language acquisition: there are facts suggesting that the acquisition process of the potential *(r)e* is identified with that of (in)transitivising morpheme *(r)e* in the formation of lower one-tier conjugation class (cf. Shibuya 1993). **(References omitted)**