
Shin-ichi Tanaka*

1. Introduction

1.1 Overview

In our daily life, when we look for a particular person that deserves to be a friend or a business partner, we often gather information and reputation on him/her, wondering what the person is like and how to evaluate him/her. Regarding such situations, Rechard S. Wurman, a graphic artist and architect, says something very suggestive in his stimulating book *Information Anxiety* 2: “[W]hen everyone says the same thing about a person, where there is absolute agreement, the person is usually totally boring. The people who inspire conflicting opinions are the most interesting. When one person characterizes someone as funny, another says serious, one says stupid, another says smart—that’s someone you want to know.” (Wurman 2001, p. 17)

The same might well be true when we are talking about a book that deserves much attention. “Absolute agreement” may invoke bored readers but “conflicting opinions” may lead to stimulating discussions and hence be interesting. But what if the book we are looking for would be regarded with “absolute agreement” as rousing “conflicting opinions”? Labrune’s book is exactly such a book. There are certain aspects with which both traditional Japanese philologists and generative phonologists would be satisfied as well as others with which they both absolutely would not. No doubt this is a book that gives specialists some momentous leads to rethink many specific issues of the Japanese phonology.

This book can be characterized as showing views and generalizations based on descriptions in traditional Japanese phonology and yet offering theoretical accounts and analyses based on the framework in current generative phonology. In this sense, it is well-balanced and comprehensive in content, but is full of controversial views and accounts and hence may be intriguing.

A brief overview of its content can be made in the following way. Chapter 1 offers some general background information on the scholarship and history of the Japanese language and also mentions its writing system and lexical structure; chapters 2 and 3 introduce specific assumptions and views on the vowel and consonant systems and their related segmental phenomena; and in chapters 4–7, the author presents more specific views and analyses of her own in the bottom-up order of the prosodic hierarchy, tackling the issues of obstruent voicing (chapter 4), mora structure (chapter 5), mora and syllable (chapter 6), and accentuation (chapter 7).

Again, this book is full of controversial views and accounts. To prove this, there already appeared, as far as the reviewer knows, at least three critical reviews well worthy of reading in the major international journals. Kawahara (2012) makes a readable introduction to the book and criticizes part of its theoretical reasoning, data sources, and phonetic transcriptions and descriptions. Irwin (2012) challenges some of its specific assumptions about rendaku (sequential voicing), its Okinawan-exclusive views in discussing dialect variation, and its aim of analyzing phenomena within the framework of Optimality Theory (OT) in a book intended for non-specialist students or non-linguist Japonologists, casting some doubt on the satisfaction of generativists, traditional Japanese dialectologists, and the general audience, respectively. Particularly adept and rich in content is the review by Vance (2013), who addresses

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Labrune’s problems with transcriptions, word choices, typographic errors, writing systems, underlying forms, and other assumptions and proposals in a fully detailed and apparently scathing manner of description.

All of the three reviews are interesting exactly because each of them makes a unique view from its own interest and stance. So I will leave the issues above to these reviews and in the following sections of this review, we will focus exclusively on the remaining issue that sounds the most controversial to the reviewer: Labrune’s mora-based theory of prosody, doing away with syllables in the prosodic hierarchy (chapter 6). In fact, this theory can be said by theoretical phonologists with “absolute agreement” to be the most controversial in the book, full of unignorable implications for phonological theory. Kawahara (2012) also takes up this issue, but I will examine this theory from my own interest and stance in section 2. Although we will focus only on controversial and problematic cases, they absolutely do not spoil the value of the book. Rather, they are important issues that encourage hot discussion. I strongly ask readers to remember this point hereafter.

Before that, let us overview what this theory is like and how she analyzes syllable-related phenomena without using syllables. For reference, readers are recommended to see Labrune (2012) as well, where more detailed and specific issues of the theory are discussed in technical terms.

1.2 Returning to classic mora-based theory

As Kawahara (2012, p. 542) states, “[t]his claim revives a view from the traditional literature, but goes counter to many views in the generative tradition.” In the present reviewer’s opinion, this claim also goes counter to one of the author’s goals to provide “a synthesis of two major research streams: that of Japanese traditional linguistics and philology … and … that of Western scholarship (p. 1).” This is because current phonological theory in Western scholarship assumes that syllables are universally incorporated into the prosodic hierarchy and follows McCawley (1968, p. 134) in regarding Tokyo Japanese as “a mora-counting syllable language.”

Instead, Labrune assumes that syllables are not universal in the prosodic hierarchy and claims that Tokyo Japanese is “a mora-counting mora language (p. 142)” (while admitting the role of syllables in some dialects in Japan, such as Aomori, Akita, and Kagoshima Japanese). That is, she rehabilitates a view from Japanese traditional linguistics and philology that the most basic and fundamental prosodic units are moras in Tokyo Japanese and calls them prosodemes with strictly binary structures as in (1).

(1) Prosodemes

a. basic moras

<table>
<thead>
<tr>
<th>te ‘hand’</th>
<th>e ‘picture’</th>
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</thead>
<tbody>
<tr>
<td>( \mu )</td>
<td>( \mu )</td>
</tr>
<tr>
<td>( \cdots )</td>
<td>( \cdots )</td>
</tr>
<tr>
<td>( C )</td>
<td>( V )</td>
</tr>
<tr>
<td>( V )</td>
<td>( V )</td>
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b. onsetless moras

<table>
<thead>
<tr>
<th>/R/</th>
<th>/Q/</th>
<th>/N/</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \mu )</td>
<td>( \mu )</td>
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<tr>
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<td>( \cdot )</td>
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<td>( +\text{cons} )</td>
<td>( +\text{cons} )</td>
<td>( +\text{cons} )</td>
</tr>
<tr>
<td>( +\text{nas} )</td>
<td>( +\text{nas} )</td>
<td>( +\text{nas} )</td>
</tr>
</tbody>
</table>

Syllables do not enter into the structures of prosodemes, and the overall prosodic hierarchy is structured like the one in (2) (for construction of the prosodic hierarchy, see sections 6.4 and 6.5). Here, ‘i’ and ‘o’ in koizumi-syusyoq ‘Prime Minister Koizumi’ form an onsetless mora in (1b) and a special mora in (1c), respectively, with an empty position due to the strict binarity of a prosodeme.
In the following sections, we will examine some consequences and problems of this hypothesis. Labrune states that “in the present approach, all normally syllable-linked phenomena … are replaced by references to the foot and/or mora (p. 176)”. Labrune (2012, p. 144) even concludes that “[under the present approach, all normally syllable-linked phenomena are replaced by reference to the foot and mora, without affecting the description and understanding of the phenomena” (the underline is due to the reviewer). I will argue, however, that this is not always true. (See also Poppe 2013, who seeks for the possibility that feet do not play any role in the accentuation of the Japanese language including Tokyo Japanese. If this is the case, syllables are necessary all the more, and Labrune’s attempt to dispense with syllables may not be successful because she cannot resort to feet instead of syllables.)

2. Some arguments against the proposal

2.1 Empirical problems

First of all, resyllabification phenomena across morphological boundaries, which occur in the postlexical stratum, are not captured if there are no syllables in Tokyo Japanese. For example, the above-mentioned phrase ko.i.zu.mi-syu.syoo ‘Prime Minister Koizumi’ often undergoes resyllabification and subsequent leftward accent shift in fast and casual speech, turning into kó.i.zu.mi-syu.syoo. Ko ‘small’ and izumi ‘spring’ originally had a morphological boundary, and hence a syllable boundary, between them. In this case, the consecutive heterosyllabic vowels in hiatus simply become a diphthong or a long vowel if their sonority is declined or level (e.g., ke.i.to → ket.to ‘woolen yarn’ and ba.ai → baa.i ‘case’). As a consequence of the two vowels becoming a diphthong, the accent on the special mora automatically moves to the head mora because they now constitute a nucleus in the same syllable. This mechanism can simply be schematized as in (3a).

(3) Resyllabification and accent shift

\[
\begin{align*}
\text{a. syllable-based} & \quad \sigma \sigma \sigma \sigma & \sigma \sigma \sigma \\
\mu & \mu \mu \mu & \mu \mu \mu \mu \\
\text{ko·izumi} & \rightarrow \text{ko·izumi} \\
\text{b. mora- or foot-based} & \quad F \quad F \quad F \\
\mu & \mu \mu \mu \\
\text{ko·izumi} & \rightarrow \text{??}
\end{align*}
\]
However, for the syllable-less theory based on prosodemes, this is very difficult to account for, because as shown in (3b), the empty onset position in the second mora blocks leftward accent shift, or even if the mora on i is delinked, the foot structure makes only rightward accent shift possible, resulting in an ill-formed accent *ko.i.zú.mi. Resyllabification is only possible when there are syllables in the prosodic hierarchy.

Incidentally, this empty onset position in the mora seems to erroneously block such casual phenomena as vowel fusion like ta.ka.i → ta.kee ‘high’ and glide formation like ka.ru.si.u.mu → ka.ru.syuu.mu ‘calsium’. Instead, accent shift, vowel fusion, and glide formation must all involve resyllabification and occur in the domain of a syllable. Hence, the syllable must play a vital role here.

Moreover, the fact that an onsetless mora in (1b) and a special mora in (1c) have the same structure may also pose a problem with the possibility of glide insertion. Let us consider the examples in (4).

(4) Distinct syllable structure
a. glide insertion
   ba.ai → ba.ai ‘case’ mi.i.ru → mi.i.ru ‘gaze’ ko.oi → ko.oi ‘carring a child’

b. no glide insertion
   baa.i ‘bye’ mii.ru ‘meal’ koo.i ‘action’

c. prosodemes
\[
\begin{align*}
| & F & F \\
\mu & \mu & \mu \\
\& & \& & \& \\
\mid & \mid & \mid & \mid & \mid & \mid & \mid & \mid \\
\end{align*}
\]

b a a i ‘case’ vs. b a a i ‘bye’

Though glide insertion is an optional rule, a slight glide (or a slight glottal stop) may occur between the heterosyllabic hiatus vowels in (4a) but it may not break into the tautosyllabic diphthongal or long vowel in (4b). However, in the syllable-less theory, the contrastive forms in (4a) and (4b) are assigned the same mora structure as in (4c), so the possibility of its application only to (4a) cannot be predicted (it might overapply to the empty position of the words in (4b)). The foot structures in (4c) are different, and it might be formulated as only occurring across the feet. However, this rule can apply to the foot-internal hiatus, as in gi.‘a ‘gear’ and bo.‘a ‘boa constrictor’, so the resolution with feet cannot stand.

2.2 Weakness of the logic

In general, positive evidence of a certain theory A is valid to verify theory A. Negative evidence of a competing theory B is valid to falsify theory B. However, positive evidence of theory A alone is not so valid to falsify theory B (as to verify theory A). A competing theory B can only be falsified if there is negative evidence of it. Conversely, theory B can easily be verified if there is positive evidence of it. This is a basic logic for verifying or falsifying a theory.

Let us replace here theories A and B with syllable-less and syllable-based theories, respectively. Labrune’s arguments are full of positive evidence of syllable-less theory but are scarce of negative evidence of syllable-based theory. Conversely, positive evidence of syllable-based theory can easily be found as shown in the preceding section. So Labrune’s logic cannot help being said to be too weak to dispense with syllable-based theory.

Her arguments against syllables are mainly of two types: one is that apparent syllable-related phenomena are accounted for equally well by moras, a reasoning based on Occam’s Razor; and the other that unlike moras, syllables lack external evidence. For the former, we will discuss it in the following section, so let us highlight the latter issue here. Specifically, she invokes lack of psychological evidence for the syllable, absence of phonetic cues for the rime, absence of any roles in speech errors, and so on, but moras do have such evidence (section 6.2.3). She even
invokes lack of agreement of foot and syllable boundaries, citing the truncation example of \textit{ri.moo.to-kon.to.roo.} \textit{ru \rightarrow ri.mo-kon} ‘remote control’ and concluding that syllable boundaries are irrelevant to this process.

However, there is a case where the disagreement between the two boundaries is crucial phonologically and hence becomes positive evidence for the syllable. Let us consider the accentuation of the foreign vocabulary in (5), which has been generalized by McCawley (1968: 134) as “[placing] accent on the syllable containing the third mora from the last.” This generalization implies that accent-bearing units are syllables in Tokyo Japanese.

(5) Foreign Accent

<table>
<thead>
<tr>
<th>syllable structure</th>
<th>examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. \ldots CV.CV.CV</td>
<td>ga.ra.pá.go.su ‘Galapagos’</td>
</tr>
<tr>
<td>b. \ldots CV.X.CV.CV</td>
<td>pi.ya.ni.su.to ‘pianist’</td>
</tr>
<tr>
<td>c. \ldots CV.CV</td>
<td>su.ku.rán.bu.ru ‘scramble’</td>
</tr>
<tr>
<td>d. \ldots CV.X.CVX</td>
<td>ri.rák.ku.su ‘relax’</td>
</tr>
<tr>
<td>e. \ldots CV.CVX</td>
<td>o.bu.ráa.to ‘Oblate’</td>
</tr>
<tr>
<td></td>
<td>ba.su.két.to ‘basket’</td>
</tr>
<tr>
<td></td>
<td>ma.née.zyaa ‘manager’</td>
</tr>
<tr>
<td></td>
<td>wa.sín.ton ‘Washington’</td>
</tr>
<tr>
<td></td>
<td>mai.ku.ro.hón ‘microphone’</td>
</tr>
<tr>
<td></td>
<td>ai.zen.há.waa ‘Eisenhower’</td>
</tr>
</tbody>
</table>

(6) Metrical structure

(7) Words with the heavy ultima CVX: \(-3/-4\)

a. \ldots CV.CV.CVX

\[ \text{ma.zi. syan/má.zi.syan ‘magician’} \]
\[ \text{re.bá.non/ré.ba.non ‘Lebanon’} \]
\[ \text{se.re.mó.níi/se.re.mo.níi ‘ceremony’} \]

b. \ldots CV.X.CV.CVX

\[ \text{kaa.dí.gan/káa.di.gan ‘cardigan’} \]
\[ \text{pen.ta.gon/pén.ta.gon ‘pentagon’} \]
\[ \text{su.wíi.tó/ pii ‘sweet pea’} \]

(8) Metrical structure

a. quantitative trochee

\[ (* \\cdot) \quad (* \\cdot) \quad (* \\cdot) \]
\[ \text{ma.zi. syan} / \text{ma.zi. syan} \quad \text{ga. ra. pa. go. su} \]

b. bimoraic foot

\[ * \quad * \quad * \quad * \quad * \]
\[ \text{ma.zi. sya.n} / \text{ma.zi. sya.n} \quad \text{ga. ra. pa. go. su} / \quad * \text{ga. ra. pa. go. su} \]

Here, why does only the metrical structure in (6e) allow accent shift? As is clear from (8a), the non-coincidence of
In summary, the mismatch between the syllable and foot boundaries is crucial to the accent variation discussed so far. The fact that agreement is preferred to disagreement would never be accounted for if it were not for the syllable in the prosodic hierarchy.

2.3 Missing essentials in explanation

As Kawahara (2012, p. 543) notes, Labrune’s syllable-less theory relies on Occam’s Razor by assuming that mora-based accounts have equal empirical or descriptive adequacy to previous syllable-based accounts. However, to replace a syllable-based theory with a mora-based theory often leads up to the loss of naturalness, validity, and convincing force in her explanation. In this sense, the reasoning of Occam’s Razor does not hold here, and hence, a syllable-based theory cannot be replaced by a mora-based theory, much less dispensed with. They are completely different in explanatory adequacy.

This point may be clear from the arguments in previous sections 2.1 and 2.2, but let us take up one more case here from an example of initial leveling as compared with initial lowering. When a word begins with a light syllable with no accent, initial lowering usually applies and realizes it as #LH...; but when it begins with a heavy syllable as in (9a), initial leveling may apply instead, realizing it as #HH..., which was first described in Hattori (1954/1980). This phenomenon is also observed when a word begins with a superheavy syllable with /R/, but not when it begins with an apparent superheavy with /J/, as was pointed out by Tanaka (2000, 2003). This difference is shown in (9b,c).

(9) Initial leveling

a. initial heavy
   tee.né.ni ‘fuel efficiency’    soo.sé.zi ‘sausage’
   HH HL L            HH HL L
   sai.hó.o.só ‘ rebroadcast’   dai.há.dó ‘Die Hard’
   HH HL LL           HH HL L
   han.hái.ki ‘ vending machine’ si.ni.de.re ‘Cinderella’
   HH HL L           HH H L L

b. initial superheavy with /R/
   roon.zí.go.ku ‘loan hell’     koon.bá.ta.ke ‘ corn field’
   HHH H L L           HHH H L L
   muun.rái.to ‘ moonlight’     tiin.è.zyaa ‘teenager’
   HHH HL L           HHH HL LL

c. initial superheavy with /J/
   wá.in.sé.ráa ‘ wine cellar’  a.in.syú.tá.in ‘Einstein’
   L H H H L           L H H H L L
   ko.in.ké.e.sú ‘coin case’    tsú.in.béd.do ‘twin bed’
   L H H HL L           L H H HL L

--- 75 ---
Unlike the initial two syllables of light-light and light-heavy with the LH tone, both the heavy and the superheavy syllables in (9a, b), if linked with the LH(H) tone as in (10), come to form an anomalous domain in which their dependent mora bears dominant prominence over their autonomous mora; changing LH(H) to HL(L) might seem preferable in mora status but actually is prohibited due to the violation of culminativity in the whole word; and this is why initial leveling applies to their domain, amending the reversal and leveling the prominence with HH(H) (Tanaka 2000, 2003). Needless to say, what I just called the “domain” is a syllable.

(10) Prominence reversal (X=R, J, N)

<table>
<thead>
<tr>
<th>CVX.CV</th>
<th>CVRN.CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>?LH H</td>
<td>?LHH H</td>
</tr>
<tr>
<td>*HL H</td>
<td>*HLL H</td>
</tr>
<tr>
<td>HH H</td>
<td>HHH H</td>
</tr>
</tbody>
</table>

For an apparent superheavy syllable with /J/, however, the autonomous nature of /J/ is inherently more remarkable than that of /R/, and clearly manifests itself as the domain is expanded from heavy (9a) to superheavy (9c); as a consequence, CVJN splits into CV+VN. Now this /J/ is not a dependent mora any more, and the first half of this apparent superheavy syllable behaves just like a light syllable, to which usual initial lowering applies as in (9c).

Incidentally, Labrune states on p. 155 that “[unaccented words beginning with CVi behave like words beginning with CVCV, for instance koikuchi ‘strongly favored’ is uttered LHHH,” but this is due to the stem-suffix boundary of an adjective, as in ko-i ‘thick,’ na-i ‘empty,’ su-i ‘sour,’ and so on, and due to the consequent syllabification of ko.i.ku.chi. However, there is no morphological boundary, words with the initial CVi structure like koi.bi.to ‘lover’ and kai.san ‘dissolution’ can be realized quite naturally as HHHH, which agrees with the fact in (9a). In fact, even ko.i.ku.chi can be realized as HHHH, especially in a longer phrase like koi.ku.chi-syoo.yu ‘strong-favored soy sauce,’ for the reason of resyllabification discussed in section 2.1. This distinction would not be captured without the conception of lexical and postlexical syllabification based on the morphological structure. Also, Labrune does not regard /J/ as a deficient mora, so the distinction in the behavior of /J/ between heavy (9a) and superheavy (9c) could not be accounted for.

Putting aside the issue of /J/, let us return to the cause of initial leveling in (9a) and (9b). An anomalous pitch change in (10) is the culprit of the phenomenon unveiled by Tanaka (2000, 2003), whose mechanism is based on the domain of a (super)heavy syllable. Labrune tries to account for (9a) by saying that “[]initial dissimilation does not occur when the second mora of the word is a deficient mora (p. 154)”. However, from this explanation, it is wholly unclear why LH turns into HH when the second H is linked to a deficient mora. The crucial point here is the relation between L and H, that is to say, between the autonomous and the dependent moras, so their constituency or domain as a syllable is indispensable.

Actually, Labrune explains why this is so in her own way, stating on p. 155 that “just as accent does not normally occur after a special mora, initial dissimilation does not normally occur before a special mora. In both cases, the near impossibility of pitch change occurs because of the inherent structural weakness of special moras, which prevents them from being the locus of pitch change (from high to low or from low to high). The adopted strategy is identical in both cases: the pitch change (fall in the case of accent, rise in the case of initial dissimilation) is moved one position leftward. In the case of initial dissimilation, there is no leftmost mora available to receive a low pitch, so the initial mora is realized with a high pitch.” This explanation might seem difficult to figure out to me, but if my understanding is correct, it can be illustrated as in (11).

(11) Labrune’s explanation (S=special mora)

<table>
<thead>
<tr>
<th>a. accent</th>
<th>b. initial lowering</th>
</tr>
</thead>
<tbody>
<tr>
<td>...CVS’</td>
<td>#CVS</td>
</tr>
<tr>
<td>*HHL L</td>
<td>*LH L</td>
</tr>
<tr>
<td>H HL</td>
<td>L HH</td>
</tr>
<tr>
<td>no available mora</td>
<td>--- structural weakness of the special mora</td>
</tr>
<tr>
<td></td>
<td>--- HL and LH one position leftward</td>
</tr>
</tbody>
</table>
Although it is not at all clear why the repair strategy must be leftward movement of the whole tone melodies, (11) might appear somewhat similar to the account in (10). However, it is completely different from (10) because something crucial is being missed here: she is talking exactly about accent and initial lowering on the heavy syllable but she completely ignores it. If (11) may capture some truth at all, the relevant domain of “the near impossibility of pitch change” must be nothing but a heavy syllable, as Tanaka (2000, 2003) claims.

2.4 Heterogeneity of the lexicon

To succeed in devising a syllable-less, mora-based theory in a particular lexical stratum does not mean that it does hold all through the other strata of the Japanese lexicon. The lexical component of a particular language has a diverse and flexible nature and its subcomponents often involve mutually inconsistent and incompatible properties.

For example, let us take up the phonemic inventory and compound accent in Japanese, as illustrated in (12).

(12) Lexical stratification

a. [ʧ, ts]

native: allophones

kat-a-nai ‘won’t win’
kat-e-ba ‘if win’

foreign: phonemes

ʧansu ‘chance’
ʧerri ‘cherry’
tsaratusutora ‘Zarathustra’
tsepperin ‘Zeppelin’

As shown in (12a), [ʧ, ts] must be allophones in the native vocabulary because they are derived from the phoneme /t/ by the two allophonic rules, /t/ → [ʧ]/_i and /t/ → [ts]/_u, respectively. In contrast, the two consonants must be phonemes in the foreign stratum because they can appear before any vowel. As for compound accent in (12b), bimoraic head nouns behave differently between the two strata: original native accent shifts leftward whereas original foreign accent retains (cf. Kubozono 1997). Here, we clearly see that for the phonemic inventory and compound accent, native and foreign strata have their own distinct systems and subgrammars in the Japanese lexicon.

In the same way, mora-based generalizations may stand in the native vocabulary, but that does not mean they do hold for Sino-Japanese and foreign words. What we have taken up as examples of foreign accent and initial leveling in sections 2.2 and 2.3 comes from the foreign and Sino-Japanese vocabulary, whose source languages such as English and Chinese are of course syllable languages, so it is quite natural that syllables do enter into the phenomena. In fact, the resyllabification phenomena in section 2.1 involve the native vocabulary as well, which proves the influence of syllables on the native stratum. Therefore, it is also quite natural that syllables play a vital role in the phonological system of Tokyo Japanese. If the heterogeneity of the lexicon is not taken into consideration, a very fundamental insight will be missed from description and generalization, and hence from theory construction.

Labrune of course admits lexical stratification and discusses it in so detail in section 1.6, saying that “the partition of the lexicon plays a key role in the grammar of the language (p. 15)”. But at the same time, she argues that “[t]he
formal boundaries between *wago*, *kango*, and *gairaiigo* tend to attenuate as time goes by, through a process of lexicon homogenization. … The classes are thus not discontinuous. They are organized rather like a *continuum* (p. 22)*. This idea is wholly true. In fact, the allophonic rules in (12a) are likely to apply even to foreign words, such as *fimuru* ‘team,’ *fiketto* ‘ticket,’ *tsuru* ‘tool,’ *tsurii* ‘tree,’ and so on.

However, the fact that the lexicon has a continuous nature and undergoes a process of homogenization does not equally mean that it has a *monolithic* structure. Theorists must look into distinction as well as interaction. For example, in compound accent, some native words may behave just like the foreign words in (12b), as in *nēko* → *perusya-nēko* ‘Persian cat’ and *siru* → *miso-siru*, ‘miso soup,’ and there are even native words that exhibit hybrid patterns, as in *āme* → *niwaka-āme/niwaka-ame* ‘sudden shower’ and *hīne* → *watasi-bīne/watasi-bune* ‘ferry boat’. Also, some foreign words behave native-like, as in *pāi* → *appuri-pāi* ‘apple pie’ and *pān* → *huransū-pān* ‘French bread’. This is a case for interaction. Crucially, however, there are no foreign words with CVVC whose accent shifts in compound, whereas there are lots of native words that have this pattern as shown in (12b). On the other hand, there are no native words with CVX whose accent retains in compound, while there are abundant foreign words that exhibit this pattern as in (12b). This is a case for distinction. But Labrun’s proposed analysis in OT, developed on pp. 228–235, does not make any distinction between the native and foreign strata and hence cannot account for such unignorable systematic gaps. This is because she treats compound accent in a monolithic way.

2.5 Potential availability of the syllables

The fact that moras are more dominantly and frequently used than syllables does not mean that syllables do not exist at all in the Japanese prosodic hierarchy. In fact, syllables are available and involved in the knowledge of Japanese speakers, who can anytime draw syllables out of their mental representation and switch from moras to syllables, say, in playing word games. If syllables were not there, Japanese speakers could NEVER use syllables in any processes of word formation or word games.

For example, we usually play the *shiritori* word game in a mora-based way like *to.o.da.i* ‘University of Tokyo’ → *i.ryo.o* ‘medicine’ → *o.sy.o.ku* ‘corruption’ → *ku.bi* ‘dismissal’. However, we can easily switch to a syllable-based way of playing, as in *too.dai* ‘University of Tokyo’ → *dai.kan.ryoo* ‘great bureaucrat’ → *ryoo.kei* ‘sentence’ → *kei.mu.syo* ‘prison’, if we make and share such a rule among players.

This means that Japanese speakers do have syllables available in the mental representation, that Tokyo Japanese does not count as evidence for dispensing with syllables, and consequently, that there must universally be syllables in the prosodic hierarchy.

2.6 Lack of independent evidence for the prosodemes

The author does not invoke independent evidence for the proposed units, prosodemes, outside of the Japanese language(s), while in the literature there have obviously been vast varieties of evidence for the syllable across various families of languages. Even if she successfully finds it, syllable-based theorists will not be perplexed because they realize the existence and importance of moras that are entailed by syllables in the prosodic hierarchy.

Rather, it is the units of prosodemes that should be excluded from the prosodic hierarchy by Occam’s Razor, because the accounts by prosodemes automatically follow from the issues of internal structure of syllables: for the constituency of a syllable, languages may have an option of either right-branching or left-branching structure, as schematized in (13). English has the right-branching structure while Japanese has the left-branching structure.

(13) Internal structure of a syllable

```plaintext
    s
   /\ \
  μ / \ μ
 /   \ /
C - - V - - X
   \ /   \ 
  μ / \ μ
   \ /   
    o
```

right-branching

left-branching
The issues captured by prosodemes seem to follow from the left-branching structure in (13). For example, the phonetic equality of temporal duration of CV and X (i.e., their isochronism) reflects the left-branching mora structure. But the more important thing here is that since moras are defined as elements in the rime, the unmarked structure is right-branching and that even Japanese speakers can make an access to it.

This point can be exemplified with the jazz musician’s language described in Tateishi (1989, p. 388), whose rule is to cut and paste word-initially the rightmost, maximal, non-exhaustive prosodic constituent of a word, putting the prefix and the remaining base into the two bimoraic templates, respectively, as in *yamaguchi (person’s name), hara (syllable) → raahaa ‘belly,’ and hai (mora) → iihaa ‘lungs’. The most interesting is the case of words with CV in which “the rightmost, maximal, non-exhaustive prosodic constituent” is a rime with a single vowel, as in hi → *ihii ‘fire,’ te → eetee ‘hand,’ and he → eehee ‘fart’. In this case, the rime in the base, which counts as a mora, is copied (not cut) and pasted word-initially and then lengthens according the bimoraic template, as in (14a).

(14) Rime mora as a constituent
   a. syllable-internal moras
      \[\begin{array}{c}
      \sigma \\
      \hline
      \end{array}\]
   b. prosodemes
      \[\begin{array}{c}
      \mu \\
      \hline
      \end{array}\]

However, in the model with prosodemes in (14b), the V of CV could not be copied and pasted precisely because the V would not be a prosodic constituent or a rime; instead, CV as a whole would constitute a mora. So the prosodeme-based theory would result in ill-formed patterns like *hiihii and could not capture the jazz musician’s language systematically. Here, the rime as a prosodic unit must serve as a constituent, just like another word game named Pig Latin (e.g., pen → enpay and spring → inspray) whose rule is to cut and paste the rime word-initially and attached the suffix -ay word-finally.

In general, Labrune mainly challenges the existence of syllables in terms of syllable quantity (heavy vs. light) and ignores the existence of syllable internal structure—rime. Hence, in her theory, what counts as a mora is simply specified for either autonomous or dependent (special) in the underlying representations, as in the onsetless mora in (1b) and the special mora /R/ in (1c). However, this naturally follows from the notion of headedness of a rime whose elements in the syllable all count as moras.

3. Conclusion

In conclusion, in spite of these criticisms, this book is still inspiring all the more for its potential controversy in either descriptive or theoretical respects. It is also instructive and informative to general readers interested in Japanese sound systems. I have only focused on the conceivable problems with her prosodeme-based theory from my own interest and stance, but it goes without saying that the book is reliable in content, adept in description, and ingenious in theory construction. While reading it, I even felt the author’s passion and sincerity for the language and the field on every single page. Especially, when I came over to the references, I was so pleased: the names of two phonologists, Shin’ichi (真一) Tanaka and Shin-ichi (伸一) Tanaka are distinguished by using the apostrophe, hyphen, and sino-Japanese characters after their own use As Comte de Buffon, a French naturalist and mathematician, so aptly expresses it, “Le style c’est l’homme même” and we cannot help feeling that the author must be considerate and conscientious.

So as I stated at the beginning of this review, this book is no doubt one to be read by anyone interested because it may invoke many opinions, either positive or negative, of generative and traditional phonologists, non-linguist Japonologists, and non-specialist students. Specialists in Japanese sound structure are also recommended to read Labrune (2012), which allows us to rethink the roles of moras and syllables in this language deeply and extensively.
References


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