

Contraction and Monophthongization in Old Japanese¹

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Introduction

The oldest recorded form of the Japanese language is Western Old Japanese (OJ), the language spoken in Nara during the 8th century. Our knowledge of OJ stems from a few texts including: *Kojiki* 古事記 (compiled around 712), *Nihongi* 日本紀 or *Nihonshoki* 日本書紀 (compiled around 720), *Fudoki* 風土記 (compiled around 730), *Bussoku seki ka* 仏足石歌 (compiled around 756), *Senmyoo* 宣命 (compiled around 797), *Nihonryooiki* 日本靈異記 (compiled early 9th century), *Norito* 祝詞 (compiled around 927), and, perhaps most importantly in terms of collected data, *Man'yooshuu* 万葉集 (compiled around 750). Through studies of these texts we are able to recover valuable information about OJ; this paper is mainly concerned with what can be learned from studying OJ in terms of its phonology and morphology.

One interesting feature of OJ is that it did not allow vowel clusters. OJ had two processes which prevented such sequences: 1) contraction, where one of the two vowels is deleted; and 2) monophthongization, where the two vowels fuse. Although many scholars have discussed these processes, there has been very little discussion on *why* these vowel clusters sometimes contract and sometimes monophthongize. This study, then, focuses on what conditions trigger contraction and what conditions trigger monophthongization.

In previous studies it has been proposed that consonant loss triggers monophthongization (I return to this point below). I accept that consonant loss triggers monophthongization, but here I am particularly interested in cases where monophthongization occurs but there is no evidence to suggest that a consonant was lost. In other words, I am mainly interested in cases of word compounding where a morpheme boundary has been deleted.

In Russell (1997: 19), I proposed that there were two different types of mor-

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pheme boundaries; when one type of morpheme boundary is lost it triggers contraction and when the other type of morpheme boundary gets lost it triggers monophthongization. However, this proposal is circular and so it proves nothing: it suggests that there are two distinct types of morpheme boundaries which trigger these different processes, but the only way we know these boundaries exist is in the processes they trigger. In order to find a more realistic explanation, this paper will study examples of both contraction and monophthongization, and demonstrate why contraction occurs in some cases and monophthongization occurs in others. I believe that the parts of speech (verb, noun, stative verb, particle, etc.) of the words being compounded determine whether contraction or monophthongization will occur.

Methodology

This study started by analyzing the examples of contraction and monophthongization presented in Unger (1993) and then data from other sources were added (see Appendices A and B). However, there are some problems with this list. First, Unger provides no English glosses for the majority of these words. Thus in cases where the data have more than one possible meaning, it is not always clear what data Unger is using to support his claims. Second, Unger provides no attestations for his examples. Because of this, I have had to reject some of the data from Unger's list, as I discovered that some of the words found there do not appear to be attested in any OJ text, or they are attested in OJ but are only recorded with characters used logographically and they are not spelled out phonetically. Third, Unger presents some examples that are only attested in Azuma (Eastern Old Japanese), which is problematic because Unger appears to be assuming that EOJ and OJ undergo these processes in the same manner, yet no evidence of this has been presented. For the time being, I have rejected data which are only found in Azuma. Other examples have been rejected for semantic reasons, because there is simply no evidence to support that words contract (or monophthongize) the way that Unger suggests. The rejected data and the reasons for their rejection are presented in Appendix C.

Note on Orthography

While a discussion on the vowel system of OJ is beyond the scope of this paper,² it is important to note that OJ had eight distinct vocalisms: *yi*, *iy*, *ye*, *ey*, *wo*, *o*, *u*, and *a*. *Koorui* (or "type A") vowels are written as *yi*, *ye*, and *wo*, and *otsurui* (or "type B") vowels are written as *iy*, *ey*, and *o*. For environments where the distinction between *koorui* and *otsurui* vowels are lost, the vowels are written as *i*, *e*, and *o*.

² For more information on the OJ vowel system see Bentley (1997), Martin (1987), Miyake (1999), Russell (1997), Unger (1993), Whitman (1985), etc.

Rules for Contraction and Monophthongization³

As previously stated, in OJ when two vowels come together within the same word either contraction or monophthongization will occur. According to Unger (1993), there was a consonant shift during the stage of the Japanese language that Unger refers to as “Archaic Japanese” (AJ).⁴ Unger proposes this consonant shift in order to account for “disappearing /p, t, k, s/ initials”.

Unger claims there is evidence for a consonant shift in AJ and proposes that AJ had two types of voiced obstruents, and that the simple voiced obstruents (not the nasal obstruents) were represented in the original go-on, and these simple obstruents lenite in the consonant shift. In this shift, AJ */b, d, g, z/ became OJ /w, y, Ø, Ø/. Also /w/ was deleted before /u/, and /y/ was deleted before /i/ (Unger 1993: 35-36). The word-medial prenasalized obstruents */Np, Nt, Nk, Ns/ became the OJ voiced obstruents /b, d, g, z/. However word-initially, these prenasalized obstruents became either OJ /p, t, k, s/, /w, y, Ø, Ø/, or simply were deleted, depending on the dialect (Unger 1993: 40).⁵ Unger admits, however, that “...this hypothesis has very little evidence to support it” (1993: 40).

Yet he goes on to claim that before this shift the rule of contraction deleted the second vowel (V₂) when it was at the beginning of a polysyllabic morpheme that compounded with a monosyllabic one. Otherwise the first vowel (V₁) was deleted. Note some examples of contraction based on Unger (1993: 42-3):

Group I: polysyllabic word + monosyllabic word: ...V₁ + V₂ > ...V₂
 polysyllabic word + polysyllabic word: ...V₁ + V₂... > ...V₂...

<i>apa umyi</i>	>	<i>apumyi</i>	[place name] (MYS IX: 1757)
<i>ara iswo</i>	>	<i>ariswo</i>	‘rough coast, jagged rocks’ (MYS II: 181)
<i>ara umyi</i>	>	<i>arumyi</i>	‘rough sea’ (MYS VIII: 1453)
<i>kageytu o<u>mo</u></i>	>	<i>kageyt<u>o</u>mo</i>	‘direction facing the sun; south’ (MYS I: 52)

Group II: monosyllabic word + polysyllabic word: (C)V₁ + V₂... > (C)V₁...

imo ga ipye > *imogapye* ‘younger sister/sweetheart’s house’

3 The following discussion on the rules for contraction and monophthongization is adapted from Russell (1997).

4 According to Unger, AJ is a stage of the Japanese language that is slightly older than OJ; he refers to it as the “direct ancestor of Old Japanese” (Unger 1993: 1). He claims that evidence of AJ can be found as quotations of earlier works as found in OJ documents (Unger 1993: 1).

5 The AJ consonant shift is discussed in more detail in Russell (1997).

(MYS V: 844)

c.f. wa ga ipye > *wagyipyē* ‘my house’ (KK 32)

yama no upey > *yamanopey* ‘on top of a mountain’ (MYS V: 872)

Unger claims that contraction also happened after the consonant shift in environments where monophthongization would not occur, and/or when the morpheme boundary was weakened but not deleted, or where lexicalization had not occurred (Unger 1993: 41).

According to Unger, monophthongization happened after the Archaic Japanese consonant shift. The monophthongs that occur are as follows (from Unger 1993: 26, Whitman 1985: 41-42 which was adapted from Yamaguchi 1971 and Oono 1974):

1. *a+yi > ey

e.g., **naga* ‘long’ + *iki* ‘breath’ > *nageyki* ‘sigh’ (MYS II: 199)

2. *yi+a > ye

e.g., **saki* ‘bloom’ + *ari* ‘exist’ > *sakyeri* ‘is blooming’ (MYS I: 16)

3. *o+yi > ey [irregular]

e.g., **tono* ‘palace’ + *iryi* ‘enter’ > **toneyryi* > *toneri* ‘attendant’ (MYS XVI: 3791)

4. *yi+o > ye

e.g., **pyi* ‘day, sun’ + *okyi* ‘put’ > *pyekyi* ‘[family name]’ (MYS III: 354)

5. *o+yi > iy

e.g., **opo* ‘big’ + *isyi* ‘rock’ > **opiysyi* ‘big rock’ > *opiysi* (KK 13)

6. *u+yi > iy

e.g., **waku* ‘young’ + *iratukwo* ‘[term of veneration (male)]’ > *wakiyratukwo* ‘[title]’ (K Oojin)

7. *u+o > wo

e.g., **syitu* ‘ancient type of native weaving’ + *oryi* ‘weave’ > *sitwori* ‘(id.)’ (NS Shindaige)

In addition, Whitman (1985: 42) presents the following example:

8. *u+a > wo

e.g., *kazu* ‘number’ + *apey* ‘to join’ > *kazwopey* ‘to count’ (MYS V: 890)

One problem with the above examples is the claim that *pyekyi* comes from *pyi* ‘sun’ + *okyi* ‘put’. This family name is recorded in the Man’yooshuu as 日置, clearly showing the characters for 日 *pyi* ‘sun’ and 置 *okyi* ‘put’, but the name is not recorded phonetically here (MYS III: 354 and VIII: 1564). The name is, however, spelled phonetically as *pyeki* 俤支 and 幣岐 (K II: 65b, 6). The first problem is that the characters used to represent a word are not necessarily connected to the etymology of that word. I am not convinced that this name comes from the word for ‘sun’ and ‘put’; for semantic reasons it seems highly unlikely, and this seems like a folk etymology to me. Another problem is that there is no proof that the *ye* of *pyekyi* comes from the

monophthongization of *yi+o*; it is also possible that *ye* is the result of monophthongization of *yi+a*. Given the problems here I feel this example should be rejected as an example of monophthongization, at least until we can prove its true etymology.

There is other evidence for **yi+o* > *ye*, which can be found in the imperative form (*meireikei*) of *yodan* verbs (see Russell 1997: 51-55 for further discussion on the formation of the imperative form of verbs).

According to Unger, monophthongization occurs where a consonant is deleted morpheme internally, and/or where a morpheme boundary is completely lost once a compound is lexicalized (Unger 1993: 26). The above data show that it is not only the loss of morpheme internal consonants that trigger monophthongization, but loss of initial consonants as well. For example, *isi* in #5 is reconstructed as having an initial **d* (Whitman 1985: 219). Another example is *taka* 'high' + *iti* 'market' > *takeyti* '[place name]' (Whitman 1985: 42). Whitman also reconstructs *iti* as being consonant initial, beginning with **y* (1985: 222). One problem with this analysis is that Whitman, among others, reconstructs **y* as coming from earlier **d* and so this reconstruction is not consistent; it would be more consistent to reconstruct both *isi* and *iti* as having an initial **d* which then goes to **y* and then is deleted. Another problem is that some question whether there is enough evidence to support the reconstruction of an initial consonant here. I return to this point below, in my discussion of the process of compounds involving a stative verb plus a noun.

In examples such as these the loss of an initial consonant triggers monophthongization and not contraction. It should also be noted that the loss of initial **d* (and **b*) presumably occurred at an earlier time.

Problems with the above analysis

One problem with Unger's hypothesis is his claim that contraction occurs before and after the proposed consonant shift and monophthongization occurs after the shift. Since both contraction and monophthongization are attested in OJ texts, I am not convinced that a claim can be made that one process is older than the other, even assuming that this shift occurred the way Unger proposed. Also, it is possible to find both contracted forms and non-contracted forms in OJ, in other words both *imwo ga ipye* 'younger sister/sweetheart's house' and *imwogapye* 'id.' are found in OJ texts. This suggests that contraction was a productive process in OJ and not something that occurred in earlier stages of the language and then also occurred later, but only under certain conditions.

A more significant problem is that Unger does not explain how deletion of a morpheme boundary results in contraction, but when a morpheme boundary is deleted and the compound lexicalized then monophthongization occurs. Clearly in both cases there is a morpheme boundary present between the two words or two morphemes being compounded. Further, this morpheme boundary is obviously lost, whether the resulting form

is created through contraction or through monophthongization. So why do we get contraction in some cases and monophthongization in others? In order to account for this problem, I have proposed that there are two different kinds of morpheme boundaries: one that triggers contraction and one that triggers monophthongization (Russell 1997: 19). As previously stated this is a circular argument and must be rejected in favor of a more workable solution.

One reason for proposing that there is a distinct motivation for contraction and for monophthongization is that there are no doublets; the same compound cannot be found with a contracted vowel in one text and a monophthongized vowel in another. I am not claiming that non-existence of a phenomena is proof of any fact about the language. Rather, I am suggesting that non-existence of such doublets raises the question of whether or not there was a regular rule which determined when contraction would occur and when monophthongization would occur.

For this study I looked at compounds involving contraction and monophthongization in terms of the lexical categories of the words being compounded. I propose that there are two different types of morpheme boundaries and that these morpheme boundaries are determined by the parts of speech of the words being compounded. One type of morpheme boundary will trigger contraction and the other will trigger monophthongization. Arguments supporting my proposal are presented in the following order:

- stative verb stem⁶ + noun
- stative verb infinitive + active verb
- noun + noun
- noun + active verb
- particle + noun
- particle + active verb
- active verb + noun
- active verb + active verb
- verbal suffix + verbal suffix
- verbal suffix + active verb

Since contraction and monophthongization only occur when a vocalic cluster is created (either because a morpheme boundary has been lost or because a consonant has been lost), this study is only concerned with cases where the second member of the compound is vowel initial, or where the second member of the compound was consonant initial at an earlier stage of the language, but the initial consonant has been lost by the time of OJ.

6 Stative verbs are also called “adjectives” in traditional grammar.

Stative Verb Stem + Noun

There are many examples of compounds resulting from the stem of a stative verb plus a noun. Some of these examples are listed below:

9. *apa* 'light' *umyi* 'ocean' > *apumyi* [place name] (MYS IX: 1757)
 10. *ara* 'rough' *iswo* 'beach' > *ariswo* 'rough coast, jagged rocks'
 (MYS II: 181)
 11. *kata* 'hard' *uwo* 'fish' > *katuwo* 'dried fish' (MYS IX: 1740)

As the morpheme boundary between the two words in each of the above compounds is deleted contraction occurs in order to prevent a vowel-vowel sequence. Furthermore, in all three examples monophthongization *could* occur, but does not. It appears that the loss of the morpheme boundary between stative verbs and nouns triggers contraction and not monophthongization.

However, the following examples appear to present a problem for this analysis.

12. *opo* 'big' *isi* 'rock' > *opiysi* 'big rock' (KK 13)
 13. *taka* 'high' *iti* 'market' > *takeyti* [place name] (KK 101)

The resulting forms in examples 12 and 13 are developed through monophthongization. As discussed above, Whitman (1985) reconstructs *isi* as coming from earlier **disi* and *iti* as **yiti*. However, since **y* < **d* it is not consistent to reconstruct these two words as having two distinct initial phonemes. The development of these forms, then, is as follows:

- 12a. **opo disi* > **opodisi* > **opoyisi* > *opiysi*
 13a. **taka diti* > **takaditi* > **takayiti* > *takeyti*

It is the loss of the initial consonant of the second member of these compounds that triggers monophthongization, and not the loss of the morpheme boundary between these two words. Further, the fact that monophthongization occurs here shows that the second member of this compound had to be consonant initial at an earlier stage of the language, and this provides internal evidence to support Whitman's reconstructions.

Based on the above examples, I will propose that when the morpheme boundary between a stative verb and a vowel-initial noun is deleted, contraction will occur in order to prevent a vowel cluster.

Stative Verb Infinitive + Active Verb

The only examples I have found of a compound resulting from a stative verb plus a verb is in the so-called *kari*-form of stative verbs which is typically followed by

auxiliary verbs, such as the negative auxiliary *zu* (stative verb-*kakarazu*). This form is made when the infinitive form (*ren'yookei*) of a stative verb is followed by the verb *ari* 'exist' in the following pattern:

14. stative verb-*ku ar-* > stative verb-*kar-*⁷
 e.g., *kanasi-ku* 'sad' *ar-i* > *kanasikari* 'being sad' (MYS V: 793)

We know that this form comes from the infinitive form of stative verbs plus *ari* because there are many attestations of this pattern where contraction does not occur, such as *opo-ku* 'big' *ar-e-do* 'although it exists' > *opokuaredo* 'although it is big' (MYS XV: 3760).⁸

In this type of word compounding, when the morpheme boundary is lost, the infinitive form of a stative verb plus the verb *ar-* always results in contraction and never monophthongization.

Noun + Noun

There are numerous examples of compounds involving two nouns, all of which result in contraction. Some examples are provided below:

15. *kapa* 'river' *uti* 'inside' > *kaputi* 'deep place in river; [place name]'
 (NS III: 311, 11)
 16. *kuni* 'country' *uti* 'inside' > *kunuti* 'inside the country' (MYS V: 797)
 17. *toko* 'endless' *ipa* 'rock; crag' > *tokyipa* 'eternal rock' (MYS V: 805)

It will be proposed that loss of the morpheme boundary between two nouns triggers contraction, and not monophthongization.

Noun + Active Verb

The data involving compounding a noun followed by a verb is somewhat more complicated. Some examples appear to involve the process of contraction, and others appear to involve monophthongization. Note the following examples:

18. *ama* 'heaven' *ori* 'descend' > *amori* 'descend from heaven' (MYS II: 199)
 19. *koto* 'word' *ide-* 'go out' > *kotide-* 'speak out' (MYS XIV: 3371)
 20. *pyidi* 'mud' *uti* 'strike' > *pyiduti* 'to be soiled with mud' (MYS II: 194)

7 This form is rare in OJ.

8 See Yamada (1954: 104-106) for more examples.

21. *kwo* ‘child; egg’ *umu* ‘give birth’ > *kwomu* ‘give birth’ (KK 71)
 22. *kazu* ‘number’ *apey-* ‘join’ > *kazwopey-* ‘count’ (MYS V: 890)
 23. *situ* ‘ancient type of native weaving’ *ori* ‘weaving’ > *sitwori* ‘native weaving’
 (NS Shindaige)
 24. *tono* ‘palace’ *iri* ‘enter’ > *toneri* ‘attendant’ (MYS XVI: 3791)

The resulting compounds in examples 18, 20, and 21 are derived through contraction, while the resulting compounds in examples 22-24 are derived through monophthongization. This appears to present a problem for the proposal that morpheme boundaries between different types of words will determine whether contraction or monophthongization will occur, and further analysis of these forms is required.

As for example 19, we cannot be positive whether contraction occurs or whether monophthongization occurs. The reason is that there is a merger of *iy* and *yi* after *t*. If contraction occurs then the underlying form for this verb is **kotyide* and if monophthongization occurs the underlying form is **kotiyde*. Unfortunately, it is not possible to prove which process occurs in an example like this where the *koo-otsu* value for a vowel is not recoverable. However, since this example can only be found in EOJ the point is moot: the example must be rejected. As for examples 18, 20, and 21, it will be proposed that contraction occurs here because monophthongization between the vowels *a+o*, *i+u* and *wo+u* never happens.

Therefore, since examples 22-24 clearly show monophthongization and not contraction, and since there are no examples of noun plus verb where contraction occurs in environments where monophthongization *can* occur, I will propose that the loss of a morpheme boundary between a noun and a verb triggers monophthongization in environments where monophthongization can occur. When monophthongization cannot occur (because the two vowels in the vowel cluster never produce a new vowel through monophthongization), contraction will occur.

Particle + Noun

There are many cases where a particle plus a noun results in contraction of a vowel. Some examples include:

25. *kagey* ‘shade’ *tu* ‘genitive’ *omo* ‘face’ > *kageytomo* ‘south’ (MYS I: 52)
 26. *kono* ‘tree-genitive’ *ure* ‘top’ > *konure* ‘tree top; twig’
 (MYS VI: 924)
 27. *wa* ‘I’ *ga* ‘nominative/genitive’ *ipyē* ‘house’ > *wagyipyē* ‘my house’ (KK 32)
 28. *wa* ‘I’ *ga* ‘nominative/genitive’ *ipyē* ‘house’ > *wagapyē* ‘my house’
 (MYS V: 837)

The loss of the morpheme boundary between a particle and a noun always results in

contraction and never monophthongization, regardless of which particle is used.

The difference in the output for doublets such as the one found in examples 27 and 28 is explained by Unger (1993) as follows: in example 27, *waga* is treated as a polysyllabic word, and therefore contracts according to the rule stated earlier that when a polysyllabic word is compounded with another polysyllabic word the first vowel is deleted and the second vowel will remain (...V₁ + V₂... > ...V₂...). In example 28, the particle *ga* is treated as a monosyllabic word and therefore the other rule of contraction applies; when a monosyllabic word is followed by polysyllabic word the vowel of the monosyllabic word will remain: (C)V₁ + V₂... > (C)V₁....

Unger's explanation is intriguing, and does seem to account for the doublets in such cases. It is not, however, an explanation that we can *prove*. It should be noted that such doublets are only found in examples involving a monosyllabic morpheme (including particles and case markers), and that the process to prevent vowel sequence is always contraction, and not monophthongization. The reason why there are doublets in examples involving monosyllabic morphemes will require further study.

Particle + Active Verb

When emphatic particles, quotation particles, and other non-case particles precede a verb, the result is always contraction. Therefore, the deletion of a morpheme boundary in this environment will be claimed to trigger contraction and not monophthongization.

29. clause-to clause-quotation particle⁹ *ipu* 'say' > clause-*tipu* '[he] says [clause]'
 e.g., *yuku* 'go' to [particle] *ipu* 'say' > *yuku tipu* 'saying they will go'
 (MYS V: 800)
30. clause-to clause-quotation particle *ipu* 'say' > clause-*topu* '[he] says [clause]'
 e.g., *tamamo* 'beautiful algae' *karu* 'harvest' to [particle] *ipu* 'say' > *tamamo karu topu* 'saying (he) would harvest beautiful algae' (MYS XV: 3638)
31. *paru* 'spring' *si* [emphatic particle] *areba* 'exist-evidential' > *parusareba* 'since it is spring' (MYS V:818)

The doublets in 29 and 30 are similar to examples 27 and 28 discussed above.

9 The word to can also be analyzed as a verb meaning 'to say' (Alexander Vovin, personal communication). Whether this word is treated as a particle or as a verb, the result is the same: loss of the morpheme boundary between to and the following verb *ipu* results in contraction.

Active Verb + Noun

So far I have only found the following examples of a compound consisting of a verb followed by a noun:

32. *panare* ‘be apart’ *iswo* ‘beach’ > *panareswo* ‘isolated beach’ (MYS XV: 3600)
 33. *panari* ‘be apart’ *iswo* ‘beach’ > *panariswo* ‘isolated beach’ (MYS XX: 4338)

These two examples are from the same word as found in two different dialects: OJ (Western Old Japanese) and Azuma (Eastern Old Japanese). Example 33 is from Azuma, and should therefore be discarded since this study is only concerned with OJ. This leaves us with just one example of verb + noun compounding, which is not sufficient for proposing a generalization about such compounds.

Active Verb + Active Verb

Next, there are many examples of compounds involving two verbs. Such compounds are always the result of contraction, as the following examples illustrate.

34. *myesi* ‘summon’ *agey* ‘raise’ > *myesagey* ‘summon [honorific]’ (MYS V: 882)
 35. *sasi* ‘point’ *agey* ‘raise’ > *sasagey* ‘raise high by hand; present to someone of a higher rank’ (MYS XIX: 4204)
 36. *uti* ‘strike’ *ute* ‘throw away’ > *utute* ‘throw away’ (MYS V: 897)

When the morpheme boundary between two verbs is deleted, the resulting form is derived through the process of contraction, and not monophthongization.

Verbal Suffix + Verbal Suffix

OJ is an agglutinating language and has many verbal suffixes, which function to express aspect, mood, conjecture, honorification, etc. When the morpheme boundary between two such suffixes is deleted, the resulting form is derived through monophthongization, as shown below:

37. verb-infinitive-*kyi* verb-retrospective *am-* conjecture > verb-*kyem-* verb-retrospective conjecture
 e.g., *tir-i-kyi* ‘fall, scatter-retrospective’ *amu* ‘conjecture’ > *tirikyemu* ‘(it) has surely fallen’ (MYS II: 104)
 38. verb-infinitive-*kyi* verb-retrospective *ar-* ‘exist’ > verb-*kyer-* verb-

retrospective¹⁰

e.g., *ar-i-kyi* (existinfinitive-retrospective) + *ar-i* 'exist-finite' > *arikyeri* 'it existed' (MYS V: 836)

Therefore, the loss of the morpheme boundary between verbal suffixes results in monophthongization.

Verbal Suffix + Active Verb

When a verb follows a verbal suffix, the resulting form appears to be the result of contraction, as in the examples below:

39. verb-*te* verb-perfective infinitive *ar-* 'exist' > verb-*tar-* verb-perfective-continuative

e.g., *teri-te* 'shine-perfective' *ar-i* 'exist-infinitive' > *teritari* 'it is shining' (MYS XV: 3872)

40. verb-*zu* verb-negative *ar-* 'exist' > verb-*zar-* verb-negative

e.g., *kwopiy-zu* 'love-negative' *ar-am-u* 'exist-conjectur-attributive' > *kwopiyzaramu* 'I would not love' (MYS XVII: 3891)

In example 39 it is not possible to prove whether contraction occurs because of the type of morpheme boundary or because the combination of *e* and *a* never produce a new vowel through monophthongization. On the other hand, example 40 clearly shows a form resulting from contraction: if monophthongization were to occur the resulting form would be **verb-zwori*. Therefore, I will propose that the deletion of morpheme boundary between an auxiliary verb and a verb results in contraction.

Conclusion

Based on the discussion above, it is now possible to present rules for the environments where contraction will occur and where monophthongization will occur in order to prevent vowel clusters. In the case of compounding, it is the loss of a morpheme boundary that will trigger either contraction or monophthongization. The conditions for each process are listed below.

Contraction is triggered when:

1. the morpheme boundary between the following categories of words is lost:
 - stative verb stem + noun
 - stative verb infinitive + active verb

10 The difference between *kyi* and *kyer-* is that *kyi* is used when the speaker is recalling his/her own experience, while *kyer-* is used to refer to past events that the speaker did not directly experience, or to express sudden realization that something has occurred (i.e. "wow the flowers have bloomed").

auxiliary verb + active verb
 noun + noun
 particle + noun
 particle + active verb
 active verb + active verb

2. monophthongization cannot occur because the two vowels that come together do not monophthongize. This is true when the two vowels in question are the same (*a+a* or *i+i*), when one of the vowels is already the result of monophthongization (*ye+a*), or there is simply no known vowel that results from monophthongization of a vowel cluster, as is the case with *yi+u*, *a+o*, *o+a*, and *o+u* (note that the same vowels in the opposite order do monophthongize).

Monophthongization is triggered when:

1. the morpheme boundary between the following categories of words is lost:
 auxiliary verb + auxiliary verb
 noun + verb
2. a consonant is lost, resulting in a vowel-vowel sequence.

The data presented in this study show that there are set conditions for contraction and for monophthongization, and that these processes do not occur randomly. Knowing these conditions will be helpful when doing internal reconstruction on OJ, and will further our understanding of the pre-OJ language.

Appendix A: Contraction Data¹¹

The data are placed into two groups

- Group I : polysyllabic word + monosyllabic word: ...V₁ + V₂ >...V₂
 polysyllabic word + polysyllabic word: ...V₁ + V₂...>...V₂...
- Group II : monosyllabic word + polysyllabic word: (C)V₁ + V₂...>(C)V₁...

1. Group I: ...V₁V₂... > V₂
 stative verb-*ku ar-* > stative verb-*kar-*
 [stative verb-infinitive] [verb] > [stative verb]
 e.g., *kanasi-ku ar-i* > *kanasikari*

¹¹ The data selected here are from Unger (1993). I have added all English glosses and attestations for these forms.

sad - infinitive + exist-infinitive > being sad
[stative verb-infinitive] [verb] > [stative verb]
Attestation: MYS V: 793

2. (clause) *to ipu* > (clause) *tipu*
clause-particle + say > [he] says "clause"
[clause-quote particle] [verb] > [clause]

or

clause-say + say > [he] says "clause"
[clause-verb] [verb] > [clause]

e.g., *yuku to ipu* > *yuku tipu*
go + particle/say + say > saying they will go
[clause-particle/verb] [verb] > [clause]
Attestation: MYS V: 800

3. noun phrase-n-i ar- > noun phrase-nar-
[noun-copula] [exist] > [clause]

e.g., *yo no koto n-i ar-eba* > *yonokoto nareba*
world + genitive + things + copula + exist-evidential > since it is a thing of this
world
[noun phrase] [copula][exist] > [clause]
Attestation: MYS V: 805

or

noun phrase-ni ari > noun phrase-nari
[noun-locative particle] [exist] > [clause]

e.g., *ipye ni ar-aba* > *ipye naraba*
house + particle + exist-conditional > if (she) were at home
[noun-locative particle] [exist] > [clause]
Attestation: MYS V: 794

4. verb-*te ar-* > verb-*tar-*
verb-perfective + existence > verb-perfective-continuative
[verb-auxiliary] [verb] > [verb]

e.g., *teri-te ar-i* > *teritari*

shine-perfective + exist-infinitive > it is shining

[verb-auxiliary] [verb] > [verb]

Attestation: MYS XV: 3872

5. *verb-zu ar-* > *verb-zari*

verb-negative + existence > verb-negative

[verb-auxiliary] [verb] > [verb phrase]

e.g., *kwopiy-zu ar-amu* > *kwopiyzaramu*

love-negative + exist-conjecture > I would not love

[verb-auxiliary] [verb] > [verb phrase]

Attestation: MYS XVII: 3891

6. *ama ori* > *amori*

heaven + descend > descend from heaven

[bound noun] [verb] > [verb]

Attestation: MYS II: 199; MYS XIX: 4254; MYS XX: 4465

7. *apa umyi* > *apumyi*

light + ocean > fresh water lake, [place name]

[stative verb stem] [noun] > [noun]

Attestation: MYS IX: 1757

8. *ara iswo* > *ariswo*

rough + beach > rough coast, jagged rocks

[stative verb stem] [noun] > [noun]

Attestation: MYS XI: 2739; MYS II: 181

9. *ara umyi* > *arumyi*

rough + ocean > rough waters

[stative verb stem] [noun] > [noun]

Attestation: MYS VIII: 1453

10. *kagey tu omo* > *kageytomo*

shade + genitive + face > south

[noun] [genitive particle] [noun] > [noun]

Attestation: MYS I: 53

11. *kapa uti* > *kaputi*

river + inside > deep place in river; [place name]

[noun] [noun] > [noun]

Attestation: NS III: 311,11

12. *kata uwo* > *katuwo*

hard + fish > katsuo (dried fish)

[stative verb stem] [noun] > [noun]

Attestation: MYS IX: 1740

13. *kono ure* > *konure*

tree+ genitive + top of a tree or plant > tree top; twig

[bound noun-genitive particle] [noun] > [noun]

Attestation: MYS VI: 924

14. *koto itakyeba* > *kotitakyeba*

Unger probably means the conditional form of:

koto itasi > *kotitasi*

words + exceeding > exceedingly noisy

[noun] [stative verb] > [stative verb]

Attestation: MYS XII: 2886

15. *kuni uti* > *kunuti*

country + inside > inside the country

[noun] [noun] > [noun phrase]

Attestation: MYS V: 797

16. *kure no awi* > *kurenawi*

Kure + genitive + indigo plant > Kure's indigo plant; crimson

[place name] [genitive particle] [noun] > [noun]

Attestation: MYS V: 804; MYS IX: 1672; MYS X: 1993

Comments: Although the semantics here may seem questionable (i.e., what does “indigo” have to do with “crimson”) the indigo plant (*Polygonum tinctorium*) has reddish purple flowers that later turn brown. *Kurenawi* (‘crimson’) may be a reference to the flowers, and not to the plant itself. The green leaves of this plant were used to make indigo dye, and in modern dying techniques a reddish liquid is sometimes produced; I have not yet confirmed whether this reddish liquid was produced using the dying techniques employed by the Japanese during the Nara period. The non-contracted form *kure no awi* is also attested in the *Honzoo wamyoo* (an encyclopedia of medicinal herbs compiled between 901-923.).

17. *myesi agey* > *myesagey*

summon + raise > summon (honorific)

[verb] [verb] > [verb]

Attestation: MYS V: 882

18. *naka tu omyi* > *nakatomyi*

middle + genitive + retainer > [court rank]

[noun] [genitive particle] [noun]

Attestation: K I: 48b, 8

19. *opo uwo* > *opuwo*

big + fish > big fish

[stative verb stem] [noun] > [noun]

Attestation: K III: 37a, 9

20. *panare iswo* > *panareswo*

be apart + beach > isolated beach

[verb] [noun] > [noun]

Attestation: MYS XV: 3600

21. *para no uti* > *paramuti*

belly + genitive + inside > in belly

[noun] [genitive particle] [noun] > [noun]

Attestation: NK 28

22. *paru si areba* > *parusareba*

spring + emphatic particle + exist-evidential > since it is spring

[noun] [emphatic particle] [verb] > [clause]

Attestation: MYS V: 818

23. *paya uma* > *payuma*

fast + horse > a horse used for official business

[stative verb stem] [noun] > [noun]

Attestation: MYS XVIII: 4110

24. *pyidi uti* > *pyiduti*

mud + to strike > to be soiled with mud

[noun] [verb] > [verb]

Attestation: MYS II: 194

25. *pyimye no aswoybi* > *pyimyenawobyi*

noble women + genitive + play > flirting with noble women

[noun] [genitive particle] [noun] > [noun]

Attestation: NK 18

26. *pyita ura* > *pyitura*

one + back > when front and back of clothing are of identical color

[noun] [noun] > [noun]

Attestation: MYS XII: 2972

27. *sasi agey* > *sasagey*

point + raise > raise high; present to someone of higher rank

[verb] [verb] > [verb]

Attestation: MYS XIX: 4204

28. *so tu omo* > *sotomo*

back + genitive + face > north

[noun] [genitive particle] [noun] > [noun]

Attestation: MYS I: 52

29. *toko ipa* > *tokyipa*

endless + rock; crag > eternal rock

[noun] [noun] > [noun]

Attestation: MYS V: 805

30. *uti ute* > *utute*

strike + throw away > throw away

[verb] [verb] > [verb]

Attestation: MYS V: 897

31. *wa ga imo* > *wagyimo*

I + genitive + younger sister/sweetheart > my younger sister/sweetheart

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: NK 96

32. *wa ga ipye* > *wagyipyie*

I + genitive + house > my house

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: KK 32

33. *yoko usu* > *yokusu*

side; horizontal + mortar > flat even mortar

[noun] [noun] > [noun]

Attestation: KK 48

Group II: $V_1V_2\dots > V_1$

34. (clause) *to ipu* > (clause) *topu*

clause-particle + say > [he] says “clause”

[clause-quote particle] [verb] > [clause verb]

or

clause-say + say > [he] says “clause”

[clause-verb] [verb] > [clause verb]

e.g., *tamamo karu to ipu* > *tamamo karu topu*

beautiful algae + harvest + particle/say + say > saying (he) would harvest beautiful
algae

[clause-verb] [verb] > [clause verb]

Attestation: MYS XV: 3638

35. *are omopu* > *aremopu*

I think/feel > I think/feel

Attestation: MYS V: 852

36. *imo ga ipye* > *imogapye*

younger sister/sweetheart+ genitive + house > younger sister/sweetheart’s house

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: MYS V: 844

37. *ipyi ni uwete* > *ipyiniwete*

rice + dative/locative + starve-[gerund] > starve and...

[noun][particle][verb-gerund] > phrase

Attestation: NK 104

38. *kokoro pa omopyedo* > *kokoropamopyedo*

heart + topic + love-although > although the heart loves

[noun][topic particle][verb-although] > [clause]

Attestation: KK 51

39. *kwo umu* > *kwomu*

child; egg + birth > give birth; lay an egg

[noun] [verb-infinitive] > [verb-infinitive]

Attestation: KK 71

40. *myi uma > myima*

honorific particle + horse > honorable horse

[particle] + [noun] > [noun]

Attestation: MYS V: 877

41. *tamate n_o ipye > tamatenopye*

[place name] + genitive + house > house in Tamate

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: Tenji 9th year 5th month

42. *tatu n_o uma > tatanoma*

dragon + genitive + horse > a fast horse

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: MYS V: 808

43. *urupasi myi omopu > urupasimiyimopu*

splendid + suffiy + think > (I) think of (her) beauty

[stative verb] [suffiy][verb] > [verb phrase]

Attestation: NK 38

44. *wa ga ipye > wagapye*

I + genitive + house > my house

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: MYS V: 837

45. *yama n_o upey > yamanopey*

mountain + genitive + above > mountain top

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: MYS V: 872

Appendix B: Monophthongization Data¹²

1. verb + *Cyi*₁ > verb

[verb] [transitivity flipper] > [verb]

e.g., **aga-* + *Cyi*₁ + *r-u* > **agaCyruru* > *ageyru*

rise [intransitive stem] + [transitivity flipper] + [verbalizer-final] > rise [transitive]

2. verb-infinitive-*kyi* + *am-u* > verb-*kyem-u*

[verb-retrospective auxiliary] [conjecture auxiliary finite] > [verb-retrospective-conjecture-finite]

e.g., *tir-i-kyi* + *am-u* > *tirikyemu*

fall, scatter-infinitive-retrospective + conjecture-finite > (it) has surely fallen

[verb-retrospective auxiliary] [conjecture auxiliary-finite] > [verb-retrospective-conjecture-finite]

Attestation: MYS II: 104

3. verb-infinitive-*kyi* + *ar-* > verb-*kyer-*

[verb-retrospective auxiliary] [exist] > [verb-retrospective]

e.g., *ar-i-kyi* + *ar-i* > *arikyeri*

exist-infinitive-retrospective + exist-finite > it existed

[verb-retrospective auxiliary] [exist] > [verb-retrospective]

Attestation: MYS V: 836

4. bound noun + *Cyi*₂ > free noun *or* bound noun + *yi* > free noun

eg. *ama-Cyi* > *amey* *or* *ama-yi* > *amey*

heaven (bound noun form) + unbinding particle > heaven (free noun form)

Attestation: MYS V: 800

The bound form of a noun is found in compounds and the free form of a noun is found in other environments. It is not possible at this time to prove whether the shape of the morpheme that functions to “unbind” the noun is *-Cyi* *or* *-yi*, whether monophthongization occurs due to loss of a consonant or for some other reason.

5. *kazu apey* > *kazwopey*

number + join > count

[noun] [verb] > [verb]

Attestation: MYS V: 890

12 Data presented here are from Omodaka (1977), Oono (1994), Russell (1997), Unger (1993), Whitman (1985), and as attested.

6. *naga ikyi* > *nageykyi*

long + breath > sigh

[stative verb stem] [noun] > [verbal noun]

Attestation: MYS II: 199

7. *opo isi* > *opiysi*

big + rock > big rock

[stative verb][noun] > [noun]

Attestation: KK 13

8. *sakyi ari* > *sakyeri*

bloom + exist-finite > be blooming

[verb-infinitive] [exist-finite (imperfective auxiliary)] > [verb]

Attestation: MYS I: 16

9. *situ ori* > *sitwori*

ancient type of native weaving + weaving > native weaving

[noun] [verb-infinitive] > [noun]

Attestation: NS Shindaige

10. *taka iti* > *takyeti*

high + market > [place name]

[stative verb stem] [noun] > [noun]

Attestation: KK 101

11. *tono iri* > *toneri*

palace + enter > attendant

[noun] [verb] > [noun]

Attestation: MYS XVI: 3791

12. *waku iratukwo* > *wakiyratukwo*

young + term of veneration (male) > [title]

[stative verb stem] [noun] > [noun]

Attestation: K Oojin

Appendix C: Rejected Data

The rejected data are presented in the following order:

- not attested in any OJ text
- attested in OJ texts, but have questionable semantics
- attested in OJ texts, but only in the EOJ sections of the MYS

Data not attested in any OJ text¹³

1. *a ga omote > agamote*

?I + genitive + face > my face

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: unknown

2. *apumyi no umyi > apumyinoymi*

[place name] + [genitive] + sea > sea of Apumyi

[noun] + [genitive particle][noun] > [noun phrase]

Attestation: unknown

Comments: This form is attested as *apumyi no umyi* (MYS II: 153, MYS III: 266), but not as *apumyinoymi*. Sasaki (1956) claims that although this is written as *apumyi no umyi* contraction would have occurred in order to preserve a 5 syllable beat. However, it is not spelled as its contracted form (while cases involving other phrases are clearly spelled out as contracting) and MYS poems do not always maintain a strict 5-7-5-7-7 beat; there are lines of poems in the MYS that have as few as 3 or as many as 8 syllable beats. Without an attested form of *apumyinoymi* I see no reason to claim that this form contracts as Unger suggests.

3. *ari arite > ararite*

?exist + exist-perfective > (it) exists; (it) existed

[verb] [verb-perfective] > [verb perfective]

Attestation: unknown

4. *nuru ga upey > nurugapey*

? + [genitive] + above > above the ?

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: unknown

5. *wa-re pa ya uwe-nu > wa re pa yawenu*

? I + topic particle + emphatic particle + starve-perfective > I am famished

[noun][particle][particle][verb-perfective] > [clause]

Attestation: unknown

Data attested in OJ texts but have questionable semantics

1. *kuti amyī > kutamyī*

? + net > [place name]

Attestation: KIII: 24-8

13 To confirm whether or not data are attested in OJ texts, I consulted several indexes for the texts and OJ dictionaries (see references).

Comments: Unger seems to be using the characters here to reconstruct the etymology for this word. Although *amyi* is written with the character for net, I am not convinced that “net” is really a part of this compound.

2. *kwopyimye ya omo* > *kwopyimyeyamo*

? meaning ?

Attestation: unknown

Comments: I suspect that Unger incorrectly transcribed *kwopyimey* as *kwopyimye*; I have found no attestations of *kwopyimyeyamo* but *kwopyimey ya mo* is attested: MYS XIV 3508 (Azuma), MYS XVII: 3970. This example is analyzed as follows: *kwopyi-m-ey* ‘love-conjecture-evidential’ *ya* [question particle] *mo* [emphatic particle]. I see no reason to claim that *ya mo* comes from **ya* + *omo* or that the particle *mo* should be reconstructed as *omo*.

3. *mata uti yama* > *matutiyama*

? bend, fork + inside + mountain > [place name]

[noun] [noun] [noun] > [noun]

Attestation: MYS III: 298; MYS XII: 3154

Comments: I am not convinced this is contraction. There are two spellings for this place name: a) 真土山 *ma* ‘pure’ + *tuti* ‘soil’ + *yama* ‘mountain’ and b) 待乳山 which suggests *matu* ‘wait’ + *ti* ‘breasts; loop’ + *yama* ‘mountain’ The characters assigned to represent a word or place name are not proof of the word’s etymology. However, I see no reason to claim *matutiyama* is a result of contraction, unless an attestation of *mata-uti-yama* can also be found.

4. *myimatupyiko ka uwesine* > *myimatupyikokawesine*

? > Emperor’s name

Attestation: NS III605, 18

Comments: I am not sure how to analyze *ka* and *uwesine* here if this really contracts the way Unger has proposed.

5. *myi opo* > *myipo*

? honorific particle + big > ? prefix

Comments: I am not sure what *myipo* Unger means: I have found two possibilities:

1. a place name written as 三穗 (MYS III: 307)

2. in the phrase *myipokytama* (Kogo shuui) where the meaning is unknown

In either case I am not comfortable claiming this word contracts as suggested.

6. *ni opopu* > *nipopu*

red clay + hang up, to cover > radiant

[noun] [verb] > [verb]

Attestation: MYS VI: 932; MYS IX: 1694

Comments: This example is well attested, but the proposed reconstruction will be rejected for semantic reasons. First, although Unger (1993) does not translate this item, he seems to be following the suggested etymology from Omodaka (1967: 550), which suggests that *ni* means “red clay” and that *nipopu* means “to redden, to brighten”; the dictionary *Wamyōshō* (compiled between 931-938 C.E.) defines *ni* as 丹砂邇似朱砂而不鮮明者也 “The *ni* powder [written phonetically with the character] 邇 resembles red powder and it is not bright.” (Omodaka 1967: 540). The word *ni*, however, refers to a dull red color and not a bright red color. Also, it should be noted that *nipopu* can be used to describe a range of items, including people (e.g., MYS XVIII: 4114; MYS XIX: 4137; also found in Azuma: MYS XIV: 3427), and skirts (MYS XVII: 3969), and several flowers: *momo* “peach” (MYS XIX: 4139, 4192); *mwomyidi* “maple” (MYS XV: 3704, MYS XVII: 3907); *parupana* “spring flowers” -- in many cases these *parupana* seem to be *sakura* “cherry” but in some they could be *umey* “plum” (MYS XVII: 3965, 3969, 3985); *pagiy* “bush clover” (MYS XV: 3656, 3677, MYS XVII: 3957); *pudi* “wisteria” (MYS XIX: 4200); *tatipana* “mandarin orange” (MYS XVII: 3916, MYS XVIII: 4111); *umey* “plum” (MYS XIX: 4287). Some of these flowers, namely *pudi* and *tatipana*, are clearly not any shade of red, so it seems unlikely that an expression that would literally be translated as “covered in red clay” would be used to describe these flowers. Further, there are poems which use *nipopu* in a way that suggests that it meant “radiant” or “bright” and not “red”: 朝露尔仁保敝流花乎 *asa tuyu ni nipopeyru pana wo* “flowers that are radiant in the morning dew” (MYS XIX: 4185); 尔保敝理之梅此雪尔 *nipopyerisi umey konō yukyū ni* “the plum blossoms which are radiant in the snow” (MYS XIX: 4287). Last, there are a number of poems which use *nipopu* in conjunction with *kurenawi* “crimson” (e.g., MYS XVII: 3969; MYS XVIII: 4111; MYS XIX: 4139, 4156, 4157, 4160, 4192, 4139). If the *ni* of *nipopu* means “red” or “red clay” then it would be redundant to combine two words for red to describe the same flower. At this time I am not sure what the etymology of *nipopu* is, but I feel there is enough evidence to dismiss the reconstruction of this word as previously proposed.

7. *osi no umyi* > *osinomyi*

? + genitive + sea > [person name]

[noun] [genitive particle] > [noun]

Attestation: K Jinguu

Comments: *Osinomyi* is written as 忍 ‘bear; hide; sneak’ and 海 ‘sea’ but the characters here do not necessarily have anything to do with the origin of this word.

8. *pyi okyi* > *pyekyi*

day; sun + put > [family name]

[noun] + [verb] > [noun]

Attestation: MYS III: 354; MYS VIII 1564

Comments: This is written as 日 ‘sun’ and 置 ‘put’ but the characters do not prove etymology. See discussion above.

9. *pey inu* > *peynu*

? meaning ?

Attestation: unknown

Comments: It is not clear what Unger means here, since he did not provide glosses for this example. Perhaps he means the word *peynu* (attested: MYS III: 469, for example) which is formed from the verb *pey* ‘pass’ and *n-u* perfective auxiliary+tinite. Some analyze the perfective as *-in-u* and some as infinitive *-i* + *-n-u*; both are valid analyses. If this is the form that Unger means, and if *inu* here is supposed to be the perfective auxiliary, and if there is sufficient evidence that the perfective should be analyzed as *-inu* and not *-i* + *-nu*, then this form may be acceptable. However, there are simply too many “ifs” at this time, and so this example will be rejected.

10. *putwo uma* > *putuma* (*ni*)

fat + horse > all

[stative verb stem] [noun] > [adverb]

Attestation: MYS XVIII: 4081

Omodaka (1967) and Oono (1994) convincingly argue against this etymology claiming that *putu* “all” + *ma* “[suffix]” is a more plausible derivation for this word. Further, it is difficult to understand how “fat horse” could mean “all”. Thus, this word will be rejected as an example of contraction for semantic reasons.

11. *te isi* > *tesi*

Attestation: MYS II: 211

Comments: It is unclear what Unger means with this example, since he offers no translation or attestation. Perhaps this is the gerund form of *tu* plus the attributive of retrospective *kyi*. This example would be acceptable if *kyi* is analyzed as *-iki* and the attributive form as *-isi*. While some might analyze these forms that way, others would reconstruct them as the infinitive *i* + *kyi* and infinitive *i* + *si* (see discussion on *peynu* above)

12. *to no amy* > *tonamy*

? bird + genitive + net > fowler’s net

[noun] [genitive particle] [noun] > [noun]

Attestation: MYS XVII: 4011

Comments: This example can only be accepted if we accept that *to* is somehow a

truncated form of *tori* ‘bird’ and we can only accept this if other attestations of *to* ‘bird’ can be found.

13. *yosu amyi* > *yosamyi*

?depend on + net > [place and personal name]

Attestation: K Middle Volume 20-7 (family name) and 26-4 (place name)

Comments: The meanings here are taken from characters used to write *yosamyi*, again, why do we have ‘net’ in the etymology of a place name?

Data attested in OJ texts, but only in the EOJ sections of the MYS

1. *ipyen no imo* > *ipyenomo*

house + genitive + younger sister/sweetheart > woman of the house

[noun] [genitive particle] [noun] > [noun phrase]

Attestation: MYS XX: 4388

2. *koto ide* > *kotide*

word + go out > speak out

[noun] [verb] > [verb]

Attestation: MYS XIV: 3371

3. *myikoto ni si areba* > *myikoto ni sareba*

words (honorific) + copula + emphatic particle + exist-evidential > since those were (the emperor’s/lord’s) words

[noun] [copula] [emphatic particle] [verb] > [clause]

or

myikoto ni sa-areba > *myikoto ni sareba*

words (honorific) + copula + verbal prefix + exist-evidential > since those were (the emperor’s/lord’s) words

[noun] [copula] [verbal prefix] [verb] > [clause]

Attestation: MYS XX: 4393

Comments: Given the context, the first analysis I offer *si areba* > *sareba* is probably more likely than *sa areba* > *sareba* but the second analysis is also possible.

4. *panari iswo* > *panariswo*

be apart + beach > isolated beach

[verb] [noun] > [noun]

Attestation: MYS XX: 4338

5. *yosi koso aruramye* > *yosikosoaruramye*

?good +emphasis + exist-suppositional > surely it is good!

[stative verb][emphasis particle][verb] > [clause]

Attestation: MYS XIV: 3430

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上代日本語における縮約と単母音化

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キーワード：上代日本語、母音縮約、単母音化、母音、合成語、語形論

上代日本語には母音連続を避けるための過程が二つある。1) 母音縮約 (contraction) と、2) 単母音化 (monophthongization) である。以前の研究では、母音縮約と単母音化の条件などが論じられてきた (Martin 1987; Russell 1997; Unger 1993; Whitman 1985) が、どのような環境で母音縮約や単母音化が起こるかについては、いずれの研究もうまく説明していない。

そこで、この論文では母音縮約と単母音化の例を研究し、なぜある時には母音縮約がおこり、べつのある時には単母音化が起こるかを例証する。そして、複合語の語彙範疇 (lexical category) によって、母音縮約が起こるのか、あるいは単母音化が起こるのかが決定されることを提示する。

In Old Japanese (OJ) there are two processes which prevented vowel-vowel sequences: 1) contraction, where one of the two vowels is deleted; and 2) monophthongization, where the two vowels fuse. Previous studies propose rules to account for which vowel will be deleted when contraction occurs, or what vowel combinations will result in which monophthongized vowel (Martin, 1987; Russell, 1997; Unger, 1993; Whitman, 1985). However, these studies fail to account for which of the two processes will occur in a given environment.

This paper will study examples of both contraction and monophthongization, and demonstrate why contraction occurs in some cases and monophthongization occurs in others. This study will demonstrate that the lexical categories (verb, noun, stative verb, particle, etc.) of the words being compounded determine whether contraction or monophthongization will occur.