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A COMPREHENSIVE STUDY OF *MWO, MÖ, MYE, MEY, PO, PYE,* AND *PEY* SYLLABLES IN THE EASTERN OLD JAPANESE DIALECTS[*]

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This paper presents the first comprehensive linguistic study of all phonographically attested examples of *mwo, mö, mey, mye, po, pye,* and *pey* syllables in the Eastern Old Japanese (EOJ) dialects. I analyze each EOJ province separately, and in doing so I present evidence for a variety of phonemic mergers in specific provinces, including *mə>/mo/, *məy>*mə>/mo/, *pəy>*pə>/po/, *məy>/me/ and *pəy>/pe/. Importantly, I offer a solution to the puzzle presented by the data from the Suruga and Tōtōmi provinces. I also show how this study is the first step towards a clear understanding of the shared innovations that will help to give us a more accurate picture of the taxonomy of the eastern linguistic area of eighth century Japan.

1. INTRODUCTION. Eastern Old Japanese refers to the group of dialects spoken in Japan during the Nara period (710-794) in the region that stretched from modern Shizuoka and Nagano to Ibaraki, and all areas between them extending southward to the Pacific. Also normally included is the large northeastern area called Mutsu[1] that encompassed modern Fukushima, Miyagi, Iwate, and Aomori. We know of the EOJ dialects from the 141 poems in Book XIV and 93 poems in Book XX of the *Man'yōshū* that show Eastern linguistic features (Russell 2006:210). The former are also known as the *Azuma-uta*, or "Azuma poems," while the latter are called the *Sakimori-uta*, or "Border guard poems." There are an additional 89 poems in Book XIV and 14 poems in Book XX of the *Man'yōshū* attributed to Eastern provinces (Vovin 2005:10-12), however these do not show any Eastern linguistic features, and are thus excluded from this study. In addition, we also have the 9 *Hitachi Fudoki* poems. These are also excluded from this study because only two (FK 7 and FK 8) show Eastern linguistic features (Vovin 2005:5) and their history of transmission is quite problematic (Ikier 2006:15-16).

The specific dialects attested in the *Man'yōshū* are situated in twelve provinces, or *kuni* 國: Kazusa 上総, Mutsu 陸奥 (also called Michinoku), Shimotsuke 下野, Hitachi 常陸, Kōzuke 上野, Izu 伊豆, Musashi 武蔵, Sagami 相模, Shimōsa 下総, Shinano 信濃, Tōtōmi 遠江, and Suruga 駿河. There is only one Izu poem (along with a variant) available to us, though most of the other provinces have a fair amount of data. There were two other provinces in this areal grouping (Kai 甲斐 and Awa 安房); however we have no linguistic material from them. Figure 1 below, based on Russell (2006:208), maps out the three main EOJ dialect regions.

The ultimate goals of this study and related studies to follow are to begin unraveling the phonetic and phonological systems of the EOJ dialects, to gain further knowledge of the internal taxonomy of EOJ, and to define what phonemic mergers took place in what areas. In regard to the subject of phonemic mergers, it should be noted that for Western Old Japanese (WOJ), the distinction between between /mo/ and /mə/, and /po/ and /pə/ has not been consistently maintained since the *Kojiki,* and it seems to have been lost in WOJ dialects by the time of the *Man'yōshū* (early eighth century) with the vowels of both labial-initial syllables merging as [o][2] (Vovin 2005:41, Miyake 2003:261–62). As for EOJ, it is clear from the start that the merger of *pə to /po/ had occurred by the time of the transcription of the poems in the *Man'yōshū*, as only four unique phonographic *po* syllables are used in the entire corpus—two in Book XIV (保EMC pâu^B, LH pou^B;[3] 抱EMC bâu^B, LH bou^B) and three in Book XX (保EMC pâu^B, LH pou^B; 富 EMC pjəu^C, LH pu^C; 寶EMC pâu^B, LH pou^B)—and all but one are from Early Middle Chinese

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[1] It is possible this was a separate northern dialect group distinct from the eastern group.

[2] Alexander Vovin (p.c.) notes that there is statistical maintenance of the contrast between *mwo* and *mö* in Book V of the MYS.

[3] I follow Schuessler 2007 for the EMC and LH readings used in this paper.

FIGURE 1. Map of the EOJ dialect regions in the eighth century.
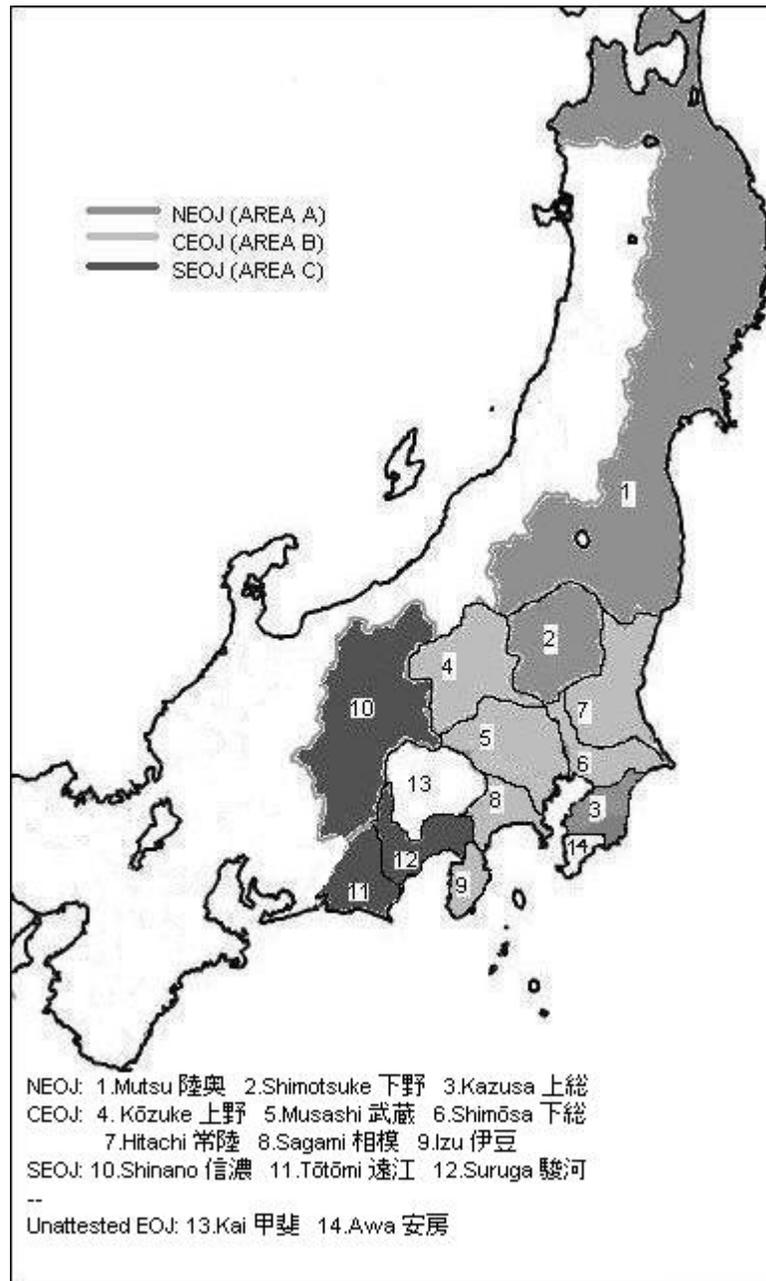
syllables with a rounded vowel diphthong, which are not syllables which would be used to indicate a central vowel sound in EOJ. The one syllable which does have a central vowel in EMC and was used to indicate WOJ /pə/ syllables in the *Kojiki* was the aforementioned 富 EMC pjəu^C (Miyake 2003:254). However, this phonogram is only used three times in the entire EOJ corpus, all in Book XX. One of the attested words, 志富*sipo* 'tide' from 20:4368.3,[4] has an ambiguous vowel in PJ, while another attestation, 布多富我美*putapoNkamyi* from 20:4382.1, is an unclear part of the poem in which it appears, giving us little help. The third example, 意富*opo* 'great' from 20:4373.3, does indeed have a central vowel in the second syllable in early WOJ, and it is written with the etymologically "correct" syllable in EOJ.

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[4] See section 1.2 for a description of the text citation system used in this study.

However, it is only one example in the entire corpus, so it is also of no help. *Po* syllables are included in this study for the sole purpose of comparing them with *pey* syllables in order to see if a merger took place between these two syllables.

The merger of *mə to /mo/ in EOJ, on the other hand, is not so straightforward, and requires a full study to be reliably determined across all of the provinces. In the present study, evidence will be presented and tested to see whether or not the *mə>/mo/ merger occurred in EOJ, as well as additional mergers that include *məy>*mə>/mo/, *pəy>*pə>/po/, *məy>/me/ and *pəy>/pe/.

Each specific province is treated as a distinct language variety, and each is analyzed separately in order to look for specific provincial mergers and to re-examine the validity of the traditional EOJ dialect areas. As shown in Figure 1 above, I still group the provinces under the headings of Area A, Area B, and Area C, which, following Russell (2006:207), are renamed as North Eastern Old Japanese (NEOJ), Central Eastern Old Japanese (CEOJ), and South Eastern Old Japanese (SEOJ), respectively. The Unknown Eastern Old Japanese (Russell 2006:207) poems are also included in this study and are presented in their own section.

1.1 LITERARY REVIEW. The philological research on EOJ, inclusive of traditional grammar studies, has been quite exhaustive, particularly the important studies by Mizushima (1972, 1984a, 1984b, 2003), Fukuda (1965), and Hōjō (1966). However, relatively little has been done in terms of any true linguistic analysis of these specific dialects. Ikier's 2006 study of the attributive marking of EOJ is a notable exception, and introduces the first comprehensive translation of the Eastern corpus with a morphological analysis provided for each poem. Unfortunately he does not separate (and discard) the poems attributed to eastern provinces in Book XIV that show no Eastern linguistic features and are written in rather pure Western Old Japanese, and thus his results may be somewhat confounded. Russell (2006:207-437) does discard the Eastern poems written in WOJ in her analysis, focusing purely on those poems with EOJ features, and she presents an extensive overview of the specific problems in the Eastern data from each dialect region. Hino 2003 presents a new reconstruction of Proto-Japonic vowels using EOJ data, as well as revised dialect divisions based on apparent innovations and retentions of vowels seen in the EOJ data. Vovin 2005 includes comparative Eastern data in his Western Old Japanese grammar, which provides the most extensive grammatical data available to date in English, especially in terms of morphological analysis.

Otherwise, very little has been done, particularly in figuring out the phonetic and phonological systems of the EOJ dialects. Scholars agree, however, that with so little done thus far, it is clear that the EOJ data is in dire need of a more advanced, comprehensive linguistic study. For example, Miyake (2003:272) makes a note of it as something he may delve into in future research, and Russell (2006:207-437) similarly mentions many times that the EOJ data need further research to be dealt with properly.

1.2 METHODOLOGY. Due to the comprehensive nature of this paper, special care was taken to ensure no data were overlooked in the analysis. First, all of the Eastern poems in the *Man'yōshū* were digitally encoded into a data file. Next, each province's poems were cut out and placed into their own separate data file (the Unknown Eastern Old Japanese poems were put into their own large file). After this, each province's file was electronically searched to ensure no syllables were missed. Each phonographic syllable that came up in the search was inputted into the tables.

The tables throughout the paper are organized by morpheme attestations, so all attestations of a specific morpheme or string of morphemes in a province are grouped together in the table. If all of the morphemes attested in a province are attested only once each, the poems are by default organized from lowest numbered poems to highest numbered poems, though it should be mentioned that the numbering in the *Man'yōshū* is arbitrary and tells us nothing of the chronology of the poems. The data tables all have the following format:

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.

The *Example* column shows a transliteration of the *Phonogram(s)* column. The following transliteration system is used:

Consonants:

p=/p/, *t*=/t/, *k*=/k/, *n*=/n/, *m*=/m/, *Np*=/ᵐb/, *Nt*=/ⁿd/, *Nk*=/ⁿg/, *s*=/s/, *Ns*=/ⁿz/, *r*=/r/, *w*=/w/, *y*=/y/

Vowels:

yi=/i/, *iy*=/ï/, *ye*=/e/, *ey*=/əy/, *wo* (syllable-initial)=/wo/, *wo* (following a consonant)=/o/, *ö*=/ə/, *u*=/u/, *a*=/a/, *e*=unknown whether the vowel is *ey* or *ye*, *i*=unknown whether the vowel is *iy* or *yi*, *o*=unknown whether the vowel is *ö* or *wo*

The *Phonogram*(*s*) column gives the original Chinese phonograms used in the text to write the syllable(s) in the morpheme(s) in question. For more information on the Chinese pronunciations of these phonograms see Schuessler 2007 and Miyake 2003.

The *Morphemic Gloss* is a morpheme by morpheme gloss (not a translation). When researching the morphemic values I consulted Omodaka 1967, the full translation of the EOJ *Man'yōshū* corpus found in Ikier 2006, Vovin 2005, and my own translations and morphological analyses of the poems. A vowel in brackets indicates it was contracted and not pronounced in the poem but is still there in the underlying representation of the morpheme. A vowel in parentheses indicates that it is in the poem but not represented by a phonogram in the example in the chart.

The *Book:Poem.Line* column shows the specific attestation, down to the line of the poem. For example, 20:4389.2 would mean the poem is from MYS Book XX, poem number 4389, line 2.

The *WOJ* column shows a grammatical Western Old Japanese cognate form, either phonographically attested or possible within the grammar (as in the case of paradigmatic forms). Morphemes which are only semantographically attested in the WOJ corpus are not included. The WOJ attestations are either from Omodaka 1967 or my own searches in the *Man'yōshū* and other Nara-period texts. When the vowel in question is unreconstructable, the form is noted as such. When no phonographically attested nor possible form is available, a "–" is shown in this column.

The *E.C.* column stands for "Etymologically Correct." There will be a "+", "–", or "?" in this column. A "+" sign means the vowel in the EOJ syllable is etymologically correct in terms of an expected reflex from a Proto-Japanese (PJ) form, which is derivable via comparison with the WOJ form. A "–" sign means the vowel is etymologically incorrect, indicating the likeliness that a merger has taken place with another syllable. More than one "+" or "–" may be found in this column for a single word-form if the word-form in the example has more than one *m*- or *p*- syllable followed by one of the vowels in question. These are listed in sequential order in the *E.C.* column. A "?" means the original quality of the vowel in question is unknown in PJ, so no conclusion can be made in regard to the "correctness" of the EOJ reflex. Since there is no synchronic contrast between [po] and [pə] in EOJ, I mark all syllables written with a *po* phonogram that are a reflex from a PJ *po or *pə syllable as being etymologically correct so as to not skew the statistical results from each province.

I statistically analyze each province independently, then summarize the results of each traditional EOJ dialect region in the form of Table 1.

TABLE 1

	*mə>/mo/	*məy>*mə>/mo/	*məy>/me/	*pəy>*pə>/po/	*pəy>/pe/
PROVINCE					

If there is evidence for a merger, it will show "Yes;" if there is no evidence it will show "No." Those mergers that are labelled "Inconclusive" should be taken with caution, as these all have only one example of an etymologically incorrect syllable, and we cannot rule out the possibility that they could be simple misspellings. If there are no data at all for the syllables in question for a particular merger it will show "No data."

The evidence for a merger lies in the rate of etymologically incorrect syllables used in a specific province. I view a significant number of such syllables as being highly indicative of a merger, as it is in line with the way merged syllables were written in WOJ texts.

2. SOUTH EASTERN OLD JAPANESE. Southern Eastern Old Japanese, also known as Area C, is the term used to refer the dialects of EOJ spoken in the Shinano, Suruga, and Tōtōmi provinces. Two of these dialects (Shinano and Tōtōmi) directly bordered central Western Old Japanese dialects, which makes it probable that they had a significant Western influence. The Suruga dialect did not border any WOJ dialect, and shows at least one striking phonological difference from the other two dialects. Another difference found in Suruga may have been present, to some degree, also in Tōtōmi, which bordered Suruga. There are only twenty-five SEOJ poems in the *Man'yōshū*, making it the most poorly attested of the three major EOJ dialect regions.

2.1 SHINANO DIALECT. The Shinano dialect is represented by seven poems in the *Man'yōshū*, specifically 3352 and 3398-3400 in Book XIV, and 4401-4403 in Book XX.

2.1.1 *MWO* AND *MÖ* SYLLABLES. There are two *mwo* syllables and two *mö* syllables attested.

TABLE 2. *Mwo* and *mö* syllables in Shinano.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**mwo**	毛	FPT	14:3398.2	mö	-
2	**mö**	母	FPT	14:3400.3	mö	+
3	o**mö**	意母	mother	20:4401.5	amo	?
4	o**mwo**	意毛	mother	20:4402.5	amo	?

In (1) we see *mwo* used once to write the focus particle, which is historically *mə, while in (2) we find *mö* being used once to write the same particle. We find the same situation in examples (3) and (4), where the form *omwo* 'mother' appears in the former, and *omö*[5] in the latter. This is the same situation found in the eighth century WOJ texts, so I conclude that *o and *ə merged to /o/ after /m/ in Shinano.

2.1.2 *MYE* AND *MEY* SYLLABLES. There is one attested *mey* syllable. There are no attested *mye* syllables.

TABLE 3. *Mye* and *mey* syllables in Shinano.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	ta**mey**	多米	benefit; for	20:4402.5	tamey	+

This syllable is etymologically correct, and due to the lack of any other data, there is no evidence for a merger here.

2.1.3 *PO*, *PYE*, AND *PEY* SYLLABLES. There is only one *po* syllable phonetically attested in this dialect. There are no phonetically attested *pey* or *pye* syllables.

TABLE 4. *Po* syllables in Shinano.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**po**tötöNkyisu	保登等藝須	cuckoo.bird	14:3352.3	**po**tötöNkyisu	+

The word *potötöNkyisu* 'cuckoo' is written correctly. With such little data there is no way to know which, if any, mergers occurred in this dialect.

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[5] This word is a borrowing from Old Korean *omö 'mother' (Alexander Vovin, p.c.). The native Japonic word for 'mother' is *papa.

2.2 SURUGA DIALECT. The Suruga dialect is represented by eleven poems in the *Man'yōshū*, specifically 3359 in Book XIV, and 4337-4346 in Book XX. Suruga is of special interest, as all examples of etymological *mö* and *mwo* syllables written with a *mey* phonogram in the EOJ corpus are found exclusively in this dialect, and exclusively in Book XX.

2.2.1 *MWO*, *MÖ*, *MYE*, AND *MEY* SYLLABLES. There are three *mwo* syllables, one *mö* syllable, and nine *mey* syllables attested. There are no attested *mye* syllables. I include the *mey* data with the *mwo* and *mö* data for reasons that will be explained below.

TABLE 5. *Mwo*, *mö*, and *mey* syllables in Suruga.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem. Line	WOJ	E.C.
1	wa-Nk-yi**mey**	和伎米	1S-POSS-beloved.girl	20:4345.1	wa-Nk-yimwo	-
2	**mey**Nkur-u	米具留	encircle-ATTR	20:4339.1	meyNkur-	+
3	**mey**Nkur-i	米具利	encircle-INF	20:4339.3	meyNkur-	+
4	o**mey**	於米	face	20:4342.5	omö	-
5	**mö**	母	FPT	20:4343.5	mö	+
6	**mey**	米	FPT	20:4345.5	mö	-
7	**mey**t-i	米知	hold-INF	20:4343.4	möt-	-
8	po**mey**-te	寶米弖	honor-GER	20:4342.2	pomey-	+
9	ka**mwo**	加毛	PT	20:4341.5	kamö	-
10	ka**mwo**	加毛	PT	20:4344.5	kamö	-
11	key**mey**	氣米	straw	20:4338.1	kömö	-
12	**mwo**nö	毛能	thing	20:4337.4	mönö	-
13	o**mey**p-	於米保	think-	20:4343.2	omöp-	-

Of the thirteen word tokens in the data, only four are written correctly from an etymological viewpoint. The Suruga data have been quite a puzzle, with no plausible explanation offered thus far. For example, Russell (2006:340) states "that these vowels are very similar, and that there was no distinction between them in SEOJ. Western scribes, then, simply chose the closest approximation they could and sometimes the result was an /ë/[6] and other times it was an /ö/." While I agree there was no distinction between these vowels in Suruga, this does not explain how the loss of distinction between these vowels came about, and it does not account for some other important points that I will discuss in this section.

After a cursory glance at the data, a number of facts quickly become apparent. First, no etymological *mey* syllable in the data is ever written as *mwo* or *mö* (though note only two roots in the corpus — *meyNkur-* and *pomey-* — have such a syllable). Second, *mwo, mö,* and *mey* are all used to transcribe etymological *mö* syllables. A good example of this is the focus particle *mə, which is written *mö* in (5) and *mey* in (6), while the particle *kamö is written *mwo* in both (9) and (10). Third, a *mey* syllable is used to write the one etymological *mwo* syllable in the data. The final and perhaps most significant thing these data show is that the phonographic *mey* syllable used in these poems (米 EMC miei[B], LH mei[B7]) is used to transcribe etymological *mo, *mə, and *məy syllables.

I believe the explanation here lies in two key factors: one is the merger of mid-central and mid-back vowel phonemes after a labial onset in Suruga, and the second is the Eastern innovation of deleting the

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[6] Russell's *ë* corresponds to my *ey*.

[7] Miyake (2003:227) notes that this syllable likely had a rhyme category of *-ay or *-əy in Southern EMC, which is closer to the phonetic value used in the Old Japanese texts. For example, compare the modern Cantonese reflex of this syllable, which is [may].

second segment of historical vowel sequences instead of fusionally reducing[8] them, as is prevalent in the West. With these two features in mind, as well as keeping in mind the vowel *-ey* is a diphthong composed of two segments, I believe the following is the most likely scenario to explain the Suruga data:

1. PJ *məy has its final segment deleted in Suruga, with the output being a merger with *mə syllables. In fact, all *əy vowels merged with *ə vowels in Suruga (irrespective of the syllable's position in the word), as part of a general process of reducing PJ diphthongs in the dialect.

2. *mə merges to /mo/.

3. Scribes noted the universal lack of an /əy/ in Suruga, and used *-ey* and *-ö* syllables interchangeably when transcribing poems from this province. Due to *mwo, mö* and *mey* all merging to [mo] in Suruga, characters for all three of those syllables in WOJ were used freely to transcribe /mo/ syllables in Suruga.

The hypothesis of historical diphthong reduction via deletion of the second segment is further supported by the contracted reflexes of other historical vowel sequences shown in the Suruga data (it should be mentioned that this occurs in many EOJ dialect regions to various degrees). For example, in 20:4339.4 we find the form 加比利 *kapyir-i* 'to return-INF', which corresponds to WOJ *kapyer-i* 'id.'. The PJ form of this word must have been *kapiar-, and in the Suruga word we see the deletion of the second vowel in the sequence *-ia- for the output [i], while in WOJ we see a fusion of this sequence to [e]. A similar example is the word 已比 *ipyi* 'house' in 20:4343.3, which corresponds to WOJ *ipye* 'id.' and is a reflex from PJ *ipia 'house'. Once again, we see the second vowel deleted in Suruga rather than fusionally reduced with the preceding vowel.

Evidence for the universal lack of a contrast between *-ey* and *-ö* is found in the initial syllable of example (11) *keymey* 'straw' (from PJ *kəmə), which is written with a *key* syllable but is etymologically from a *kə syllable. Another example is 氣等 *keytö* 'words', found in 20:4346.4, which corresponds to WOJ *kötö* 'id', both forms being reflexes from PJ *kətə 'word'. Again, the first syllable is written with a *key* syllable, whereas we would expect a *kö* syllable.

Further evidence is found in 20:4337.4 in the word form 價尔弓 *key-n-i-te* come(INF)-PERF-INF-GER 'had come and …'. The stem in this word form is historically PJ *kə-. In WOJ we find contraction when the infinitive follows this stem, with the output of *k-yi* 'come-INF'. In Suruga it is most likely that the sequence *kə-i 'come-INF' was simply reduced via a deletion of the second vowel, leaving the form /kə/. The scribe wrote this as *key* because there was no contrast between *key* and *kö* in the dialect.

A final example is 麻氣婆之良 *ma-key-N-pasira* true-tree-GEN-shrine 'shrine of the true tree' in 20:4342.1. Here we see the morpheme "tree" written as *key*. "Tree" is historically from PJ *kəy, and its WOJ free form is *kiy* while the bound, compounding form is *kö-*. It is clear the morpheme for "tree" in this Suruga word-form is the compounding form, and there is no reason why it would retain its original *-y when this dialect (and other EOJ dialects) had a clear prohibition against any vowel sequences, choosing to delete the second vowel in the majority of cases. And yet the scribe wrote this word with a *key* character, which stands as strong evidence that there was no contrast between *key* and *kö* syllables in Suruga; both had merged to /kə/.

The question remains, if such mergers took place in Suruga, what would motivate the scribes to use a *key* character in place of *kö,* and a *mey* character in place of *mwo* or *mö*? After all, no such transcription method is attested in any WOJ text (not even any misspellings of the kind). Why would they not simply write all of the syllables as *kö* and *mwo/mö*? As Ikier (2006:14) aptly notes, we do not know whether or not the scribes of the *Sakimori-uta* were WOJ speakers, or the border guards themselves. Both are possibilities that cannot be completely dismissed. This transcription method, which appears only in Book XX, and only in Suruga, raises the question as to whether at least some of the poems may have been written down by Suruga speakers. According to this hypothesis, they used the chararacters freely where there was no phonological contrast, mimicking the free variation of characters used by WOJ scribes after

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[8] I prefer the term "fusional reduction" to the more traditional "monophthongization," for the simple fact that not all of the vowels produced via this reductive process were monophthongs. For example, Russell (2006:235) correctly notes that *-ey* is synchronically a diphthong, but goes on to state that the sequence *-ai monophthongized into *-ey*, which is a contradiction in terms.

mergers took place in their language. Alternatively, if WOJ scribes did indeed write down these poems, the substitution of *key* for *kö* and *mey* for *mö* or *mwo* may have acted to point out a difference in the Suruga pronunciation of these words in a creative way, which is in line with similar practices employed by the scribes in the *Man'yōshū*.

2.2.2 *PO, PYE,* AND *PEY* SYLLABLES. There are two *po* syllables and one *pye* syllable attested in Suruga. There are no attested *pey* syllables.

TABLE 6. *Po* and *pye* syllables in Suruga.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**pye**	敝	area; shore	14:3359.2	pye	+
2	**po**mey-te	寶米弓	honor(INF)-GER	20:4342.2	pomey-te	+
3	omey**p-o-**Ntö	於米保等	think-EV-CONC	20:4343.2	omöp-ey-Ntö	-

Examples (1) and (2) are written correctly, and there is no sign of any *pye/pey* merger in this dialect. In (3) we see the evidential suffix after a *-p* stem verb root written as *-o-* instead of the expected reflex *-ey-*. There is indeed only one attested example, and by itself it would not be very convincing, but when taken into account and compared holistically with the Suruga data presented in section 2.2.1, it gives further evidence that the same thing happened with *p-* initial syllables and the vowels *ə, *əy, and *o as with *m-* initial syllables and those respective vowels. I offer the following hypothesis:

1. PJ *pəy syllables lose their final vowel segment in Suruga, along with all other *-əy segments in the dialect, merging *pəy to *pə.

2. *pə merges to /po/.

3. *Po* and *pey* phonograms are used interchangeably to write synchronic Suruga /po/ syllables that are etymologically from PJ *po, *pə, or *pəy.

2.2.3 SUMMARY. The data are scarce, but when the data from both sections above are taken together in the analysis, I believe that the above hypotheses I have presented offer the most logical and plausible explanation. What I have put forth accounts for all of the data in a way that is consistent with what we know of the way vowel sequences were reduced in Suruga and other Eastern dialects, as well the tendency for scribes to maximize their range of characters to write a syllable after a merger has taken place.

2.3 TŌTŌMI DIALECT. The Tōtōmi dialect is represented by seven poems in the *Man'yōshū*, all from Book XX. The poems are 4321-4327.

2.3.1 *MWO, MÖ, MYE,* AND *MEY* SYLLABLES. There are ten *mö* syllables and one *mwo* syllable attested. There are no attested *mye* or *mey* syllables.

TABLE 7. *Mwo* and *mö* syllables in Tōtōmi.

	Example	Phonogram(s)	Morphemic Gloss	Book.Poem.Line	WOJ	E.C.
1	-Ntö**mö**	登母	-CONC	20:4323.2	-Ntömö	+
2	**mö**Nka**mwo**	母我毛	DES.PT	20:4325.2	möNkamö	+-
3	**mö**	母	FPT	20:4324.5	mö	+
4	**mö**	母	FPT	20:4325.1	mö	+
5	**mö**	母	FPT	20:4327.1	mö	+
6	**mö**	母	FPT	20:4327.3	mö	+

7	**mömö**	母々	hundred	20:4326.3	mwomwo	--
8	**mömö**	母々	hundred	20:4326.4	mwomwo	--

Six syllables are etymologically correct, while five are etymologically incorrect. Here we see a more consistent use of *mö* for etymological **mə* syllables (60%) than in the other two dialects, though only slightly. Overall, it seems clear that a merger of *mö* and *mwo* occurred (or was occurring) in Tōtōmi as well.

2.3.2 *PO, PYE,* AND *PEY* SYLLABLES. There are three attested *pey* syllables, one attested *po* syllable, and one attested *pye* syllable.

TABLE 8. *Po, pye*, and *pey* syllables in Tōtōmi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	sa**pey**	佐倍	PT ('even')	20:4322.4	sapey	+
2	tö**pey**	等倍	far	20:4324.1	töpo	-
3	ta**po**myi	多保美	*unclear*	20:4324.1	–	?
4	ni**pey**	尓閇	PN	20:4324.3	–	?
5	**pye**	弊	area	20:4326.2	pye	+

The sole *pye* syllable in (5) is written correctly, while the sole *po* syllable in (3) is unknown. Among the three *pey* syllables, one is etymologically correct, one is incorrect, and the other is unknown. Of great interest is example (2). As in section 2.2.1, once again we see an example of an -*ey* syllable being used to write a WOJ -*o* syllable (which in this case is actually a reflex of a PJ **-ə* syllable). I believe the most likely explanation for this is that the merger of *po* and *pey* occurred in Tōtōmi as it did in Suruga, so scribes used *pey* and *po* syllables interchangeably. It follows perfectly with the sequence of sound changes I proposed in Suruga, in sections 2.2.1 and 2.2.2, and would give further evidence of a SEOJ innovation of an **-əy>*-ə* merger. However, the lack of corroborating *mey* data is unfortunate, and owing to this it is hard to make an absolute conclusion in the case of Tōtōmi. It should also be noted (2) and (3) occur in the same line as *töpeytapomyi,* and since *tapomyi* is an unknown element, it is possible this whole construction consists of a different root entirely, which would automatically make the hypothesis I am presenting here invalid for Tōtōmi.

2.4 SUMMARY OF SEOJ DATA. Based solely on the linguistic features described above, it is possible that Suruga and Tōtōmi were of the same dialect region, as both show indications of having the merger of **-ə*, **-əy*, and **-o* to /-o/ after a labial initial. Though it should be emphasized that while the Suruga evidence is strong, the Tōtōmi evidence is based on one, slightly dubious example. In addition, we would need more than one shared innovation to confidently group the two provinces into their own dialect. The Shinano speech variety does not share this innovation, so this study offers no linguistic evidence to group it with the other two language varieties. Unfortunately the Shinano corpus is quite small, which makes its comparison with the other two provinces rather difficult.

Table 9 summarizes the mergers found in SEOJ.

TABLE 9. Evidence for mergers in SEOJ provinces.

	*mə>/mo/	**məy>*mə>*/mo/	**məy>*/me/	**pəy>*pə>*/po/	**pəy>*/pe/
Shinano	Yes	No	No	No	No data
Suruga	Yes	Yes	No	Yes	No
Tōtōmi	Yes	No	No	Yes (Inconclusive)	No

3. NORTH EASTERN OLD JAPANESE. North Eastern Old Japanese (NEOJ), also known as Region A, was spoken in three provinces: Kazusa, Mutsu, and Shimotsuke. There are a total of thirty NEOJ poems in the *Man'yōshū*.

3.1 KAZUSA. There are fifteen Kazusa poems in the *Man'yōshū*: two from Book XIV (3382 and 3383), and thirteen from Book XX (4347-4359).

3.1.1 *MWO* AND *MÖ* SYLLABLES. There are seventeen *mwo* and ten *mö* syllables attested.

TABLE 10. *Mwo*, *mö*, and *mey* syllables in Kazusa.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	wa-Nk-yi**mö**	和伎母	1S-POSS-beloved.girl	20:4353.3	wa-Nk-yimwo	-
2	wa-Nk-yi**mwo**	和藝毛	1S-POSS-beloved.girl	20:4357.3	wa-Nk-yimwo	+
3	i**mö**	伊母	beloved.girl	20:4351.5	imwo	-
4	i**mö**	伊母	beloved.girl	20:4354.4	imwo	-
5	ku**mwo**	久毛	cloud	20:4355.4	kumwo	+
6	-Ntö**mö**	等母	-CONC	20:4351.3	-Ntömö	+
7	watar-a**m-wo**[9]	和多良毛	cross-TENT-ATTR	20:4355.2	watar-am-u	?
8	sö-**m-ö**	曽母	do-TENT-ATTR	14:3382.5	se-m-u	?
9	**mö**	母	FPT	20:4347.4	mö	+
10	**mö**	母	FPT	20:4353.5	mö	+
11	**mö**	母	FPT	20:4357.4	mö	+
12	**mwo**	毛	FPT	14:3383.3	mö	-
13	**mwo**	毛	FPT	20:4358.5	mö	-
14	si**mö**	思母	frost	14:3382.3	simo	?
15	körö**mö**	己呂母	garment	20:4351.1	körömö	+
16	**mö**t-i	母遅	hold-INF	20:4353.3	möt-i	+
17	**mö**t-i	母知	hold-INF	20:4356.2	möt-i	+
18	**mwomö**	毛母	hundred	20:4349.1	mwomwo	+ -
19	ka**mö**	加母	PT	20:4347.5	kamö	+
20	ka**mö**	加母	PT	20:4348.5	kamö	+
21	ka**mö**	可母	PT	20:4354.5	kamö	+
22	ka**mwo**	可毛	PT	20:4356.5	kamö	-
23	ka**mwo**	加毛	PT	20:4359.3	kamö	-
24	ka**mwo**	可毛	PT	20:4359.5	kamö	-
25	[o]**mö**p-	母波	think-	20:4357.5	omöp-	+
26	kö**mwo**	許毛	rush.mat	20:4354.1	kömö	-

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[9] Generally it is thought only non initial *-o could raise to /u/ in WOJ, which would tell us the original PJ form of the attributive was *-o, since the corresponding WOJ attributive ends in *-u*. However, as Russell (2006:643) mentions, there is evidence this was originally *-ə, as seen in the WOJ copular attributive form *n-ö* COP-ATTR. In any case, the vowel quality of the PJ attributive is not clear, so in this paper I take a conservative approach and mark all *mwo* and *mö* syllables containing an attributive suffix in EOJ with a "?" in the E.C. column.

Ten of the syllables are etymologically incorrect, fourteen are etymologically correct, and three are unknown. These statistics indicate etymological *mo and *mə syllables were written freely with *mwo* or *mö* characters, which is strong support that there was no contrast between the vowels in these syllables.

3.2.1 *MYE* AND *MEY* SYLLABLES. There is one *mey* syllable attested. There are no attested *mye* syllables.

TABLE 11. *Mey* syllables in Kazusa.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	ma**mey**	麻米	bean	20:4352.3	mamey	+

The one etymological *mey* syllable is written *mey* in Kazusa, so there is no evidence to suggest that *məy merged with *mə or *me in this province.

3.2.2 *PO, PYE,* AND *PEY* SYLLABLES. *Po, pye,* and *pey* syllables are amply attested in Kazusa. There are eight *po* syllables, eight *pey* syllables, and two *pye* syllables in total.

TABLE 12. *Po, pye,* and *pey* syllables in Kazusa.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**-pye**	敝	-ALL	20:4359.4	pye	+
2	**pey**	倍	area	20:4352.1	pye	-
3	**pey**	閇	area	20:4359.1	pye	-
4	**-pey**	倍	-CL	20:4350.2	-pye	-
5	pa**p-o**	波保	crawl-ATTR	20:4352.3	pap-u	+
6	**po**r-i	保里	desire-INF	14:3383.5	por-i	+
7	tö**po-**	登保	far-	14:3383.4	töpo-	+
8	o**po**	於保	great; large	20:4358.1	opo	?
9	i**pey**	伊閇	house	20:4347.1	ipye	-
10	i**pey**	伊倍	house	20:4353.1	ipye	-
11	i**pey**	伊倍	house	20:4353.4	ipye	-
12	kari**po**	加里保	inn, lodging	20:4348.4	–	?
13	na**po**	奈保	PT	20:4351.4	napo	+
14	ka**pey**ri	加倍理	return-INF	20:4350.5	kapyer-i	-
15	**pye**	敝	prow	20:4359.2	pye	+
16	**pey**	閇	prow	20:4359.5	pye	-
17	si**popo**	志保々	soaked	20:4357.4	–	?

The most striking characteristic of the Kazusa data is the repeated use of a *pey* character for an etymological *pye* syllable. All eight attested *pey* syllables are used to write etymological *pye* syllables, while only two of the etymological *pye* syllables in the data are written as *pye*. In 20:4359, we even see the same morpheme written once as *pye* (15) and again as *pey* (16). This gives evidence for a different merger in Kazusa than those found in SEOJ, namely the merger of *pəy to /pe/. Rather than deleting the final vowel in the *pəy syllable, Kazusa instead fused the [əy] sequence to [e], with the palatality of the [y] fronting and raising the [ə].

3.3 MUTSU. There are only two poems from Mutsu in the corpus, both from Book XIV (3426, 3437).

3.3.1 *MWO*, *MÖ*, *MYE*, AND *MEY* SYLLABLES. Within the two Mutsu poems there are three *mwo* syllables. There are no attested *mö*, *mye* or *mey* syllables.

TABLE 13. *Mwo* syllables in Mutsu.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	se-**m-wo**	勢毛	do-TENT-ATTR	14:3426.4	se-m-u	?
2	pyi**mwo**	比毛	string	14:3426.5	pyimo	?
3	ka**mwo**	可毛	PT	14:3437.5	kamö	-

Here we see (1) is unknown, (2) is unknown, and (3) is incorrect. Since the particle *kamwo* in 3437 is etymologically *kamö*, this looks like it could be evidence for a merger in Mutsu, but since it is only one example we cannot exclude the possibility this was a misspelling. Due to this, we are unable to make a definite conclusion in this province.

3.3.2 *PO, PYE,* AND *PEY* SYLLABLES. There is only one *po* syllable attested. There are no attested *pye* or *pey* syllables.

TABLE 14. *Po* syllables in Mutsu.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	-tö**po**-[10]	杼抱	be.far	14:3426.2	töpo	+

This syllable is written properly, so there is nothing we can conclude in the way of mergers in Mutsu.

3.4 SHIMOTSUKE. There are thirteen Shimotsuke poems in the *Man'yōshū*: two from Book XIV (3424, 3425) and eleven from Book XX (4373-4383).

3.4.1 *MWO*, *MÖ*, AND *MEY* SYLLABLES. There are seventeen attested examples of *mö* and four attested examples of *mwo*.

TABLE 15. *Mwo* and *mö* syllables in Shimotsuke.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	ku**mwo**	久毛	cloud	20:4380.5	kumwo	+
2	**-Ntömwo**	等毛	-CONC	20:4378.2	**-**Ntömö	-
3	**mö**Nka**mö**	母賀母	DES.PT	20:4377.2	möNkamö	++
4	**mö**Nka**mö**	母我母	DES.PT	20:4383.5	möNkamö	++
5	-u**mö**	布母	-EXCL	20:4378.5	-umö	+
6	**mö**	母	FPT	20:4377.1	mö	+
7	**mö**	母	FPT	20:4377.5	mö	+
8	**mö**	母	FPT	20:4381.5	mö	+
9	**mwo**	毛	FPT	20:4383.4	mö	-
10	**mwo**r-i	毛利	guard-NML	20:4381.2	mwor-i	+
11	**mö**r-i	母里	guard-NML	20:4382.5	mwor-i	-
12	**mö**t-am-u	母多牟	hold-TENT-FIN	14:3424.5	möt-am-u	+
13	a**mö**	阿母	mother	20:4376.3	amo	?
14	a**mö**	阿母	mother	20:4377.1	amo	?
15	a**mö**	阿母	mother	20:4378.3	amo	?

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[10] This attested form is prefixed with the locative *saN-*.

16	**amö**	阿**母**	mother	20:4383.5	amo	?
17	si**mö**tukye	之**母**都家	PN	14:3424.1	–	?
18	si**mö**tukye	志**母**都家	PN	14:3425.1	–	?
19	myika**mö**	美可**母**	PN	14:3424.2	–	?
20	**mö**körö	**母**已呂	similarity (PP)	20:4375.5	mokörö	+

Twelve syllables are etymologically correct, three are incorrect, and seven are unknown. We see a very high percentage of correctly spelled syllables in Shimotsuke. Overall it is a rather low rate of misspelling, but still enough to make a merger between these syllables likely for this province.

It should be noted that there are four attestations of the Shimotsuke word *amö* 'mother', and they are all written exactly the same, as 阿母. Despite the consistency, this is not particularly helpful in determining the quality of the vowel in that word's final syllable, as while the character 母 has a phonographic usage for *mö,* it also has a semantographic usage for 'mother', which was clearly an equally important reason for its usage in these poems.

3.4.2 *MYE* AND *MEY* SYLLABLES. There are two attested *mey* syllables. There are no attested *mye* syllables.

TABLE 16. *Mey* syllables in Shimotsuke.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**amey**	阿**米**	heaven	20:4374.1	amey	+
2	**mey**	**米**	eye	20:4383.5	mey	+

Both of these syllables are written correctly from an etymological standpoint, so there is nothing to conclude here in regard to mergers.

3.4.3 *PO*, *PYE*, AND *PEY* SYLLABLES. There are two *po* syllables, two *pye* syllables, and one *pey* syllable attested.

TABLE 17. *Po, pye,* and *pey* syllables in Shimotsuke.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	ka**pye**r-i	可**敝**里	return-INF	20:4373.2	kapyer-i	+
2	o**po**	意**富**	great; large	20:4373.3	opo	+
3	a**pye**-	阿**敝**	join(INF)	20:4377.5	apey-	-
4	**pey**	**倍**	area; direction	20:4379.2	pye	-
5	puta**po**Nkamyi	布多**富**我美	*unclear*	20:4382.1	–	?

In (3) we see an etymological *pey* syllable written with a *pye* phonogram, and in (4) we see an etymological *pye* syllable written as *pey*. This seems to be evidence of a *pye/pey* merger in Shimotsuke. Example (5) is an unknown word-form, but the rest of the attested syllables are etymologically correct.

3.5 SUMMARY OF NEOJ DATA. Table 18 summarizes the evidence for various mergers in NEOJ.

TABLE 18. Evidence for mergers in NEOJ provinces.

	*mə>/mo/	*məy>*mə>/mo/	*məy>/me/	*pəy>*pə>/po/	*pəy>/pe/
Kazusa	Yes	No	No	No	Yes
Mutsu	Yes	No	No	No	No data
Shimotsuke	Yes	No	No	No	Yes

4. CENTRAL EASTERN OLD JAPANESE. Central Eastern Old Japanese (CEOJ), also known as Area B, was spoken in six provinces: Hitachi, Kōzuke, Izu, Musashi, Sagami, and Shimōsa. There are a total of seventy-eight CEOJ poems in the *Man'yōshū* with Eastern linguistic features (plus the Izu poem and its variant, for a total of eighty in this study), making it the best attested of the three traditional dialect regions.

4.1 HITACHI. The Hitachi province is represented by fifteen poems; five from Book XIV (3351, 3388, 3394, 3395, 3397), and ten from Book XX (4363-4372).

4.1.1 *MWO* AND *MÖ* SYLLABLES. There are six *mwo* syllables and fifteen *mö* syllables attested.

TABLE 19. *Mwo* and *mö* syllables in Hitachi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**mö**rö-**mö**rö	母呂々々	all	20:4372.13	morö-morö	++
2	i**mö**	伊母	beloved.girl	20:4363.5	imwo	-
3	i**mö**	伊母	beloved.girl	20:4365.5	imwo	-
4	i**mö**	伊母	beloved.girl	20:4366.5	imwo	-
5	i**mö**	伊母	beloved.girl	20:4367.5	imwo	-
6	i**mö**	伊母	beloved.girl	20:4369.4	imwo	-
7	**mö**Nka	母我	DES.PT	20:4366.2	möNka	+
8	**mö**te	母弓	face	20:4367.1	omote	?
9	**mö**	母	FPT	20:4369.3	mö	+
10	**mwo**	毛	FPT	20:4369.5	mö	-
11	**mö**	母	FPT	20:4372.5	mö	+
12	saN-körö**mwo**	左其呂毛	PRE-garment	14:3394.1	körömö	-
13	ka**mwo**	可毛	PT	14:3351.2	kamö	-
14	ka**mö**	可母	PT	14:3351.3	kamö	+
15	ka**mö**	可母	PT	14:3351.5	kamö	+
16	ka**mwo**	可聞	PT	14:3395.5	kamö	-
17	ka**mö**	可母	PT	20:4364.5	kamö	-
18	ka**mwo**	可毛	PT	20:4371.5	kamö	-
19	**mwo**	毛	seaweed	14:3397.3	mo	?
20	-**m-ö**	母	-TENT-ATTR	20:4367.3	-m-u	?

Among the *mwo* and *mö* syllables seven are etymologically correct, eleven are etymologically incorrect, and three are unknown. Based upon these numbers, it is quite clear that *mwo* and *mö* syllables merged in this dialect.

4.1.2 *MYE* AND *MEY* SYLLABLES. There are three *mey* syllables and one *mye* syllable attested.

TABLE 20. *Mye* and *mey* syllables in Hitachi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	-(a)**m-ye**	賣	-TENT-EV	14:3394.5	-am-ey	-
2	-(a)**m-ey**	米	-TENT-EV	20:4371.5	-am-ey	+
3	su**mey**	須米	PN of deity	20:4370.4	sume	?
4	tu**mey**	都米	nail	20:4372.9	tumey	+

Among the three *mey* syllables, all but one are etymologically correct, with (18) *sumey* being a possible exception as the original quality of this vowel is unknown. The one attested *mye* syllable is etymologically incorrect. Once again we are only given one example, so it may have been a simple misspelling. However, the data in section 4.1.3 may give support for this being further evidence for the merger of *-əy>/e/ after a labial onset in Hitachi.

4.1.3 *PO*, *PYE*, AND *PEY* SYLLABLES. There are two *pey* syllables, one *pye* syllable, and one *po* syllable attested.

TABLE 21. *Po, pye,* and *pey* syllables in Hitachi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	si**po**	志富	tide	20:4368.3	sipo	+
2	ka**pye**r-i	可敝里	return-NML	20:4368.5	kapyer-i	+
3	ka**pey**r-i	可閇理	return-INF	20:4372.3	kapyer-i	-
4	ka**pey**r-i	可閇利	return-INF	20:4372.15	kapyer-i	-

There is no overlap between *po* and *pey* syllables here, so any merger like we see in SEOJ varieties is not to be found in Hitachi. Examples (3) and (4) are important because they each contain an etymological *pye* syllable spelled with a *pey* phonogram (note the same root in question, *kapyer-*, is written correctly in (2)). Again, these could be simple misspellings, but since there are two examples (along with the data from 5.1.2), they are likely to be evidence of a merger between *pəy and *pe in Hitachi, and may stand as additional evidence for a general CEOJ innovation of such a merger. The provinces to follow will test whether or not we can claim this merger for all of CEOJ, or just some provinces within the grouping.

4.2 KŌZUKE. There are a total of twenty-two Kōzuke poems, making it the best attested of the CEOJ provinces. The poems are 3402, 3404, 3405, 3408-3410, 3412-3415, 3418-3420, 3422, 3423, and 3434-3436 from Book XIV, and 4404-4407 from Book XX.

4.2.1 *MWO* AND *MÖ* SYLLABLES. There are sixteen *mö* syllables and fifteen *mwo* syllables attested.

TABLE 22. *Mwo* and *mö* syllables in Kōzuke.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	wa-Nk-yi**mwo**	和藝毛	1S-POSS-beloved.girl	20:4404.3	wa-Nk-yimwo	+
2	i**mwo**	伊毛	beloved.girl	20:4407.4	imwo	+
3	i**mwo**	伊毛	beloved.girl	14:3423.5	imwo	+
4	i**mö**	伊母	beloved.girl	20:4405.1	imwo	-
5	ku**mö**	久母	cloud	14:3409.2	kumwo	-
6	ku**mö**ri	久母理	cloudy	20:4407.1	kumwori	-
7	**mwo**Nka**mö**	毛我母	DES.PT	14:3436.5	möNkamö	-+
8	-u**mö**	久母	-EXCL	14:3412.5	-umö	+
9	-u**mö**	久母	-EXCL	20:4406.5	-umö	+
10	-u**mö**	布母	-EXCL	14:3419.5	-umö	+
11	**mö**	母	FPT	14:3402.4	mö	+
12	**mwo**	毛	FPT	14:3405.3	mö	-
13	**mö**	母	FPT	14:3408.5	mö	+
14	**mwo**	毛	FPT	14:3413.2	mö	-
15	**mö**	母	FPT	14:3414.4	mö	+
16	**mö**	母	FPT	14:3435.4	mö	+

17	**mwo**	毛	FPT	20:4405.4	mö	-
18	**mö**	母	FPT	20:4406.2	mö	+
19	ne**mwo**körö	祢毛己呂	cordial	14:3410.3	nemokörö	?
20	**mwo**ru	毛流	PN	14:3436.3	–	?
21	ka**mö**	可母	PT	14:3413.5	kamö	+
22	ka**mö**	可母	PT	20:4404.5	kamö	+
23	ka**mö**	加母	PT	20:4407.5	kamö	+
24	piy**mwo**	非毛	string	20:4404.4	pyimo	?
25	piy**mwo**	非毛	string, cord	20:4405.3	pyimo	?
26	-(a)**m-wo**	毛	-TENT-ATTR	20:4406.2	-(a)m-u	?
27	**-m-ö**	母	-TENT-ATTR	14:3418.5	-m-u	?
28	-(a)**m-wo**	毛	-TENT-ATTR	14:3405.4	-(a)m-u	?
29	o**mwo**p-ye	於毛敝	think-EV	14:3435.5	omöp-ey	-
30	o**mwo**p-yi	於毛比	think-INF	14:3419.3	omöp-yi	-

Among the *mwo* and *mö* syllables, fifteen are etymologically correct, while nine are etymologically incorrect and seven are unknown. Once again, the merger of *mwo* and *mö* is clear here.

4.2.2 *MYE* AND *MEY* SYLLABLES. There are two attested *mey* syllables. There are no attested *mye* syllables.

TABLE 23. *Mey* syllables in Kōzuke.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	-si**mey**	志米	-CAUS	14:3409.5	-(a)simey	+
2	saNta**mey**-	佐太米	decide(INF)-	14:3418.4	saNtamey-	+

Both examples are etymologically correct, so there is no evidence of any mergers involving *mey* or *mye* syllables in this dialect.

4.2.3 *PO*, *PYE*, AND *PEY* SYLLABLES. There are nine *po* syllables, four *pye* syllables, and four *pey* syllables attested.

TABLE 24. *Po, pye,* and *pey* syllables in Kōzuke.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**-pye**	敝	-CL	14:3435.5	-pye	+
2	i**pye**	伊敝	house	14:3423.5	ipye	+
3	a**p-ye**r-u	安敝流	meet-PROG-ATTR	14:3413.5	ap-yer-u	+
4	ika**po**	伊香保	PN	14:3409.1	–	?
5	ika**po**	伊香保	PN	14:3410.1	–	?
6	ika**po**	伊香保	PN	14:3414.1	–	?
7	ika**po**	伊可保	PN	14:3419.1	–	?
8	ika**po**	伊可保	PN	14:3422.1	–	?
9	ika**po**	伊可抱	PN	14:3423.2	–	?
10	ika**po**	伊可保	PN	14:3435.1	–	?
11	kurwo**po**	久路保	PN	14:3412.2	–	?
12	Nka**pey**	賀倍	PT (*unclear*)	14:3420.5	–	?
13	i**p-ey**	伊倍	say-EV	14:3422.3	ip-ey	+

14	na**pey**	奈倍	seedling	14:3418.2	napey	+
15	na**pey**	奈倍	seedling	14:3418.3	napey	+
16	omwo**p-ye**-Npa	於毛斂婆	think-EV-COND	14:3435.5	omöp-ey-Npa	-
17	siratö**po**pu	志良登保布	*unclear* (MK)	14:3436.1	–	?

Here, nearly half of the data are comprised of eastern place names, which does not allow us to compare the syllables with a WOJ syllable, making their historical quality unknown. Of the syllables which are historically known and comparable with WOJ, only one is written etymologically incorrect, and that is example (16) which shows an etymological *-əy syllable written with a *pye* phonogram. Since it is only one example, we cannot deny that it could be nothing more than a misspelling. So, there is no convincing evidence for any mergers in this dialect.

4.3 IZU. The Izu province is represented by only one poem, though it also has a variant form. This poem is from Book XIV number 3360a and its variant 3360b. It should be noted the Izu poem and its variant have no EOJ linguistic features, and are written in more or less pure WOJ, so this data should be approached with skepticism. I include this data for no reason other than it is our only linguistic attestation of Izu (even though it is likely corrupt).

4.3.1 *MWO* AND *MÖ* SYLLABLES. There are three *mwo* syllables and two *mö* syllables attested.

TABLE 25. *Mwo* and *mö* syllables in Izu.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	ku**mwo**	久毛	cloud	14:3360b.2	kumwo	+
2	**mwo**	毛	FPT	14:3360a.3	mö	-
3	**mwo**	毛	FPT	14:3360a.4	mö	-
4	**mö**	母	FPT	14:3360b.3	mö	+
5	[o]**mö**p-ey	母倍	think-EV	14:3360b.4	omöp-ey	+

Here we see two etymologically incorrect syllables, and three etymologically correct syllables. It appears that a merger between the two syllables in question occurred in Izu.

4.3.2 *MYE* AND *MEY* SYLLABLES. There are three *mey* syllables attested. There are no attested *mye* syllables.

TABLE 26. *Mey* syllables in Izu.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	myiNtare-si**mey-m-ey**	美太礼志米梅	confuse-CAUS-TENT-EV	14:3360a.5	myiNtare-simey-m-ey	++
2	sö**mey**-	曽米	begin(INF)-	14:3360b.5	sömey-	+

All of these syllables are etymologically correct, so there is nothing to conclude in the way of mergers among these syllables in Izu.

4.3.3 *PO, PYE,* AND *PEY* SYLLABLES. There is one attested *pey* syllable. There are no attested *pye* syllables.

TABLE 27. *Pey* syllables in Izu.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	[o]mö**p-ey**	母倍	think-EV	14:3360b.4	omöp-ey	+

Once again, this syllable is etymologically correct, so there is nothing to conclude in the way of mergers among these syllables in Izu.

4.4 MUSASHI. There are sixteen Musashi poems, specifically 3374, 3375, 3376, and 3379 from Book XIV, and 4413-4424 from Book XX.

4.4.1 *MWO* AND *MÖ* SYLLABLES. There are eleven *mwo* syllables and twelve *mö* syllables attested.

TABLE 28. *Mwo* and *mö* syllables in Musashi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**mö**nöwo	母能乎	although	14:3379.5	mönöwo	+
2	i**mö**	伊母	beloved.girl	20:4415.4	imwo	-
3	i**mwo**	伊毛	beloved.girl	20:4423.4	imwo	+
4	ku**mwo**	久毛	cloud	20:4421.4	kumwo	+
5	-Ntö**mö**	騰母	-CONC	20:4419.2	-Ntömö	+
6	**mwo**	毛	FPT	14:3374.3	mö	-
7	**mwo**	毛	FPT	14:3376.2	mö	-
8	**mö**	母	FPT	20:4415.3	mö	+
9	**mö**	母	FPT	20:4415.5	mö	+
10	**mö**	母	FPT	20:4420.5	mö	+
11	körö**mö**	許呂母	garment	20:4424.2	körömö	+
12	**mö**s-i-te	母之弖	hold-INF-GER	20:4415.2	möt-i-te	+
13	yu**mey**	由米	NEG.PT	14:3376.5	yumey	+
14	ka**mö**	可母	PT	14:3379.2	kamö	+
15	ka**mwo**	加毛	PT	20:4418.5	kamö	-
16	ka**mö**	加母	PT	20:4422.5	kamö	+
17	ka**mö**	可母	PT	20:4423.5	kamö	+
18	pyi**mwo**	比毛	string	20:4416.5	pyimo	?
19	pyi**mwo**	比毛	string	20:4420.3	pyimo	?
20	**-m-wo**	毛	-TENT-ATTR	20:4415.5	mö	?
21	**-m-ö**	母	-TENT-ATTR	20:4418.5	-m-u	?
22	**-m-wo**	毛	-TENT-ATTR	20:4423.5	-m-u	?
23	**-m-wo**	毛	-TENT-ATTR	20:4422.5	-m-u	?
24	[o]mwop-a**m-ö**	毛波母	think-TENT-ATTR	20:4419.5	omöp-am-u	-?

Only five of the attested syllables are etymologically incorrect, while thirteen are etymologically correct and seven are unknown. Musashi shows a fairly low rate of misspelling, but it is still enough evidence for a merger between the two syllables in question.

4.4.2 *MYE* AND *MEY* SYLLABLES. There are two attested *mey* syllables. There are no attested *mye* syllables.

TABLE 29. *Mey* syllables in Musashi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	yu**mey**	由米	NEG.PT	14:3376.5	yumey	+
2	sö**mey-**	曽米	dye-	20:4424.3	sömey-	+

Both syllables are written with etymologically correct phonograms. Once again, no mergers can be seen in this data.

4.4.3 *PO*, *PYE*, AND *PEY* SYLLABLES. There are two *po* syllables, two *pye* syllables, and one *pey* syllable attested.

TABLE 30. *Po*, *pye*, and *pey* syllables in Musashi.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	ura**pye**	宇良俾	divination	14:3374.2	urapye	+
2	o**po**	於保	great; big	20:4414.1	opo	+
3	i**pye**	伊弊	house	20:4415.4	ipye	+
4	pa**p-o**	波保	crawl-ATTR	20:4421.4	pap-u	+
5	**-pey**	倍	-ALL	20:4422.2	-pye	-

Both *po* syllables are etymologically correct; however in example (5) we see the attested *pey* syllable is used to write an etymological *pye* syllable. This could be a simple misspelling or it could be additional evidence for a *pəy>/pe/ merger. As we saw before, it is not possible make a definite conclusion with only one example, even though the merger hypothesis fits well with much of the comparative data in CEOJ.

4.5 SAGAMI. There are eleven Sagami poems, specifically 3361, 3363, 3366, 3368-3370, 3431, 3432 from Book XIV, and 4328-4330 from Book XX.

4.5.1 *MWO*, *MÖ*, *MYE*, AND *MEY* SYLLABLES. There are seven *mö* syllables and four *mwo* syllables attested. There are no attested *mye* or *mey* syllables.

TABLE 31. *Mwo* and *mö* syllables in Sagami.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**mö**Nka**mwo**	母我毛	DES.PT	20:4329.5	möNkamö	+-
2	**mwo**	毛	direction	14:3361.2	mo	?
3	**mö**	母	direction	14:3361.2	mo	?
4	**mö**	母	FPT	14:3368.4	mö	+
5	**mö**	母	FPT	14:3431.4	mö	+
6	**mö**	母	FPT	14:3432.4	mö	+
7	**mö**	母	FPT	14:3432.5	mö	+
8	pyi**mwo**	比毛	string	14:3361.5	pyimo	?
9	pyi**mö**	比母	string	14:3370.5	pyimo	?
10	**-m-wo**	毛	-TENT-ATTR	20:4329.5	-m-u	?

Again, there is a high occurrence of syllables written correctly from an etymological viewpoint, with only one syllable in example (1) being incorrect. Five of the syllables are unknown. However, we can see that examples (2) and (3) also show an etymologically incorrect syllable, as the same morpheme in

question is written *mwo* in (2) and *mö* in (3). Overall, it is not as convincing as data from previous provinces, though it is probable a merger of these syllables occurred in Sagami as well.

4.5.2 *PO, PYE*, AND *PEY* SYLLABLES. There are two *po* syllables and one *pye* syllable attested. There are no attested *pey* syllables.

TABLE 32. *Po* and *pye* syllables in Sagami.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**-pye**	敝	-ALL	14:3363.2	-pye	+
2	si**po**	思保	tide	14:3366.5	sipo	+
3	o**po**	於保	great	20:4328.1	opo	+

Since all of the syllables are written correctly, nothing can be concluded from this data other than the fact that /po/ and /pe/ syllables existed in Sagami.

4.6 SHIMŌSA. There are fourteen Shimōsa poems, specifically 3349, 3384, 3385 from Book XIV, and 4384-4394 from Book XX.

4.6.1 *MWO* AND *MÖ* SYLLABLES. There are two *mwo* syllables and fifteen *mö* syllables attested.

TABLE 33. *Mwo* and *mö* syllables in Shimōsa.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	[i]**mö**	母	beloved.girl	20:4388.3	imwo	-
2	i**mö**	以母	beloved.girl	20:4390.4	imwo	-
3	i**mö**	伊母	beloved.girl	20:4391.5	imwo	-
4	**mö**tö	母等	CL	20:4386.2	mötö	+
5	**mö**	母	FPT	14:3349.5	mö	+
6	**mwo**	毛	FPT	14:3385.5	mö	-
7	**mö**	母	FPT	20:4384.5	mö	+
8	**mö**	母	FPT	20:4385.5	mö	+
9	**mö**	母	FPT	20:4386.3	mö	+
10	**mö**	母	FPT	20:4386.3	mö	+
11	**mö**	母	FPT	20:4386.5	mö	+
12	**mö**	母	FPT	20:4389.3	mö	+
13	körö**mö**	己呂母	garment	20:4388.4	körömö	+
14	o**mö**	於母	mother	20:4386.4	amo	?
16	ka**mwo**	可聞	PT	14:3384.3	kamö	-
18	ka**mö**	加母	PT	20:4390.5	kamö	+
19	o**mö**p-	於母波	think-	20:4389.5	omöp-	+

Eleven syllables are etymologically correct, five are etymologically incorrect, and one is unknown. As we saw in other CEOJ provinces, a merger of *mwo* and *mö* is quite clear here.

4.6.2 *MYE* AND *MEY* SYLLABLES. There are three attested *mey* syllables. There are no attested *mye* syllables.

TABLE 34. *Mye* and *mey* syllables in Shimōsa.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	kata**mey-**	加多米	harden-	20:4390.3	katamey-	+
2	-una**m-ey**	久奈米	-TENT2-EV	20:4390.5	-uram-ey	+
3	a**mey**	阿米	heaven	20:4392.1	amey	+

All of these syllables are etymologically correct, and since there are no attested *mye* syllables we are unable to determine if a merger between *mey* and *mye* occurred in Shimōsa.

4.6.3 *PO, PYE,* AND *PEY* SYLLABLES. There are six *po* syllables and six *pye* syllables attested. There are no attested *pey* syllables.

TABLE 35. *Po* and *pye* syllables in Shimōsa.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	**pye**	敝	area	20:4385.3	pye	+
2	**pye**	弊	prow	20:4389.2	pey	-
3	tö [i]**p-ye-**Ntö	等弊等	COP say-EV-CONC	20:4388.1	tö ip-ey-Ntö	-
4	o**po**	於保	great	20:4393.1	opo	+
5	o**po**	於保	great	20:4394.1	opo	+
6	i**pye**	以弊	house	20:4388.3	ipye	+
7	-tama**p-o**	他麻保	-HON-ATTR	20:4389.4	-tamap-u	+
8	**-pye**	弊	pot	20:4393.4	pey	-
9	omöp-a**pye-**	於母波弊	think(INF)-dare(INF)	20:4389.5	–	?
10	si**po**	志保	tide	20:4389.1	sipo	+
11	**popo**m-	保々麻	to.be.unopened	20:4387.3	–	?

All of the *po* syllables are etymologically correct or unknown. The *pye* syllables, on the other hand, once again show us something very interesting: three of them (examples (2), (3), and (8)) are etymologically incorrect, while only two are etymologically correct and one (example (9)) is unknown. This is good evidence for a *pəy>/pe/ merger in Shimōsa.

4.7 SUMMARY OF CEOJ DATA. Table 36 below summarizes the conclusions which can be made in regard to mergers in the CEOJ provinces. It should be reiterated that the Izu data should not be taken as seriously as the data from other provinces.

TABLE 36. Evidence for mergers in CEOJ.

	*mə>/mo/	*məy>*mə>/mo/	*məy>/me/	*pəy>*pə>/po/	*pəy>/pe/
Hitachi	Yes	No	Yes (Inconclusive)	No	Yes
Kōzuke	Yes	No	No	No	Yes (Inconclusive)
Izu	Yes	No	No	No	No
Musashi	Yes	No	No	No	Yes (Inconclusive)
Sagami	Yes	No	No data	No	No
Shimōsa	Yes	No	No	No	Yes

5. UNKNOWN EASTERN OLD JAPANESE (UEOJ). There are 101 Eastern poems from provinces with an unknown place of origin. From Book XIV the poems include 3442, 3444-3448, 3450, 3452, 3456, 3458, 3460, 3461, 3463, 3465, 3466, 3468, 3469, 3472-3474, 3476-3478, 3480-3485, 3487, 3489, 3493-3496, 3499-3506, 3509, 3511-3518, 3520-3533, 3536, 3537, 3539-3541, 3543, 3544, 3546, 3548, 3549, 3551-3553, 3555-3557, 3561, 3563-3566, 3571, 3572, 3575, and 3576. From Book XX the poems include 4425-4432 and 4436. These data as a whole are of little help in terms of specific provincial and dialectal innovations, as each poem belongs to a specific eastern province but we are not yet able to identify what these provinces are. The only hope in being able to match a poem to a province (or more realistically, a dialect region) would be through a meticulous comparison of dialectal features in the SEOJ, NEOJ and CEOJ poems as compared to those features exhibited in the UEOJ poems. Such a study is beyond the scope of this paper, but for the sake of completeness I present the UEOJ data in full in the sections that follow.

5.1 *MWO* AND *MÖ* SYLLABLES. There are eighty-seven *mwo* syllables and sixty-seven *mö* syllables attested. There are also two quasi-phonographic *mo* attestations and one semantographic *MO*[11] attestation which I included for the sake of completeness (it is not possible to determine the quality of the vowel in any of these attestations).

TABLE 37. *Mwo* and *mö* syllables in UEOJ.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem. Line	WOJ	E.C.
1	tö**mwo**si-	等毛思	attractive	14:3523.4	tömösi-	-
2	tö**mwo**si-	登毛之	attractive	20:4425.4	tömösi-	-
3	**mwo**tö	毛等	base	14:3495.5	mötö	-
4	wa-Nk-yi**mwo**	和伎毛	1S-POSS-beloved.girl	14:3566.1	wa-Nk-yimwo	+
5	i**mwo**	伊毛	beloved.girl	14:3446.1	imwo	+
6	i**mwo**	伊毛	beloved.girl	14:3474.5	imwo	+
7	i**mwo**	伊毛	beloved.girl	14:3480.3	imwo	+
8	i**mö**	伊母	beloved.girl	14:3481.3	imwo	-
9	i**mö**	伊母	beloved.girl	14:3485.2	imwo	-
10	i**mwo**	伊毛	beloved.girl	14:3489.4	imwo	+

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[11] Semantographic attestations are written in capital letters to distinguish them from phonographic attestations.

11	i**mwo**	伊毛	beloved.girl	14:3517.2	imwo	+
12	i**mwo**	伊毛	beloved.girl	14:3527.4	imwo	+
13	i**mö**	伊母	beloved.girl	14:3528.3	imwo	-
14	i**mö**	伊母	beloved.girl	14:3531.1	imwo	-
15	i**mwo**	伊毛	beloved.girl	20:4427.1	imwo	+
16	i**mwo**	伊毛	beloved.girl	20:4429.4	imwo	+
17	i**mwo**	伊毛	beloved.girl	20:4432.3	imwo	+
18	sakyi**mwo**ri	佐伎毛利	border.guards	20:4425.1	–	?
19	ku**mö**	君母	cloud	14:3511.2	kumwo	-
20	ku**mö**	久母	cloud	14:3512.4	kumwo	-
21	ku**mwo**	久毛	cloud	14:3514.2	kumwo	+
22	ku**mwo**	久毛	cloud	14:3515.4	kumwo	+
23	ku**mwo**	君毛	cloud	14:3516.4	kumwo	+
24	ku**mwo**	久毛	cloud	14:3517.1	kumwo	+
25	ku**mwo**	久毛	cloud	14:3518.2	kumwo	+
26	ku**mö**	君母	cloud	14:3520.4	kumwo	-
27	ku**mwo**	久毛	cloud	14:3522.3	kumwo	+
28	-Ntö**mö**	杼母	-CONC	14:3543.4	-Ntömö	+
29	N-ku**mö**	具母	COP [-ATTR]-cloud	14:3513.3	kumwo	-
30	**mö**Nka**mö**	母賀母	DES.PT	14:3448.5	möNkamö	+
31	**mö**Nka**mwo**	母我毛	DES.PT	14:3523.5	möNkamö	+-
32	ka**mö**	可母	duck	14:3524.5	kamwo	-
33	ka**mö**	可母	duck	14:3525.2	kamwo	-
34	ka**mö**	加母	duck	14:3527.2	kamwo	-
35	-ar-una**m-ö**	可流奈母	-exist-TENT2-ATTR	14:3476.5	-ar-uram-u	?
36	o**mö**	於母	face	14:3473.5	omo	?
37	o**mwo**	於毛	face	14:3515.1	omo	?
38	o**mwo**	於毛	face	14:3520.1	omo	?
39	[o]**mwo**	毛	face	14:3523.2	omo	?
40	**-umö**	布母	-EXCL	14:3489.5	-umö	+
41	**-umö**	都母	-EXCL	14:3482b.5	-umö	+
42	**-umö**	布母	-EXCL	14:3525.5	-umö	+
43	**-umwo**	都毛	-EXCL	14:3528.5	-umö	-
44	**-umö**	布母	-EXCL	14:3541.5	-umö	+
45	**-umö**	湏母	-EXCL	14:3546.5	-umö	+
46	**-umö**	須母	-EXCL	14:3548.5	-umö	+
47	-u**mö**	留母	-EXCL	14:3565.5	-umö	+
48	**mwo**	毛	FPT	14:3442.4	mö	-
49	**mwo**	毛	FPT	14:3444.4	mö	-
50	**mö**	母	FPT	14:3446.5	mö	+
51	**mö**	母	FPT	14:3456.3	mö	+

52	**mwo**	毛	FPT	14:3463.2	mö	-
53	**mö**	母	FPT	14:3466.5	mö	+
54	**mwo**	毛	FPT	14:3469.1	mö	-
55	**mö**	母	FPT	14:3459.4	mö	+
56	**mö**	母	FPT	14:3473.3	mö	+
57	**mö**	母	FPT	14:3477.5	mö	+
58	**mwo**	毛	FPT	14:3478.3	mö	-
59	**mwo**	毛	FPT	14:3478.4	mö	-
60	**mö**	母	FPT	14:3481.5	mö	+
61	**mwo**	毛	FPT	14:3482a.3	mö	-
62	**mwo**	毛	FPT	14:3484.3	mö	-
63	**mö**	母	FPT	14:3493.1	mö	+
64	**mo**	文	FPT	14:3495.5	mö	?
65	**mö**	母	FPT	14:3503.5	mö	+
66	**mö**	母	FPT	14:3505.5	mö	+
67	**mwo**	毛	FPT	14:3505.5	mö	-
68	**mö**	母	FPT	14:3509.3	mö	+
69	**mö**	母	FPT	14:3509.5	mö	+
70	**mö**	母	FPT	14:3512.5	mö	+
71	**mö**	母	FPT	14:3513.5	mö	+
72	**mwo**	毛	FPT	14:3521.3	mö	-
73	**mwo**	毛	FPT	14:3529.3	mö	-
74	**mö**	母	FPT	14:3530.3	mö	+
75	**mö**	母	FPT	14:3530.5	mö	+
76	**mö**	母	FPT	14:3532.5	mö	+
77	**mö**	母	FPT	14:3533.5	mö	+
78	**mö**	母	FPT	14:3537.5	mö	+
79	**mo**	文	FPT	14:3541.3	mö	?
80	**mö**	母	FPT	14:3544.5	mö	+
81	**mö**	母	FPT	14:3551.3	mö	+
82	**mwo**	毛	FPT	14:3552.5	mö	-
83	**mö**	母	FPT	14:3553.5	mö	+
84	**mö**	母	FPT	14:3555.4	mö	+
85	**mö**	母	FPT	14:3561.5	mö	+
86	**mwo**	毛	FPT	14:3563.5	mö	-
87	**mö**	母	FPT	14:3563.5	mö	+
88	**mwo**	毛	FPT	20:4425.5	mö	-
89	**mwo**	毛	FPT	20:4429.5	mö	-
90	**mwo**	毛	FPT	20:4432.5	mö	-
91	**mwo**	毛	FPT	20:4431.5	mö	-
92	**mö**	母	FPT	20:4436.5	mö	+
93	si**mwo**	志毛	frost	20:4431.2	simo	?

94	körö**mwo**	許呂毛	garment	14:3482a.1	körömö	-
95	körö**mwo**	去呂毛	garment	20:4431.4	körömö	-
96	-N-ku**mwo**	久毛	-GEN-cloud	14:3516.2	kumwo	+
97	yuk-una**m-ö**	由久奈母	go-TENT2-ATTR	14:3526.4	yuk-uram-u	?
98	o**mwo**shirwo-kyi	於毛思路伎	interesting-ATTR	14:3452.1	omoshirwo-kyi	?
99	**mwo**myit-u	毛美都	leaves.turn-ATTR	14:3494.3	momyit-u	?
100	su**m-wo**	須毛	live-ATTR	14:3527.1	sum-u	?
101	kwop-una**m-wo**	故布奈毛	love-TENT2-ATTR	14:3476.2	kwop-uram-u	?
102	**mwo**tö	毛登	origin; base	14:3474.2	mötö	-
103	KWO**mwo**ti	兒毛知	PN	14:3494.1	–	?
104	ka**mö**	可母	PT	14:3463.5	kamö	+
105	ka**mö**	可母	PT	14:3465.4	kamö	+
106	ka**mö**	可母	PT	14:3480.5	kamö	+
107	ka**mwo**	可毛	PT	14:3483.4	kamö	-
108	ka**mö**	香母	PT	14:3499.5	kamö	+
109	ka**mö**	可母	PT	14:3500.2	kamö	+
110	ka**mö**	可母	PT	14:3527.5	kamö	+
111	ka**mö**	可母	PT	14:3549.3	kamö	+
112	ka**mö**	可母	PT	14:3556.5	kamö	+
113	ka**mö**	可母	PT	14:3557.2	kamö	+
114	ka**mwo**	可毛	PT	14:3566.3	kamö	-
115	ka**mö**	可母	PT	14:3572.5	kamö	+
116	ka**mwo**	可毛	PT	20:4428.5	kamö	-
117	-kö**mö**-	其母	-reed-	14:3524.1	kömö	+
118	**mwo**körö	毛己呂	similarity (PP)	14:3527.2	mokörö	-
119	pyi**mwo**	比毛	string	14:3465.2	pyimo	?
120	pyi**mwo**	比毛	string	14:3483.2	pyimo	?
121	pyi**mwo**	比毛	string	14:3551.4	pyimo	?
122	pyi**mwo**	比毛	string	20:4427.4	pyimo	?
123	-(a)**m-wo**	毛	-TENT-ATTR	14:3516.5	-(a)m-u	?
124	-(a)**m-wo**	毛	-TENT-ATTR	14:3472.5	-(a)m-u	?
125	-**m-wo**	毛	-TENT-ATTR	14:3473.4	-m-u	?
126	-**m-wo**	毛	-TENT-ATTR	14:3494.4	-m-u	?
127	**mwo**nö	毛乃	thing	14:3481.4	mönö	-
128	**MO**nö	物能	thing	14:3511.4	mönö	?
129	**mwo**nö	毛能	thing	14:3512.2	mönö	-
130	**mwo**nö	毛乃	thing	14:3528.4	mönö	-
131	**mwo**nö	毛能	thing	14:3551.4	mönö	-
132	**mwo**nö	毛乃	thing	20:4425.5	mönö	-

133	[o]**mwo**p-u	毛布	think-ATTR	14:3494.4	(o)möp-u	-
134	[o]**mwo**p-u	毛布	think-ATTR	14:3494.5	(o)möp-u	-
135	o**mwo**p-u	於毛布	think-ATTR	14:3511.4	omöp-u	-
136	[o]**mö**p-o-nösu	**母**抱乃須	think-ATTR-COMP	14:3552.5	omöp-u-nasu	+
137	[o]**mwo**p-aNpa	毛波婆	think-COND	20:4426.5	omöp-aNpa	-
138	[o]**mwo**p-ye	毛敝	think-EV	14:3572.1	omöp-ey	-
139	[o]**mwo**p-ey-Npa	毛倍婆	think-EV-COND	14:3504.5	(o)möp-ey-Npa	-
140	[o]**mwo**p-ey-Npa	毛倍婆	think-EV-COND	20:4427.5	omöp-ey-Npa	-
141	o**mwo**p-os-una**m-ö**	於毛抱須奈**母**	think-HON-TENT2-ATTR	14:3552.4	omöp-os-	-?
142	o**mwo**p-yi	於毛比	think-INF	14:3481.5	omöp-yi	-
143	o**mwo**p-yi-	於毛比	think-INF	14:3528.5	omöp-yi	-
144	o**mwo**p-yi	於毛比	think-INF	14:3564.5	omöp-yi	-
145	[o]**mwo**p-yi-te	毛比弖	think-INF-GER	14:3514.5	omöp-yi-te	-
146	[o]**mö**p-yi-mas-u	**母**比麻須	think-INF-increase-FIN	14:3557.5	omöp-yi-mas-u	+
147	[o]**mwo**p-an-aku	毛波奈久	think-NEG-NML	14:3482a.5	omöp-an-aku	-
148	[o]**mö**p-yi	**母**比	think-NML	20:4425.5	omöp-yi	+
149	o**mwo**p-oy-u	於毛保由	think-PASS-FIN	14:3522.5	omöp-oy-u	-
150	o**mwo**p-yer-aNpa	於毛敝良婆	think-PROG-COND	14:3503.3	omöp-yer-aNpa	-
151	o**mö**p-yer-u	於**母**敝流	think-PROG-FIN	14:3531.5	omöp-yer-u	+
152	[o]**mö**p-ar-i	**母**波里	think-PROG-INF	14:3526.5	omöp-yer-i	+
153	o**mwo**p-unam-u	於毛布奈牟	think-TENT2-ATTR	14:3496.3	omöp-uram-u	-
154	kötetaNsuku**mwo**	許弖多受久毛	*unclear*	14:3553.4	–	?
155	mat-una**m-wo**	麻都那毛	wait-TENT2-ATTR	14:3563.4	mat-uram-u	?

Sixty-nine syllables are etymologically correct, while sixty-one syllables are etymologically incorrect and twenty-six are unknown. As seen in all of the specific provinces, the merger of *mwo* and *m*ö is quite clear in the UEOJ data.

5.2 *MYE* AND *MEY* SYLLABLES. There are three *mye* syllables and six *mey* syllables attested.

TABLE 38. *Mye* and *mey* syllables in UEOJ.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	tu**m-ye**-Ntö	都賣杼	pluck-EV-CONC	14:3444.3	tum-ey-Ntö	-
2	kat-i**mye**r-i	可知馬利	win-CONJ-INF	14:3450.5	kat-imyer-i	+

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3	-ky-e**m-ey**	鷄米	-PAST-TENT-EV	14:3468.5	-ky-em-ey	+
4	-(a)**m-ey**	米	-TENT-EV	14:3484.4	-(a)m-ey	+
5	-si**mye**	之賣	-CAUS	14:3518.5	-simey	-
6	a**mey**	阿米	rain	14:3561.4	amey	+
7	waka**mey**	和可米	seaweed	14:3563.2	–	+
8	kö**mey**-te	許米弖	enter(INF)-GER	14:3575.5	–	?
9	a**mey**	阿米	heaven	20:4426.1	amey	+

Five syllables are etymologically correct, while two are etymologically incorrect and one is unknown. Both of the etymologically incorrect syllables involve the usage of a *mye* syllable for an etymological *mey* syllable.

5.3 *PO, PYE,* AND *PEY* SYLLABLES. There are twenty-six *po* syllables, thirty-six *pye* syllables, and thirteen *pey* syllables attested. There are also two semantic attestations (one *PO* and one *PE*), which I include for the sake of completeness, since they represent monosyllabic lexemes in EOJ (as mentioned before, it is not possible to determine the quality of the vowel from such attestations).

TABLE 39. *Po, pye,* and *pey* syllables in UEOJ.

	Example	Phonogram(s)	Morphemic Gloss	Book:Poem.Line	WOJ	E.C.
1	söwa**pye**	曽和敝	*unclear*	14:3566.3	–	?
2	[u]**pey**	倍	above	14:3465.3	upey	+
3	[u]**pey**	倍	above	14:3518.1	upey	+
4	u**pey**	宇倍	above	14:3522.3	upey	+
5	u**pey**	宇倍	above	14:3525.3	upey	+
6	u**pye**	宇敝	above	14:3539.1	upey	-
7	**PE**	邊	area	14:3489.2	pye	?
8	**pye**	敝	area	14:3504.1	pye	+
9	**pye**	敝	area	14:3531.4	pye	+
10	**pey**	倍	area	14:3541.1	pye	-
11	**pye**	敝	area	14:3575.2	pye	+
12	o**po**se-m-u	於保世牟	blame-TENT-ATTR	14:3566.4	opose-	+
13	ipa**po**	伊波保	boulder	14:3495.1	ipapo	+
14	-**pye**	敝	-CL	14:3456.2	-pye	+
15	-**pye**	弁	-CL	20:4431.3	-pye	+
16	tökye-n-a**p-ye**	等家奈敝	come.undone-NEG-ITER-? (*unclear*)	14:3483.2	–	?
17	pa**p-o**	波抱	crawl-ATTR	14:3525.2	pap-u	+
18	aya**po**-ka-Ntö	安夜抱可等	dangerous-EV-CONC	14:3539.3	–	+
19	ka**po**	可保	face	14:3505.3	kapo	+
20	ka**po**	可保	face	14:3575.3	kapo	+
21	tö**po**-	等保	far	14:3463.1	töpo-	+

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22	tö**po**	等保	far	14:3478.1	töpo	+
23	-tö**po**-	登保	far	14:3522.5	töpo	+
24	ku**pye**	久敝	fence	14:3537a.1	–	?
25	wo**pye**-n-aku	遠敝奈久	finish-NEG-NML	14:3500.5	wopey-n-aku	-
26	nuNkan-a**p-ye**	奴我奈敝由家杼	flow-ITER-? (*unclear*)	14:3476b.4	–	?
27	nwoNkan-a**p-ye**	努賀奈敝	flow-ITER-? (*unclear*)	14:3476a.4	–	?
28	-N-ka**po**	我保	-GEN-face	14:3502.3	kapo	+
29	o**po**	於保	great	14:3480.1	opo	+
30	o**po**	於抱野呂尓	great	14:3520.3	opo	+
31	o**po**	於保	great	14:3521.2	opo	+
32	**PO**	穂	head.of.grain	14:3506.4	po	?
33	[i]**pye**	敝	house	14:3476b.5	ipye	+
34	i**pye**	伊敝	house	14:3481.3	ipye	+
35	i**pye**	伊敝	house	14:3532.5	ipye	+
36	ka**pye**rute	加敝流弖	maple	14:3494.2	–	?
37	a**p-o**	阿抱	meet-ATTR	14:3478.3	ap-u	+
38	ap-an-ö**p-ye**	安波乃敝	meet-NEG-ITER-?	14:3478.4	–	?
39	ap-an-a**p-ye**-Npa	阿波奈敝婆	meet-NEG-ITER-EV-COND	14:3482b.3	–	-
40	ap-an-a**p-ye**-Npa	安波奈敝波	meet-NEG-ITER-EV-COND	14:3524.3	–	-
41	a**p-ye**r-u	安敝流	meet-PROG-ATTR	14:3463.5	ap-yer-u	+
42	o**po**po**po**si-ku	於保々思久	melancholic-INF	14:3571.3	opoposi-ku	++
43	sa**pye**-n-a**p-ye**-n-u	佐弁奈弁奴	obstruct-NEG-ITER- ?-PERF(?)-FIN(?) (*unclear*)	20:4432.1	–	??
44	**pye**Ntas-i	敝太思	partition-INF	14:3445.5	pyeNtate	+
45	a**pey**	阿倍	PN	14:3523.2	–	?
46	sa**pey**	左倍	PT	14:3474.2	sapey	+
47	sa**pey**	佐倍	PT	14:3502.4	sapey	+
48	sa**pey**	左倍	PT	14:3514.3	sapey	+
49	sa**pey**	左倍	PT	14:3523.5	sapey	+
50	sa**pye**	佐敝	PT	14:3548.5	sapey	-
51	Nka**pey**	我倍	PT (*unclear*)	14:3502.5	–	?
52	Nka**pye**	我弁	PT (*unclear*)	20:4429.3	–	?
53	[i]**p-ye**na	敝奈香	say-? (*unclear*)	14:3499.5	–	?
54	i**p-ye**	伊敝	say-EV	14:3461.1	ip-ey	-

55	ip**-ye**-Ntömö	伊㪫杼母	say-EV-COND	14:3543.4	ip-ey-Ntömö	-
56	ne-n-a**p-ye**	祢奈㪫	sleep-NEG-ITER-? (*unclear*)	14:3529.4	–	?
57	NE-N-A**p-ye**	宿莫㪫	sleep-NEG-ITER-? (*unclear*)	14:3555.5	–	?
58	ne-n-a**p-ye**-nö	祢奈㪫乃	sleep-NEG-ITER-ATTR(?)-GEN(?) (*unclear*)	14:3482b.4	–	?
59	NE-n-a**p-ye**-Ntömö	宿奈㪫杼母	sleep-NEG-ITER-EV-CONC	14:3509.3	–	-
60	ne-n-a**p-ye**-Npa	佐祢奈㪫波	sleep-NEG-ITER-EV-COND	14:3466.3	–	-
61	pa**pye**-te	波㪫而	stretch-GER	14:3525.4	papey-	-
62	[o]mö**p-o**	母抱	think-ATTR	14:3552.5	omöp-u	+
63	[o]mwo**p-ye**	毛㪫	think-EV	14:3572.1	omöp-ey-	-
64	[o]mwo**p-ey**-Npa	毛倍婆	think-EV-COND	14:3504.5	omöp-ey-Npa	-
65	[o]mwo**p-ey**-Npa	毛倍婆	think-EV-COND	20:4427.5	omöp-ey-Npa	+
66	omwo**p-o**s-unam-ö	於毛抱須奈母	think-HON-TENT2-ATTR	14:3552.4	omwop-os-	+
67	omwo**p-o**y-u	於毛保由	think-PASS-FIN	14:3522.5	omöp-oy-u	+
68	omö**p-ye**r-u	於母㪫流	think-PROG-	14:3531.5	omöp-yer-u	+
69	omwo**p-yer**-aNpa	於毛㪫良婆	think-PROG-COND	14:3503.3	omöp-yer-aNpa	+
70	si**po**	斯抱	tide	14:3450.3	sipo	+
71	si**po**	等抱	tide	14:3473.3	sipo	+
72	si**po**	志保	tide	14:3503.2	sipo	+
73	si**po**	志保	tide	14:3549.2	sipo	+
74	si**po**	思保	tide	14:3553.3	sipo	+
75	si**po**	思保	tide	14:3556.1	sipo	+
76	ka**pey**	可倍	*unclear*	14:3482a.2	–	?

Fourty-six syllables are etymologically correct, thirteen are etymologically incorrect, and eighteen are unknown. All of the etymologically incorrect syllables involve either writing *pye* for a PJ *pəy syllable, or writing *pey* for a PJ *pe syllable. There are no examples of a *po* phonogram being used to write a *pəy or *pe syllable, nor any examples of a *pye* or *pey* phonogram being used to write a *po syllable.

6. CONCLUSION. Table 40 below maps out the mergers presented in this paper across the various provinces.

TABLE 40. Evidence for mergers among the Provinces and UEOJ.

	*mə>/mo/	*məy>*mə>/mo/	*məy>/me/	*pəy>*pə>/po/	*pəy>/pe/
Shinano	Yes	No	No	No	No data
Suruga	Yes	Yes	No	Yes	No
Tōtōmi	Yes	No	No	Yes (Inconclusive)	No
Kazusa	Yes	No	No	No	Yes
Mutsu	Yes (Inconclusive)	No	No	No	No data
Shimotsuke	Yes	No	No	No	Yes
Hitachi	Yes	No	Yes (Inconclusive)	No	Yes
Kōzuke	Yes	No	No	No	Yes (Inconclusive)
Izu	Yes	No	No	No	No
Musashi	Yes	No	No	No	Yes (Inconclusive)
Sagami	Yes	No	No data	No	No
Shimōsa	Yes	No	No	No	Yes
UEOJ	Yes	No	Yes	No	Yes

Based on this evidence, Suruga and Tōtōmi might be grouped together as varieties of the same dialect (which I will label Dialect A), which is in line with the traditional SEOJ grouping with which they have previously been linked. Everything else save Shinano, Mutsu, and Sagami shows evidence for the merger of *pəy>/pe/, which might group them together in a different dialect region (which I will label Dialect B). The UEOJ data shows evidence for the mergers found in Dialect B but not those in Dialect A (except *mə>/mo/, which is found in every province), which may be evidence that many of the UEOJ poems come from the provinces in Dialect B.

Obviously one cannot claim these tentatively proposed dialect regions to be conclusive without further research into other shared innovations. The *pəy>/pe/ merger, for example, could be an areal feature and not necessarily a shared innovation. Thus the dialect regions proposed in this paper should not be taken as conclusive, but rather as a starting point towards a complete taxonomy of the EOJ dialects based upon a comprehensive linguistic analysis of the corpus. This analysis will involve a full collection of shared innovations among the provinces, in a similar fashion as presented in the present study. A proper, complete analysis of the phonological and morphological systems of the EOJ dialects is an accompanying element also crucial towards this goal. Such a study is forthcoming by the author.

APPENDIX A: LIST OF ABBREVIATIONS

1S – First Person Singular
ALL – Allative
ATTR – Attributive
CAUS – Causative
CEOJ – Central Eastern Old Japanese
CL – Classifier
CONC – Concessive
COND – Conditional
CONJ – Conjunctive
CONV – Converb

COP – Copula
DES.PT – Desiderative Particle
DIM – Diminutive
EXCL – Exclamatory
EMC – Early Middle Chinese
EV – Evidential
FIN – Final
FK – Fudoki Kayō
FPT – Focus Particle
GEN – Genitive

GER – Gerund
HON – Honorific
INF – Infinitive
ITER – Iterative
LH – Late Han
MK – Makura Kotoba
MYS – Man'yōshū
NEG – Negative
NEG.PT – Negative Particle
NEOJ – North Eastern Old Japanese
NML – Nominalizer
NOM – Nominative
PASS – Passive

PAST – Past tense
PJ – Proto-Japanese
PN – Place Name
POSS – Possessive
PP – Postposition
PRE – Prefix
PROG – Progressive
PT – Particle
SEOJ – South Eastern Old Japanese
TENT – Tentative
TENT2 – Tentative 2
UEOJ – Unknown Eastern Old Japanese
WOJ – Western Old Japanese

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