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Proto-Japonic *e and *o in Eastern Old Japanese

Thomas PELLARD

In this article I examine the correspondences found between Western Old Japanese high vowels and Eastern Old Japanese midvowels in light of the recent hypotheses concerning the Proto-Japonic vowel system. Correspondences in both the morphology and the lexicon are established and then comparative evidence from several modern Japanese and Ryukyuan dialects is adduced to show that these are instances of retention of Proto-Japonic *e and *o.

Keywords : Eastern Old Japanese, Proto-Japonic, Japanese dialects, Ryukyuan.

Cet article examine les correspondances existant entre les voyelles hautes du japonais ancien de l'Ouest et les voyelles moyennes du japonais ancien de l'Est, à la lumière des récentes hypothèses sur le vocalisme du proto-japonique. Des correspondances à la fois dans le lexique et dans la morphologie sont établies, puis des données comparatives de plusieurs dialectes japonais modernes et de langues ryukyu sont fournies pour confirmer qu'il s'agit de cas de rétention des voyelles *e et *o du proto-japonique

Mots-clés : japonais ancien de l'Est, proto-japonique, dialectes japonais, langues ryukyu.

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1. INTRODUCTION

The Old Japanese (OJ) language of the 7th and 8th centuries is known to us through a collection of mostly poetic texts written in Chinese characters used phonetically. The overwhelming majority of these texts, more than 4000 songs plus some prose, originates from the Yamato plain in Western Japan, where the government of the Yamato state was located. But several texts contain some material written in special varieties of Japanese from the Eastern provinces. These are:

- the *Azuma uta* (AU), 238 poems in volume XIV of the poetic anthology *Man'yōshū* (M, completed in 759), presented as poems from the Eastern region (out of which 8 are variants);
- the *Sakimori uta* (SU), 93 poems in volume XX of the *Man'yōshū*, composed by border guards from the Eastern region conscripted to Kyūshū, as well as by their wives;
- the *Hitachi Fudoki* (HFK), an imperial gazetteer of the Hitachi province, located in Eastern Japan, which contains 9 poems and was written after the imperial decree of 713.

These texts exhibit some peculiar phonological, grammatical and lexical elements, which can only be explained as dialectal features: most of the OJ texts are written in Western Old Japanese (WOJ), the language of the political center of the Yamato state, while the AU, SU and HFK reflect Eastern Old Japanese (EOJ), a dialect continuum of the Eastern provinces, which correspond to the modern regions of Tōhoku, Kantō and part of Chūbu.

These features are most numerous in the SU, whose authors are clearly identified as coming from the Eastern provinces. On the other hand some of the AU are clearly not written in EOJ but have been in fact composed by dignitaries of the capital sent to the East by the government (Mizushima 1984:221-222). The 9 poems of the HFK contain very few EOJ features and are not a very useful source.

Although comparatively well studied (Fukuda 1965, Hōjō 1966, Mizushima 1984, Mizushima 2005), EOJ data paradoxically

seem to have been until recently rather underestimated[1] in the study of the history of the Japonic[2] language family, long victim of the common prejudice that WOJ is the variety of Japonic closest to the proto-language. But it is clear that EOJ data are essential in many aspects (Antonov 2006, Vovin 2007, Vovin in press). Indeed, as will be demonstrated below, a thorough study reveals that a number of the peculiarities observed are in fact not unique to EOJ but can be found in some modern Japanese dialects and Ryukyuan, a sister branch of Japanese in the Japonic family[3]. They are thus not innovations but archaisms reflecting the proto-language.

The most striking of these features are the cases where we find WOJ high vowels i_1 and *u* respectively corresponding to EOJ[4] midvowels $e_{(1/2)}$ and $o_{(1)}$. Similar correspondences are also found between WOJ and Proto-Ryukyuan (PR), which leads us to reconstruct the midvowels *e and *o in Proto-Japonic (PJ, first centuries CE). The reconstruction of these vowels is also partially supported by philological evidence (Miyake 2003). A system of at least 6 vowels incorporating *e and *o[5], absent from previous reconstructions based mainly on internal reconstruction of WOJ

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[1] Notable exceptions are Hōjō (1966), Thorpe (1983), Haggers (2000), and Hino (2003).

[2] *Japonic* is now a fairly common term including both Japanese and the Ryukyuan languages.

[3] I have modified transcriptions of data from Japanese and Ryukyuan dialects to a more phonetic notation, but without any accentual or tonal marks.

[4] Eastern Old Japanese will be transcribed as Western Old Japanese, with A-type (*kō-rui*) syllables marked with a 1 subscripted after the vowel (i_1, e_1, o_1), and B-type (*otsu-rui*) ones with a 2 (i_2, e_2, o_2), those without distinctions remaining unmarked (*i*, *e*, *o*), without discussing here the problem of whether EOJ had this distinction (it seems that EOJ did not distinguish between i_1 and i_2 or e_1 and e_2, but distinguish o_1 and o_2; see Fukuda 1965, Mizushima 1984, Mizushima 2005).

[5] Hattori (1978-1979) and Frellesvig & Whitman (2004) both reconstruct a seventh vowel, respectively *ü and *ɨ, but for different reasons. Their hypotheses are supported by very few examples and have not received general acceptance.

(Whitman 1990, Martin 1987), is thus now generally accepted for PJ (Hattori 1978-1979, Frellesvig & Whitman 2008, Vovin in press).

*i				*u
	*e	*ə	*o	
		*a		

Table 1: PJ vowels

PJ *e and *o are thought to have raised to i_1 and *u* in WOJ, but some in some cases they may have been preserved as e_1 and o_1:

WOJ	<	PJ	>	PR
i_1	<	*i	>	*i
i_2	<	*ui	>	*i
i_2 (e_2)	<	*əi	>	*e
e_2	<	*ai	>	*e
e_1	<	*ia	>	*e
e_1	<	*iə	>	*e
i_1 (e_1)	<	*e	>	*e
u	<	*u	>	*u
o_1	<	*ua	>	*o
o_1	<	*au	>	*o
u (o_1)	<	*o	>	*o
o_2	<	*ə	>	*o
a	<	*a	>	*a

Table 2: Diachronic developments of PJ vowels

Still, Miyake (2003:96-97) remarks that aside from the verbal adnominal suffix (see 2.1.), there are no cases where PR *e and *o corresponding to WOJ i_1 and *u* are reflected as $e_{1/2}$ and $o_{(1)}$ in EOJ.

This article presents further evidence for the PJ midvowels and their preservation in EOJ.

2. PROTO-JAPONIC *o

We can find a fair number of cases where EOJ $o_{(1)}$ corresponds to WOJ *u*. Although they are well known, these correspondences have not yet been clearly shown to be cases of retention from PJ. Comparison with several modern Japanese dialects and with Ryukyuan supports this theory.

2.1. Adnominal forms of verbs

OJ has a special inflected form for verbs, traditionally called "adnominal" or "attributive" (Jap. *rentaikei*), used in relative clauses, in nominalized clauses and in certain focus and interrogative constructions. For adjectives and verbs belonging to certain conjugational classes, it is distinct from the "conclusive" form (Jap. *shūshikei*) used in main clauses. We find in EOJ as many as 48 adnominal forms marked by a final -$o_{(1)}$ for consonant-base verbs and auxiliaries (20 in the AU, 27 in the SU, 1 in the HFK), whereas in WOJ these verbs and auxiliaries lack the adnominal/conclusive distinction and have a uniform ending in -*u*.[6] Here is an example of an EOJ adnominal form followed by a conclusive one:

[6] The exceptions are for some irregular verbs which have a special conclusive form in -*i* and an adnominal ending -*u*. We should also note that in Middle Japanese the adnominal and conclusive forms were accentually distinct even when segmentally identical (Martin 1987:191-198).

(1) 故奈 乃 思良 禰 爾 阿抱 思太 毛
ko$_1$na no$_2$ sira ne ni ap-o sida mo
Kona GEN white peak LOC meet-ADN time PT
"When [we] meet on the white peak(s) of Kona" (M 14.3478)

(2) 佐伎母里 爾 佐須
Saki$_1$mori ni sas-u
Sakimori LOC designate-CCL
"[He] assigned me to Sakimori [duty]." (M 20.4382)

We find only two cases of this *-o$_1$* occurring in other conjugational classes: with *arapare$_2$-* "to appear" (*araparo$_1$*, M 14.3414) and the perfective auxiliary *-n-* (*-n-o$_1$*, M 14.3395, 14.3480, 14.3527, 20.4403), which have the adnominal forms *araparuru* and *-nuru* in WOJ. These can be explained as having been analogically leveled to a consonant-base in EOJ, a phenomenon well attested in Japanese and Ryukyuan also.

Some of these *-o$_{(1)}$* forms are apparently used as conclusive ones, but the same situation is found in WOJ, a phenomenon known as *rentai-dome* in Japanese. Final adnominal forms are used to denote emphatic mood.

One problem with these special adnominal forms is that although they are too numerous to be considered as accidental misspellings, they are still in a minority: we find many more adnominal forms identical to WOJ than special ones. Nevertheless, one must recall, as mentioned in the introduction, that some of the EOJ poems are in fact written in WOJ, and that also EOJ has been subject to strong influence from WOJ, which led to its eventual and complete obliteration. It is therefore not surprising that we find comparatively so few dialectal features in the EOJ corpus.

The main issue for us here is to determine whether these adnominal forms are innovations or archaisms. I think it is possible to build a solid case for their archaic character by adducing comparative evidence from both modern Japanese dialects (2.1.1.)

and Ryukyuan (2.1.2.), and also by adding in other examples of the same correspondence not restricted to adnominal forms (2.2.).

2.1.1. Japanese dialects

2.1.1.1. Hachijō dialects

The Hachijō and Aogashima dialects are two very closely related dialects spoken on islands 290 km to the South of Tokyo. Both have an opposition between conclusive forms in /-u/ and adnominal ones in /-o/ for verbs (Hirayama et al. 1965:190-206, Ōshima 1984:254-262):

Verb	Conclusive	Adnominal
"write"	kaku	kako
"get out"	dasu	daso
"hold"	motsu	moto

Table 3: Verb forms in Hachijō dialects.

Here is one example of a conclusive form (3) and one of an adnominal form (4):

(3) uno hito mo kuni: kear-u te:ja
that person INCL country.LOC return-CCL HS
"Apparently he's going home too." (Hirayama1965:193)

(4) wa=ga ik-o toki
I=NOM go-ADN time
"When I go…" (KKK 1950:208)

2.1.1.2. Toshima dialect

This dialect, spoken in one of the Izu islands between the Izu peninsula and the Hachijō islands, similarly has adnominal forms in

/-o/, though they are also used as conclusive forms (Ōshima 1984:250-261). But we also find forms in /-u/, followed by an auxiliary, in the precise constructions which historically derive from a conclusive form followed by an auxiliary, as with the conjectural /bei/ (WOJ be_2ki_1) or the negative conjectural /mai/ (Middle Japanese *mazi*):

(5) kaze=ga ɸuk-u bei
wind=NOM blow-CCL CONJ
"It will (probably) be windy." (Ōshima 1984:265)

It thus seems that, as in other Japanese dialects, adnominal forms have replaced the conclusive ones, but the latter have been preserved in some constructions in this dialect. We can therefore reconstruct an ancient opposition between adnominal forms in *-o and conclusive ones in *-u.

Verb	Old conclusive	Adnominal & new conclusive
"write"	kaku	kako
"get out"	dasu	daso
"hit"	butsu	buto

Table 4: Verbal forms in Toshima dialect.

It is important to note that the Toshima dialect is not directly related to the Hachijō group, and that these islands are separated by a great distance. Furthermore, there are several other islands whose dialects do not possess similar forms. This consequently excludes that their /-o/ forms could be common innovations or borrowings.

2.1.1.3. Akiyama dialect

The Akiyama dialect, spoken in the mountains between the Niigata and Nagano prefectures, has not been usually brought into

the discussion of EOJ or PJ adnominal forms, yet it constitutes another piece of independent evidence. Here again we find an opposition adnominal /-o/ vs. conclusive /-u/ (Mase 1992:197-202):

Verb	Conclusive	Adnominal
"write"	kaku	kako
"push"	osu	oso
"rise"	tatsu	tato

Table 5: Verbal forms in Akiyama dialect.

(6) kotta tʃijonoɸudʒi=ɡa kats-u-rɔː
next.time.TOP Chiyo no fuji=NOM win-CCL-CONJ
"Next time Chiyo no fuji (Sumo wrestler's name) will probably win." (Mase 1992:201)

(7) kat-o dotʃaː sokkɛ=no mon da
win-ADN time.TOP like.this=GEN thing COP
"It's like that when you win." (Mase 1992:201)

The Akiyama dialect has undergone a lowering of most of its high vowels *i and *u to /e/ and /o/, but not after every consonant, and especially not after /k/, /s/ or /t/. Hence this lowering cannot explain the adnominal forms in /-o/. Analogy with verbs whose base-consonant has not prevented the lowering of *u to /o/ cannot explain it either: why would verbs have had their ending lowered to /-o/ in adnominal function but not in conclusive function? It is more reasonable to consider the /-o/ in these adnominal forms as original.

2.1.2. Ryukyuan

Thorpe (1983:182-183) reconstructs a PR suffix *-o for attributive (here called adnominal) and emphatic mood, which also appears before prohibitive, achievement, interrogative, adversative

and concessive markers, but he does not discuss the comparative evidence underlying his reconstruction at length.

Indeed one can find in most Northern Ryukyuan dialects (Amami and Okinawa) a fossilized adnominal form appearing only before some formal nouns[7] and suffixes. It is felt as archaic by speakers (Uchima 1997:34) and is usually not used anymore as a true adnominal form, except in some traditional songs (Matsumoto 1998:199). Contrary to the actual adnominal and conclusive forms, this form does not originate from a compound with the stative verb "to be".

For example, in the Northern Okinawan dialect of Nakijin Yonamine, this form is found among others before the formal nouns [ʔmjoːdui] ("interval", "while"), [haːʤi] ("expectation", "ought to"), [kʰaʤiri] ("limit", "as much as"), the terminative suffixes [madiː], [gadiː], [jakˀiː], or the restrictive suffix [bikˀeː], and even as a main clause predicate when the adverb [ʤoi] ("very") is used in the sentence (Nakasone 1987:155):

(8) waː=ga hakˀ-u ʔmjoːdui mattʃˀureː
I-NOM write-ADN while wait.IMP
"Wait while [I] write [it]."

(9) waː=ga hakˀ-u madiː mattʃˀureː
I=NOM write-ADN until wait.IMP
"Wait until [I] write [it]."

(10) ʔariː(ː) gandeː ʤoi hakˀ-u
he AMBIG very write-ADN
"He writes very well."

These forms can be reconstructed with a final *-o, directly attached to the root of consonant-base verbs. For instance, the

[7] Formal nouns are nouns which are used as function words in some grammatical constructions.

obsolete adnominal form of *t*-base verbs (/mat-/ "to wait", /tat-/ "to stand") has its final syllable corresponding to WOJ $to_{(1/2)}$ and not *tu*.

Dialect	ADN	with	person[8]	one	when
WOJ	tatu, matu	to_2	pi_1to_2	pi_1to_2tu	itu
Chabana[9]	matu	tu	pitʃu	tiːtʃi	ʔitʃi
Yonamine[10]	tatˀu	tˀu	tʃˀuː	tˀiːtʃˀi	hitʃˀiː
Naha-Shuri[11]	tatu	tu	ttʃu	tiːtsi	ʔitsi
PR	*tato, *mato	*to	*pito	piteetu	*etu

Table 6: Ryukyuan adnominal forms

In Southern Ryukyuan (Sakishima, *e.g.* Miyako, Yaeyama and Yonaguni), the situation is more complicated, and the forms which appear at first sight to correspond to *-o (in Yonaguni or Hatoma for example) should better not be taken at face value. The diachronic developments of the verbal morphology in Ryukyuan are a complicated matter, and the reconstruction of the Proto-Sakishima verbal system is particularly problematic because of some contradictory correspondences. This would require a separate treatment, which is far beyond the scope of this article[12].

2.1.3. Conclusion on adnominal forms of verbs

Adnominal forms with a final /-o/ or reconstructible with an *-o are thus attested in several different (sub-)branches of the

[8] The /t/ in the last syllable of "person" has undergone regular progressive palatalization in many of dialects.
[9] Nakama (1992), Hattori et al. (1959).
[10] Nakasone (1987), Hattori et al. (1959).
[11] For more details on this problem, see Kokuritsu Kokugo Kenkyūjo (1963), Nohara (1976).
[12] See on this matter Thorpe (1983), Uchima (1984), Nakama (1992), Karimata (1999).

Japonic family (EOJ, Hachijō, Toshima, Akiyama and Ryukyuan). Hence this excludes the possibility that these forms are a common innovation. The geographic distribution, with several attestations in very distant and isolated areas, also excludes the possibility of borrowing.

Whitman (1990:538-540) has proposed to explain EOJ's adnominal *-o* as a lowering of *-uwu < *-u-ru, but evidence for such a development in EOJ is scarce. It would also imply that EOJ and PR both underwent the same innovation, which is not realistic. Hayata (2000) considers the EOJ $-o_{(1)}$ to have a diphthongal origin and reconstructs the PJ adnominal ending as *-rua. But if *ua indeed develops into Old Japanese o_1, it does not raise to *u* in WOJ (*cf.* $kazu\text{-}ape_2$- "number-assemble" > $kazo_1pe_2$- "to count"). We would thus expect adnominal forms in $-o_1$ in WOJ too.

We can also add as further evidence the interesting inscription found on the Inariyama burial mound sword (471? 531?), also partially attested in the Eta Funayama burial mound inscription (5th c.). It may be interpreted as having an adnominal *-o* following the verb $take_1$- "to be tall, great" (Miyake 2003:122):

(11)	獲	加	多	支	鹵
Later Han	*ɣuək	*ka	*tɑi>*tɑ	*kie>*cie	*lɑʔ>*lɔʔ
Early Middle Chinese	*ɦwɛk	*kæ	*ta	*ciə	*loʔ
WOJ	$waka\text{-}take_1ru$ "(the one who is) young and fierce"				

Therefore it seems rather unlikely that the adnominal forms arose late in Japonic, as proposed by Frellesvig (2008), since there is definitely evidence for reconstructing the adnominal/conclusive opposition in PJ from comparative evidence.

2.2. Lexical examples

We find also some lexical examples exhibiting the same correspondence WOJ *u* :: EOJ $o_{(1)}$ and for which we can tentatively reconstruct PJ *o.

The toponym $To_2pe_2tapomi_1$ (M 20.4324, WOJ *Töpotapumî* "Tōtōmi") seems to be derived from $*to_2po$-tu-apa-umi_1 "distant-GEN-fresh-sea" (Ōno et al. 1974). I propose below several pieces of original evidence that point to a reconstruction of PJ *omi rather than *umi for "sea"[13], which would agree with the EOJ $-omi_1$ in $To_2pe_2tapomi_1$. First, most of WOJ words beginning with *um-* are attested also spelled as *mum-* in WOJ or Middle Japanese, but umi_1 "sea" is not:

uma	~	muma	"horse"
umago	~	mumago	"grand-child"
uma-	~	muma-	"good"
umare-	~	mumare-	"to be born"
ume	~	mume	"plum"

Table 7: WOJ and MJ *um-* ~ *mum-* alternations.

Second, though Thorpe (1983:325) is unable to decide whether PR "sea" was *umi or *omi, I believe it is possible to reconstruct an initial *o here. In Thorpe's reconstruction, PR initial *o and *u seem to have generally merged, but a closer look at the data reveals that certain dialects have in some cases different reflexes. For instance whereas Yoron uniformly has an initial /u-/ in the words below, other dialects have /(ʔ)u-/ only for some of them:

[13] An anonymous reviewer has informed me that such a reconstruction has already been suggested by Leon Serafim, but his hypothesis unfortunately still remains unpublished.

Dialect	be born	grand-child	horse	sea	pus	think
Yoron[14]	unurjuŋ	umaga	uma	umi	untʃuː	umujuŋ
Nakijin[15]	ʔmaːriŋ	ʔmaːga	ʔmaː	ʔumi	ʔumiː	ʔumiŋ
Ishigaki[16]	mari-	maːɸaː	ʔmma	ʔumï	ʔuŋku	ʔumoːŋ
Yonaguni[17]	maːruŋ	maːŋu	mma	unnaga	untu	umuŋ
New PR reconstruction	*umare-	*umag[a,o]	*uma	*omi	*omi	*omow-

Table 8: PR *um- and *om-

On this basis I propose the following amendment to Thorpe's PR reconstruction:

PR		Modern Ryukyuan dialects
*u	>	(ʔ)m ~ Ø / #_m
*o	>	(ʔ)u / #_m

Table 9: Diachronic developments of PR *om- and *um-

In most Ryukyuan dialects the word for "sea" has an initial /(ʔ)u-/[18], and should be therefore reconstructed as PR *omi < PJ *omi.

The word "snow" is attested as *yo₂ki₁* in EOJ (M 20.3423) and corresponds to WOJ *yuki₁*. While we usually find an EOJ o_1 corresponding to WOJ *u*, we have here a problematic case of o_2, but we should note that this is an AU poem, and it may thus have been corrupted by the scribes of WOJ. We can find similar forms with an

[14] Nakamatsu (1999), Nakama (1992).
[15] OGKS (1999-2003).
[16] Miyagi et al. (2002).
[17] Hirayama & Nakamato (1964), HDOBK (1986).
[18] In most Southern Ryukyuan dialects, the expected initial /u-/ in "sea" has fronted to /i-/ (ex: Miyako /im/). Thorpe (1983:45) states that this development is regular: initial *u or *o is fronted to *i before a "syllabic" consonant.

o in several modern Japanese dialects located in the following prefectures (Tokugawa et al. 1989, Hirayama et al. 1992-1994): Aomori, Yamagata [jogï], Niigata, Sado, Nagano [joki]). In Ryukyuan, the cognates of WOJ *yuki*$_1$ usually mean not "snow" but "hail", and no modern dialect seems to have retained a distinction between PJ *ju and *jo or *jə. Still, in the Old Okinawan poetic anthology *Omoro Sōshi*, believed to contain a number of spellings reflecting a stage before the raising of PR *e and *o (Vovin 2005: xix), the word "snow/hail" is found spelled only once as *yuki* (poem #583) and 15 times as *yoki* (poems #39, 100, 490, 514, 514, 583, 672, 672, 1000, 1085, 1085, 1086, 1287, 1511, 1511). This may thus imply that "snow/hail" had a midvowel *o rather than *u.

The form *wosagi*$_1$ (M 14.3529) for WOJ *usagi*$_1$ "hare, rabbit" is paralleled by some modern Japanese dialects which have an initial *o-* in this word: Kawabe [osaŋï], Toyama [oʃaŋi], Wakayama [osagi], Gokosan [osagi] (Tokugawa et al. 1989, Hirayama et al. 1992-1994). Furthermore, the transcriptions of Koguryŏ toponyms in the *Samkwuk saki* (1145), which record a language in all likelihood related to Japanese in someway, contain the word "hare" transcribed as 烏斯含, which can be reconstructed in Early Middle Chinese as *ɔ siə̆ ɣəm (Pulleyblank 1991).

We also find other cases of the correspondence EOJ *o*$_{(1)}$ :: WOJ *u*, but we lack comparative evidence to confirm that they are instances of retention of PJ *o. This is the case for *ayapo-* (M 14.3539, WOJ *ayapu-* "dangerous"), *no*$_1$*re-* (M 20.4351, WOJ *nure-* "sleep"), *popom-* (M 20.4387, WOJ *pupum-* "to be unopened"), *ayo*$_1$*k-* (M 20.4390, WOJ *ayuk-* "shake") and *-to*$_2$*to*$_2$ (M 20.4421, WOJ *-tutu* "continuative suffix", problematic since EOJ has an *o*$_2$ here).

We also find a doublet form *tayura* (M 14.3392) ~ *tayo*$_1$*ra* (M 14.3368) "agitated" with *o*$_1$ ~ *u* for a word not attested in WOJ. This could reflect the coexistence of a pre-raising and a post-raising form (possibly in different dialects, though both poems are from the Shimōsa province).

Finally there is the problematic *semi$_1$do$_1$* (M 14.3546, WOJ *si-mi$_1$du* "fresh water") which does not match the PJ reconstruction *mentu for "water", expected from PR *mezu (Thorpe 1983:345):: WOJ *mi$_1$du*. Indeed the Ryukyuan evidence clearly points to a final *-u and not *-o (and also to a medial *e not *i).

3. PROTO-JAPONIC *e

Parallel to EOJ *o$_{(1)}$* :: WOJ *u*, we find cases of EOJ *e$_{(1/2)}$* corresponding to WOJ *i$_1$*. In the same way, these can be shown to be retentions of PJ *e, with adnominal forms as the main bulk of evidence.

3.1. Adnominal forms of adjectives

Adjectives have a special adnominal form too, marked by *-ki$_1$* in WOJ, and we find a corresponding marker *-ke$_{1/2}$* in EOJ attested 18 times (10 times in AU, 8 times in SU):

(12) 阿志氣 比等 奈里
asi-ke$_2$ pi$_1$to$_2$ nar-i
bad-ADN person be-CCL
"[He] is a bad person." (M 20.4382)

But first it must be noted that we can find a few occurrences of the adnominal marker *-ke$_1$* in WOJ. One example is found in the *Kojiki*, known for its archaic features like the *mo$_1$*/*mo$_2$* distinction lost in most of the later texts[19]:

[19] See Bentley (2002) for a discussion of the *mo$_1$*/*mo$_2$* distinction in the *Man'yōshū*.

(13) 波斯祁 夜 斯
pasi-ke$_1$ ya si
dear-ADN EMPH EMPH
"How dear it is..." (Kojiki 33)

The same form *pasi-ke$_1$* is also found in M 15.3691 and M 15.3692, but the usual adnominal form of this adjective is *pasi-ki$_1$*, which is attested in the same construction as above (*pasi-ki$_1$ yasi*, M 7.1358, M 8.1619). The form with *-ke$_1$* is thus neither a *hapax legomenon* nor a scribal error, but can be explained as the preservation of a pre-raising archaic form.

Moreover, here again some modern Japanese dialects preserve this marker, and these are not a random collection of dialects: the dialects having /-ke/ all happen to also preserve the adnominal verbal suffix /-o/.

Thus adnominal forms in /-ke/ are attested in the Hachijō dialect (Hirayama et al. 1965:195–196, Ōshima 1984:259, 262):

Adjective	Adnominal
"high"	takake
"bad"	waruke
"good"	joke

Table 10: Adjectival forms in Hachijō dialect

(14) taka-ke jama
high-ADN mountain
"A high mountain" (Ōshima 1984:262)

The Akiyama dialect also has a distinction between conclusive and adnominal forms of adjectives, the latter ones being marked by /-(k)ke/ (Mase 1992:205-207) :

Adjective	Conclusive	Adnominal
“happy”	oreʃiː	oreʃike
“good”	eː	eke
“red”	akɛː	akakke

Table 11: Adjectival forms in Akiyama dialect

(15) satʃo non-de aka-kke tsurɔ ʃi-ter-o na
alcohol.ACC drink-SEQ red-ADN face.ACC do-DUR-CCL EXCL
“[You] have drunk alcohol and your face is red.” (Mase 1992:206)

(16) atama-kke=ga ʃireː
head-hair=NOM white.CCL
“[His] hair is white.” (Mase 1992:206)

Although in this dialect most of the *i have lowered to /e/, this /-ke/ is not explainable as a lowering of *-ki, since WOJ $ki_{1/2}$ corresponds to a palatalized /tʃi/ in Akiyama (Mase 1992:61–89):

Word	WOJ	::	Akiyama
“time”	to_2ki_1		totʃi
“fog”	ki_2ri		tʃire
“tree”	ki_2		tʃi
“breath”	iki_1		etʃi

Table 12: WOJ $ki_{1/2}$ :: Akiyama tʃi

We can thus assume this suffix goes back to PJ *-ke. Nonetheless, the conclusive forms like [akɛː] must come from *aka-i, and this *-i must in turn be a lenition of adnominal *-ki, as happened in other Japanese dialects[20]. At present I can only propose

[20] I would like to thank Bjarke Frellesvig for having pointed this out to me.

that these forms are due to the influence of surrounding dialects and Standard Japanese.

Unfortunately there is no Ryukyuan evidence in this case, since Ryukyuan has an adjectival morphology in most parts different from Japanese. According to Hirayama & Nakamoto (1964), there is a marker corresponding to the WOJ -be_2ki_1 in some Ryukuan dialects, the adnominal form of a debitive/conjectural marker inflected like adjectives. This is in all likelihood a recent loan from Japanese, the correspondences between Ryukyuan dialects being highly irregular.

Martin (1987:812), who generally rejects the existence of PJ *e and *o, has argued that EOJ -$ke_{1/2}$ and WOJ -ki_1 are contractions of -*ku ari*, the adverbial ending of adjectives followed by the verb "to be":

(17) -ku ari > -kai > EOJ -ke
> -ki > WOJ -ki_1

There are several problems which make this proposal unacceptable. First, this construction would be very odd as the origin of the adnominal ending, since the form *ari* is an infinitive and conclusive form, but not an adnominal form (the adnominal form of this verb is *aru*). Second, the construction -*ku ar*- is indeed attested in OJ, and we also find the contracted form -*kar*-. Both survive in later Japanese and some dialects[21]. It is thus improbable that there was yet a third, completely fused, version of this construction, restricted to adnominal function.

Thus, although the evidence is less impressive than for -*o*, it is possible to make a case for the archaic nature of the adjectival adnominal suffix -*ke*. However the question of whether it existed in

[21] It is even attested in most dialects of Miyako Ryukyuan: -*kaz* ~ -*ka:* (data from my own fieldwork).

PJ is still open, as we lack Ryukyuan evidence for it, so we can only reconstruct it for Proto-Japanese, not Proto-Japonic.

3.1. Lexical examples

For the following examples there exists no standard PJ reconstruction, nor do we find straightforward comparative evidence. We can only suppose that they may be instances of PJ *e:

EOJ	::	WOJ	Gloss	Reference
sawesawe	::	sawisawi	onomatopoeia	(M 14.3481)
sake$_2$ku	::	saki$_1$ku	“safely, happily”	(M 20.4368)
sake$_1$ku	::	saki$_1$ku	“safely, happily”	(M 20.4372
ke$_1$nite	::	ki$_1$nite	“having come”	(M 20.4337)

Table 13: EOJ $e_{1/2}$ :: WOJ i_1

The word *utikape*$_2$ (“seam”, M 14.3482) is not attested in WOJ, but we find a form *utikapi*$_1$ in a variant of this poem (3482’), possibly reflecting a post-raising form.

4. CONCLUSION

In this article I have established the correspondences Western Old Japanese i_1 :: Eastern Old Japanese $e_{(1/2)}$ and WOJ u :: EOJ $o_{(1)}$ and given comparative evidence from three independent Japanese dialects (Hachijō, Toshima, Akiyama), also from Ryukyuan, in both the lexicon and the morphology, to support the view that these are cases of retention of Proto-Japonic *e and *o. Based on this, I have proposed several Proto-Japonic reconstructions, most notably the verbal adnominal ending[22] *-o and the adjectival adnominal ending

[22] This reconstruction is for consonant-base verbs only and makes use of only the comparative method.

*-ke. These constitute further evidence for the Proto-Japonic 6 vowels hypothesis. I also suggested an improvement to Thorpe's Proto-Ryukyuan reconstruction and showed that PR distinguished initial *u and *o before *m.

Proto-Japonic *e and *o are best preserved in the morphology of both Eastern Old Japanese and Japanese dialects. Certainly the influence of Western Old Japanese and its successor Middle Japanese, which had lost PJ *e and *o, played a great part in the quasi-total elimination of these vowels in Eastern Old Japanese and peripheral Japanese dialects. Contamination by Western Old Japanese also explains why we find more raised forms than forms having preserved the midvowels. This situation can be interpreted as a typical case of an innovation spreading from a center (WOJ) and failing to affect the dialects located at the periphery or in isolated areas.

Unfortunately, the limitations of the Eastern Old Japanese corpus, along with the fact of contamination by Western Old Japanese, prevent us from grasping the whole details of its special features, both archaic and innovative. We should also bear in mind that Eastern Old Japanese was not a monolithic language, but a group of dialects spoken over a large area. A detailed study of the geographical distribution of these features indeed reveals several distinct areas influenced at different degrees by Western Old Japanese (Hino 2003).

Although Eastern Old Japanese data should be recognized and used as an important source for the study of the history of the Japonic language family, the nature and the size of the corpus hardly make it usable as a primary source. We should always try to find other comparative evidence before taking Eastern Old Japanese at face value. This is the principle which has been applied in the present analysis.

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