Deriving *Mizenkei* in Old Japanese Verbal Morphology

1. Background

In Old Japanese (OJ), an /a/ vowel regularly occurs between particular verbal suffixes (roughly listed in (1), adapted from Frellesvig (2010: 112), where the /a/ in parentheses is no more than a morphophonemic notation and not meant to be a part of the affixes) and quadrigrade verbs (consonant verbs more generally, i.e., verbs whose root ends in a consonant, in most cases having the shape CVC-), but is absent between such suffixes and bigrade/monograde verbs (i.e., verbs with roots ending in a vowel, e.g., CV-, CVCV-; henceforth vowel verbs). As shown in (2a), when the Tentative affix *-m-* attaches to the verb root *ap-* 'to meet', an /a/ vowel must occur in between, whereas in (2b), where *-m-* follows the Causative *-ase-* (which is a vowel verb itself), such an /a/ vowel cannot be present. (3) shows the same pattern with the Negative Tentative *-ⁿzi*.

(1) *-(a)ye-/-(a)re-* Passive; *-(a)simɛ-* Causative; *-(a)s-* Respect; *-(a)ⁿzu/-(a)n-* Negative; *-(a)m-* Tentative; *-(a)ⁿzi* Negative Tentative; *-(a)ᵐba* Conditional; *-(a)na* Optative; *-(a)masi* Subjunctive

(2) a. wotəme-ni taⁿda n-i ap-**a**-m-u
maiden-DAT direct COP-INF meet-**MZK**-TENT-C
'[I] want to meet maidens face to face' (KK 18; adapted from Vovin 2020: 717)

b. kimi-ni kik-ase-Ø-m-u
lord-DAT listen-CAUS-**MZK**-TENT-C
'[I] want to make [my] lord listen [to a cuckoo]' (MYS 18.4067; Vovin 2020: 718)

(3) a. kuyi pa ar-**a**-ⁿzi ⁿzə
regret TOP exist-**MZK**-NEG.TENT FP
'[you] would have no regret' (NK 124; Vovin 2020: 618)

b. wa-ᵑga kaⁿdo suᵑgï-Ø-ⁿzi
I-POSS gate pass-**MZK**-NEG.TENT
'[the cuckoo] probably would not pass my gate' (MYS 20.4463; Vovin 2020: 619)

In traditional grammar, the /a/ vowel is analyzed as a part of a derived stem of the verb, i.e., the *Mizenkei*, literally meaning 'irrealis'. The stem is formally the same as the root of vowel verbs (*akɛ-* > *akɛ-Ø-* 'to open'), and is the root of consonant verbs *plus* the /a/ vowel (*kak-* > *kak-a-* 'to write'). However, it is obvious that the suffixes in (1) do not constitute a natural class and accordingly, the term *Mizenkei* 'irrealis' is no doubt a misnomer. Such a solution is also not easy to be translated into modern morphological theory, making an alternative analysis desirable.

This study provides a new morphosyntactic account of the distribution of the /a/ vowel. We argue that *-a-* is a functional head in OJ. It is inserted at PF with its distribution in principle conditioned by morphosyntactic, rather than phonological or morphophonological, rules. We first discuss and exclude previous proposals (as well as some other logically possible analyses that are not explicitly discussed in the literature) respectively, and then present our proposal in section 3.

2. Previous and some other potential analyses

We already have argued that the traditional *Mizenkei* account is not satisfactory (simply renaming it the '*a*-stem' certainly makes no essential difference). We further suggest that **(I)** one cannot simply treat the /a/ vowel as a part of the suffixes in (1), which is deleted to avoid hiatus (OJ generally does not allow VV sequences) when they attach to the root of a vowel verb, since as Frellesvig (2010: 112) points out, applying regular hiatus breaking rules in OJ would derive incorrect forms. It will also be shown that an ad hoc morphophonological rule that arbitrarily deletes the /a/ vowel in derivation is not applicable. Besides, there are some true vowel-initial suffixes in OJ that behave dissimilarly to those in (1). **(II)** The /a/ vowel is clearly not a part of the root of the verb, since it can be shown from the full paradigm that the behavior of /a/ is totally different from the final vowels (/ɛ/ or /ï/)) in

canonical vowel verbs. **(III)** We will also show that there is no tenable evidence to consider /a/ an epenthetic vowel in OJ. **(IV)** It is economically undesirable to claim that all such affixes in (1) simply have (at least) two allomorphs (as in Vovin 2020); that they appear to follow a parallel pattern certainly demands an explanation. **(V)** It is not enough to resort to the idea of conjugation classes, i.e., stating that consonant verbs select /a/ for *Mizenkei* and /i/ for the *Ren'youkei* (i.e., infinitive), while vowel verbs select /ɛ/ or /ï/ for both forms (illustrated in (4)), since it will become evident that those final vowels behave quite differently, and must be treated in different ways.

(4) a. consonant verbs: i. Ø => *-i-* /Root$^{C}{}_{+INF}$ [_] ii. Ø => *-a-* /Root^{C} [_]
b. vowel verbs (*ɛ*-type): i. Ø => *-ɛ-* /Root$^{V1}{}_{+INF}$ [_] ii. Ø => *-ɛ-* /Root^{V1} [_]
c. vowel verbs (*ï*-type): i. Ø => *-ï-* /Root$^{V2}{}_{+INF}$ [_] ii. Ø => *-ï-* /Root^{V2} [_]

3. A new proposal

We propose that *-a-* is an independent morpheme located at *v*° in OJ. The differences between vowel verbs and consonant verbs lie not only in their phonological shapes, but also in their different abilities/timings with regard to head movement. Note that synchronically the two phenomena have no logical relations, but are just a diachronic coincidence (see Whitman (2008) who convincingly argues that the final vowels of vowel verbs have a lexical origin). To be specific, we argue that (only) the roots of vowel verbs move to *v*° in narrow syntax, where the affixes in (1) are attached. On the other hand, consonant verb roots stay in-situ, leaving *v*° unoccupied. However, *v*° must be overtly realized (as a PF condition in OJ), and *-a-* is thus inserted in the yet-to-be-occupied *v*° position, followed by general word-formation processes (to derive the correct surface order) and the merger of higher functional heads in the next phase (assuming that *v*P is phasal and the derivation is circular). The procedures are illustrated in (5) (omitting some irrelevant details).

(5)

processes			vowel verbs	consonant verbs
current phase	Syntax	Root-*v* merger	[$_{v\text{P}}$ [$_{\text{Root}}$ $\sqrt{AK\mathcal{E}}$]]	[$_{v\text{P}}$ [$_{\text{Root}}$ $\sqrt{KAK}$]]
		syntactical movement	[$_{v\text{P}}$ $\sqrt{AK\mathcal{E}}$ [$_{\text{Root}}$ ~~$\sqrt{AK\mathcal{E}}$~~]]	-
	PF	*a*-support	-	[$_{v\text{P}}$ $\sqrt{A}$ [$_{\text{Root}}$ $\sqrt{KAK}$]]
		lexical insertion	[$_{v\text{P}}$ *akɛ-*]	[$_{v\text{P}}$ *-a-* [$_{\text{Root}}$ *kak-*]]
		word-formation	[$_{v\text{P}}$ *akɛ-*]	[$_{v\text{P}}$ *kaka-*]]
next phase			[$_{\text{XP}}$ $\sqrt{}$Aff [$_{v\text{P}}$ *akɛ-*]]	[$_{\text{XP}}$ $\sqrt{}$Aff [$_{v\text{P}}$ *kaka-*]]
			...	...

It is well-known that the behaviors of verb movement are different cross-linguistically, which might affect many other aspects of the grammar. For example, *do*-support is certainly related to the lack of movement of English verbs (contrasted with French verbs), a phenomenon which we argue can be readily compared to our parallel *a*-support proposal. Our study thus suggests that such differences can in fact occur in different parts of the grammar (e.g., *do*-support in TP vs. *a*-support in *v*P) and also within a single language (e.g., vowel verbs vs. consonant verbs in OJ).

Selected References: Frellesvig, B. 2010. *A History of the Japanese Language*. Cambridge University Press. -- Vovin, A. 2020. *A Descriptive and Comparative Grammar of Western Old Japanese: Revised, Updated and Enlarged 2nd Edition*. Brill. -- Whitman, J. 2008. The source of the bigrade conjugation and stem shape in pre-Old Japanese. In Bjarke Frellesvig & John Whitman & (eds.), *Proto-Japanese: Issues and Prospects*: 159–173. John Benjamins.