A further remark on Hittite i̯e/a-verbs

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1. Introduction

In the 2022 and 2023 ECIEC's I presented papers on the history of Hittite *i̯e/a*-verbs in *-i̯ae-* or *-i̯ai-*, and it was argued that Hittite verbs in *-i̯ae-* (*-i̯ai-*) are neither direct borrowings from Luvian as Oettinger (1979) suggested nor due to a graphic innovation as Kümmel (2019) suggested. They are reasonably explained by Hittite internal facts. I will make a further remark on this problem. More specifically, I will discuss the prehistory of the 3 sg. mediopassive in *-i̯āitta* represented by *kar-di-mi-i̯a-IT-ta-at* 'was angry' KUB 48.106, 17 (MH/MS) in a detailed manner.

2. The 3 sg. mediopassive in *-āitta*

(1) Many Hittite denominative verbs in *-āi-/-ā-* reflect $*-éh_2-i̯e/o-$, which is the factitive $*-eh_2-$ extended by the denominative suffix $*-i̯e/o-$. Doublets such as *armaḫḫ-* ($< *-éh_2-$) 'make pregnant, impregnate' vs. *armā(i)-* ($< *-éh_2-i̯e/o-$) 'be(come) pregnant' or *kutruu̯aḫḫ-* ($< *-éh_2-$) 'summon as witness' vs. *kutruu̯ā(i)-* ($< *-éh_2-i̯e/o-$) 'bear witness' undoubtedly speak for the existence of this type; cf. a different view by Oettinger (1979:358) and Kloekhorst (2008:133), both of whom reconstruct $*-o-i̯e/o-$ for this type.

(2) Jasanoff (2022/2023:74) assumes that the complex thematic suffixes were always followed by the *mi*-series of endings $*-m(i)$, $*-s(i)$, $*-t(i)$ in the active and the ending $*-to(r)$ in the 3 sg. mediopassive in the parent language. There are not any instances such as the 3 sg. mediopassive *-i̯a(ri)* and *-ške(ri)* in Hittite. This assumption, following the principle of Occam's razor, is simple and does not seem to present any serious problems. However, the following two problems in (3)-(4) seem to me difficult to understand.

(3) Only a handful traces of *t*-less 3 sg. mediopassives are found in daughter languages as seen in Indic (e.g. *śaye* $< *-o-i$ 'lies', imperfect *aśayat* $< *-o + -t$, *duhe* 'milks', imperfect *aduhat*) and Old Irish (passive absolute *berair* 'is carried', conjunct *-berar*), whereas the older $*-o$ was completely ousted by the modernized $*-to$ in Greek, Latin, and Germanic. However, a significant number of mediopassives still belong to the *a*-class in Hittite as represented by *eša* 'sits', *kiša* 'becomes', etc. Cuneiform Luvian and Lycian also have *t*-less *zii̯ar(i)* 'lies' and

sijẽni (*sijeni*), respectively. The locus from which **-t* spread is the corresponding 3 sg. active **-t(i)*. If the complex thematic suffixes had always been equipped with the *mi*-series of endings in Proto-Indo-European (**-i̯e-t(i)*, **-sk̂e-t(i)*, **-eh₂-i̯e-t(i)*, **-i̯e-to(r)*, **-sk̂e-to(r)*, **-eh₂-i̯e-to(r)*), there would have been abundant loci from which *-t-* spread later. It would be naturally difficult to understand why Hittite had the still productive *a*-class mediopassive, because the period in which Neo-Hittite manuscripts were recorded is not so distant from composition of Rig Veda.

(4) The phonologically regular outcome of the supposed PIE 3 sg. mediopassive **-éh₂-i̯e-to* in Hittite is not *-ātta*, but *-āitta*, as illustrated by the contrast between 3 sg. *-āizzi < *-éh₂-i̯e-ti*, *-āit < *-éh₂-i̯e-t* and 1 sg. *-āmi < *-éh₂-i̯e-mi*, *-ānun < *-éh₂-i̯e-n + m̥*. The synchronic alternation of the suffixes *-ā-* (as seen in the 1 sg.) and *-āi-* (as seen in the 3 sg.) is accounted for by the phonological rule that changes PA **e* to *a* in Hittite in post-tonic open syllables before sonorants. The 1 sg. **-éh₂-i̯e-mi* (pres.) and **-éh₂-i̯e-n + m̥* (pret.) became **- á-i̯a-mi* and **-á-i̯a-nun* by the above-mentioned phonological rule and compensatory lengthening caused by loss of **h₂*, which later contracted to *-āmi* and *-ānun* after the loss of intervocalic yod. (There is not any compelling evidence for reconstructing the thematic vowel **-o-* in pre-Hittite or further back in Proto-Anatolian; cf. Yoshida 2014.) On the other hand, the relevant phonological rule did not apply to the 3 sg. **-éh₂-i̯e-ti* (pres.) as well as **-éh₂-i̯e-t* (pret.) because the ending did not begin in a sonorant. This is a historical account for the distribution of *-ā-* and *-āi-*.

(5) The above phonological rule is well established; e.g. *pé-eš-ši-i̯a-mi* KBo 17.3 iv 18 (OS) 'I throw', *pé-eš-ši-i̯a-u-e-ni* KUB 35.164 obv. 6 (OS) 'we throw' in contrast to *pé-eš-ši-ez-zi* (OS), *pé-eš-ši-i-e-ez-zi* (OS), *ú-e-mi-i̯a-u-en* KBo 22.2 obv. 14 (OS) 'we found' in contrast to *ú-e-mi-ez-zi* (OS), *ú-e-mi-zi* with single *-z-* (OS), *ú-e-mi-et* (OS), *ḫu-la-a-li-i̯a-mi* KBo 17.1 iii 22 (OS) and 17.6 iii 14 (OS) 'I entwine' in contrast to *ḫu-la-a-li-e-z[i]* with single *-z-* (OS), *ḫu-la-a-li-ez-zi* (OS); cf. *ḫulāli-* 'distaff'. It also works with 1 pl. and 2 pl. active present endings, *-u̯ani* (*ak-ku-uš-ke-e-u̯a-ni* 'we drink repeatedly' KUB 36.110 Rs. 7 OS) and *-tani* (*ak-ku-uš-ke-ta-ni* VBoT 58.1, 18 OH/NS), the oblique stem of *u*-stem adjectives such as *āššau̯aš* (*< *h₁és-eu̯-os*) 'good' and the oblique stem of *i*-stem adjectives such as *šallai̯aš* (*< *sélH-ei̯-os*) 'great, large'.

(6) It is, however, not the case that 3 sg. mediopassives in *-āitta* are unattested. In fact, forms in *-āitta* are more frequently recorded than those in *-ātta*. The following list in (7) includes the mediopassive forms of the *-āi-/-ā-* class. The mediopassives in *-ā-* outside the 3 pl. are marked in boldface for the sake of clarity; cf. 3 pl. *-anta < *-ento*, cf. Melchert 1994:134.

(7) *ḫandāi-* 'to arrange, to prepare'
   pres. 3 sg. **ḫandātar[i]**, **[ḫa]ndāttari**, *[ḫa]ndāitta*, *ḫand[āi]tta*, *ḫandāitta*, *ḫandaitta*, *ḫandāittari*, *ḫandaittari*, *ḫandaittāri*, etc. (many attestations)

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pres. 3 pl. *ḫandanda*, *ḫandantari*, *ḫandāntari*

pret. 2 sg. *ḫandāittat*

pret. 3 sg. **ḫandāta[t]**, **ḫandātt[at]**, *ḫandāittat*, *ḫantāittat* (many attestations)

pret. 3 pl. *ḫandantati*, *ḫantantat*, *ḫandantati*, *ḫandantat*

igai-/egai- 'to cool down'

pres. 3 sg. *igaitta*, *igaetta*

irḫāi- 'to make rounds'

pres. 3 sg. *irḫaitta*, *irḫāitta(ri)*, *irḫaitta(ri)*, etc.

pret. 3 sg. *irḫaittat*

išḫaḫruᵤai- 'to weep'

pret. 3 sg. **išḫaḫruᵤattat**

luluᵤāi- 'to support, to thrive'

pres. 3 sg. *luluᵤaitta*, etc.

munnāi- 'to hide'

pres. 3 sg. **munnattari**, *munnaittari*, etc.

pret. 3 sg. *munnaitta*

pašiḫai- 'to rub, to squeeze'

pres. 3 sg. **pašiḫat[ar]i**

dammešḫāi- 'to oppress'

pret. 3 sg. *dammešḫāittat*, etc.

tuḫḫāi- 'to be short of breath, to grasp for breath'

pres. 3 sg. *tuḫḫaitta*, etc.

(8) We may wonder which are older, mediopassives in *-āitta* or mediopassives in *-ātta*. I argue that mediopassives in *-ā-* are older and mediopassives in *-āi-* are a secondary replacement because the replacement of mediopassives in *-āi-* by those in *-ā-* is totally unmotivated. It should be noted that the corresponding active 3 sg. forms have *-āizzi* in the present and *-āit* in the preterite; cf. Oettinger 1979:358, Kloekhorst 2008:132. On the other hand, replacement in the opposite direction receives a natural explanation. Of particular importance in this respect is that active verbs are predominant over mediopassive verbs in the *-āi-/-ā-* class, as illustrated by the following verbs in (9) that were not treated in the preceding discussion of (7).

(9) *arai-* 'to stop, to rein in': pres. 3 sg. *araizzi*, etc., pret. 3 sg. *arāit*, etc.

arallai- 'to associate, to join': pres. 3 sg. *arālaizzi*, etc.

arkuᵤai- 'to make a plea': pres. 3 sg. *arku[ᵤa]izzi*, etc., pret. 3 sg. *arkuᵤāit*

aruᵤāi- 'to bow': pres. 3 sg. *aruᵤāizzi*, etc., pret. 3 sg. *aruᵤait*, etc.

ḫarpai- 'to heap up': pres. 3 sg. *ḫarpāizzi*, etc.

ḫaruᵤanai- 'to get light, to dawn': pres. 3 sg. *ḫaruᵤanāizzi*, etc.

ḫattaluu̯ai- 'to bolt, to lock': pres. 3 pl. *ḫataluu̯anzi*, pret. 3 pl. *[ḫa]taluu̯aer*

ḫatrai- 'to write': pres. 3 sg. *ḫatrāizzi*, etc., pret. 3 sg. *ḫatrait*, etc.

ištantāi- 'to linger, to be late': pres. 3 sg. *ištantāizzi*, pret. 3 sg. *ištantait*, etc.

iu̯aru̯āi- 'to lend, to give': pret. 3 pl. *iu̯āru̯āir*

kalgalinai- 'to clang, to clash': pres. 3 sg. *kalgalināizzi*, etc.

kartai- 'to cut off': pret. 1 sg. *kartānun*

genzuu̯ai- 'to treat gently': pres. 2 sg. *genzuu̯asi*, etc., pret. 3 sg. *genzuu̯ait*

kutruu̯ai- 'to bear witness': pres. 3 sg. *kūtruu̯āizzi*, etc.

laḫḫii̯āi- 'to go on an expedition': pres. 3 sg. *laḫḫii̯āizzi*, etc., pret. 3 sg. *laḫḫii̯ait*, etc.

lappinai- 'to light': pres. 3 pl. *lappinanzi*

lelai- 'to conciliate, to pacify': pres. 3 pl. *lelanzi*, etc., pret. 3 sg. *lelāit*, etc.

līšai- '?': pres. 3 sg. *lišaizzi*, etc.

malai- 'to approve': pres. 2 sg. *malāši*, etc., pret. 3 sg. *malāit*, etc.

manii̯aḫḫai- 'to be in charge of': imper. 2 pl. *manii̯aḫḫaitten*

markištāi- 'to take someone by surprise (?)': pres. 3 sg. *markišdāizzi*, etc.

mitai- 'to tie with red wool (?)': pres. 3 sg. *mitaizzi*, etc.

mugai- 'to moan, to ask': pres. 3 sg. *mugāizzi*, etc., pret. 3 sg. *mūgait*, etc.

mūtai- 'to root, to dig in, to remove': pres. 3 sg. *m[ut]āizzi*, etc.

palu̯ai- 'to cry out': pres. 3 sg. *palu̯āizzi*, etc.

paršanai- 'to crouch': pres. 3 sg. *parašnāizzi*, etc.

pii̯anai- 'to reward (someone)': pres. 3 sg. *pii̯anāizzi*, etc., pret. 3 sg. *pii̯anait*

piddai- 'to bring, to render': pres. *piddāizzi*, etc., pret. 3 pl. *piddāer*, etc.

pittalai- 'to abandon, to discard': pres. 2 sg. *piddalaši*, etc., pret. 3 sg. *piddalait*

pūu̯ai- 'to pound, to grind': pres. 3 sg. *pūu̯aizzi*, etc.

šaḫešnai- 'to fortify': pret. 3 sg. BÀD-*ešnait*, etc.

šāktai- 'to tend to (medically)': pres. 3 sg. *šāktāizzi*, etc.

šalu̯ai- 'to penetrate (?), to stick (?)': pres. 3 sg. *šalu̯āizzi*, pret. 3 sg. *[šalu̯]āit*

šarlai- 'to exalt, to praise': pres. 1 sg. *šarlāmi*, 3 sg. *šarlāizzi*, etc., pret. 3 sg. *šarlāit*, etc.

šaruu̯ai- 'to plunder': pret. 3 sg. *šarruu̯ait*, etc.

šau̯itištai- 'to wean': pres. 3 sg. *šau̯itištaizzi*

šutāi- '?': pres. 3 sg. *šutāizzi*

takšulai- 'to agree, to be friendly': pres. 3 sg. *takšulāizzi*, etc., pret. 3 sg. *takšulāit*

tarmai- 'to nail, to hammer': pres. 3 sg. *tarmāizzi*, etc., pret. 3 sg. *parmāit*, etc.

duḫušii̯ai- 'to await': pret. 3 sg. *duḫušii̯ait*, etc.

u̯antai- 'to glow, to light': pret. 3 sg. *u̯antait*

u̯arrai- 'to come to help': pres. 3 sg. *u̯arrāizzi*, pret. 3 sg. *u̯arrait*

u̯edai- 'to bring hither': pres. 3 sg. *u̯idāizzi*, etc., pret. 3 sg. *u̯idāit*, etc.

zaḫḫurai- 'to break, to crush': imper. 3 sg. *zaḫḫuraiddu*, etc.

(10) There are forty-four verbs in the above list, where a representative sample of the attested active forms are shown. It should be noted that none of the verbs have mediopassive forms. It is therefore arguable that the older 3 sg. mediopassives in *-ātta* were largely replaced by those in *-āitta* under influence from the corresponding active 3 sg. forms in *-āizzi* and in *-āit*. In fact, the mediopassives in *-āitta* shown in (7) have their active counterparts without exception as illustrated in (11).

(11) *ḫandāitta*: pres. 3 sg. *ḫantāizzi*, etc., pret. 3 sg. *ḫandāit*, etc.
    igaitta: pret. 3 sg. *igait*
    irḫaitta: pres. 3 sg. *irḫāizzi*, *irḫaizzi*, etc.
    luluu̯aitta: pres. 2 sg. *luluu̯aiši*, pret. 3 sg. *luluu̯āit*
    munnaittari: pres. 3 sg. *munnāizzi*, etc. pret. 3 sg. *munnāit*, etc.
    dammešḫāittat: pres. 3 sg. *dammišḫāizzi*, *dammešḫaizzi*, etc., pret. 3 sg. *dammeišḫāit*, etc.
    tuḫḫaitta: pres. 3 sg. *tuḫḫāizzi*, pret. 3 sg. *tuḫḫāit*, etc.

(12) pres. 3 sg. *ḫandātar[i]* KBo 15.33 iii 23 (OH/MS), *[ḫa]ndāttari* KBo 17.78 i 10 (?/MS, fragment, CTH 652), pret. 3 sg. *ḫandāta[t]* KBo 15.33 iii 23 (OH/MS), *ḫandātt[at]* KBo 8.69, 14 (OH/NS); cf. *[ḫa]ndāitta* KBo 20.14 + KBo 25.33 obv. 9' (OS), *ḫand[āi]tta* KBo 20.14 + KBo 25.33 obv. 13' (OS)

    Most of the forms are attested in relatively old manuscripts and their texts are mostly Old Hittite. However, there are two examples of *ḫandāitta* with *-āi-* attested already in Old Hittite manuscripts (OS). This means that the morphological pressure from the active 3 sg. *ḫantāizzi* and *ḫandāit* started to work at an early date.

    pres. 3 sg. *munnattari* VBoT 24 ii 17 (pre-NH/NS according to *CHD*)
    pres. 3 sg. *pašiḫat[ar]i* VBoT 120 ii 25 (MH/NS)
    pret. 3 sg. *išḫaḫru̯attat* KUB 1.16 ii 6 (NH)

(13) imper. 2 sg. *ḫandaḫḫut* KUB 17.10 ii 32 (OH/MS), imper. 3 sg. *[SIxSÁ-at]taru* KUB 14.11 i 24 (NH)
    imper. 3 sg. *egattaru* KUB 7.58 i 8 (MH/NS), *egaddaru* KUB 45.20 i 23 (MH/NS), *igattaru* KUB 7.58 i 12 (MH/NS)
    These imperatives are considered to be resistant to morphological pressure from their indicative counterparts because analogical influence from indicatives to imperatives is indirect. That the imperative preserves archaic features is also illustrated by the fact that some *ta*-class mediopassives still retain their old character as *a*-class in their imperative forms as seen in e.g. pres. 3 sg. *ḫapdari* 'joins' in contrast to imperative 3 sg. *ḫapparu*, which shows *-a*, not *-ta* (cf. Yoshida 2019).

(14) The above discussion naturally leads us to assume that the 3 sg. mediopassive verbs with complex thematic suffixes, at least those with *-éh₂-i̯e-, were not followed by *-to, but by the original ending *-o, i.e. *-éh₂-i̯e-o. Vowel contraction would be expected between the suffix -i̯e- and the ending -o. A long ō would probably result from the sequence of *e* and *o,* as in Attic Greek γένους 'of a kind' in contrast to Homeric γένεος. However, this long ō could become shortened under influence from the short -o in the root class.

(15) Proto-Anatolian   *-eh₂-i̯o*

  -Ø → *-to*   *-eh₂-i̯o-to* (ḫalzii̯a 'calls' → ḫalzii̯atari; cf. Watkins 1969:87)

  compensatory lengthening   *-ā-i̯o-to*

  *o > *a   *-ā-i̯a-ta*

  loss of i̯ and contraction   *-āta*

  influence from the active   *-āta ~ *-āita*

  Old Hittite   -ātta ~ -āitta

(16) The 3 sg. mediopassive verbs with the complex thematic *-éh₂-i̯e-* probably came to be followed by *-to in the extra-Anatolian branches at the stage after Anatolian had split off and the rest of the branches were still a unity.

Based on the form in -āitta thus created, the 3 sg. mediopassive verbs in -i̯āitta was analogically introduced in and after the Middle Hittite stage.

3. The overall history of Hittite i̯e/a-verbs

(17) There is no positive evidence for positing *-i̯o- with the *o*-timbre in the verbs in -i̯e/a- at the pre-Hittite stage. The 3 pl. endings, -anzi and -anta, are regularly derived from *-enti and *-ento by a Proto-Anatolian phonological rule that changes *en to *an before a dental. The suffix -i̯a- in OS examples referred to in (5), i.e. pé-eš-ši-i̯a-mi, pé-eš-ši-i̯a-u-e-ni, ú-e-mi-i̯a-u-en, and ḫu-la-a-li-i̯a-mi, is explained by the rule mentioned above that changes PA *e to *a in Hittite in post-tonic open syllables before sonorants. Likewise, the *a*-vocalism in the 3 pl. preterite ending -ar, i.e. u̯emii̯ar 'they found' (< *au-h₁ém-i̯e-r) KUB 17.10 i 37, ḫānii̯ar 'they drew' Bo 6472, 12, and šapašii̯ar 'they scouted' (< *spéʰ-i̯e/o-r) Maşat-Höyük Brief 6, Rs. 22, is phonologically explained by a rule which changed posttonic *´-er to -ar in Hittite (Yoshida 2021).

(18) However, the morphological replacement of -i̯e- by -i̯a- not observed in Old Hittite started after the Old Hittite period, so that -i̯a- drastically increased in Middle Hittite. The spread of -i̯a- is explained not by a sound change, but by analogy from the 3 pl. -i̯anzi and -i̯anta.

(19) In and after Middle Hittite, the sequence in -i̯ae- or -i̯ai- is observed. These are not direct borrowings from Luvian (Oettinger 1979) nor due to a graphic innovation (Kümmel 2019). The verbs in -i̯ae- (-i̯ai-) are reasonably explained by Hittite internal facts. The distribution of the forms in -i̯ae- (or -i̯ai-) is restricted to the 3 sg. present, 3 sg. preterite and 3 pl. preterite together with a small number in the 2 sg. imperative. There is no doubt that these are secondary creations. The 3 pl. preterites which exhibit -i̯aer with *a*-timbre, e.g. *da-i̯a-er* 'they stole' HKM 36 Vo 46 (MH/MS), *a-ni-i̯a-er* 'they carried out' KBo 12.13 iii 10 (OH/NS), *a-ri-i̯a-er* 'they determined by oracle' KBo 4.6 Ro 26 (NH), were first introduced in Middle Hittite, when -i̯a- replaced older -i̯e- to a large degree. The creation of the 3 pl. preterite in -i̯aer is closely related to the spread of -i̯a-. Scribes who wrote forms in -i̯aer must have perceived the synchronic stem as ending in -i̯a, to which the canonical 3 pl. ending -er was attached.

(20) It is significant that verbs of the *i̯e/a*-class and of the -āi-/-ā- class came to share the same sequence in -āe- in the 3 pl. preterite and that the -i̯e/a- class has the sequence -i̯āi- or -i̯āe- in the same positions of the paradigm where -āi- or -āe- of the -āi-/-ā- class is used (3 sg. active present -āizzi, preterite -āit, mediopassive present -āitta, preterite -āittat, 2 sg. active imperative -āi, and the 3 pl. active preterite -āer.). This parallelism between the two productive verbal classes naturally leads us to assume that the sequence -i̯āi- (-i̯āe-) in the -i̯e/a- class is a result of morphological influence from the sequence -āi- (-āe-) in the -āi-/-ā- class. The analogical proportion that created the sequence -i̯āi- is shown below:

$$\text{3 pl. pret. } \textit{-āer} : \textit{-i̯āer} \ :: \ \text{3 sg. pret. } \textit{-āit} : X_1$$
$$:: \ \text{3 sg. pres. } \textit{-āizzi} : X_2$$
$$:: \ \text{3 sg. mediopassive pret. } \textit{-āittat} : X_3$$
$$:: \ \text{3 sg. mediopassive pres. } \textit{-āitta} : X_4$$
$$:: \ \text{2 sg. imper. } \textit{-āi} : X_5$$

$X_1 = $ *-i̯āit*, e.g. *la-aḫ-ḫi-i̯a-IT* KBo 12.33 ii 5 (NH)
$X_2 = $ *-i̯āizzi*, e.g. *la-hi-i̯a-IZ-zi* KUB 5.1 i 1 (NH)
$X_3 = $ *-i̯āittat*, e.g. *kar-di-mi-i̯a-IT-ta-at* KUB 48.106, 17 (MH/MS)
$X_4 = $ *-i̯āitta*, e.g. *ka[r-di-mi-]i̯a-IT-ta* IBoT 1.36 I 49 (MH/MS)
$X_5 = $ *-i̯āi*, e.g. *tar-ku-mi-i̯a-i* KUB 30.10 i 5 (OH/MS)

It is important to note that this proportion only became possible after the 3 pl. preterite -i̯āer was introduced at the Middle Hittite stage. This explains why the sequence -i̯āi- is lacking in Old Hittite verbs.

Kloekhorst (2008:209, 643, 671, 707, 830, 865, 1006 etc.) observes that some *i̯e/a*-verbs have the 3 sg. pres. ending *-i̯aizzi* influenced from the *-āizzi* of the *-āi-/-ā-* class. However, no systematic treatment is given to its creation. Furthermore, he suggests that *tuḫšii̯a-* 'to wait' belongs to the *-āi-/-ā-* class (p. 894). It is not clear to me how the *i̯* of *tuḫšii̯a-* is accounted for.

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