Baltic ê- and î/jâ-stems
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BALTIC *ē*- AND *ī/jā*-STEMS

Eighty years ago, N i c o l a a s   v a n   W ı j k tried to identify Baltic *ē*- and *ī/jā*-stems in the Old Prussian catechisms (1918, 29–32) This resulted in the following classification of the evidence (acc sg forms unmarked)

(1) *ē*-stems

I *semmın*, II *semmıen*, E *semmıen* (8x), *semıen* (2x), *semman*, dat I *semmey*, II *semmıey*, nom E *semmē*, EV *same*, Lith *žeme*, Latv *zeme*

I *muttın*, II *mutıen*, E *mūtıen*, *mutıen*, *mūtın*, nom *mūtı*, EV *mothe*, Lith *mote*, Latv *māte*

I *geıwın*, II *geywıen*, E *gıjwın*, gen *gıjwıs*, nom *gıweı*, Latv *dzīve*

E *perōnıen* (3x), *perōnın* (2x), nom *perōnı*

E *warrıen*, *warrın* (2x), *wareın* (2x), nom Latv *vara*, *vare*

E *peısālın*, nom *peısāleı*

E *teısın* (5x), *teıschın*, gen *teısıs*, nom *teısı*, Lith *teıse*, *tıesa*

(2) possible *ē*-stems

E *sālın*, nom EV *soalıs*, Lith *žole*, Latv *zāle*

II *druwın*, E *drūwıen* (3x), *druwıen* (7x), *nıdruwıen*, nom *druwı*, *druwıs*, I *droffs*

E *dūsın*, *dusın*, *doūsın*, *daūsın* (2x), nom EV *dusı* < Polish *dusza*

E *tıckrōmıen* (2x)

(3) *ı*-stems

I *nactın*, II *naktın*, E *naktın*, *nacktın*, *nacktıen* (2x), nom Lith *naktıs*

E *nautın* (2x), *nautıen*, dat *nauteı*

(4) *ī/jā*-stems

E *mārtın*, *mārtan*, nom Lith *martı*

E *waıspattın* (2x), nom Lith *vıešpatı*

E *maldūnın* (2x)

(5) *ja*-stems

I *rekıan*, II *reykyen*, E *rıkıjan* (31x), *rıckıjan*, gen *rıkıjas* (6x), nom I *rekıs*, *rıckıs*, II *rykyes*, *reykeıs*, E *rıkıjs* (24x), *rıckıjs*, *rıkeıs*

I *tawıschen*, II *tauwyschen*, E *tawıschan* (4x), *tawıschen*, *tawısen*, gen I *tawıschıs* (2x), II *tauwyschıs*, *tauwyschıes*, E *tawıschas* (3x)

(6) possible *ja*-stems

I *naseilen* (2x), II *naseylien* (2x), E *noseilien* (7x), *noseilin* (5x), *nuseilin*, gen I *naseilis*, II *naseylis*, E *noseilis* (2x), *noseilīs*, nom *nosēilis*, *noseilis* (2x)

I *pekollin*, II *pykullien*, E *pickullien* (2x), gen *pikullis*, nom EV *pyculs*

I *geittin* (2x), II *geytien*, E *geitien* (2x), *geitin* (3x), *geitan*, nom *geits*, EV *geytye* (for -*ys*)

I *etwerpsannan, attwerpsannan*, II *etwerpsennian* (2x), E *etwerpsennian* (2x), *etwerpsennien* (7x), *etwerpsennin, etwerpsenninn*, nom *etwerpsnā* (2x), *etwerpsna* (2x)

I *tirtin*, II *tirtien*, E *tīrtian, tīrtin, tīrtan*, dat *tīrtsmu* (3x), nom I *tirts*, II *tirtis*, E *tū ts* (2x)

E *busennien* (2x), *bousennien, bausennien* (5x), nom *bousennis*

E *aucktimmien*

E *nertien* (3x), gen *nierties*

E *pogirrien*, nom Lith *pagyris*

Most acc sg forms in -*in*, -*ien* cannot be identified as belonging to the *i*-, *ja*- or *ē*-stems (v a n W i j k, 1918, 37–39) If we eliminate the less reliable instances, the evidence for the acc sg endings can be summarized as follows

ē-stems I -*in* (3x), II -*ien* (3x), E -*ien* (12x), -*in* (2x)

i-stems I -*in*, II -*in*, E -*in* (4x), -*ien* (3x)

ī/jā-stems E -*in* (5x)

ja-stems I -*ian, -en*, II -*yen, -en*, E -*ijan* (32x), -*an* (4x), -*en* (2x)

On the basis of the evidence I reconstruct for the *ē*-stems */-ien/, for the *i*- and *ī/jā*-stems */-in/, and for the *ja*-stems */-jæn/ (cf K o r t l a n d t, 1998a, 1998b) The ending */-ien/ was written -*in* in the First catechism, was corrected to -*ien* in the Second, and became mixed up with the ending */-in/ in the Enchiridion before the generalization of the ending */-an/ of the *a*-stems Accordingly, the expected acc sg ending is for the *ē*-stems -*ien* (written -*in* in the First catechism), for the *i*- and *ī/jā*-stems -*in* (all sources), and for the *ja*-stems -*(i)an*, -*(i)en* (which may be written -*in* in I and E) This leads me to disagree with v a n W i j k' s identification of the stem formation in the following instances

E nom *teisi*, acc -*in* (6x) is probably an *ī/jā*-stem

EV nom *soalis*, E acc *sālin* is probably a *ja*-stem

I nom *droffs*, II acc *druwin*, E nom *druwis* suggests an *i*-stem, whereas E nom *druwi*, acc -*ien* (11x) points to an *ē*-stem This word will be discussed below

EV nom *dusi*, E acc -*in* (5x) is probably an *ī/jā*-stem

I *naseilen* (2x), II *naseylien* (2x) is definitely a *ja*-stem

I *etwerpsannan, attwerpsannan* may belong either with II *etwerpsennian* (2x), which is a *ja*-stem like E nom *bousennis*, acc -*ien* (8x), or with E nom *etwerpsnā* (2x), *etwerpsna* (2x), which is an *ā*-stem

We now turn to the Elbing Vocabulary In an important but neglected article (1973), Jules L e v i n has identified 137 *ē*-stems (47 of which have an equivalent in Lithuanian)

and 25 *ī/jā*-stems He makes clear that the difference cannot be attributed to phonological variation or dialect mixture but represents a genuine morphological distinction While 35% of the *ē*-stems have East Baltic equivalents, the *ī/jā*-stems have East Baltic cognates which are *jā*-, *ja*- or *ı*-stems While almost a third of the *ē*-stems represent suffixal or prefixal derivations or compounds, derived *ī/jā*-stems are few and semantically detached Levin points out that over 60% of the *ī/jā*-stems belong to three out of eleven semantic groups (landscape and natural phenomena, body parts and diseases, agriculture and related terms), whereas none is found in the group denoting wildlife, which contains 34 *ē*-stems He argues that among the loanwords from Slavic, the *ē*-stems *medınıce, nadele, calene* represent an older stratum than the *ī/jā*-stems *dusı, garkıty, knapıos,* evidently as a result of the rise of new */j/ in Proto-Lekhitic (cf K o r t l a n d t, 1979b, 271) The Prussian *ī/jā*-stems have recently been discussed by K a u k i e n e (1996), who unfortunately disregards most of the scholarly literature

The morphological distinction between *ē*- and *ī/jā*-stems is found not only in Prussian, but also in Lithuanian, where the latter type is preserved in *martı*, gen *marčıos*, and *patı*, gen *pačıos* We may therefore look for correspondences in Slavic and other Indo-European languages The classic study on the subject is by Holger P e d e r s e n (1926) In his discussion of the Lithuanian *ē*-stems, Pedersen distinguishes between the following types

(1) *žvake, mente, gıre,* Latin *facēs,* Vedic *mánthās, girís,* Slavic *gora* These are *eH₁*-stems

(2) *arklıde, avıde, alude, pelude,* also *žvaıgžde,* Prussian EV *umnode,* Slavic *zvězda,* Vedic *-dhā̆,* Latin *-dēs* These are compounds of the root *dheH₁- 'put'

(3) *šlove,* Slavic *slava,* Latin *cluēre,* which may also be an *eH₁*-stem

(4) *gerve,* Latin *grūs,* which may be an *uH₁*-stem

(5) *žeme,* Slavic *zemlja,* which is an extension of a root noun, like *upe, saule, muse, pele*
Besides, there are two types which represent Proto-Indo-European *ıH*-stems

(6) *vılke, nepte,* Vedic *vrkís, naptís* This type is usually represented by Slavic *-ıca* (cf L o h m a n n, 1932, 21, 24)

(7) *deıve,* Vedic *deví* This type can easily have replaced the flexion of *martı* and *patı* on the analogy of the preceding type

It thus appears that the *ē*-stems represent original hysterodynamic *eH₁*- and *ıH*-stems (with accentual mobility between the stem and the ending), whereas the *ī/jā*-stems directly continue proterodynamic *ıH₂*-stems (with accentual mobility between the root and the suffix), cf Vedic *vrkís,* gen *vrkıàs* < **-ıHos,* versus *deví,* gen *devyā̆s* < **-ıeH₂s* The two types of *ıH*-flexion are attested in Slavic, e g in *sǫdı, sǫdıı,* gen *sǫdıję* 'judge' and *mlьnı, mlьnıı,* gen *mlьnıję* 'lightning' versus *bogynjı,* gen *bogynję* 'goddess' (cf especially L o h m a n n, 1932, 60–62) It has long been recognized that as a rule the former type is found in derivations from *o*-stems and the latter type in derivations from consonant stems (e g L o h m a n n,1932, 22, 67) This explains the ending of Prussian EV *sansy* as op-

posed to the 34 $\bar{e}$-stems denoting wildlife, including 19 species of wild birds, which correspond to the regular type of Lith. *vilkė*, cf. *žąsis*, gen. pl. *žasų*, versus *vilkas*.

The distinction between hysterodynamic and proterodynamic *iH*-stems has a perfect analogue in the distinction between hysterodynamic and proterodynamic *uH*-stems. P e d e r s e n reconstructs a proterodynamic paradigm *plēdhū*, gen. *plēdhuēs < *-ueH₁s* for Latin *plēbēs* and Greek *plēthūs*, and similarly for Lith. *gervė* and Latin *grūs* (1926, 63, 71). There is no reason to reconstruct an original hysterodynamic paradigm on the basis of Greek gen. *plēthúos* (thus B e e k e s, 1985, 39 and S c h r i j v e r, 1991, 380f.) because the latter can easily be analogical. Note that Latin *-b-* represents intervocalic **-dhw-*, not intervocalic **-dh-* (as in *vidua* 'widow'), and cannot therefore be derived from **-dhuH-*. Similarly, I reconstruct a proterodynamic paradigm for Avestan *hizū-*, *hizvā-*, Vedic *juhū-*, *jihvā-*, Prussian EV *insuwis*, in spite of Gāthic gen. *hizvō < *-uHos*, which can easily have arisen on the basis of the original accusative **-uHm*, cf. Gāthic acc. *tanvə̄m*, which is trisyllabic like gen. *tanvō < *-uHos*. The motivation for the restoration of the laryngeal in the oblique cases of the Avestan word for 'tongue' was probably the phonetic development of **-zv-* to **-zb-* in Iranian, which gave rise to a paradigm **hizū*, **hizu'am*, **hizbā-*, with an oblique stem which is preserved in later Iranian languages. In the Rgveda we find acc. *juhuàm* beside *jihvā́m*, inst. *juhuà* beside *jihvā́* and *jihváyā*, gen. and abl. *jihváyās*, nom. pl. *juhuàs* beside *jihvā́s*, inst. pl. *juhū́bhis* beside *jihvā́bhis*, and the compound *juhu-àsyas* beside nom. sg. *jihvā́*. This points to a paradigm **juhū*, **juhu'am*, obl. *jihvā-*, in accordance with the Iranian forms. Note that Vedic acc. *devī́m* must be analogical in view of the root aorist 1st sg. *ábhuvam < *-uHm*, with vocalization of the final nasal, as opposed to monosyllabic *-ām < *-eHm*, with compensatory lengthening of the vowel.

The flexion of the hysterodynamic *uH*-stems is best preserved in Slavic *svekry*, gen. *svekrъve* 'mother-in-law'. Jan R o z w a d o w s k i has shown that the original accusative is *svekrovь < *-euHm*, not *-ъvь* (1914, 14–18). This must be a highly archaic form because there is no model for an analogical origin. The elimination of the isolated full grade suffix in other Indo-European languages is a trivial development. The antiquity of the Slavic paradigm is corroborated by the regular loc. sg. and nom. acc. pl. endings *-i*, which are identical with the *i*-stem endings and differ from the endings of both the *ā*-stems and the consonant stems. This is especially remarkable because we find the *ā*-stem endings in the dat., inst. and loc. pl. forms. I conclude that we have to reconstruct loc. sg. **-euHi*, nom. pl. **-euHes*, acc. pl. **-euHns*, which yielded the attested loc. sg. and acc. pl. endings. The nom. pl. form adopted the acc. pl. ending, as happened with all feminine nouns in Slavic. The early introduction of the *ā*-stem endings in the oblique plural cases suggests the previous existence of **-H₂es* in the nom. pl. ending. Thus, everything seems to point to an original hysterodynamic paradigm **suekruH₂s*, **-euH₂m*, **-uH₂os*, as opposed to proterodynamic **pleH₁dhuH₁*, **-ueH₁s*, and comparable with e. g. the *nt*-participle **H₁eints*, **H₁ientm*, **H₁intos* (cf. Beekes 1985, 70).

The Latin material has been discussed in detail by Peter S c h r i j v e r (1991, 363–390). He argues that hysterodynamic *ē*-stems like *vātēs* joined the third declension whereas root nouns such as *spēs* became the core of the fifth declension. Furthermore, he tentatively distinguishes between four types of *iH*-stems:

(1) proterodynamic *iH₂*-stems, which are reflected in the formations of *genetrīx, rēgīna, avia*, and denominal abstracts like *mīlitia*.

(2) proterodynamic *iH₁*-stems, which are reflected in deverbal abstracts of the fifth declension such as *aciēs*.

(3) hysterodynamic *iH₂*-stems, which are reflected in denominal abstracts and collectives like *māteriēs*, gen. *māteriae*.

(4) hysterodynamic *iH₁*-stems, in particular *neptis*, which may be compared with *socrus*.

In order to explain the *iē/iā*-flexion of *māteriēs*, Schrijver assumes that original *-iH₂m* yielded Latin *-iem* which then served as a basis for the creation of a nominative in *-iēs*. This is highly improbable in view of the subjunctive ending 1st sg. *-im* < *-īm* < *-iH₁m*. It follows that the flexion of the types represented by *mīlitia* and *aciēs* is based entirely on the proterodynamic oblique cases. The *iē/iā*-flexion of *māteriēs*, gen. dat. *-iae* now offers independent evidence for the reconstruction of an accusative in *-eiH₂m*, the phonetic reflex of which was *-ēm*, cf. *trēs* < *treies*, in agreement with the Slavic evidence for hysterodynamic *-euHm*. Note that Slavic antevocalic *-ei*- yielded *-ij*-, e. g. in *trije* < *treies*, so that the full grade suffix was lost phonetically in the hysterodynamic *iH*-flexion.

S c h r i j v e r ' s evidence for reconstructing *-H₁*- instead of *-H₂*- in *neptis* and *socrus* is delicate, as he points out himself (1991, 365). Moreover, it seems to be contradicted by the *ā*-stem endings in the Slavic oblique plural cases of *svekry*. If the suffix was *-uH₁*-, we would expect *i*-stem endings here. However, it must be recalled that Baltic *ē*-stems are usually reflected as *ā*-stems in Slavic, e. g. *zvězda* 'star'. I therefore see no cogent objection to the view that the Slavic evidence for the color of the laryngeal can be disregarded. Note that we have *-H₂*- in Old Polish *kry* 'blood', cf. Greek *kréas*. Besides, I find it very difficult to see how Latin *neptis* and *socrus* could avoid becoming *ā*-stems if they had an *a*-coloring laryngeal. I therefore subscribe to S c h r i j v e r ' s view that these two nouns represent hysterodynamic *iH₁*- and *uH₁*-stems.

The reconstruction of a hysterodynamic accusative in *-euHm* provides an elegant solution for the coexistence of *vidhū*- and *vidhevā*- in the word for 'widow', Prussian *widdewū* (cf. B e e k e s, 1992, 184). This word evidently represents the hysterodynamic *uH₂*-stems and thereby supports the reconstruction of *-H₁*- in the word for 'mother-in-law'. The preservation of the front vowel in the medial syllable of Prussian *widdewū*, as opposed to the regular development of heterosyllabic *-eu*- in Slavic *vъdova* (cf. K o r t l a n d t, 1979a, 57), suggests that *-eu*- spread to the nominative at an early stage and that we have to reconstruct a Balto-Slavic nom. sg. form *videuH*.

Now we return to the Prussian material The reconstruction of acc sg *-eiHm for the hysterodynamic iH-flexion offers a straightforward explanation for the peculiar accusative *warein* (2x) and the nominatives *giwei* and *pisālei* It appears that there was a paradigm with nom -ei and acc -ein beside the dominant paradigm with nom -ē and acc -ien and the proterodynamic ī/jā-flexion with nom -i and acc -in The type in -ei, -ein evidently represents the original iH_1-stems reflected in the Latin deverbal abstracts like *aciēs* Interestingly, Slavic *neti, netii*, Old Polish *niec*, Czech *net'*, gen *neteře*, Slovak *neter* (but cf Vaillant, 1958, 258) shows that the flexion of this hysterodynamic iH_1-stem remained distinct from the flexion of the proterodynamic iH_1-stems even if the latter adopted the acc sg ending *-eiHm* in Prussian It follows that all of the reconstructed types must have existed side by side in Balto-Slavic The proterodynamic iH_1-stems can now be identified with the Slavic type *volja* 'will' (cf S t a n g, 1957, 57) The corresponding type of proterodynamic uH_1-stems is reflected in *klętva* 'oath' It appears that the proterodynamic iH_1-stems joined the proterodynamic iH_2-stems in Lithuanian, e g *valia*, gen *valios*, cf also Latvian *vara* beside *vare* In Slavic, the hysterodynamic type *sǫdi(i)* may include original iH_1- as well as iH_2-stems while denominal nouns like *koža* 'skin', which belong to the same type as *volja*, may represent earlier proterodynamic iH_2-stems Note that from a semantic point of view Vedic *rathī́s* 'charioteer', like the Slavic word for 'judge', fits Latin *vātēs* better than *māteriēs* and may therefore contain *-iH_1- whereas *-iH_2- is probable for feminines such as Slavic *mlъ̃ni(i)*, Prussian EV *mealde* This leads us to the following tentative classification of the Balto-Slavic material (Prussian unmarked)

(1) hysterodynamic eH_1-stems and original root nouns *umnode*, Lith *gire, žvaigžde*, Russ *gora, zvezda*

(2) hysterodynamic uH_1-stems and original root nouns Lith *šlove*, Russ *slava, svekrov'*

(3) hysterodynamic uH_2-stems and original root nouns *widdewū*, Russ *vdova, krov'*

(4) proterodynamic uH_1-stems *gerwe*, Lith *gerve*, Czech *žeráv*, Russ *kljatva*

(5) proterodynamic uH_2-stems *insuwis*, Lith *liežuvis*, Russ *jazyk*

(6) hysterodynamic iH_1-stems Lith *nepte*, Russ *sud'ja*

(7) hysterodynamic iH_2-stems *mealde*, Lith *vilke*, Russ *molnija, volčica*

(8) proterodynamic iH_1-stems *giwei*, Lith *valia*, Russ *volja*

(9) proterodynamic iH_2-stems *sansy*, Lith *pati*, Russ *boginja, koža*

Most important is that in Prussian, unlike East Baltic and Slavic, the proterodynamic iH_1-stems adopted the flexion of the hysterodynamic iH_1-stems and thereby remained distinct from the proterodynamic iH_2-stems This points to an early split Also noteworthy is that in Slavic the H_1-stems were evidently redistributed according to animacy and gender Russian *gora, zvezda, slava, kljatva, volja* versus *sud'ja* versus *svekrov'*, Czech *net', žeráv*, similarly in the Slavic proterodynamic iH_2-stems *koža* versus *bogynji* The ā-stem flexion of the type *sǫdi(i)* is therefore remarkable and must probably be attributed to a compara-

tively recent phonetic development This supports the reconstruction of *-*ıH₁* ın *sǫdı(ı)* versus *-*ıH₂* ın *mlõnı(ı)*

Apart from the *ıH₁*-stems, which remained a distinct category ın Prussian but joined the corresponding *ıH₂*-stems elsewhere, ıt appears that the West and East Baltic reflexes are usually ın agreement We often find a neuter ın -*ȷan* beside a collective ın -*ē* or -*ȷā*, e g EV *garıan*, E *garrın* 'tree' beside Lıth *gıre, gırıa* 'forest', further I *kraugen*, E *krawıan* beside *krawıa*, EV *crauyo* 'blood', also EV *soalıs*, E *sālın* 'herb' beside Lıth *žole* 'grass' This model can hardly account for I *stas droffs*, corrected ın II *stan druwın*, E *(stas) druwıs* beside *sta druwı*, acc -*ıen* (11x), which points to an original neuter *ı*-stem beside the femınıne *ē*-stem Sımılarly, we find a neuter nom *gıȷwan*, *gıwan*, gen *gīwas* (2x), *geıȷwas*, acc -*an* (9x), beside the femınıne *gıweı*, gen *gıȷwıs*, acc *gıȷwın*, I *geıwın*, II *geywıen* As these deverbal abstracts fit the *ıH₁*-stems semantically, ıt seems probable to me that the neuter *ı*-stem, which could either become masculine or adopt *a*-stem endings, was created on the basıs of the oblıque cases with zero grade suffix *-*ı*- of the femınıne nouns ın -*eı*, acc -*eın* This again confirms the paradıgms of Latin *māterıēs* and Slavıc *svekry* discussed above

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