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PIE *i*-presents, *s*-presents, and their reflexes in Latin

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1. Athematic present stems in Proto-Indo-European regularly show ablaut *e* : *zero*, an alternation which is linked to the accent. In root presents, the full grade can occur in the root or in the ending; in suffixed presents, we mainly find the ablaut alternation between the suffix and the ending. Such ablaut can only rarely be reconstructed directly on the basis of language-internal alternations: the clearest cases are provided by the suffix of the optative, **-ieh₁-* / **-ih₁-*, which has come to characterize a mood, and the infix of the nasal presents – which goes back to an original nasal suffix. Another suffix, which only comparative reconstruction allows us to postulate, is the athematic present suffix **(e)s-*, which is found in a petrified form for instance in Lat. *gerō* beside *agō* (**h₂g-es-* vs. **h₂eg-*), Skt. *śróṣati* < **kleu-s-*, and, with apparent schwebe-ablaut in the root, Gr. ἄέξω, Av. *vaxš-* from the root **h₂ueg-*. Pedersen (1921: 26) already posited a PIE *s*-present of the shape **CC-és-ti*, **CC-s-énti*. Since this suffix proceeded to yield the *s*-future of, for instance, Greek, Italo-Celtic and Baltic-Slavic, while its injunctive lies at the basis of the *s*-aorist in many languages, it seems likely that it conveyed the semantics of accomplishment or perfectivity to the verb.

2. It was noticed long ago that Balto-Slavic combines *i*-presents with *ē*-preterites/aorists, the best known example being Lithuanian *miniù*, *minì* versus infinitive *minėti*, preterite *minėjo* ‘to remember’, Old Church Slavic *мѣнѣти*, *мѣнѣши*, inf. *мѣнѣти*, aor. *мѣнѣхъ* ‘to think’. It is important to note the different ablaut grades in the present suffix: Lithuanian continues PIE **mṇ-i-*, whereas Slavic continues **mṇ-ei-*. Kortlandt (1987, 1989) argues on philological grounds that Old Prussian still shows a

synchronic alternation in some present stems between a sg. suffix *-ei-* and a pl. suffix *-i-*; this would confirm the comparative reconstruction arrived at through East Baltic and Slavic. Kortlandt therefore posits the existence of a PIE athematic present with ablauting *i*-suffix: **-ei-* in the singular, **-i-* in the plural. He also suggests that this might explain the Latin type *capiō*, a view endorsed by Schrijver (1991: 411). The paradigm would have looked as follows:

sg. **CC-éi-mi*, **CC-éi-si*, **CC-éi-ti*
 pl. **CC-i-mé(s)*, **CC-i-th₁é*, **CC-i-énti*.

Traces of this system can be found elsewhere. In Sanskrit, the present *kṣéti*, *kṣiyánti* ‘to dwell’ could be explained from **tk'-éi-ti* vs. **tk'-i-énti* (Kortlandt 1989), which enables us to derive the Indo-Iranian verb from the PIE root **tek-* ‘to build’ in an elegant way. This conclusion has now been canonized in *LIV*, which adds that the PIE “aorist” (in my view, a present) **d^hg^{wh}-ei-* ‘to perish’ is probably a derivative of PIE **d^heg^{wh}-* ‘to burn’.

The same suffix is probably found in the PIE laryngeal-final roots with a so-called root enlargement **-i-*. Some of the best known instances are **d^heh₁-* vs. **d^heh₁-i-* ‘to suck’, **kreh₁-* vs. **kreh₁-i-* ‘to sift’, **peh₂-* vs. **peh₂-i-* ‘to protect’, **peh₃-* vs. **peh₃-i-* ‘to drink’, **seh₁-* vs. **seh₁-i-* ‘to let go’ (cf. Rasmussen 1989: 19–63). If we regard **-i-* as a normal present suffix, these verbs are directly comparable to Skt. *kṣéti*, *kṣiyánti* and BSl. **minei-/mini-*. In fact, this interpretation enables us to explain some roots with an apparent schwebe-ablaut as consisting of root plus suffix: a verb such as **sh₂ei-* ‘to tie’ can now be reinterpreted as **sh₂-éi-*, with a full grade of the suffix. I do not agree with Jasanoff 2003: 91–127, who posits a non-ablauting verbal suffix **-i-* which would have occurred *only* after roots in a final laryngeal. Jasanoff is unable to explain this distribution (p. 115), and leaves the non-Anatolian evidence for *i*-presents undiscussed.

Kloekhorst (2006, 2008: 143–147) has argued that the Hittite *hi*-conjugation verbs of the type *pāi – piyanzi* ‘to give’, *dāi –*

tiyanzi ‘to put’ must be explained on the basis of a suffix ablaut **-ói-* vs. **-i-*. Spelled out, his reconstructions for the two stems mentioned are PIE **h₁p-ói-ei*, **h₁p-i-énti* ‘give’, and **d^hh₁-ói-ei*, **d^hh₁-i-énti* ‘to put’ (Kloekhorst 2006: 116). Altogether, he posits **-oi-/*-i-* ablaut for 24 Hittite *hi*-verbs, and his argumentation seems convincing to me. If his views are substantiated by future research, they provide further evidence for the existence of an athematic, ablauting *i*-suffix. Alexander Lubotsky (fn. 10 in Kloekhorst 2006) has observed that Skt. *sphāya-^{te}* ‘to become fat’, which has hitherto been difficult to explain, could regularly go back to PIE **sph₁-ói-ei*; in any case, its Hittite cognate *išpāi* ‘is satiated’ also belongs to the class of *pāi* – *piyanzi*.

On the basis of the Hittite data, Kortlandt (2010: 378) argues that the suffix **(o)i-* “apparently contributed a sense of directionality”. It remains a point for future research whether this interpretation could apply to the PIE suffix **-ei-/*-i-* in general.

3. If *i*-presents were indeed a separate morphological class of PIE, we will need to reconsider some of our reconstructions. Peter Schrijver (2003) has investigated whether Kortlandt’s hypotheses on PIE **-ei-/*-i-* might also apply to Celtic and Italic. He finds several morphological irregularities which have hitherto been lacking a convincing explanation, and which may now be understood as reflecting a verbal suffix **-ei- / *-i-*. Here is a short summary of the Celtic evidence brought forward by Schrijver (2003: 68–74):

- a. The Old Irish present class BII partly continues an athematic *i*-present: *gaibid*, *-gaib* ‘takes’ < **g^hab^h-i-ti*, (but *maidid*, **-maidi* >> *-maid* ‘breaks’ < **madjeti*), **gainithir* ‘is born’ < **g^hnh₁-i-*. This class has generalized the suffix **-i-*.
- b. Some non-present forms have introduced **-ei-* from the present (where **-i-* was subsequently generalized):
 - Middle Welsh 3s.pret. *-wys*, 3p. *-yssant*, MBret. 3s. *-os* < PCl. **-ē-s-t* < **gab-ei-s-t*

- Welsh pret.impers. -wyt < *gab-ei-to-
- verbal noun W -wyt, MCo. -us, -os, MBret. -oet, Vann. -ouet (Schumacher 2000: 106) < *gab-ei-tu-
- c. The same connection between *i*-presents and *ē*-preterites as in BSl. exists in Italo-Celtic: *g^hab^(h)-i- ‘grab’ (OIr. *gaibid*, U. *hahtu*) vs. *g^hab^(h)-ē- ‘have’ (Lat. *habēre*, U. *habetu*). Within Latin, *iaciō* ‘to throw’ is opposed to *iaceō* ‘to lie’.

4. Schrijver also presents two sets of forms as evidence in favour of *i*-presents in Latin. In the first place, he shows that the present of the type *capiō* can be derived from the zero grade of the *i*-suffix, and moreover, that this is the only likely option in the light of historical phonology. We must therefore reject the scenarios by which the paradigm of *capiō* has been derived from a thematic suffix *-ie/o- by earlier scholars. Together with the OIr. type *gaibid*, Schrijver’s explanation of the type *capiō* provides a strong indication that Italo-Celtic possessed athematic *i*-presents. As in Celtic, this present type has apparently generalized the zero grade of the suffix *-i- in Latin, at least in the present.

The second group of forms which Schrijver considers as possible evidence for *i*-presents is a number of scattered forms belonging to present stems of the type *capiō* (p. 74–75) which show an unexpected long *-ī-*. The forms can be subdivided into four categories:

- a. present forms: *cupīret*, *cupīs* (to *cupiō*), *morīrī* (to *morior*), *fodīrī* (to *fodiō*), *orīrī*, *adorītur*, *aborīrī* (to *orior*), *adgredīmur*, *aggredītur*, *progređīrī* (to *gradior*), *inlicīre* (to *laciō*);
- b. perfect stems: *cupīvī*, *sapīvī* (to *sapiō*);
- c. inchoatives in *-īsc-*: *concupīscō*, *proficīscor* (to *faciō*), *resipīscō* (to *sapiō*), *adipīscor* (to **apere*), *com-*, *reminīscor* (**mn-i-*);
- d. deverbals nouns: *fodīna* ‘mine’, *rapīna* (to *rapiō*).

As Schrijver admits himself: “While none of the forms that contain *-ī-* and are connected with *capere*-type verbs constitutes watertight evidence for *-ī-* < **-ei-* if considered in isolation, the frequency of *-ī-* in forms connected with the *capere*-type gains momentum against the backdrop of the Celtic evidence for **-ei-*.” In sections 5 and 6, I will point to further possible evidence within Latin.

5. Schrijver very briefly adduces Lat. *pariō* ‘to give birth to, bear’ (ppp. *partus*, *-pertus*) as possibly reflecting PIE **prh₃-i-*. We find a number of compounds with long *-ī-* in Old Latin: *comperīrī* ‘to find out, discover’, *experīrī* ‘to put to the test, attempt’, *opperīrī* ‘to wait, await’, *reperīre* ‘to recover, discover’. These might be explained from thematization in the present, and the same might be true for Umbrian *amparitu* [3s.ipt.II.], *amparihmū* [3s.ipt.II.pass.] ‘to erect’, which also show long *-ī-*. But we also find *perītus* ‘experienced, expert’ (Pl.+) and *perīculum* ‘trial, danger’ (Pl.+), neither of which can be explained from **prh₃-ie/o-*. They might therefore reflect **perh₃-ei-*.

6. Some verbs of the third conjugation show a fourth-conjugation perfect in *-īvī*, namely *cupiō* ‘to desire’, *petō* ‘to make for, reach out to’, *quaerō* ‘to seek’, *sapiō* ‘to notice, know’, and the deverbatives in *-essō*. Since the semantics of these verbs (expect *sapiō*) all involve an attempt or a desire, it is generally assumed that their perfect in *-īvī* analogically spread from *cupīvī* on semantic grounds, e.g. by Sommer (1914: 565) and Leumann (1977: 594). Since *cupīvī* itself cannot be original, Meiser (2003: 126, 237) assumes that it was adopted from a compound **concupīre*; this is problematic insofar as *concupīre* itself is not attested in Old Latin, but only from Cicero onwards.

A review of the philological evidence renders it questionable that *cupere* was the driving force behind the spread of *-īvī*. Here is a list of the perfect and the ppp. of the relevant verbs before Cicero:

cupere: pf. *cupīsti* (Catullus); ppp. *cupītus* (Plautus).

petere: pf. *petī(v)ī* etc. (Plautus, Lucilius, Varro); sup. *petītum* (Plautus), ppp. *petītus* (Lucilius).

expetere: pf. *expetīvī* etc. (Plautus, Terence).

quaerere: pf. *quaesī(v)ī* etc. (Plautus 6x, Terence 3x, Varro); ppp. *quaesītus* (Plautus 6x, Naevius *inquaesīta*, Terence 2x, Varro).

exquīrere: pf. *exquīsī(v)ī* (Plautus 4x), ppp. *exquīsītus* (Plautus 4x).

sapere: pf. *sapīssēt* (Plautus 1x); “*sapīvī et sapuī secundum Varronem*” (Priscian *gramm.* II 499, 17).

resipīscere ‘to regain one’s senses’: pf. *resipīsti* (Plautus), *resipīsse* (Terence), *resipīvī* (Afranius).

The list shows that *cupīvī* is unattested before Catullus. This is considerably later than the perfects in *-īvī* of *petere*, *quaerere* and *sapere*, for which *cupīvī* is supposed to have provided the model. Of course, it is conceivable that a perfect **cupīvī* did exist but happens to be unattested; but then again, the perfect may also have been **cupuī* instead of **cupīvī*. What we do have in Plautus is *cupītus*. In the traditional view of *cupiō* as a PIE *ie/o*-verb, *cupītus* would have to be analogical after the fourth conjugation. But we may now venture the possibility that it phonetically reflects a sequence **-ei-to-*, as is found in Celtic.

The verbs *petō* and *quaerō* have a well-attested perfect in *-īvī* and a well-attested past participle in *-ītus*. As argued above, the traditional explanation of these forms as being modeled on *cupīvī* is problematic. Since they are quite close to each other in semantics (in fact, closer than to *cupiō*), it is possible that either *petō* or *quaerō* has adopted long *-ī-* from the other. As for *quaerō*, it is agreed that the original forms were **kwaissī*, **kwaistos*, as shown by derivatives such as *quaestiō*, *quaestor* and *quaestus*. The verb probably goes back to a Proto-Italic present **kwaise/o-*, which may reflect an earlier verb **kueh₂-i-* (Nussbaum 2007); in any case, there is no reason to assume an *i*-suffix after **kwais-*. This reasoning leaves *petere* as the source verb for the perfect in *-ī-*. Until recently, there was no cognate of

petere which suggested an *i*-present. Kloekhorst (2008: 655) now proposes that the Hittite cognate of *petere*, viz. the *hi*-conjugated *pattai*⁻ⁱ / *patti*- ‘to run, fly, flee’ < **pth*_{1/2}-, reflects a PIE present **pth*_{1/2}-*ó*i- / **pth*_{1/2}-*i*-, with *o*-grade of the suffix *-*i*-. The combination of the Latin evidence and Hittite would then point to a PIE *i*-stem present.

7. The Latin deverbative presents in *-essō* are formed from four extant present stems. I exclude from the discussion *arcessō* ‘to cause to come, summon, fetch’, because it is probably secondary with regard to the variant *accersō* < **ad*-*kers*-*s-e/o-* (cf. de Vaan 2008: 51). The remaining verbs are derived from the *i*-stem presents *capiō*, *faciō*, *laciō*, and from *petō*:

capessere ‘to seize, lay hold of’: pres. *capessō*, *-is*, etc. (Plautus), *capesset* (Naevius), *capissam* (Pacuvius); inf. *capessere* (Ennius, Plautus, Virgil). pf. *capessivī* (Cic.+), part.fut. *-itūrus* (Tacitus, Apuleius).

incipissere ‘to begin’: pres. *-issō*, *-issis*, *-issit* (only Plautus).

facessere ‘to do eagerly, accomplish; go away’: pres. *facessō*, *-is*, etc. (Ennius, Plautus to Cicero); pf. *facessī* (Priscian, Charisius), *facesseris* (Cicero), *facessisset* (Tacitus); ppp. *facessitus* (Cicero).

lacessere ‘to excite, provoke’: pres. (Plautus+); pf. *-īssit* (Terence, Cicero+), *-īsse* (Lucilius, Livy), *-īver-* (Sallust, Livy); ppp. *laccēsitus* (Rhet.Her.).

petessere ‘to strive after’: *petessit*, *petessēns* (Lucretius, Cicero), inf. (Festus, Paulus ex Festo *petissere antiqui pro petere dicebant*).

appetissere ‘to strive after’: *adpetissis* (1x Accius).

expetessere ‘to desire, long for’: pres. *expetessō*, *-is* (Plautus only).

These presents have mostly been called ‘desideratives’ or ‘intensives’ by ancient and modern scholars alike (cf. Bartalucci 1963), but I prefer a definition as ‘conative’ on the basis of the comparison with their base verbs: *capiō* ‘to take’, *incipiō* ‘to begin’, *faciō* ‘to do, make’, *laciō* ‘to entice’, *petō* ‘to make for, reach out’, *appetō* ‘to stretch out for’, *expetō* ‘to request’.

Before we can discuss the etymology of the suffix, we need to establish which of the variants *-ess-* and *-iss-* is primary. If the suffix contains Proto-Italic *-*i*- we expect it to surface as *-*issō*,

as a sound law **-iss-* > *-ess-* is unknown; compare the superlatives in *-issimus* which contain **i*. In fact, we find the spelling *-iss-* in a few forms: *capissam*, *appetissere* and *incipissere*, and in some *variae lectiones* for *petessere*. Based on their connection with the *i*-stem verbs such as *capiō*, Sommer (1914: 585) therefore concludes that *-issere* was the original variant.

However, it would be difficult to explain the shift to *-ess-* in the remaining majority of attestations. We could posit a four-part analogy which would have taken effect after the lowering of the middle vowel in the infinitive *facere*:

<i>facere</i>	<i>amāre</i>		<i>facere</i>	<i>amāre</i>
<i>*facissit</i>	<i>amāssit</i>	>>	<i>facessit</i>	<i>amāssit</i>

But the infinitive *facere* was the only form in the paradigm of *faciō* with suffixal *-e-*, which was conditioned by *r* and was furthermore unstressed. It seems unlikely that it could have ousted original **-i-*. Therefore, I will assume that *-ess-* is the older variant. In that case, *-iss-* in *appetissere* and *incipissere* must be explained from assimilation to the surrounding *i*'s; this would fit with the attested forms *incipissis*, *incipissit* and *appetissis*, merely not with *capissam*. An additional philological argument could be that *-iss-* may be regarded as a *lectio facilior* vis-à-vis *-ess-*, in view of the superlative suffix *-issimus* and the pluperfect subjunctive in *-(v)iss-*. It follows that the striking correlation of the four presents in *-essere* with Italic *i*-presents must be indirect or coincidental.

8. The origin of the suffix has not been clarified. Most scholars have assumed that *-ess-* is in some way connected with the perfective futures in *-ss-* of the first and second conjugation such as *amāssō* 'I will love', *negāssim* 'I would deny', *prohibēssit* 'may he protect (from)', *sī licēssit* 'if it be allowed'. In Plautus, this type is found especially often in prohibitions or warnings and other negative clauses, and in conditionals (Kühner 1912 I: 798–800, de Melo 2007b: 171–190). The most explicit explana-

tion of *-essō* can be found in Leumann (1977: 555), who mainly follows Thomas 1935. Leumann posits the following four-part analogy:

<i>impetr-ā-t</i>	<i>impetr-ā-ssere</i>
<i>*pet-e-t</i>	<i>X = *pet-e-ssere</i>

This analogy would be semantically motivated: the form in *-āssere* can have a prospective connotation (although most indicative forms are mere futures), and the presents in *-essere* are also, in a certain way, prospectives. Since **fakit* would predict an infinitive **facissere*, Leumann assumes that the variant *-essere* was generalized among third-conjugation verbs.

The key role which the infinitive in *-āssere* plays in this explanation is disputable for both morphological and semantic reasons. The infinitive is only found six times in Plautus from only three different verbs, all of them compounds which look like recent creations: *reconciliāssere* ‘to bring back in future’, *impetrāssere* ‘to succeed in future’, *oppugnāssere* ‘to besiege in future’. Whereas *-āssere* always has the meaning of a future infinitive, *-essere* does not show a future meaning, but can be described as conative. To my mind, this renders it unlikely that *-essō* was modeled on the perfective future in *-āssō*, *-āssim* or on the rare infinitive in *-āssere*. The meaning and the morphology are sufficiently different, and the type in *-essere* is too well-established by the time the literary tradition starts.

9. It seems to me that the semantic difference between the conative type *facessere* and the perfective future type *amāssere* provides the key to the understanding of these categories. If they had both originated in the same period in the same category, the difference in their meanings would be difficult to account for. Since *amāssō* synchronically has the same perfective future meaning as the type *faxō*, and since *amāssō* is a paradigmatic form of *amāre* whereas *facessō* is a synchronically untransparent derivative of *faciō*, I regard *amāssō* as a more recent type

than *facessō*. The conative meaning of the latter takes us back to the Proto-Italic present suffix **-es-*.

The basic study on the sigmatic verb forms in Latin is still Pedersen (1921), with additions by Meiser (1993) and Kortlandt (2006: 152, 2008). At their origin lies a PIE verbal suffix **(e)s-* with perfective semantics; it formed “a hysterodynamic *s*-present with zero grade root vocalism and a static *s*-aorist with *e*-vocalism in the root” (Kortlandt 2008: 229): pres. **tr-és-ti*, **tr-s-énti*, aorist **tēr-s-t*, **ter-s-nt*. The suffix *-s-* became the *s*-future of Sabellic, spreading also to derived present stems: Oscan *deiuast* ‘will swear’, *censazent* ‘will judge’, *fust* ‘will be’, *didest* ‘will give’, Umbrian *eest* ‘will go’, *ferest* ‘will bring’. Its subjunctive in **-ē-*, an Italic innovation on the basis of the PIE optative suffix **-ieh₁-* (see Jasanoff 1991: 87, 96) survives as the imperfect subjunctive of Latin (*amā-r-ēs*) and Oscan (*fusíd*). Isolated traces of *s*-presents may also be seen in the verbs *recuperāre* ‘to take back’ < **-kap-es-ā-* and *tolerāre* < **telas-ā-* ‘to support’. Several of the presents in **-sā-* which have no nominal *s*-formation as a basis in Latin (e.g. *rixārī* ‘to quarrel’, *taxāre* ‘to assess’, *vexāre* ‘to treat roughly, shake’; see Nussbaum 2007 for a collection) might also go back to athematic *s*-presents.

The type *facessō* would fit in neatly as a present type retaining the full grade **-es-* and the semantic value of the perfective *s*-present from before this was interpreted as a future tense. Thus, just like *faciō* and *capiō* represent *i*-presents derived from Proto-Italic roots **fak-* and **kap-*, *facessō* and *capessō* represent PIIt. *es*-presents to these roots. For the geminate **-ss-* I adopt the solution put forward by Schrijver (2006: 61¹³) for the type *amāssō*: the 2sg. and 3sg. injunctive **fak-es-s* and **fak-es-t* merged into a form **fakess* which was underspecified for person and mood. The same would have happened to the indicatives **fak-es-si* and **fak-es-ti* after analogical *i*-apocope. The clearest parallel for the sound change **-st* > **-ss* is Latin *os* ‘bone’, gen. *ossis* from **ost*, gen. **ost-n-* (Venetic dat.pl. *ostinobos*). The underspecified forms must have been replaced by the transparent forms **fakess-es* and **fakess-ed*, whence the suffix *-ess-*

could spread to the other persons and moods of the paradigm. In the case of *capessō*, the existence of *recuperāre* may be regarded as additional confirmation for the reconstruction **kap-es-*.

While we have now explained the form and function of the presents in *-essō*, one is entitled to ask why this type only survives from the roots *fak-*, *kap-*, *lak-* and *pet-*. Although a definite answer is hard to give, it is striking that at least three of the four roots indicate a conative action themselves: *kap-*, *lak-*, *pet-*. Possibly, then, these verbs were mainly used in the factual indicative, since they already had a conative connotation from the start. Other verbs may have been used more often in (what came to be) the subjunctive or in the optative, where a final sequence **-ess* did not arise because a vowel always followed the suffix **(e)s-*.

10. The same phonetic change **-st > *-ss* assumed by Schrijver must lie at the basis of the perfective future **amāss-*, which was formed from the aorist stem **amā-s-*. The spread of aoristic *-s-* to verbal stems in **-ā-* already took place in Proto-Italic judging by Venetic 3s. *donasto*, 3p. *donasan* ‘gave’ < **dōnā-s-*. In the second conjugation, perfective futures in *-ēssō* are only attested from stative verbs, not from causatives. This renders it possible that these were formed on the basis of an aorist in **-ē-s-*, as argued by Rix (1998: 628). But in view of the very small number of verbs involved (*habeō*, *prohibeō*, *licet*), we cannot exclude the possibility that the type in *-ēssō* was formed only recently on the model of *-āssō*.

A different phonetic cause for the type *amāss-* is proposed by Rix (1998: 625f.) and Meiser (1998: 183), who assume a phonetic change **-ās- > *-ass-* according to the *littera*-rule in Proto-Italic. However, this explanation is untenable for many reasons. It is motivated teleologically by Rix, viz. in order to differentiate the perfective future from the imperfective PIIt. *s*-future. Such a change does not qualify as regular sound change, however. Had Rix’ scenario been regular, the imperfect subjunctive *amārem* would also have become **amāssem*.

Furthermore, undisputed Latin examples of the *littera*-rule are restricted to the initial syllable (cf. Meiser 1998: 77), and a short-vowel sequence **-ass-* would have undergone internal vowel reduction to **-ess-*. Rix therefore assumes that *amāss-* is due to the analogical restoration either of */ā/*, or “wenigstens die für die 1. Konjugation typische Vokalfarbe [a]”. The latter, however, would have been phonologically impossible after internal vowel reduction took effect.

Most of the other forms of the perfective future in *-s-* can be derived from the stem of the *s*-aorist, of which they continue the PIIt. subjunctive with primary endings (*faxō*) and the optative (*faxim*) (Schrijver 2006: 62). Rix (1998: 631f.) emphasizes that an *s*-aorist cannot be proven to have existed for all attested verb forms, for instance in the case of *incēnsit*, *iuverō*, *occīsit*, *rapsit*, *sīrīs* (where a PIIt. *s*-aorist is unattested but could have existed), and of *adempsit*, *capsit*, *faxō*, *insexit*, *obiexim* (where root aorists, thematic aorists or reduplicated perfects are attested or expected). It must be remembered, however, that **-s-* was not in origin a tense marker, but a derivational suffix indicating perfective aspect. Thus, one should not ask whether an attested perfective future in **-s-* would fit in beside an attested Latin perfect or PIE aorist, but whether it would qualify as a PIIt. (*e*)*s*-present. Seen from this perspective, such forms as *adempsit* < **-em-s-* and *insexit* < **-sek^w-s-* lose their extravagancy. The stem *fax-* < **fak-s-* could be merely the zero-grade variant of **fak-es-* attested in *facessō*. Note that Venetic *vhagsto* ‘made’ confirms sigmatic **fak-s-* for Proto-Italic (pace de Melo 2007a: 17). Of course, this stem must represent an innovation with regard to PIE, since root-final *-k-* probably arose in the PIE root aorist (Kortlandt 2006: 155). The form **fak-* was generalized as root form and provided the derivational basis for the *i*-present *faciō*, and the *s*-present **fak-es-ti*, **fak-es-t*, aor. **fak-s-t*, aor.sb. **fak-s-e-t*, aor.opt. **fak-s-ī-t*.

11. Three Latin verbs present relic forms of the perfective future with intervocalic *-r-* < **-s-*: *moneris* (ind.), *monerint* (sb.) ‘to

advise' < **mone-s-*, *adiuverō* (ind.), *adiuverint* (sb.) 'to help' < **ad-ijowa-s-*, and *sīrīs*, *sīrit*, *sīrint* (sb.) 'to let' < **sei-s-*. Rix (1998: 624) has shown that syntactically they behave just like the perfective futures in *-s(s)-*. They somehow escaped the introduction of intervocalic *-ss-* of the types *facessō* and *amassō*, maybe because they were mainly used in the subjunctive and optative with vocalic endings (see section 9, end). The form of the derivational basis points to a Plt. present in the case of *sīr-* < **sei-s-* (Rix 1998: 630f.) and of *iuver-* with its short *u* in Plautine scansion. Although *moner-* has the *o*-grade of the causative present **mon-eie-* > Plt. **monē-*, the short vowel in front of **-s-* invites comparison with *monitum* and the Latin pf. *monuī* < **mone-w-*, which could have replaced an aorist **mone-s-* (thus also Rix 1998: 629). Under this perspective, the three stems with *r*-relics confirm the productivity of the perfective *s*-presents and aorists within Italic.

Bibliography

- Bartalucci, A. (1963): 'I desiderativi in *-esso*', *Rendiconti Accademia dei Lincei. Scienze morali, storiche e filologiche* 18, 345–372.
- Jasanoff, J. (1991): 'The origin of the Italic imperfect subjunctive', *Historische Sprachforschung* 104, 84–105.
- (2003): *Hittite and the Indo-European Verb*, Oxford University Press.
- Kloekhorst, A. (2006): 'Hittite *pai-/pi-* 'to give'', *Indogermanische Forschungen* 111, 110–119.
- (2008): *Etymological Dictionary of the Hittite Inherited Lexicon*, Leiden: Brill.
- Kortlandt, F. (1987): 'The formation of the Old Prussian present tense', *Baltistica* 23, 104–111.
- (1989): 'Lithuanian *statyti* and related formations', *Baltistica* 25, 104–112.
- (2006): 'Italo-Celtic', in F. Kortlandt (2007): *Italo-Celtic origins and prehistoric development of the Irish language*, Amsterdam - New York: Rodopi, 149–157.
- (2010): 'Hittite *hi*-verbs and the Indo-European perfect', in F. Kortlandt (2010): *Studies in Germanic, Indo-European and Indo-Uralic*, Amsterdam - New York: Rodopi, 373–382.

- (2008): ‘The origin of the Indo-Iranian desiderative’, in L. Kulikov and M. Rusanov (eds.), *Indologica. T. Ya. Elizarenkova Memorial Volume (Orientalia et Classica; 20)*, Moskva: Izdatel'stvo RGGU, 227–230.
- Leumann, M. (1977): *Lateinische Laut- und Formenlehre*, Munich: Beck.
- LIV = *Lexikon der indogermanischen Verben.*, 2001². Unter Leitung von H. Rix ... bearbeitet von M. Kümmel, Th. Zehnder, R. Lipp, B. Schirmer, Wiesbaden: Reichert.
- Meiser, G. (1993): ‘Uritalische Modussyntax: zur Genese des Konjunktiv Imperfekt’, in H. Rix (ed.), *Oskisch-Umbrisch. Texte und Grammatik*, Wiesbaden: Reichert, 167–195.
- (1998): *Historische Laut- und Formenlehre der lateinischen Sprache*, Darmstadt: Wissenschaftliche Buchgesellschaft.
- (2003): *Veni Vidi Vici. Die Vorgeschichte des lateinischen Perfektsystems*, Munich: Beck.
- de Melo, W. (2007a): ‘The sigmatic future and the genetic affiliation of Venetic: Latin *faxō* ‘I shall make’ and Venetic *vha.g.s.to* ‘he made’’, *Transactions of the Philological Society* 105, 1–21.
- (2007b): *The Early Latin Verb System. Archaic forms in Plautus, Terence and beyond*, Oxford University Press.
- Nussbaum, A. (2007): ‘Latin present stems in -sā-: A possibly not so minor type’, handout, Kyoto, September 2007.
- Pedersen, H. (1921): *Les formes sigmatiques du verbe latin et le problème du futur indo-européen*, København (*Historisk-filologiske Meddelelser* III, 5).
- Rasmussen, J. E. (1989): *Studien zur Morphophonemik der indogermanischen Grundsprache*, Innsbruck: IBS.
- Rix, H. (1998): ‘Bemerkungen zu den lateinischen Verbformen des Typs *faxo faxim*’, in J. Jasanoff, H. Craig Melchert and L. Oliver (eds.), *Mír Curad. Studies in Honor of Calvert Watkins*, Innsbruck: IBS, 619–634.
- Schrijver, P. (1991): *The reflexes of the Proto-Indo-European laryngeals in Latin*, Amsterdam - Atlanta: Rodopi.
- (2003): ‘Athematic *i*-presents: the Italic and Celtic evidence’, *Incontri Linguistici* 26, 59–86.
- (2006): ‘Review of: Gerhard Meiser, *Veni Vidi Vici. Die Vorgeschichte des lateinischen Perfektsystems* (München: Beck, 2003)’, *Kratylos* 51, 46–64.
- Schumacher, S. (2000): *The historical morphology of the welsh verbal noun*, Maynooth: National University of Ireland.
- Sommer, F. (1914): *Handbuch der lateinischen Laut- und Formenlehre. 2. und 3. Auflage*, Heidelberg: Winter.
- Thomas, F. (1935): ‘Sur les désidératifs latins en -essō’, *Revue de Philologie* 61 (9 de la 3me série), 280–287.
- de Vaan, M. (2008): *Etymological Dictionary of Latin and the other Italic Languages*, Leiden: Brill.