The Origin of the Italic Imperfect Subjunctive

The six tenses of Classical Latin form a symmetrical pattern, with the three-way temporal contrast of the *infectum,* or present system, replicated in the *perfectum,* or perfect system:[1]

	Present	Future	Past
Infectum	*tangis* (pres.) 'you touch'	*tangēs* (fut.) 'you will touch'	*tangēbās* (impf.) 'you were touching'
Perfectum	*tetigistī* (perf.) 'you have touched'	*tetigeris* (fut. perf.) 'you will have touched'	*tetigerās* (plupf.) 'you had touched'

The neatness of this array is slightly disturbed by the fact that the perfect is frequently employed as a simple preterite ('you touched') rather than as a resultative present. This function, however, is confined to the indicative. In the subjunctive, where the present : future contrast is neutralized and the six fundamental tenses are reduced to four, the perfect subjunctive serves simply as the non-past subjunctive of the perfect series:

	Non-Past	Past
Infectum	*tangās* (present subj.)	*tangerēs* (imperfect subj.)
Perfectum	*tetigerīs* (perfect subj.)	*tetigissēs* (pluperfect subj.)

An almost identical system is found in Oscan and Umbrian, where the absence of attested pluperfect forms may be accidental. We may thus speak of an "Italic" verbal system, distinguished from the system reconstructible for Proto-Indo-European by the following innovations:[2]

1) the creation of a morphologically distinct future, replacing the desiderative presents and modal forms that served to express futurity in the parent language;

2) the functional merger of the PIE aorist and perfect into a single tense, the "perfect," with the value of both a simple preterite, functionally continuing the old aorist, and a resultative present, continuing the old perfect;

3) the introduction of a resultative future (the future perfect) and a resultative preterite (the pluperfect), serving as perfect system counterparts to the non-present tenses of the *infectum;*

4) the elimination of the PIE subjunctive : optative contrast and the establishment of a single subordinate mood, the "subjunctive"; and

5) the introduction of an opposition between past (imperfect, pluperfect) and non-past (present, perfect) subjunctives, partly duplicating the tense system of the indicative.

Developments 1)–3) are well understood. Proto-Italic had two future formations, one based on the PIE subjunctive in *-e/o-* (cf. Lat. *eris* < **es-ze-e-si, tangēs* < **tange-e-si, amābis* < *amā-* + *-bis* < **bhuh₁-e-si*), and the other a specializiation of the PIE desiderative in **-(h₁)s-* (cf. Osc. 3 sg. *deiuast* 'will swear', OLat. *faxō, -is* 'will do', *amāssō, -is* 'will love' (with secondarily geminated *-ss-*)).[3] There were also, as in the closely related Celtic languages, two groups of perfect stems, one deriving from the PIE perfect proper (Lat. *tetigī, -istī* < **tetag-,* Osc. *fefak-* (: *fak-* 'do')), and the other from the PIE aorist (cf. Lat. *dīxī, -istī; uēnī, -istī,* Osc. 3 sg. *kúmbened* 'conuēnit').[4] The most distinctive innovation of Proto-Italic, the expansion of the perfect system, probably had its starting point in the creation of the future perfect. As I have tried to show elsewhere (Jasanoff 1987), this tense was originally an *s*-future built to the perfect stem: forms like Lat. *tetigeris* (< **tetagise-*) and Osc. fut. pf. 3 sg. *fefacust* go back to earlier **tetag-s-* and **fefak-s-,* respectively, with **-s-* secondarily re-

---

[1] Here and below, Latin temporal and modal categories will usually be cited in the 2 sg., which preserves the structure of the preceding stem more clearly than the 1 sg. or 3 sg.

I would like to thank Alan Nussbaum for his helpful comments on an earlier version of this paper. Remaining errors, of course, are my own.

[2] The term "(Proto-)Italic" will be used here to refer to the later stages of the protolanguage ancestral to Latin (with Faliscan) and the dialects of the Osco-Umbrian group (Oscan, Umbrian, Marrucinian, Paelignian, Vestinian, etc.). We are not yet in a position to draw meaningful conclusions about such Italic languages as Venetic, Sicel or South Picene.

[3] The immediate affinities of the Latin *faxō-* and *amāssō-*types are thus with the *s*-futures of Celtic, Greek, Indo-Iranian, and Balto-Slavic, and not with the PIE *s*-aorist. The Italic *s*-future was originally athematic, with fixed root accent and **ē : *ĕ* ablaut (cf. Jasanoff 1988: 233 ff.). It is impossible to tell whether *faxō, -is,* etc. represents a purely mechanical thematization of earlier **faksmi, *-si,* or the inherited subjunctive of such a present.

[4] A survey of the Latin perfect stem types is given by Leumann (1977: 585 ff.).

placed by *-is- in Latin and by *-us- in Osco-Umbrian.[5]) The Latin pluperfect is an analogical pendant to the future perfect, made by substituting the synchronic preterite marker *-ā- for *-elo- on the model of the future: imperfect pairs erō, is: eram, -ās and -bō, -bis: -bam, -bās.

The prehistory of the Italic subjunctive is more complicated. To the extent that the attested forms have clear etymologies at all, they go back not to PIE subjunctives, which yielded futures, but to PIE optatives. The most archaic modal forms in Latin add the optative sign *-ieh₁- / *-ih₁- directly to an athematic present stem, as in OLat. siem, -ēs, 1 pl. sīmus, and uelim, -īs, edim, -īs. The same formation underlies the obsolescent present subjunctives of the type faxim, -īs and amāssim, -īs, properly optatives corresponding to the desiderative presents (> futures) faxō and amāssō. The faxim-type has an analogue in the perfect system, where the perfect subjunctive tetigerim, -īs (< *tetagisī) stands in the same relation to the future perfect tetigerō, -is as faxim and amāssim to faxō and amāssō.[6]) Conspicuously absent in Italic is any trace of the PIE "thematic" optative in *-oi- (i. e., *-o- + -ih₁-). The thematic presents of the second, third, and fourth conjugations form their subjunctives with the mood sign

---

[5]) The *-u- of Osco-Umbrian *-us- is ultimately due to the influence of the verb *fū- 'be(come)', which historically formed a future perfect *fefust < *fefu-s- (cf. Umbr. 3 pl. fefure) and a perfect *fefed < *fefu- (cf. Buck 1928: 173, 362 and already Brugmann 1880: 40). The more problematic *-i- of Lat. *-is- seems originally to have been a union vowel, imported into the future perfect from the perfect indicative (cf. dīxistī < *deiks-i-stai, dīximus < *deiks-i-mos, etc.). The source of *-i- in the indicative is perhaps to be sought in the u-perfects of long-vowel roots, where Proto-Italic inherited 1 sg. and 3 sg. forms in *-ōu from late PIE (cf. Ved. tasthāu 'stands', etc.). When the perfect endings were extended by the hic et nunc particle *-i in pre-Latin (cf. tetigī < *-a-i, tetigit < *-e-i[t], tetigēre < *-ēr-i), the paradigm of the nascent u-perfects would have become

1,3 sg.   *gnōui, *sēui, *strāui
2 sg.   *gnōstai, *sēstai, *strāstai
1 pl.   *gnōmos, *sēmos, *strāmos, etc.

The morphologically opaque ui-element was subsequently extended to the other persons and numbers, giving rise to *sēuistai, *sēuimos, etc. The final step was the analogical replacement of *-ui by *-uai in the 1 sg. and *-uei[t] in the 3 sg., leaving *-i- "stranded" as a union vowel in the 2 sg., 1 pl., and 2 pl.

[6]) Note that the absence of a reflex of *-ie- in uelim, -īs and edim, īs is not due to analogical leveling, but reflects the fixed root accent of these forms, which took the zero grade of the optative suffix in the singular as well as the plural (cf. Narten 1968). Since fixed root accent was also a feature of the athematic s-presents (cf. note 3), the types faxim, -īs and tetigerim, -īs have invariant -ĭ- as well.

---

*-ā-, an element common to Italic and Celtic (cf. Lat. tangās, Osc. deicans 'dīcant', OIr. ·bera 'ferat').[7]) The first conjugation present subjunctives in *-aē- (< *-āiē- or *-ăiē-; cf. Lat. amēs, Osc. deiuaid 'iuret', Umbr. portaia 'portet') are more problematic: their source is probably to be sought in the small minority of first conjugation verbs which go back to athematic presents in *-ā- (*-eh₂-) or *-ă- (*-h₂-) with optatives in *-ieh₁- / *-ih₁-. A derivation from the PIE "long vowel" subjunctive in *-āiē- (i. e., *-eh₂ie-e/o-), though favored in the older literature, is unlikely on functional grounds.[8])

By far the most puzzling innovation of the pre-Italic period – and the only one that will concern us here – was the creation of the distinctive "past" subjunctives of the type tangerēs (impf. subj.) and tetigissēs (plpf. subj.). The use of the imperfect and pluperfect subjunctive in Latin, and apparently also in Oscan and Umbrian, is in large part regulated by the rule of „Sequence of Tenses" (ST), which governs the succession of tense markings in complex sentences. The effect of the rule is very simple: in certain common types of subordinate clauses that require the subjunctive, a past subjunctive appears if and only if a past tense appears in the corresponding main clause. So, e. g., in indirect questions:

1) nesciō quid faciās (pres. subj.) / fēceris (perf. subj.)
   'I don't know what you are doing / have done'

but

2) nesciēbam quid facerēs (impf. subj.) / fēcissēs (plpf. subj.)
   'I didn't know what you were doing / had done'

---

[7]) Cf. Jasanoff (1983: 75 ff.), where it is suggested that tangās, dīcās, etc., and their Celtic counterparts, along with the imperfects erās (: MW 3 sg. oed 'was') and -bās (: OIr. 3 sg ba 'was') originated as preterites in *-h₂- to inherited subjunctives – often aorist subjunctives – in *-e/o-. The ā-optative was primitively independent of the present stem; traces of this state of affairs can still be seen in forms like OLat. attigās and aduenās for classical attingās, adueniās. A distant connection with the "ā-preterites" of Tocharian and Balto-Slavic is likely.

[8]) Here and below, I write *-aē- rather than the usual *-āē- for the Proto-Italic forms because it is unclear whether the inherited nucleus of the type was provided by verbs like renouāre, with presents in invariant *-ā- and optatives in original *-ā-iē- < *-eh₂-ieh₁- (cf. Hitt. newahh- 'make new'), or by verbs like inclināre, with presents in *-(n)ā- / *-(n)ă- and optatives in earlier *-(n)ă-iē- < *-(n)h₂-ieh₁-. The great mass of first conjugation presents, of course, had presents in *-āie/o- (*-eh₂-ie/o-) and "optatives" in *-āiā- (> *-ā-); modal forms of this kind are still normal in Celtic (cf. OIr. ·glana 'purgat, purget'), but have been eliminated from Italic, presumably owing to their near homophony with the indicative. Umbrian -aia- shows the addition of the productive subjunctive sign *-ā- to the phonological reflex of *-aē- (cf. Buck 1928: 174).

And in purpose clauses:

3) *ēs ut uīuās* (pres. subj.)

 'You eat that you may live' (= 'You eat to live')

but

4) *edēbās ut uīuerēs* (impf. subj.)

 'You were eating that you might live' (= 'You were eating to live')

ST is thus in essence an agreement rule which copies the value of the feature [± past] from the verb in a matrix sentence to the verb in an embedded sentence. Agreement marking of this kind is very common in modern European languages, including English, where the contrast between sentences like "I don't know what you *are* doing" and "I didn't know what you *were* doing," as in the above glosses, is as much a part of the language as the contrast between *faciās* and *facerēs* in Latin. (English, of course, uses the indicative or a modal auxiliary in such cases.) Among the older IE languages, Attic Greek employs the subjunctive in a variety of subordinate clauses after a present or future, but uses the optative after an imperfect or aorist, thus duplicating the effect of ST with a rule of "Sequence of Moods." A case can be made for positing such a rule, with the optative serving as the "past" of the subjunctive in certain contexts, in the parent language.

In Italic, where the PIE optative (or its successor category, the *ā*-subjunctive) was prehistorically substituted for the old subjunctive in all its modal functions, the contrast between [+past] and [-past] in subordinate clauses is necessarily expressed by different means. The mark of the past subjunctive in Latin and Osco-Umbrian is a suffix reconstructible as **-sē-*, which is added to present stems to form the imperfect subjunctive, and (in Latin at least) to perfect stems to form the pluperfect subjunctive. Since the overwhelming majority of present stems end in a vowel, the typical outcome in Latin is *-rē-* in the imperfect subjunctive, with regular rhotacism of intervocalic **-s-* to *-r-* (cf. *tangerēs, facerēs, amārēs,* etc.). Unrhotacized *-sē-* is preserved after *-s-* in the verb 'to be' (impf. subj. *essēs,* etc.; pres. stem *es-*), and assimilates to a preceding *-l-* in the verb 'to want' (impf. subj. *uellēs,* etc.; pres. stem **uel-*).[9]) In Oscan, where there was no phonological

---

[9]) The descriptive rule that the imperfect subjunctive is made by adding personal endings to the present infinitive (cf. *tangere, facere, esse, uelle*) is due, of

change of **-s-* to *-r-*, *-sē-* is directly attested in forms like impf. subj. 3 pl. *patensíns* < **patne-sē-nt* 'panderent' and 3 sg. *fusíd* < **fu-sē-t* 'esset', the latter with a synchronically isolated Latin cognate in the irregular imperfect subjunctive *foret*.[10]) The Latin pluperfect subjunctive in *-isse-* shows the addition of **-sē-* to complexes of the type **tetagis-*, which were extracted as synchronic perfect stems from the future perfect (**tetagise/o-*), perfect subjunctive (**tetagisī-*), and pluperfect indicative (**tetagisā-*).

The origin of this morpheme is unknown. After more than a century of ingenious but inconclusive etymological proposals, the only result on which scholars are generally agreed is that there was no suffix of the required shape in PIE, and that the seemingly unanalyzable sequence **-sē-* must therefore once have contained a morpheme boundary. In practice, the search for an explanation of the imperfect subjunctive has typically reduced to the search for a PIE or pre-Italic **-s-*, and a PIE or pre-Italic **-ē-*, with meanings that could have combined to yield the required past modal sense.[11])

There are two obvious candidates for the *s*-element. The traditional favorite is the **-s-* of the PIE sigmatic aorist, a formation represented in Latin by perfects of the type *dīxī, -istī.* Many scholars (e. g., Thurneysen 1884: 275, Buck 1933: 301) have traced the imperfect subjunctive to an earlier "*ē*-subjunctive" of the *s*-aorist. But how and why such a tense-mood combination would have given rise to a modal category in Italic is unclear, since the PIE subjunctive is otherwise known only to have yielded Italic futures (cf. *tangēs, eris*).[12]) There is also a formal problem. Since the PIE *s*-aorist was an athematic category, with a stem that ended in simple **-s-* rather than **-se/o-*, its subjunctive in the parent language was marked not by **-sē-* (i. e., **-se-e/o-*) but by **-s-e/o-*, which would ultimately have

---

course, to the accident that the Latin infinitive goes back historically to the loc. sg. in **-i* of an *s*-stem verbal noun.

[10]) In Oscan intervocalic **-s-* was voiced to *-z-*, but the change is not represented in the native writing system.

[11]) In the discussion that follows, the term "imperfect subjunctive" is in part simply an abbreviation for the more unwieldy "imperfect and pluperfect subjunctive." But the form of the pluperfect subjunctive in Latin, which presupposes a reanalyzed perfect stem **tetagis-*, makes it likely that the imperfect subjunctive is in fact the more archaic of the two categories.

[12]) Buck (op. cit., 301) glosses the *ē*-subjunctive of the *s*-aorist as "a future of the past, which is a rational basis for the actual uses of the tense." He cites no typological parallels; one suspects that he has confused "future of the past" with the much more usual "past of the future" (see below).

yielded Latin forms of the type *tangeris* rather than the attested *tangerēs*. Such "short vowel" subjunctives of the *s*-aorist are well attested in Homeric Greek and Vedic Sanskrit; it is hard to see why they should have been replaced by forms in *-ē-, proper only to thematic stems, in Italic.

The natural alternative is to consider the possibility of a connection between the *-ē- of *-sē- and the PIE optative suffix *-i̯ē- / *-ī-. Here too the initial signs are discouraging. As can be seen from forms like the Latin pronominal genitive *eius* < *esi̯o* + -s, the sequence *-si̯- was not regularly simplified to *-s- in Italic. In principle, the combination *-s- + *-ē- could also have come about analogically, through the secondary extension of *-ē- to the *s*-aorist from a category such as the subjunctive type *amēs*, where *-i̯ē had become *-ē- by regular sound change. But it is not at all clear why the formally and functionally remote *amēs*-type should have induced the nascent imperfect subjunctives in *-si̯ē- (*amāsi̯ē-, *fakisi̯ē-, etc.) to give up their *-i̯-. An altogether different reconstruction of the optative suffix is therefore favored by Hirt (1915: 140 ff.), who cites the Greek *s*-aorist optatives in 3 sg. -seie, pl. -seian (type *deíxeie* (pres. *deíknumi*)) and the Old Prussian "optatives" in -sei (e. g., *boūsei* 'would be' (: Osc. *fusíd*, Lat. *foret*?)) to argue for a special PIE *s*-aorist type in *-s-ei-. In Italic the combination of *-s-ei- with the endings of the 1 sg. and 3 pl. would have yielded preforms in *-s-ei̯-m and *-s-ei̯-n̥t; these, in Hirt's view, developed via *-sei̯em and *-sei̯ent to *-sēm and *-sēnt, from which *-sē- was analogically extended to the other persons and numbers. Neither the Baltic nor the Greek comparison, however, can any longer be upheld. It is now clear that Gk. -seie rests on older -sie, which is found in Cretan dialect inscriptions; OPr. -sei is a development of the *s*-future rather than of the *s*-aorist, which is unattested in Baltic.[13] In a careful study of the relevant Indo-Iranian evidence, Hoffmann has pointed out (1968: 246, fn. 4; cf. below) that there was probably no *s*-aorist optative in the parent language at all.[14]

---

[13]) The critical Greek forms are the optatives *kosmēsie* and *dikaksie*, which show that the -ei- of the classical ("Aeolic") type *deíxeie* is an inner-Greek creation (cf. Rix 1976a: 232 f.). On the Prussian forms cf. Stang (1966: 442 f.).

[14]) Verbs with *s*-aorist indicatives and subjunctives originally built their aorist optatives directly from the unsigmatized root; cf. Ved. aor. indic. *yauṣ-*, or. subj. *yoṣa-*, but aor. opt. *yūyā-* (: *yu-* 'ward off'). The absence of inherited forms in *-si̯ē- makes it unproductive to speculate on the possibility of an ad hoc Italic phonological rule that simplified *-si̯- to *-s- after stops.

According to an isolated suggestion by Safarewicz (1952: 103 ff.), the imperfect subjunctive was originally the "ē-preterite" of an *s*-aorist indicative. But even if it could be shown – and it cannot – that Italic once had a preterite suffix *-ē-, the semantic basis for Safarewicz' proposal would remain unintelligible.[15]

The other possible source of the *-s- of *-sē- is the *-s- of the PIE desiderative/future. A priori, a connection of the imperfect subjunctive with the Italic *s*-future (Lat. *faxis*, Osc. *deiuast*) would seem at least as attractive as a connection with the *s*-perfect. "Desiderative" -s- was highly productive in Italic, where it gave rise to a whole new tense, the future perfect; the *s*-perfect (< aorist), by contrast, is limited in its distribution in Latin and is not found at all in Osco-Umbrian. Morphological links between futures and modal forms are typogically very common; familiar examples from modern languages include the English pair *will: would* and the Romance future and conditional in -r- (cf. Fr. *chantera* 'will sing': *chanterait* 'would sing', etc.).[16] Yet the prospects for explaining the imperfect subjunctive as a subjunctive or optative of the desiderative are poor. The possibility of a long vowel subjunctive in *-s-ē- can be dismissed out of hand: since *-s- and *-ē- each imparted future meaning separately, it is inconceivable that they could have yielded anything but a future when used together. A desiderative optative in *-s-i̯ē- / *-s-ī-, analogically transformed to eliminate the *-i̯-, would make better sense from a functional point of view. But the optative of the desiderative is already attested in the Latin type *faxīs*, *amāssīs*, etc., and these are present, not imperfect subjunctives. Cowgill (1973: 292, fn. 41) makes a valiant attempt to keep the desiderative possibility alive by taking *-sē- as the synchronic subjunctive in -ē- (cf. *amēs*) of a present in *-sā-. Under this analysis, Lat. *forēs* would represent the present subjunctive of a lost first conjugation indicative *forās 'you wish to be'. Cowgill's proposal, however, is too contrived to be convincing, and it is badly compromised by the fact that the 3 sg. subjunctive of

---

[15]) The *-ē- meant by Safarewicz is the morpheme that underlies the "ē-aorists" of Greek (e. g., 3 sg. *ephánē* to *phaínomai*) and Balto-Slavic (e. g., OCS 3 sg. *mьně* 'thought' to pres. 3 sg. *mьnitъ*). The use of this element as a preterite marker is a post-IE development that was not shared by Italic; cf. Jasanoff (1978 passim).

[16]) Similar "conditionals" based on futures, all with uses partly overlapping those of the Latin imperfect subjunctive, are found in Sanskrit (*bhaviṣyati* 'will be': *abhaviṣyat* 'would be') and Old Irish (*móirfid* 'will magnify': *nomóirfed* 'would magnify').

an Italic present *fusā- would have appeared as *fusaid , not fusid, in Oscan.[17])

To summarize, the problem of the origin of the imperfect sub-junctive has not responded well to what might be called the "com-binatory" approach – the technique of decomposing a complex mor-pheme (here *-sē-) into its presumed constituents (here *-s- and *-ē-) and attempting to etymologize these separately. Ordinarily the method is quite successful. The handbooks of Latin, and of every other IE language, offer countless examples of suffixes whose his-tory is basically revealed by the judicious insertion of a hyphen: the -bā- of the Latin imperfect can be analyzed as -b-ā-, the preterite in -ā- of the auxiliary -b- < *-bhu̯- 'be'; the adjectival suffix -ānus is etymologically -ā-nus, the sequence that arose from the addition of *-no- to ā-stem nouns; and so on. In the case of the imperfect sub-junctive it is not the segmentation *-s-ē- that raises problems, but the next step – the identification of the elements *-s- and *-ē- with recognizable PIE morphemes. The first term is in all likelihood the marker of the aorist or desiderative, but neither alternative is obvi-ously preferable to the other; the second is presumably a mood sign, but the Italic treatment of the IE moods is so confused that no clear choice can be made between the subjunctive (formally straightfor-ward, functionally difficult) and the optative (functionally straight-forward, formally difficult). None of the four possible combinations yield the required composite meaning – past subjunctive – in any simple way.

The problem, however, can be viewed in a completely different light. Past attempts to explain the imperfect subjunctive have typi-cally proposed one or another identification of the *-s- and *-ē- and suggested ways – or left it to the reader to imagine ways – that the combination *-s-ē- could have acquired the functions associated with *-sē- in the attested languages. As we shall see, there are advan-tages to be gained from a less PIE-centered, more "synchronic" ap-proach – one that focuses on the state of the Proto-Italic system at the critical moment when the need for tense marking in the subjunc-

---

[17]) Cowgill suggests that *-ē- was the regular contraction product of *-āē-, and that the treatment seen in Osc. deiuaid was analogical. By 1980, however, he had abandoned this idea, and suggested to me in a personal communication that *fusē- might better be interpreted as an ē-preterite of the s-future. The latter pro-posal was perhaps influenced by Pedersen (1921: 14 f.), who derives the imper-fect subjunctive from a "conditional" (i. e., a preterite of the future) in *-s-m̥ (> *-sem), *-s-s, *-s-t̥, subsequently enlarged by the *-ē- of amem, -ēs.

tive was first recognized and addressed by native speakers. The par-ent language, as we know, had two subordinate moods, which, to judge from the Greek Sequence of Moods rule, may originally have been used in ways that approximated the use of the present and past subjunctives in Latin. But the PIE situation was transformed in Italic, where the subjunctive became a future, and the only modal category that remained, other than the imperative, was the optative. Thus, there must have been a period in the evolution of Proto-Italic when there was no formal distinction between the two "subjunc-tives" (= optatives) in sentences like

5) *ne skiō   kʷid   fakiās / faksīs
   (= Lat. nesciō   quid   faciās (pres. subj.))
   'I don't know   what   you are doing'

and

6) *ne skiēfām   kʷid   fakiās / faksīs
   (= Lat. nesciēbam quid   *faciās (for impf. subj. facerēs))
   'I didn't know   what   you were doing'.[18])

It is against the background of the grammar that produced sentences 5) and 6) – a grammar with no contrast between present and past subjunctives, and therefore also with no ST rule – that the substitu-tion of the new imperfect subjunctive *fakisēs (> Lat. facerēs) for *fakiās / *faksīs in 6) must be understood.

That the speakers of Proto-Italic would have found it expedient to attach the feature [+ past] to an embedded verb in "secondary se-quence" (i. e., after a [+ past] main verb) is not surprising, given the cross-linguistic frequency of interclausal tense agreement rules. Other IE languages which have lost the subjunctive : optative oppo-sition have similarly introduced a distinction between past and non-past varieties of a single subordinate mood, among them Celtic and Germanic, the immediate neighbors of Italic to the west and north. In these languages the origin of the forms that function as past sub-junctives is clear. The Insular Celtic languages make their past sub-junctive by adding the endings of the imperfect indicative to the sub-junctive stem, thus creating, in effect, an imperfect of the subjunctive

---

[18]) These examples, of course, are merely intended to illustrate a stage of Proto-Italic when there was as yet no tense agreement between matrix verbs and subjunctives in embedded clauses. The particular choice of syntactic frame is ar-bitrary; similar sentences could have been constructed using a variety of other clause types.

(cf. OIr. pres. subj. *do·bera* 'may give', past subj. *do·berad* 'might give', formally comparable to *do·goa* 'chooses', impf. *do·goad* 'used to choose'). Translated into Italic terms, this procedure would have generated imperfect subjunctives of the type Lat. **faciābam, -bās* or **faxi(ē)bam, -bās,* which are not found in any actually attested Italic dialect.

The model of the past subjunctive in Germanic, however, is more instructive. The forms that pattern as past subjunctives in this branch of the family are etymologically simply optatives of the preterite, i.e., optatives of the PIE perfect (cf. Go. *tekan* 'touch', pret. 3 sg. *taitok*, pret. subj. *taitoki*).[19] The transformation of the perfect optative into a true past subjunctive in Germanic was triggered by two developments with close typological parallels in Italic – the elimination of the PIE subjunctive as a distinct mood and the conversion of the perfect indicative into a simple preterite. With the loss of the old subjunctive, Proto-Germanic entered a linguistic stage comparable the Italic stage represented by sentences 5) and 6). Its response to the absence of tense distinctions in modal subordinate clauses was to replace the optative of the present by the optative of the preterite/perfect in [+past] environments.[20] What, we may now ask, would have been the analogous development in Italic? The only synchronic subjunctive associated with a past tense in early Proto-Italic was the subjunctive of the perfect. The Italic perfect was functionally as well as formally a conflation of the PIE perfect and aorist; Lat. *tetigī, -istī* still means both 'have touched', with a development of the old perfect meaning, and 'touched', continuing the value of the old aorist. Since there were no modal forms of the imperfect in PIE, and

---

[19] This is true at least for strong verbs; the origin of the preterite optative in weak verbs is necessarily bound up with the problem of the origin of the weak preterite itself.

[20] It is easy to see why this happened. In Proto-Germanic, as in every other early IE language, there were many kinds of subordinate clauses – those conveying information assumed to be factually true, for example – that regularly employed the indicative. For obvious semantic reasons, such clauses would routinely have used the preterite (< perfect) after a main verb marked for past time, just as, e.g., Eng. *I know that Edward is king* translates, in the past, to *I knew that Edward was king.* It would have been a trivial step for this agreement pattern to spread to clauses that required the subjunctive, with the subjunctive of the preterite (= the old perfect optative) substituting for the present subjunctive in [+past] contexts. The result was the simple sequence of tenses rule seen, e.g., in Go. *jah athaitands sumana magiwe frah-uh hva wesi þata* 'and calling one of the lads, asked (pret.) what that [clamor] was (pret. subj.)' (Luke 15, 26).

---

since the perfect and aorist were no longer distinguished in early Proto-Italic, the "Germanic" treatment of sentence 6) would have been to substitute the perfect subjunctive – the structural counterpart of Lat. *fēcerīs* – for **fakiās / *faksīs.*[21]

The form of the perfect subjunctive in Proto-Italic is seldom explicitly discussed. In Latin, as noted earlier, the perfect subjunctive in **-sī-* (*tetigerim, -īs; fēcerim, -īs,* etc.) is an optative of the s-future of the perfect, i.e., the future perfect (*tetigerō, -is; fēcerō, -is,* etc.), just as the present subjunctive in **-sī-* (*faxim, -īs,* etc.) is an optative of the simple s-future (*faxō, -is*). As such, the *tetigerim*-type represents an innovation that can be no older than the creation of the future perfect itself; to judge from the absence of comparable forms in Osco-Umbrian, it may be considerably later. *A priori,* we might have expected that Proto-Italic would have inherited a more archaic type of perfect subjunctive based directly on the unsigmatized perfect stem, just as in the present system the non-sigmatic *faciās,* based directly on the present stem, is firmly entrenched beside *faxīs.* No such s-less (or rather r-less) forms are found in Latin, but they are well-attested in Oscan and Umbrian, where they supply our only examples of the perfect subjunctive in these languages. Significantly, the Osco-Umbrian perfect subjunctive is formed with the mood sign **-ē-* – a fact which is obscured, but not concealed, by the conventions of Oscan orthography. The high mid vowel that developed from PIE **ē* in Oscan is not distinguished from the reflex of PIE **ī* in inscriptions written in the Latin alphabet; perfect subjunctives like 3 sg. *fefacid* 'may have done, fecerit' and *fuid* 'may have been, fuerit' can as easily go back to preforms in **-ī-* as in **-ē-.* But the ambiguity is resolved in favor of **-ē-* by the forms 3 pl. *tríbarakattíns* 'aedificauerint' and 3 sg. pass. *sakrafír* 'sacratum sit', both written in the native Oscan alphabet and using the special symbol *í* to represent a lower vowel than *i.*[22]

The Osco-Umbrian – and no doubt Proto-Italic – perfect subjunctive in **-ē-* thus takes its place beside the imperfect subjunctive in **-sē-* and the first conjugation present subjunctive in **-aē-* as the third Italic category in which the vowel **-ē-* functions as a mood

---

[21] The assumption that the PIE perfect and aorist had already fallen together is important for the argument that follows. See, however, note 36.

[22] The evidence for the mood sign of the perfect subjunctive in Umbrian is completely ambiguous; cf. Poultney (1959: 137). The form *herifi,* listed as a perfect subjunctive in the older handbooks, has been attractively explained as an infinitive by Rix (1976b).

sign. Its origin in this case is relatively clear. A PIE $\bar{e}$-subjunctive, as
proposed, e.g., by Buck (1928: 175), is excluded on the familiar se-
mantic and morphological grounds: not only do PIE subjunctives
normally give Italic futures, but most of the PIE stem-types that un-
derlie the Italic perfect were non-thematic, and hence would regu-
larly have formed short vowel subjunctives in the parent language.[23]
The optative sign $*-i\bar{e}-$ / $*-\bar{\imath}-$ offers a better, and indeed the only
realistic point of departure. Since intervocalic $*-i-$ was lost in the
Proto-Italic period, $*-i\bar{e}-$ would have given $*-\bar{e}-$ by normal sound
change in the optatives of vowel-final perfect stems. Osc. *fuid*
[fuēd], which can be exactly equated with the Vedic Sanskrit root
aorist optative *bhūyā́ḥ*, is the most striking example of this kind.[24]
The root $*f\breve{u}$-, however, is not isolated: Latin perfects of the type
sēuī, plēuī, and *strāuī,* are almost certainly late replacements of root
aorists $*s\bar{e}$- ($*seh_1$-), $*pl\bar{e}$- ($*pleh_1$-), and $*str\bar{a}$- ($*streh_2$-), the regular
optatives of which, before the loss of $*-i-$, would have been $*sai\bar{e}$-
($*sh_1\text{-}ieh_1$-), $*pl\bar{a}i\bar{e}$- ($*plh_1\text{-}ieh_1$-), and $*str\bar{a}i\bar{e}$- ($*strh_2\text{-}ieh_1$-).[25] From
such forms, $*-\bar{e}-$ was evidently extended to the great mass of perfect
stems that ended in a consonant.

The replacement of $*-i\bar{e}-$ by $*-\bar{e}-$ after consonants, which was
probably an Italic rather than a purely Osco-Umbrian development,
was favored by a number of special circumstances. In perfects of the
reduplicated type, optative forms like 3 sg. $*fefak\text{-}i\bar{e}\text{-}t$ would regu-
larly have retained their postconsonantal $*-i-$.[26] No $*-i-$ appeared,
however, in the corresponding plural forms, which were based on
the weak optative stem in $*-\bar{\imath}-$. The $*-i\bar{e}-$ / $*-\bar{\imath}-$ alternation would
have led to difficulties in cases where the perfect stem ended in $*-g-$
or $*-d-$. These consonants were completely assimilated to a follow-

---

[23] The only thematic perfect stems in Italic were those based on old thematic
aorists; such perfects might have been expected to form subjunctives in $*-\bar{a}-$, re-
placing PIE thematic optatives in $*-oi-$.

[24] Ved. *bhūyā́ḥ,* with the "precative" ending $-ḥ < *-st,$ is an inner-Indic re-
placement of Indo-Iranian *bhūyā́t* (: Avestan *būiiā̊t*).

[25] These forms, of course, were eventually replaced in Latin by regularized
perfect subjunctives built to the new indicatives in *-u-* (*seuerīs, pleuerīs, strāuerīs*);
cf. note 5. Other perfects that would have lost intervocalic $*-i-$ in the optative
were the Italic counterparts of *gnōuī, pāuī,* and *crēuī* (both 'I have separated '
and 'I have grown').

[26] The choice of the perfect stem *fefak-* as an example is convenient in view
of Osc. *fefacid,* but it is not at all clear that this verb actually formed a reduplicated
perfect in Proto-Italic. Lat. *fēcī, -istī,* which matches Gk. *éthēka,* probably re-
flects the more original formation.

---

ing $*-i-$ in Proto-Italic; examples of the change in Latin include the
comparatives *maior* [maiior] < $*mag\text{-}i\bar{o}s$ and *peior* [peiior] < $*ped\text{-}i\bar{o}s$. The subjunctives corresponding to the Latin perfects *tetigī* and
cecidī (: pres. *cadō*) would thus have emerged in Proto-Italic as $*te\text{-}taii\bar{e}$- / $*tetagī$- and $*kekaii\bar{e}$- / $*kekadī$-, with $*-ii-$ for $*-gi-$ and
$*-di-$, respectively. The morphological opacity of $*tetaii\bar{e}$- and $*ke\text{-}kaii\bar{e}$- would have made them prime candidates for analogical re-
structuring. Since the clusters $*-gi-$ and $*-di-$ were phonotactically
prohibited, the simplest way to restore the integrity of the perfect
stems $*tetag-$ and $*kekad-$ would have been to generalize the pattern
already established in perfect subjunctives of the type $*fu\bar{e}$- / $*fu\bar{\imath}$-.
The proportion was simple:

$$*fu\bar{\imath} : *fu\bar{e}\text{-} :: *tetag\bar{\imath}\text{-}, *kekad\bar{\imath}\text{-} : X; \ X = *tetag\bar{e}\text{-}, *kekad\bar{e}\text{-}.$$

Once generated in this way, the new $*tetag\bar{e}$- and $*kekad\bar{e}$- would
naturally have helped trigger the replacement of the type $*fefakii\bar{e}$-
by $*fefak\bar{e}$-. Eventually, the weak stems $*tetag\bar{\imath}$-, $*kekad\bar{\imath}$-, $*fu\bar{\imath}$-, and
$*fefak\bar{\imath}$- were eliminated by inner-paradigmatic leveling.[27]

The newly transformed mood sign $*-\bar{e}-$ was subsequently general-
ized to the other perfect types. The mechanism by which $*-i\bar{e}-$ was
replaced by $*-\bar{e}-$ in the "long-vowel" perfects, both old root aorists
like Lat. *uēnī* (: Osc. *kúmbened*)[28] and true perfects like Lat. *ēmī,*
was probably the same as in the case of $*tetag\bar{e}$- and $*fefak\bar{e}$-. In the
s-perfects (*dīxī,* etc.) the details are less clear. Here there were prob-
ably no forms in $*-s-i\bar{e}-$ or $*-s-\bar{\imath}-$ in the parent language at all; as
pointed out by Hoffmann (cf. above), there is good reason to believe
that the optative of the PIE *s*-aorist was a suppletive formation built
directly from the verbal root. The perfect subjunctive corresponding
to Lat. *dīxī,* originally based on a non-sigmatic stem $*dikii\bar{e}$- or
$*deikī$-, was eventually transformed to $*deiks\bar{e}$- in Italic, but the ex-

---

[27] This is basically the explanation of Osco-Umbrian $*fu\bar{e}$- and $*fefak\bar{e}$-
given by Lindeman (1982: 303ff.). But Lindeman wrongly tries to derive the
Latin perfect subjunctive *fuerī-* from the same original paradigm as $*fu\bar{e}$-, taking
$*fu\bar{e}$- from the strong stem $*bhu\text{-}i\bar{e}$- and *fuerī-,* despite its $*-is-$, from the weak
stem $*bhu\text{-}\bar{\imath}$-. He is thus forced to treat the invariant $*-\bar{e}-$ of Osco-Umbrian as a
post-Italic innovation.

[28] It is worth noting, perhaps, that *uēnī* and *kúmbened* go back to the same
paradigm. The Latin long vowel, which is also found in Tocharian, arose by in-
ner-PIE sound change in the 1 sg. and 2 sg., where underlying $*g^w\acute{e}m\text{-}m$ and
$*g^w\acute{e}m\text{-}s$ both regularly gave $*g^w\bar{e}m$ within the parent language. (In the case of
the 2 sg. I owe this observation to Alan Nussbaum.) Latin generalized $*-\bar{e}-$ to the
whole paradigm, while Osco-Umbrian retained the $*-\breve{e}-$ of the 3 sg.

act analogical route by which *deiks-, the general perfect stem, came to be combined with the productive subjunctive marker *-ē- is unknown. Still less can be said about the prehistory of the subjunctives corresponding to the Osco-Umbrian f-perfect (cf. Osc. perf. subj. sakrafír < *-f-ē-), the Oscan tt-perfect (cf. tríbarakattíns < *-tt-ē-), the Umbrian nki̯-perfect (cf. perf. subj. 3 sg. combifiansi 'nuntiauerit' < *-nki̯-ē-), and the Latin u-perfect (type amāuī; Italic perfect subjunctive *amāu̯-ē-?). To the extent that these formations, all more or less obscure, go back to the Proto-Italic period, they no doubt made their subjunctives in *-ē- < *-i̯ē- according to the productive pattern. They are unlikely to be very old, and have nothing to say about the etymology of the mood sign.

In short, we are still far from being able to write a detailed history of the Proto-Italic perfect subjunctive. Nevertheless, it can be taken as a safe working hypothesis that by the end of the linguistic stage represented by sentences 5) and 6), this category had come to be characterized, regardless of stem-type, by the mood sign *-ē- < *-i̯ē-. Returning now to the problem of the imperfect subjunctive, let us suppose that early Proto-Italic adopted the "Germanic" strategy of substituting the perfect subjunctive for the present subjunctive in [+past] syntactic environments. The effect of this change would have been to establish a crude sequence of tenses rule: present subjunctives in primary sequence alternated with perfect subjunctives in secondary sequence. Some typical 2 sg. forms, chosen to reflect the major perfect stem types, are listed below.

	primary sequence	secondary sequence	
'touch'	*tagās / *taksīs	*tetagēs	(reduplicated perfect)
'be'	*fu̯ās / *fusīs	*fu̯ēs	(root perfect)
'say'	*deikās / *deiksīs	*deiksēs	(s-perfect)
'come'	*gʷenās / *gʷenasīs	*gʷēnēs	(long-vowel perfect)
'love'	*amaēs / *amāsīs	*amāu̯ēs	(u-perfect)

While several of these forms are merely educated guesses, the overall pattern is clear enough.[29]) All ordinary verbs formed a per-

fect subjunctive in *-ē-, which also served as a past subjunctive in [+past] environments, and two present subjunctives, one in *-ā- or *-(a)ē-, and the other in *-sī-. The functional difference between the two present subjunctives is unknown. Presumably the s-forms originally had a desiderative nuance which was absent from the forms in *-ā- and *-(a)ē-, but no such contrast is detectable in Latin, the only Italic language to attest both types. The s-subjunctive, no less than the subjunctive in *-ā- (*-(a)ē-), was fully productive – a point which requires some emphasis in view of the changed situation in the daughter languages. The type is extinct in Osco-Umbrian; its distribution is restricted even in Old Latin, where it is confined to roots ending in a stop (cf. tāxīs, dīxīs) and to root-like complexes ("bases") ending in a long vowel (cf. amāssīs, with secondary gemination). The absence of forms like *forīs (< *fūsīs) and *ueneīs (< *gʷenāsīs), however, is secondary in Latin, as can be seen from the survival of the corresponding indicatives as s-futures in Oscan and Umbrian (cf. Osc., Umbr. 3 sg. fust 'will be'; Umbr. 2 sg. menes 'you will come' (i.e., *benes, with analogical *-es for *-as < *-as-si)).[30]) Taken together, the Latin and Osco-Umbrian evidence points to a completely general distribution for both the s-future and its original optative, the s-subjunctive, in Proto-Italic. The significance of this fact will be seen directly.

There was one major difference between the pre-Italic system as just described and that of Proto-Germanic. In Proto-Germanic the PIE perfect developed into a simple preterite, and its optative was correspondingly transformed into a simple past subjunctive. In Italic, however, where the indicative of the perfect retained the dual function of a simple preterite, reflecting the PIE aorist, and a resultative present, reflecting the PIE perfect, there was a corresponding se-

---

29) The deradical ā-subjunctives *tagās and gʷenās are set up on the strength of OLat. attigās and aduenās, which were eventually replaced in Latin by the classical tangās and ueniās (cf. note 7). Of the s-subjunctives, only *gʷenasīs calls for comment; the non-radical *-a- reflects the laryngeal (*-h₁-) that regularly stood between root-final sonorants and the *-s- of the PIE desiderative (cf. the

Greek "Attic" futures tenō (root ten-), phtherō (root phther-), etc. < *-esō). The reconstruction *amāu̯ēs for the perfect subjunctive of *amā- is based on the assumption, admittedly speculative, that Proto-Italic had a u-perfect corresponding to Latin amāuī. Nothing will depend on this conjecture in the discussion that follows; any of the imaginable alternatives – *amāsēs, *amāfēs, *amāttēs, or even *amānki̯ēs – would serve our purposes equally well.

30) Note also the early forms iuuerint and monerint, which are best taken as s-subjunctives of iuuāre (iuuere) and monēre, respectively. The -ĕ- of iuuerint is probably the reflex of a root-final laryngeal; the -ĕ- of monerint belongs to the base mone-, which was extracted in early Italic from the causative stem *mon-eye/o- (cf. ptcp. monitus < *mone-tos). Other, less satisfactory, views are discussed by Leumann (op. cit., 596).

mantic split in the perfect subjunctive. On the one hand, the perfect subjunctive was employed as a past subjunctive in [+past] syntactic environments, as postulated above. On the other, it retained its function as a resultative present subjunctive – the role it still plays, e.g., in Latin sentences of the type *nesciō quid fēcerīs* (perf. subj.) 'I don't know what you have done' (cf. sentence 1) above). For purposes of distinguishing the two functions, we may write *tetagēs₁* for the perfect subjunctive in its past value, and *tetagēs₂* for the same form in its more original resultative present value. Our table can be recast as follows:

present subjunctive	past subj.	resultative pres. subj.
*tagās / *taksīs	*tetagēs₁	*tetagēs₂
*fuās / *fusīs	*fuēs₁	*fuēs₂
*deikās / *deiksīs	*deiksēs₁	*deiksēs₂
*gʷenās / *gʷenasīs	*gʷēnēs₁	*gʷēnēs₂
*amaēs / *amāsīs	*amāu̯ēs₁	*amāu̯ēs₂

The expansion of the perfect subjunctive into the role of a past subjunctive had the desirable effect of allowing tense agreement to be marked between matrix verbs and embedded verbs in certain kinds of complex sentences. But the formal identity of *tetagēs₁* and *tetagēs₂* was inconvenient in other ways. The two functions, corresponding roughly to the functions of the later imperfect and perfect subjunctive, were very different; occasionally they even contrasted in identical syntactic environments, as was apparently the case, e.g., in result clauses.[31]) *A priori*, there was no reason why *tetagēs₁*, marked for past time but not for "perfectivity," i.e., completedness vis-à-vis some other action, should have coincided in form with *tetagēs₂*, marked for perfectivity but not for past time. The situation would have encouraged speakers to differentiate between the two forms if a simple method for doing so had presented itself. And as it happened, such a method lay ready to hand.

The form *deiksēs₁*, built to an s-perfect, was the [+past] counterpart of the present subjunctives *deikās* and *deiksīs*, from the latter

---

[31]) Note, for example, the difference between *tam longē aberam ut nōn uīdērem* (impf. subj.) 'I was too far away to see' (i.e., seeing was in principle impossible), and *tam longē aberam ut nōn uīderim* (perf. subj.) 'I was so far away that I didn't see' (i.e., circumstances made seeing impossible). Cf. Woodcock (1959: 122-3).

of which it differed only in showing *-ē-* for *-ī-* before the personal ending. This phonological resemblance was entirely fortuitous, since the *-s-* of *deiksēs₁* was the *-s-* of the PIE s-aorist, while the *-s-* of *deiksīs* was the *-s-* of the PIE desiderative/future. But the accidental similarity of the two forms was synchronically useful: it allowed speakers to reinterpret the past subjunctive *deiksēs₁* as a derivative of the present subjunctive *deiksīs*, and to generalize the pattern of the pair *deiksīs : *deiksēs₁* to other verbs. The proportion was simple:

$$*deiksīs : *deiksēs_1 :: *taksīs, *fusīs, *g^wenasīs, *amāsīs : X;$$
$$X = *taksēs, *fusēs, *g^wenasēs, *amāsēs.$$

The effect of this change was to equip every present subjunctive in *-sī-* – and the type, it will be recalled, was productive in Italic – with a preterite in *-sē-*. The new past subjunctives, which had the advantage of being morphologically distinct from the corresponding resultative forms, supplanted the older *tetagēs₁*, *fuēs₁*, *gʷēnēs₁*, and *amāu̯ēs₁*. Non-past *tetagēs₂*, *fuēs₂*, *gʷēnēs₂*, and *amāu̯ēs₂* were unaffected; the association of resultative meaning with the perfect stem was too strong to be shaken. Henceforth there were two categories – a purely resultative ("perfect") subjunctive in *-ē-*, built to the perfect stem, and a nonresultative past subjunctive in *-sē-*, built to the stem of the s-future and s-subjunctive. The latter formation, having no remaining tie to the perfect system, was now in every sense an imperfect subjunctive.

The creation of *taksēs*, *fusēs*, *gʷenasēs*, and *amāsēs* under the influence of *deiksēs* was the single most important step in the evolution of the classical imperfect subjunctive. Two of the new forms, *fusēs* and *amāsēs*, were directly ancestral to their attested counterparts in Latin and Osco-Umbrian (Lat. *forēs*, Osc. 3 sg. *fusíd*; Lat. *amārēs*). The others – *taksēs*, *gʷenasēs*, and *deiksēs* itself – were subject to a further analogical change. The Latin forms *tangerēs*, *uenīrēs*, and *dīcerēs* go back to Proto-Italic prototypes *tangesēs*, *gʷenīsēs*, and *deikesēs*, with *-sē-* added to the present stem rather than to the root (cf. also Osc. 3 pl. *patensíns* present stem *patne-* + *-sē-*). The shift from the structure *root + tense/mood sign* to *present stem + tense/mood sign* was in all likelihood prompted by the formal identity, as yet undisturbed by analogy, of the imperfect subjunctive *deiksēs₁* and the perfect subjunctive *deiksēs₂*. To remedy the inconvenient homophony of the two forms, recourse was had to the model of first conjugation verbs like *amā-*, where the sequence that

preceded the *-sē- of the imperfect subjunctive was identical with the present stem.[32]) The formula was

2 sg. pres. indic. *amās(i) (< *-āi̯esi; cf. Lat. amās): impf. subj. *amāsēs :: pres. indic. *deikes(i) : X; X = *deikesēs.

With *deikesēs established beside the present stem *deike-, the replacement of *taksēs and *gʷensēs by *tangesēs (: 2 sg. pres. *tanges (i) and *gʷenīsēs (: 2 sg. pres. *gʷenīs(i) was all but inevitable.[33]) The result was the system reconstructible for late Proto-Italic:

present subjunctive	impf. subj.	perf. subj.
*tagās / *taksīs	*tangesēs	*tetagēs
*fuās / *fusīs	*fusēs	*fuēs
*deikās / *deiksīs	*deikesēs	*deiksēs
*gʷenās / *gʷenasīs	*gʷenīsēs	*gʷēnēs
*amaēs / *amāsīs	*amāsēs	*amāu̯ēs

The post-Italic history of these forms is well-known. Osco-Umbrian was relatively conservative: although the present subjunctive in *-sī- was lost and the s-perfect gave way to other stem-types, the basic structure of the imperfect subjunctive (*present stem* + *-sē-) and perfect subjunctive (*perfect stem* + *-ē-) was retained. In Latin, on the other hand, the perfect subjunctive in *-ē- was completely replaced by the type tetigerīs < *tetagisī-, formally an s-subjunctive of the perfect stem with the union vowel *-i- inserted before the mood sign. Whether there was originally a corresponding Proto-Italic type *tetag-sī-, which was lost in Osco-Umbrian along with the simple s-subjunctive (*tag-sī-), is impossible to determine.[34]) Pre-Latin *te-

---

[32]) The same was true in the second conjugation; compare OLat. pres. subj. prohibēssīs, with the same secondary gemination as in amāssīs, beside impf. subj. prohibērēs. The substitution of present stems for roots is, of course, extremely common throughout the IE family.

[33]) Similarly, imperfect subjunctives in *-isē- were created to present stems in *-ī-; cf. facerēs < *fakisēs beside facis < *fakis(i).

[34]) Note that the analogical argument presented here depends crucially on the synchronic interpretation of the perfect subjuncitves in *-ē- (*tetagēs, *deiksēs, etc.) as [+past] counterparts of the present subjunctives in *-sī- (*taksīs, *deiksīs, etc.). This pairing of *-ē- (perf. subj.) with *-sī- (pres. subj.) would have been perfectly natural so long as forms like *tetagēs were the only perfect subjunctives in the language. But after the rise of the type *tetaksīs there would have

tagisī- (tetigerīs), like the future perfect *tetagise/o- (tetigeris) and the pluperfect indicative *tetagisā- (tetigerās), was eventually reanalyzed: the s-element ceased to be interpreted as a separate morpheme and was synchronically assigned to the perfect stem. The extended stem in *-is-, suffixed by the past subjunctive marker *-sē-, gave rise to the most recent category in the Latin system, the pluperfect subjunctive in *-issē- (type tetigissēs < *tetagis-sē-). Nothing similar is found in Osco-Umbrian.[35])

The approach taken above thus yields a simple and elegant solution to the problem of the imperfect and pluperfect subjunctives. We have assumed the following developments:

1) the merger of the PIE perfect and aorist into a single Italic category with a subjunctive in *-ē-, probably reflecting an original optative in *-i̯ē- / *-ī-;[36])

2) the extension of the perfect subjunctive in *-ē-, qua subjunctive of the preterite, to "past" functions later associated with the imperfect subjunctive;

3) the differentiation of the perfect subjunctive into two formally distinct categories, a resultative perfect subjunctive in *-ē- and a past

---

been formal, and perhaps also semantic, reasons for speakers to reinterpret *tetagēs as the past subjunctive corresponding specifically to *tagās, and to associate the innovated *tetaksīs with the s-subjunctive *taksīs. A form like *deiksēs would thenceforth probably have patterned as the past of *deikās, not *deiksīs, and there would have been no motivation for the fundamental proportion *deiksīs : *deiksēs :: *taksīs : X. None of this excludes the possibility of a Proto-Italic *tetaksīs, but it does suggest that the imperfect subjutive *tangesēs, or at least its predecessor *taksēs, was the earlier creation.

[35]) The perfect infinitive in -isse < *-is-si (tetigisse, fēcisse, etc.) is a formation of the same type, superficially resembling the pluperfect subjunctive in the same way that the present infinitive resembles the imperfect subjunctive. See note 9.

[36]) There are excellent reasons, in my view, to regard the elimination of the perfect: aorist opposition as one of the earliest common Italic–perhaps even Italo-Celtic–innovations. The roots *fak- 'do' and *deik- 'say', which base their synchronic perfects on the aorist in Latin (fēc-, dīx-) but on the reduplicated perfect in Osco-Umbrian (cf. Osc. perf. subj. fefacid, Umbr. fut. perf. dersicust < *dedik-), point not to a separate merger of the two categories in the two branches, but merely to a secondary extension of the reduplicated perfect in Osco-Umbrian. It should be noted, however, that the explanation proposed here can easily be accommodated to a theory of Proto-Italic in which the perfect and aorist remained distinct. In place of perfect subjunctives in *-ē- we could, if necessary, simply assume a series of Proto-Italic aorist subjunctives of the type *fuē-, *gʷēnē-, and *deiksē-; the substitution of these for present subjunctives in [+past] environments would have led to a variant of the scenario described above.

(imperfect) subjunctive in *-sē-, the latter generalized from pairs of the type *deiksīs : *deiksēs;

4) the replacement of *deiksēs, *taksēs, etc., by *deikesēs, *tangesēs under the influence of verbs like *amā- (pres. stem): *amāsē- (impf. subj.); and

5) in Latin, the substitution of *-isī- for *-ē- in the perfect subjunctive, followed by the analogical reinterpretation of *-is- as part of the perfect stem and the addition of *-sē- to *-is- to form the new pluperfect subjunctive.

If this scenario is correct, the history of tense marking in the Italic subjunctive is methodologically instructive. The problem has traditionally been approached from a purely formal, PIE-centered point of view, with attention focused, e.g., on the question of whether the *-s- of the tense/mood sign *-sē- should be identified with the *-s- of the PIE desiderative or the *-s- of the PIE sigmatic aorist. In reality, both etymologies are correct: the spread of *-sē- as a past subjunctive marker was made possible by the confusion of the *-s- of *deiksēs, which historically belonged to the s-aorist, with the *-s- of *deiksīs, which historically belonged to the desiderative. The all-important fact is that the creation of the imperfect subjunctive took place at a time when the traditional PIE categories – desiderative, aorist, perfect, subjunctive, optative – had been transformed beyond recognition. The rise of *-sē-, anomalous in PIE terms, was a perfectly natural development in the context of the early Italic system, with its present subjunctive in *-sī- and perfect subjunctive in *-ē-. The lesson is an obvious one, but it deserves to be re-emphasized. Linguistic history is the record of successive synchronic stages, each with structural peculiarities of its own, and each dependent on the structural characteristics, old and new, of its immediate predecessors.

Dept. of Linguistics   Jay H. Jasanoff
Yale University
Box 1504 a Yale Station
New Haven, CT 06520
USA

Bibliography

Brugmann, Karl (1880): Beiträge zur conjugationslehre. Morphologische Untersuchungen 3. 1–90.

Buck, Carl Darling (1928): A Grammar of Oscan and Umbrian, 2nd edn. Boston: Ginn and Co.

(1933): Comparative Grammar of Greek and Latin. Chicago: University of Chicago Press.

Cowgill, Warren (1973): The source of Latin stāre, with notes on comparable forms elsewhere in Indo-European. Papers on Italic topics presented to James Wilson Poultney (= Journal of Indo-European Studies 1.3), 271–303.

Hirt, Hermann (1915): Zur Verbalflexion. Indogermanische Forschungen 35. 137–47.

Hoffmann, Karl (1968): Zum Optativ des indogermanischen Wurzelaorists. Pratidānam. Indian, Iranian, and Indo-European studies presented to Franciscus Bernardus Jacobus Kuiper on his sixtieth birthday, ed. by J. C. Heesterman, G. H. Schokker, and V. I. Subramoniam, 3–8. The Hague, Paris: Mouton.

Jasanoff, Jay (1978): Stative and middle in Indo-European (= Innsbrucker Beiträge zur Sprachwissenschaft 23). Innsbruck: Innsbrucker sprachwissenschaftliche Gesellschaft.

- (1983): The IE. "ā-preterite" and related forms. Indogermanische Forschungen 88. 54–83.

- (1987): The tenses of the Latin perfect system. Festschrift for Henry Hoenigswald, ed. by George Cardona and Norman H. Zide, 177–84. Tübingen: Günter Narr Verlag.

- (1988): PIE "*ĝnē-" 'recognize, know'. Die Laryngaltheorie und die Rekonstruktion des indogermanischen Laut- und Formensystems, ed. by Alfred Bammesberger. Heidelberg: Carl Winter Verlag.

Leumann, Manu (1977): Lateinische Laut- und Formenlehre. München: Verlag C. H. Beck.

Lindeman, Frederik Otto (1982): Notes italiques. Bulletin de la société de linguistique 77. 303–8.

Narten, Johanna (1968): Zum "proterodynamischen" Wurzelpräsens. Pratidānam. Indian, Iranian, and Indo-European studies presented to Franciscus Bernardus Jacobus Kuiper on his sixtieth birthday, ed. by J. C. Heesterman, G. H. Schokker, and V. I. Subramoniam, 9–19. The Hague, Paris: Mouton.

Pedersen, Holger (1921): Les formes sigmatiques du verbe latin et le problème du futur indo-européen. Det kgl. danske videnskabernes selskab. Historisk-filologiske meddelelser III. 5.

Poultney, James W. (1959): The bronze tables of Iguvium. Baltimore: American Philological Association.

Rix, Helmut (1976a): Historische Grammatik des Griechischen. Darmstadt: Wissenschaftliche Buchhandlung.

- (1976b): Die umbrischen Infinitive auf -fi und die urindogermanische Infinitivendung *-dʰi̯ōi̯. Studies in Greek, Italic, and Indo-European linguistics offered to Leonard R. Palmer on the occasion of his seventieth birthday, ed. by Anna Morpurgo Davies and Wolfgang Meid (= Innsbrucker Beiträge zur Sprachwissenschaft 16), 319–32. Innsbruck: Innsbrucker sprachwiss. Gesell.

Safarewicz, Jan (1952): Contributions à la grammaire latine. Eos 46. 97–105.

Stang, Christian S. (1966): Vergleichende Grammatik der baltischen Sprachen. Oslo – Bergen – Tromsö: Universitetsforlaget.

Thurneysen, Rudolf (1884): Der italokeltische Conjunktiv mit ā. Beiträge zur Kunde der indogermanischen Sprachen [BB], 8. 269–88.

Woodcock, Eric Charles (1959): A new Latin syntax. Cambridge: Harvard University Press.