Rix, Helmut
1995a Etruskische Personennamen. In: Eichler et al. (eds.), 719–724.
Rix, Helmut
1995b Römische Personennamen. In: Eichler et al. (eds.), 724–732.
Saalfeld, Günther Alexander Ernst Adolph
1964 [1884] *Tensaurus italograecus. Ausführliches historisch-kritisches Wörterbuch der griechischen Lehn- und Fremdwörter in Lateinischen.* Hildesheim: Olms. [Vienna: Gerold.]
Untermann, Jürgen
1993 'Urverwandtschaft' und historische Nachbarschaft im Wortschatz der italischen Sprachen. *Incontri linguistici* 16: 93–101.
Untermann, Jürgen
1995 Die vorrömischen Personennamen der Randzonen des alten Italien. In: Eichler et al. (eds.), 732–738.
Untermann, Jürgen
2000 *Wörterbuch des Oskisch-Umbrischen*. (Handbuch der italischen Dialekte 3). Heidelberg: Winter.
Vetter, Emil
1953 *Handbuch der italischen Dialekte.* Vol. 1. *Texte mit Erklärung, Glossen, Wörterverzeichnis.* Heidelberg: Winter.
Wallace, Rex E.
2007 *The Sabellic Languages of Ancient Italy.* Munich: LINCOM.EUROPA.
Weise, Friedrich Oscar
1964 [1882] *Die griechischen Wörter im Latein*. (Preisschriften der Jablonowskischen Gesellschaft XV. 23). Leipzig: Zentral-Antiquariat der Deutschen Demokratischen Republik. [Leipzig: Hirzel.]
WOU = Untermann 2000.

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51. The dialectology of Italic

1. The status of Proto-Italic within Indo-European

The differences between Latino-Faliscan and Sabellic are not trivial and have led some to view Italic as a pseudo-branch or *Sprachbund* that arose through convergence of geographically contiguous but phylogenetically not closely connected dialects, rather than as a node on the Indo-European Stammbaum. This view goes back to the 1910s and 1920s and originated in Germany, though it came to be identified especially with Italian scholars. See the overview of scholarship in Jones (1950: 62–63). Beeler (1966) takes a compromise position. The methodological issues surrounding this dispute cannot

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be adequately addressed here. In my view, a traditional Proto-Italic stage most easily accounts for the available evidence and involves the fewest additional assumptions. We will examine the evidence from phonology, morphology, lexicon, and syntax in 1.1–1.4 below and discuss Latin–Sabellic divergences in 1.5.

1.1. As Weiss (2009: 467 ff.) notes, the phonological isoglosses traditionally used as diagnostic of an Italic subgroup of Indo-European are a somewhat mixed bag of trivial and non-trivial innovations. The following discussion incorporates much of his list, augmented with some additional material; I have tried to include some items not usually discussed in this context. Space does not allow inclusion of every conceivable Proto-Italic innovation.

1.1.1. Four of Weiss's "most probative" changes are shared with Venetic (1.1.1.1–1.1.1.3 and 1.1.1.5) and at least one is probably shared with Celtic (1.1.1.6). Given the uniqueness of these changes within Indo-European, they are unlikely to have arisen independently in these branches. This means that if one wants to use the first four of these as evidence of an Italo-Venetic subgroup (or however one chooses to label it), one must also use the fifth as evidence of an Italo-Celtic (or Italo-Veneto-Celtic) one.

1.1.1.1. Labialization of PIE **dh* and **$g^{w}h$* to *f* word-initially and *f* (often showing up as *v* or *β*) word-internally. At least the first of these is found in Venetic (*vha.g.s.to* 'fecit'). Weiss adds **gh-/ĝh- > h-*. This is more complicated because of the difference between Latin and Faliscan in the development of **ghu-/ĝhu-*. See further below, 3.2.2.

1.1.1.2. PIE voiced aspirates > voiceless fricatives word-initially and voiced fricatives word-internally. Fricatives are an uncommon outcome of the voiced aspirates in branches where that series is kept distinct from the other stop series, and hardly ever met with word-initially (cf. Kümmel 2007: 66–67). Only in Greek (starting in the Hellenistic period, sporadically earlier) do the aspirates ultimately become fricatives across the board. Germanic turns them into fricatives word-internally. Sanskrit (orthographic) *h* from **ĝh* and (before front vowel) **$g^{(w)}h$* seems to have been a voiced fricative originally (Wackernagel 1896: 243–244), and in Middle Indic, debuccalization of aspirated stops, producing *h*, is common intervocalically. In Armenian, fricatives can result from original voiced aspirates in some word-internal contexts. Thus the fact that all the Italic languages share the development to *f*/*h* word-initially and *v*/*γ* word-internally is significant (that is, assuming that the Latin stop outcomes are hardenings of earlier fricatives still preserved in Sabellic; this is not universally agreed upon).

1.1.1.3. Unstressed **o* in the sequence **o̯u̯(H)V > *au̯(H)V* (Thurneysen-Havet's Law). This has recently been shown to be an Italic rather than a Latin-specific change and to have operated before the shift to word-initial stress (Vine 2004, 2006), cf. U. *sauitu* imper. 'cut, slash' < **kso̯u̯-é̯i̯e-*, Lat. *cauus* 'hollow' < **kouH-ó-*. Apparently also in Ven. *ho.s.tihavo.s.*

1.1.1.4. **r̥, l̥ > or, ol.* This is diagnostic of Italic according to various authors. Also in Venetic (*voltigenei*, perhaps *murtuvoi*). Weiss notes that several Greek dialects independently show *o*-vocalism here too, but it is otherwise rare.

1.1.1.5. **m̥mV* > **omV* and secondary **m̥* > *om*, as in *homō* and OLat. *esom* (with clitic reduction from **esmi*, via **esm̥*). Venetic has *dekomei* 'tenth' (loc.) < **dek̂m̥mei*.

1.1.1.6. Syncope of **-Cie̯-* to *-Ci-* in an open syllable after single light syllable. This may be shared with Celtic. Syncope also seems to have affected the sequence **iiV-* produced from **-i̯V-* after a heavy syllable.

1.1.2. I would consider the following innovations to be as probative as the ones Weiss deems "most probative":

1.1.2.1. **-ei̯e-* > **-iie̯-* when the first *e* is unstressed (Vine 2012), whence *o*-stem denominatives in **-e-i̯é-* > *-ī-* (Lat. *seruīre*, U. **seritu**). Similarity to Celtic denominative *ī*-verbs from **-e-i̯e-* is superficial only, since there **-ei̯e-* > **-ē-* > *-ī-* (McCone 1996: 49). While I find Vine's account for the Italic *ī*-denominatives compelling, I am not certain that acrostatic *i*-stem nom. pl. (**´-ei̯es* >) **´iie̯s* would have further developed to *-īs* as he claims (2012: 565−567), as, pace Vine, Weiss (2009: 145 n. 21) may be right that the syncope did not happen in closed syllables, cf. 4th-conjugation participles in *-ient-*, gerund(ive)s in *-iend*/*iund-*, 3pl. *-iunt*.

1.1.2.2. Stressed *CR̥HC* > **CaRaC*, parallel to Greek but without the different coloring effects for the different laryngeals. This is strongly doubted by Schrijver (1991: 193−197), and I agree with him that most of the alleged examples are not very good. But at least *caluus* < **kalawos*, probably the base of the Oscan gentilicium **Kalaviis**, and *palma* < **palamā* alongside Skt. *-kūlva-* and Gk. παλάμη, respectively, are difficult to explain otherwise.

1.1.2.3. The counting of **(C)VR* and sequences of two syllables as a heavy sequence for the purposes of "Sievers' Law", e.g. **or-i̯e-* > **or-iie̯-* > Lat. *or-ī-* 'rise', **her-i̯e-* > **her-iie̯-* > U. *her-ī-* 'wish', **sepel-i̯e-* > **sepel-iie̯-* > *sepel-ī-* 'bury'. I place quotations around this phenomenon because it is not clear whether we are dealing in Italic with Sievers' Law proper or a similar, independent phenomenon; cf. Weiss (2009: 40) and now Byrd (2015: 188 with n. 21). The occurrence of Sievers' Law following a sequence of two syllables is also found in Germanic.

1.1.2.4. Apocope of **-i.* The limits of this change for Italic are disputed (see Weiss's discussion, 2009: 468 with n. 17). The personal endings **-si, *-ti, *-nti* undergo apocope in some other branches also, including Insular Celtic. Contra Weiss (2009: 468) and with Schrijver (2006: 49) and McCone (1996: 100−102), the Celtic change is specific to Insular Celtic; and it is not limited there to verbs, cf. McCone (1996: 100−102). Hock (2007: 71−72), followed by Weiss, thinks this loss is attributable to phrase-final apocope, since verbs in an SOV language would have been at the end of a phonological phrase. But Insular Celtic is VSO, and that word-order was established before the loss of **-i* (see McCone 2006: 65 for remarks on the early date of verb-initial syntax in Insular Celtic). At any rate, apocope of **-i* in Italic is not limited to verbs, and Meiser's suggestion (1998: 73−74) that **-i* was lost when unstressed (at a time before stress-retraction to initial syllables) may work better, whence e.g. **éti* > *et* but loc. sg. **pedí* > *pede.*

1.1.2.5. *-ūi̯V- > *-īi̯V- (the "*pius* rule") has often been considered Italo-Celtic, cf. OIr. consuetudinal present *biïd* etc. < **bhūi̯e-* like Lat. *fiō*. But Zair (2009) has shown that the other putative Celtic examples are not probative, and adduces some counterexamples, leading him to suggest a different explanation for *biïd*. Even if *biïd* should turn out to show the rule (I for one do not find Zair's account of this form entirely convincing), the rule's effects were clearly more limited in that branch − perhaps restricted to after labials. If the Italic and Celtic material is to be combined, the more restricted application of the rule in Celtic could mean it originated in pre-Italic and spread limitedly to pre-Celtic.

1.1.2.6. The dissimilation of **l...l* > **l...r*, as in Lat. *mīlit-āris*, Vest. *Flusare* 'Floralis' (month name).

1.1.2.7. *-gi̯- > -i̯i̯-. Weiss (2009: 469) points out that Sabellic examples of this are lacking, but he notes that it must predate 1.1.1.6 above (whence *ait* < **ai̯i̯et* < **ag-i̯et[i]*), which seems good evidence to me for its being Proto-Italic in date.

1.1.2.8. Development of thorn clusters to **ks* (> *s* in Latin) is widely regarded as diagnostic of Italic (thus e.g. Meiser 1986: 38). Though it is true there is no clear Sabellic evidence (Weiss 2009: 469), it is very difficult to imagine that the merger of **tḱ*, **gʷhdh*, and **ks* as (ultimately) *(k)s* in Latin (*ursus*, *sitis, situs* 'mold', *texō*) only happened at the pre-Latino-Faliscan level. The reduction of **dhĝh* to **ĝh* in 'yesterday', though found in Albanian and Germanic, is not found in the more closely related Celtic, where **dh* won out, suggesting the cluster reduction was *einzelsprachlich*, though surely before **dh* would have become *f* (it is inconceivable that a ***fh-* or ***fχ-* would have become *h-*).

Kloekhorst (2014: 46−49, 62−63) disputes Schindler's (1977: 31−32) widely followed claim that the reduction of **dhĝh(m̥)m-* to **ĝh(m̥)m-* in 'earth' was *grundsprachlich*. He seems to be right that it is at least post-Anatolian, but the agreement among Gk. χαμαί, Lat. *humī*, *homō* (there probably was no **χemōn*, contra Kloekhorst 2014: 49; see Livingston 2004: 34), Goth. *guma*, Lith. *žmuõ*, and maybe the Ved. forms in *jm-* (if they replace expected **hm-*) cannot be argued away, and his alternative explanations seem far-fetched to me. The late PIE speakers who migrated into Europe as well as their pre-Indo-Iranian kin probably had undergone the reduction. (Kloekhorst is right, though, that in prevocalic position the attested reductions are *einzelsprachlich*.) Thus the agreement among Lat. *homō*, *humus*, SPic. **homanah** is not diagnostic of a specific Italic simplification in this word.

1.1.3. The following two changes appear to me less probative than Weiss allows:

1.1.3.1. Unstressed *-ōu̯- > *-āu̯-. Only attested in *octāuus*, Osc. **Úhtavis** 'Octāvius'. The isolated example and the well-known irregularities in the development of the ordinal numerals across the family make it uncertain whether this is a regular sound change or a sporadic lexical change.

1.1.3.2. *-su̯- > *-ru̯- was proposed by Rix (1981) as a Proto-Italic change on the basis of *Minerua* < **menes-u̯ā* 'the mindful one' and *caterua* 'throng', Umb. **kateramu** 'organize themselves into groups' < **kates-u̯ā(-)*, cf. *catēna* 'chain' < **kates-nā*, and several other Latin etyma. But Meiser (1986: 184) points out that U. nom. sg. **mersus** 'correct'

< pre-Umbrian **medes-u̯os* not §*mederu̯os* indicates the change was post-Italic. The reason for Rix's (1981: 112) dating of the change to Proto-Italic is Etruscan *Men(e)rva* and variants, with *-r-* already in the 6th century, too early for rhotacism in Italic. But, contrary to the prevailing view, Minerva's name does not seem to me securely etymologizable; certainly there is little if any guarantee that it has anything to do with 'mind'. In Etruria, where she was worshiped long before coming to Rome, Menrva was a goddess of lightning and war, and had chthonic associations as well as connections to health and the nursing of babies (see e.g. Jannot 2005: 148; de Grummond 2006: 71–78). In Rome she was primarily a patroness of craftsmen and tradespeople (Wissowa 1912: 253); associations with wisdom postdate the equation with Athena. The real figure of a divinized mind or sensibility would appear rather to be Mens (Bona), whose worship began in 217 BCE, when, following Rome's disastrous military defeat at Trasimene during the Second Punic War, she was introduced after consultation of the Sibylline Books. Mens is one of several deities that were apparently imported from Greece in that year (Wissowa 1912: 313–314). The putative sound change is somewhat suspect for a Proto-Italic date anyway, given that nowhere else did **s* rhotacize fully to **r* that early, and even the precursor of rhotacism, intervocalic **-s-* > **-z-*, is *einzelsprachlich* (1.1.4.1. below).

The parallel of Lat. *mergō* < **mezgō* cited by Rix (1981: 118) need not be of Proto-Italic date, either; Latin is the only witness. The comparison of **menes-u̯ā* to Ved. *manas-vín-* (Rix 1981: 117) is of no value; *manas-vín-* first occurs in the Brāhmaṇas and belongs to a very productive adjective type (°*as-vín-*) of the post-Rigvedic period (Debrunner 1954: 917). In sum, Umbrian and Latin could have both inherited a Proto-Italic **-su̯-* (and **-zg-*, for that matter) with later independent change of **s* > **z* > *r*. Osc. **aísívu** tPo 17, reasonably interpreted as 'of the gods' in *Imagines*: 2 793–795, was suggested by Fortson and Weiss (2013) to be from **aisu̯om* by anaptyxis, from the *u*-stem **aisu-*. But if **-su̯-* clusters behaved like *-CR-* clusters generally in Oscan, one would really expect §**aísuvu.** The idea in *Imagines* that **aísívu** has taken on the last half of **deív-** remains quite dubious, but the matter requires further investigation.

1.1.4. A few of the numerous items that are clearly not probative (see Weiss 2009: 468–470 for some others) deserve some comment:

1.1.4.1. Weiss (2009: 470) is probably right that intervocalic **-s-* > **-z-* is later than Proto-Italic. He cites *maximus* < **magisomos* before voicing, though he allows that **mag(i)zomos* cannot be excluded (Weiss 2009: 81 n. 8). Another example might be **esom*. If this had become **ezom* in Proto-Italic, we might expect Lat. §*rum* instead of *sum*: aphaeresis happened due to clisis, and an unstressed cliticized **zom* arguably would not have escaped rhotacism.

The initial *z-* of Fal. 3pl. *zot* 'sunt' cannot be separated from the initial *z-* of *zextos*, *zenatuo*, etc.; whatever their explanation, this problem is not relevant here (see Bakkum 2009: 85–86 for a recent assessment). Although it is moot for our present purposes, I am not sure Weiss is right to dismiss intervocalic **-s-* > **-z-* as a trivial change. It is, of course, commonly seen cross-linguistically, but it did not occur prehistorically in any other branch of IE except Germanic, where it was part of a larger set of changes (Verner's Law), and in Eretrian Greek, where it is a local (if early) development.

1.1.4.2. Weiss deems **mi̯* > *ni̯* trivial because of its also being found in Greek. For Proto-Italic, I am not convinced this even happened, trivial or not. The evidence is

essentially confined to *ueniō*, which, however, is very ambiguous. (The Greek evidence is just as uncertain; see e.g. Brugmann and Thumb 1913: 90; Schwyzer 1939: 309.) *Quoniam* < **k^{w}om-i̯am* has also been forwarded as an example (Leumann 1977: 126; Weiss 2009: 160), but I have little confidence that this conjunction is ancient. Furthermore, **mi̯* > *ni̯* is potentially contradicted by the word-initial change **mi̯-* > *m-*, evidenced e.g. by *mouēre* < **mi̯euH-ē-* (on this verb see now in detail Vine 2006: 217 ff.). On all these issues, see Fortson to appear.

1.1.4.3. Kümmel (2008: 6) suggests **k^{w}e(n)k^{w}-* > **k^{w}o(n)k^{w}-* as a possible Proto-Italic change, assuming pre-Sabellic **k^{w}onk^{w}e* is not an innovation of that branch (Lat. *quīnque* is worthless because it owes its vocalism to *quīn[c]tus*). Indeed, Lat. *popīna*, a Sabellic loan, does show that **k^{w}ek^{w}-* became **k^{w}ok^{w}-* in both these groups. Such rounding, however, seems fairly unremarkable and probably not a solid isogloss. The rest of the family is of little help since **k^{w}e(n)k^{w}-* sequences are limited to Italic and Celtic. The rounding in OIr. *cóic* < pre-Irish **k^{w}ink^{w}e* is a late change (McCone 1996: 118) and was not conditioned by a following labiovelar anyway.

1.1.5. The particular assemblage of the secure innovations shared among the Italic languages is unique and, even leaving aside the doubtful cases, they are most easily attributed to a stage of common development. Note that there are no sound changes specific to either Latino-Faliscan or Sabellic that must predate the innovations listed above. We might expect that there would be some if the convergence theory were correct, as it presupposes a space of time in which pre-Sabellic dialectal IE and pre-Latino-Faliscan dialectal IE were undergoing their own developments prior to the convergence period. This is the source of the awkward position, tellingly highlighted by Tikkanen (2009: 254), in which advocates of the convergence theory wind up: they "often find themselves assuming a continued close connection" between pre-Latino-Faliscan and pre-Sabellic after they split from Western IE, with the result that "[w]hat is proposed by the *Sprachbund* theory is thus a split that is not really a proper separation … If so, one cannot help but wonder what kind of separation is actually meant." (The detailed discussion of the Italic problem found in Tikkanen's 2009 thesis, which I was only able to consult through the kindness of the author, is not included in its published version, Tikkanen 2011.)

1.2. Even more significant are the morphological innovations binding the Italic family together.

1.2.1. As is well-known, principal among these are innovative features of the Italic verb.

1.2.1.1. The development of the four conjugations with stem-vowels in *-ā- -ē- -e-/-i-* and *ī-* from the same inherited sources in each case. In large measure the development of these conjugations is due to sound change, especially the early loss of intervocalic yod and vowel-contractions, but since it is likely that some of the latter were analogical (e.g. **āo* > *ā*, **ēo* > *-ē-* in the 1pl. and 3pl. of 1st- and 2nd-conjugation verbs) it is methodologically simpler to ascribe the relevant analogies to a (pre-)Proto-Italic phase than to independent developments. Given that 1sg. *-āō* is still uncontracted (or restored) in Sabellic, 3pl. pan-Italic *-ānt* (Lat. *-ant*), *-ēnt* (Lat. *-ent*, SPic. **-int**) is noteworthy. It is entirely thinkable, however, that the phonology of the *ā*-denominatives of Italic, Venetic

(*dona.s.to*), and Celtic (Ir. *móraid*) reflects an inherited feature going much farther back than Italic.

1.2.1.2. Meiser (1993: 171) points out that cognate Latin and Sabellic verbs have the same present stems nearly three-quarters of the time, by contrast with the situation in the perfect (see below, 1.5.4.). This strongly suggests common development.

1.2.1.3. The gerund and gerundive morpheme, which becomes *-nd-* in Latin and *nn-* in Sabellic. The form, function, and unusual syntax of the gerundive, attested in both branches of Italic, form a cluster of non-trivial morphosyntactic innovations. For the most recent account of its origin, see Jasanoff (2006) (**-ntino-*).

1.2.1.4. The loss of the inherited imperfect indicative and its replacement with the formant **-βā-*. Although it is not assured that Osc. **fufans** is an imperfect rather than a pluperfect, the morpheme is the same in either case and had the same preteritizing function. (Pisani's [1963] attempt to derive it from **bheudh-* is unsuccessful, and his remark that *es-* rather than *fu-* is elsewhere the only imperfective stem does not seem accurate, given imperf. subj. **fusíd** = Lat. *foret* and the imperatives **futu**, etc.) It has now also been suggested by Dupraz (2010: 320−321) that the broken form *profafạ*[on a North Oscan (Vestinian) inscription from Navelli (Mattiocco 1986: 92−95; *Imagines.* Incerulae 3, not in *ST*) is also an imperfect in *-fā-*. (The editors are agnostic about the final letter before the break in *profafạ*[; Mattiocco's (1986) reading is based on autopsy and should probably be followed. The inscription has apparently since been lost.)

The similar loss of the imperfect in Insular Celtic is commonly believed to have been precipitated by the loss of **-i*, said to have erased the distinction between many primary and secondary endings (see e.g. Schrijver 1992: 189 ff.). This works well in the 2sg. and 1pl. But in the 3rd person, this account is complicated by the fact that final stops were realized as voiced already in late PIE, as clearly reflected in Celtic by the Celtiberian ablatives and 3rd-person imperatives in *-z* < **-d.* Thus what we write as **-(n)t* was really **-(n)d*, which would have been distinct from newly created **-(n)t* by apocope from **-(n)ti.* The same considerations apply to Italic. The loss of the imperfect in both these branches, then, may well be more than just an automatic byproduct of the apocope of **-i.*

Whether the future morpheme **-βe/o-* is also of Proto-Italic date, and was totally lost in Sabellic, is unclear. It is also unclear to me whether **-βe/o-* and Insular Celtic subjunctive **be/o-* necessarily share a common source (on **be/o-* see Schumacher 2004: 247−248). A specifically Latino-Faliscan analogy of the type **esā-* : **ese/o-* : **-βā-* : X, X = **-βe/o-* cannot be ruled out.

1.2.1.5. The imperfect subjunctive in **-sē-*. (see 1.5.1)

1.2.1.6. The 2nd-plural mediopassive endings in *-m°* (Sabellic **-mō[r]*, Lat. *-minī*, *-minō*). Though the details of the preform are unclear, the base alone is a sufficiently non-trivial innovation.

1.2.1.7. It has been suggested by Meiser (2003: 57), Harðarson (2011), and most extensively Fortson (2012) that Latin mediopassive inf. *-rier* is cognate with Sabellic *-fē(r)*,

from PIE *-*dh̥eh₁* vel sim., with contamination of the dental (pre-Latin *-*δ*-) with the *-*z*- of the active infinitive morpheme. Fortson (2012: 89 ff.) further suggested that the mediopassive marker -*r* was added already by Proto-Italic times (Umbrian -*f[e]i* could easily result from *-*f[e]ir*, contra the erroneous account in Rix 1976: 328).

1.2.1.8. The loss of all inherited participles besides the present active and perfect passive. Lexicalized traces of present mediopassive (*alumnus*) and probably aorist (*cliēns*) participles survive, but the death of these as productive categories probably preceded Proto-Italic. A few words have been etymologized as old perfect active participles (e.g. recently SPic. **vepses** by Meiser 2003: 48–49 and Martzloff 2007; my money is on **vepses** simply being the genitive of a *lāpsus*-type perfect passive participle: '… of Titus Alius buried [vel sim.] in this tomb'). I have not found these proposals convincing, but they do not change the picture in any case.

1.2.1.9. The generalization of the optative to an all-purpose modal or "subjunctive" category, with precise agreements in morphology across the branch: in the present, the full-grade optative suffix *-*i̯ēˆ*- was added to the stem-vowel -*ā*- in the first conjugation, while the other conjugations used the morpheme *-*ā*-.

1.2.1.10. The reduction of 1sg. **esmi* to **esm̥̂* > **esom.* For arguments that this is an Italic innovation, see Joseph and Wallace (1987).

1.2.2. We may add the following from non-verbal categories:

1.2.2.1. Loss of the instrumental and its replacement by the ablative. This may be shared with Celtiberian and the rest of Celtic, but only Italic is certain to have remade inherited *o*-stem instrumental *-*eh₁* as *-*ēd* and to have used this as an adverb formant (Old Latin *facillumed*, Osc. *amprufid* 'improperly' Lu 1, SPic. **kupíríh** AP 2 'well' < **kuprēd*). The spread of ablative *-*d* outside the *o*-stems is shared with Celtic (Celtiberian). In Young Avestan, which also spread the dental outside the *o*-stems, the new ablative formation was based on the genitive (replacement of gen. -*s* with abl. -*t̯*).

1.2.2.2. Loss of the dual. Not characteristic of any other ancient branch except, independently, Anatolian (if it had the dual in its prehistory) and Armenian.

1.2.2.3. The addition of a particle -*i* to demonstratives and the nom. sg. animate relatives: masc. *$k^{w}o$-*i* fem. *$k^{w}a$-*i* > Lat. *quī quae*, Osc. **pui paí**. A parallel development is found in Insular Celtic *$k^{w}ei$ (> OIr. *cía*, MW *pwy*), but with different ablaut.

1.2.2.4. The creation/addition of an adverb *$k^{w}omk^{w}e$ to the relative/indefinite to form a more intensive indefinite 'whosoever': U. **pisi pumpe**, Lat. *quīcumque.*

1.2.2.5. The suffixation of the particle **ke* to deictic pronouns: Lat. *hi-c*, Pael. *ecuc*, Osc. *izik.* This could of course be an areal feature, as is probably the case with the abstraction of a suffix of identity having the shape -*dem* in Latin and *-*dom* in Sabellic (Lat. *īdem*, Osc. m. nom. sg. **ísídum**) from neut. nom.-acc. sg. *-*d* plus a particle **em* or **om*. -*dom* did not spread quite as far as -*dem*, cf. Osc. m. nom. pl. **ius-um** 'īdem'.

1.2.2.6. The remaking of the 2sg. dat. personal pronoun **tebhi* as **tebhei* (Lat. *tibī*, Osc. **tfei**). Other branches have performed similar remodelings but with different dative endings; independently OPr. *tebbei* has used the same ending as Italic.

1.2.2.7. In derivational morphology, mention may be made of the innovatory adjective and noun suffixes **-āno-*, **-āri-/-āli-*, **-āsi̯o-*, **-āto-* (see Hajnal 1993), **-dhli-*, **-idho-*, **-i̯i̯ōn-*, **-mōni̯om*; abstract nouns in **-itiā*; the generalization of the *o*-grade agent-noun suffix **-tōr-*; the feminine agent-noun suffix **-trīk-*; the diminutive suff. **-kelo-*; and the repetitive verbal suffix **-tā-* (in Sabellic in U. **etatu** etc. < **ei-tā-*; on the type, see Weiss 2009: 401–402 with inclusion of an analysis by A. Nussbaum from an oral presentation).

1.3. Although lexical correspondences are widely considered the least reliable material for purposes of subgrouping (so e.g. Tikkanen 2009: 47), it is clear from studies like Untermann (1993) and Rix (2005) that the lexical impact of either Latin on Sabellic or the other way around was modest at best, and semantically circumscribed. If two matching lexemes are innovative vis-à-vis PIE with respect to morphology and/or semantics, and have each undergone subbranch-specific sound changes such that later borrowing is unlikely or impossible, then a strong case can be made for their having common patrimony. There are close to 120 morphologically and/or semantically innovative exact lexical correspondences (or implied correspondences, as when one branch attests a denominative verb to a lost base preserved in the other branch) between Latin and Sabellic. This number is impressive given the limited surviving corpus. Unlike the probable or provable loanwords of later times, these correspondences span all semantic fields. Dismissal of them based simply on automatic fall-back to borrowability is in my opinion too cavalier.

1.3.1. It may be useful to list these items in one place. The list is primarily culled from Untermann's dictionary (2000); see also Untermann (1993) for discussion of specific semantic groups and individual lexemes. I have kept the list conservative (quite a few other, less certain correspondences could be added) and included only one Latin (or Faliscan) and one Sabellic form per entry. I write Proto-Italic fricatives as voiceless throughout for convenience: **ādro-* 'black': Lat. *āter*, U. *adro*; **ad-ser-e/o-* 'declare (a captured slave) free': Lat. *asserere*, O. *aserum*; **ai̯es-* 'bronze': Lat. *aes*, U. adj. **ahesnes** (but tentatively suggested by Cowgill 1973: 294 n. 45 to be a borrowing from Latin); **aiu̯i-tāt-* 'lifetime': Lat. *ae(ui)tāt-*, O. **aítateís**; **ali-tero-* 'other (of two)': Lat. *alter*, O. **alttram**; **aru̯o-* 'field': Lat. *aruum*, U. **arvam**°; **atk^{w}e* 'as' (vel sim.) > Lat. *atque* 'as, and', U. **ape** 'when'; **-dām* in time adverbs: Lat. *quon-dam* 'at one time', U. *nersa* 'until'; **deiu̯īno-* 'divine': Lat. *dīuīnus*, O. **deivinais**; **dek-ē-* 'be proper': Lat. *decēre*, U. **tiçit**; generalized stem **d(i)i̯ē-* from the acc. sg. **d(i)i̯ēm* 'day': Lat. *diē-*, Osc. *zicolom* < **di̯ē-ke/olo-* (also Venetic [loc. *diei*]); generalized oblique stem **di̯ou̯-* 'Jove': Lat. *Iou-*, Mars. *iou-*; **du-plo-* 'double, two each': Lat. *duplus*, U. *dupla*; **eme/o-* 'buy': Lat. *emere*, U. **ematur**; **e/is-to-* 'this': Lat. *iste*, U. **estu** (Celtib. *iśte* 'and[?], or[?]' is possibly built of the same material, but remains uncertain); pres. **fak-i̯e/o-* 'make, do': Lat. *faciō*, U. **façia**; **fameli(i)ā* 'household': Lat. *familia*, U. **fameřias**; **famelo-* 'slave': Lat. *famulus*, P. *famel*; **fatē-* 'speak, make solemnly known': Lat. *fatērī*, O. **fatíum**; ? **fēl-* 'suckling' vel. sim.: Lat. *fēlā-* 'suck', U. **feliuf** 'suckling' (?); **fēsiāi* 'religious holiday': Lat. *fēriae*, O. **fiísíais**; **flōs-* 'flower': Lat. *flōs*, Vest. (month-name) *flusare*; **Flōsā* 'Flora': Lat. *Flōra*, O. **fluusaí**; **fraud-* 'wrongful act, flaw': Lat. *fraud-*, U. *frosetom* if

fraud-t-; *gnārā- ‘relate, recite’: Lat. *narrāre*, U. **naratu**; *gnāti(ō)n- ‘stock, group of related people’ vel sim.: Lat. *nātiōn- ‘stock, race’, U. **natine** ‘patrician family’; *g^{w}rāt- ‘favor, grace’: Lat. *grātēs*, O. *brateis*; *k^{w}anto- ‘how much/great’: Lat. *quantus*, O. *pantes*; *hospot- ‘stranger’: Lat. *hospit-*, P. *hospus*; *ifei ‘there’: Lat. *ibi*, U. **ife**; *i̯oko- ‘word, speech’: Lat. *iocus* ‘joke’, U. **iuka** ‘prayers’; *i̯uu̯enkā- ‘heifer’: Lat. *iuuenca*, U. *iuengar*; *karō, *karn- ‘piece of meat’: Lat. *carō, carn-* ‘meat’, U. **karu, karn-** ‘part of sacrificial animal’; *kasē- ‘lack’: Fal. **carefo**, O. **kasit**; *katelo- ‘small animal (used in sacrifices), puppy’: Lat. *catulus* ‘puppy’, U. **katel** ‘puppy (?)’; *kates- ‘chain’: Lat. *catēna* < *kates-nā*, U. **kazi**; *katesu̯ā ‘group, throng’: Lat. *caterua*, U. **kateramu** ‘group together’; *ke- ‘here, hither’ as a terminative preverb: Lat. *ce-dō* ‘hand over!’, Osc. *ce-bnust* ‘shall have come (to)’; *Ker-es- ‘Ceres’: Lat. *Cerēs*, O. **kerrí**; *kersnā (*kert-es-nā*) ‘portion, meal’: Lat. *cēna*, O. **kerssnaís**; *kleitrā ‘container for transport’: Lat. dimin. *clītellae* ‘pack-saddle’, U. **kletram**; *klu-ē- ‘be called’: Lat. *cluēre*, SPi. **kduíú**; *koisā- ‘take care’: Lat. *cūrāre*, P. *coisatens*; *kontrād ‘against’: Lat. *contrā*, O. *contrud*; *kubā- ‘lie’: Lat. *cubāre*, SPic. **qupat**; *k^{w}ām ‘than, as’: Lat. *quam*, O. *pam*; *k^{w}ām-dō ‘when’: Lat. *quandō*, U. *panu-pei* ‘whenever’; *k^{w}ō ‘whither’: Lat. *quō*, U. **pu-e**; *k^{w}osi̯o- ‘whose’: Lat. *cuius*, O. **púiiu**; *k^{w}ufei ‘where’: Lat. *(-c)ubi*, U. *pufe*; *lēg- ‘law’: Lat. *lēg-*, Marr. *lixs*; *likē- ‘be allowed’: Lat. *licēre*, O. **líkítud**; *louko- ‘sacred grove’: Lat. *lūcus*, O. **lúvkeí**; *manu-þ- ‘commit, hand over’: Lat. *mandā-*, O. **manafum**; *manu- ‘hand’: Lat. *manus*, U. **manuve**; *mēnssā ‘(flat?) baked good’: Lat. *mēnsa*, U. **mefa**; *nei ‘not’: Lat. *nī*, O. *nei* ‘except’; *nōmen- ‘name; (political) state’: Lat. *nōmen*, U. *nome*; *n̥-tag-ro- ‘untouched, unused’: Lat. *integer*, U. **antakres**; *oit- ‘use’: Lat. *ūtī*, P. *oisa* (perf. part.); *oll- ‘that’: Lat. *olle*, O. **úlleís**; *oltm̥mo- ‘last’: Lat. *ultimus*, O. **últiumam**; *op ‘up to, over against’: Lat. *ob*, O. **úp**; *op-sito- ‘covered, buried’: Lat. *opsitus*, O. **úpstúst** (*Imagines* 2: 1239–1240); *pāk- ‘peace’: Lat. *pāc-*, U. *pas-* (+*paȧ-*?); *parasā ‘type of bird’: Lat. *parra*, U. **parfam**; *patne/o- ‘open (tr.)’: Lat. *pandere*, O. **patensíns**; *pelp-men- ‘meat’: Lat. *pulmentum*, U. *pelmner*; *pīi̯ā- ‘make expiation’: Lat. *piāre*, U. *pihatu*; *pīi̯āklom ‘expiatory offering’: Lat. *piāculum*, U. *pihaclu*; *pīi̯o- ‘dutiful’: Lat. *pius*, O. **piíhiúí**; *portā- ‘carry’: Lat. *portāre*, U. *portatu*; *postm̥mo- ‘last’: Lat. *postumus*, O. **pustmas**; *potē- ‘be able’: Lat. *potēns*, O. **pútíad**; *prai ‘in front of’: Lat. *prae*, O. **prai**; *prai-tero- adj. ‘in front’: Lat. *praeter* ‘before, beyond’, U. *pretra* ‘the first ones’; *prai-stat-ā ‘protectress’: Lat. *Praestita*, U. **prestate**; *prismo- ‘first’: Lat. *prīmus*, P. *prismu*; *profā- ‘approve’: Lat. *probāre*, O. **prúfatted**; *profo- ‘correct’: Lat. *probus*, U. **prufe**; *poplo- ‘people’: Lat. *populus*, U. *poplom*; *rē- ‘thing, matter, property’: Lat. *rēs*, U. **ri**; *re-u̯eid-s-e/o- ‘check over, inspect’: Lat. *reuīsere*, U. **revestu**; *sakrā- ‘sanctify’: Lat. *sacrāre*, O. **sakrannas** (not *sak-ro- itself given W. *hagr* ‘ugly’, see Maier 1987); *salau̯o- ‘whole, safe’: Lat. *saluus*, O. **salavs**; *sankto- ‘sacred’: Lat. *sānctus*, O. **saahtúm**; *sed-ē- ‘sit’: Lat. *sedēre*, U. *sersitu*; *sedi-/sēdi- ‘seat’: Lat. *sēdēs*, U. *sersi*; *sei ‘if’: Lat. *sī*, U. *se-pis*; *sekā- ‘cut’: Lat. *secāre*, U. **prusekatu**; *sekno- ‘image’: Lat. *signum*, O. **segúnú** ‘figurine’; *seru̯o- ‘observing’: Lat. *seru-āre*, O. **serevkid** ‘responsibility’; *seupo- ‘supine’: Lat. *suppus*, U. *sopa* (see now Weiss 2010: 358–383); *skapelā- ‘shoulder(blade)’: Lat. *scapulae*, U. *scapla*; *sollo- ‘every’: Lat. *soll-*, O. **sullus**; *stipelā- ‘agree upon contractually’: Lat. *stipulāre*, U. *stiplatu*; *sup(e)rād ‘above’: Lat. *suprā*, U. **subra**; *superno- ‘upper’: Lat. adv. *superne*, U. *superne*; *supero- ‘upper’: Lat. *superus*, O. **supruis**; *supmo- ‘highest’: Lat. *summus*, U. **sume**; *taf(e)lā ‘board, table’: Lat. *tabula*, U. **tafle**; *tanto- ‘so much/great’: Lat. *tantus*, O. *etanto*; *ten-ē- ‘hold’: Lat. *tenēre*, U. *tenitu*; *termen- ‘boundary’: Lat. *termen*,

O. **teremníss**; **termino-* 'boundary stone': Lat. *terminus*, U. *termnom*; **tersā* 'ground, earth': Lat. *terra*, O. **teras**; **togā* 'covering, toga': Lat. *toga*, SPic. **tokam** (Vine's 1993: 232 n. 44 alternate interpretation of **tokam** as from **tōkkā* < **toutikā-* 'public' [: U. *toce*] requires a monophthongization already in the 6th century BCE; but cf. unmonophthongized **toútaih**); **transu̯orsso-* 'transverse': Lat. *trānsuersus*, U. *trahuorfi*; **trifu-* (or **triβu-*, Weiss 2010: 193 ff.) 'tribe': Lat. *tribus*, U. **trifu**; **tri-podā-* 'dance the three-step': Lat. *tripodāre*, U. *ahatripursatu*; **u̯aβemōniom* 'surety': Lat. *uadimōnium*, O. **vaamunim** (see most recently Fortson and Weiss 2013: 665–667); **u̯alē-* 'fare/be well': Lat. *ualēre*, O. ϝαλε; **leifrā* 'unit of weight': Lat. *lībra*, U. (abbrev.) *uef*; **u̯(e)iu̯ā* 'road': Lat. *uia*, O. **víú**; **u̯inkelo-* 'fetter': Lat. *uinculum*, ? U. *preuiślatu* 'bind fast (in advance)'; **u̯okā-* 'call': L. *uocāre*, U. *subocau*; **u̯ostero-* 'your (pl.)': Lat. *uoster*, U. *uestra* (with secondary *e*-vocalism in Umbrian).

1.3.2. Note also the following quasi-exact correspondences (same morphemes in different order, or slightly different morphemes, different ablaut grades, etc.): Lat. *quoad* ~ O. **adpúd**; Lat. *extrā* 'outside' ~ O. **ehtrad** (**ek-* instead of **eks-*); Lat. *fānum* 'temple' (**fas-no-* < **dhh₁s-no-*) ~ O. **fíísnú** (**fēs-nā* < **dheh₁s-no-*); Lat. *cornīx* 'crow' ~ U. *curnaco*; **Mārt-*/**Mawort-*/**Mamert-* 'Mars'; Lat. *mōnstrum* ~ SPic. **múfqlúm** < **mons-t/klo-* (I follow Vine 1993: 127–130 against the usual reconstruction **mones-t/klo-*; in addition to his argument that this is not an environment where we would expect syncope in either South Picene or Latin, secondary *ns* syncopated from **nVs* does not yield *f* elsewhere in Sabellic); Lat. *pīcus* 'woodpecker' (vocalism after *pīca* 'magpie'; see Meiser 1986: 47–48 for the morphological analysis) ~ U. *peico/a* (**-ĭ-*); Lat. *plautus* 'flat-footed' ~ O. **plavtad** 'sole (of foot or shoe)', U. *preplotatu* 'trample (in advance)'; Lat. *(porcī) sācrēs* 'sacrificial (pigs)' ~ O. **sakrim** 'sacrificial animal'; Lat. *sollemnis* 'yearly' ~ O. **súllemnaís** (reading of *Imagines* 1: 418).

1.4. Tikkanen (2009: 180–181, 242–243) has argued that the Latin and Sabellic accusative with infinitive and the gerundive constructions (cf. 1.2.1.3) reflect syntactic innovations of Proto-Italic.

1.5. If the divergences between Sabellic and Latino-Faliscan indicated that the most recent common ancestor of the two branches can only have been PIE itself, then we would not be justified in setting up an intermediate Proto-Italic node. But even the most striking and pervasive differences – above all in the formation of the perfect – are part of a system that had to have arisen considerably later than PIE, a system that included the innovations enumerated above plus some others shared also with one or another branch (principally the specialization of unreduplicated *s*-desideratives as futures and the functional merger of aorist and perfect).

1.5.1. Some Sabellic innovations postdate innovations common to both Sabellic and Latin and therefore presuppose an earlier Proto-Italic stage. The change of word-internal **-nss-* to *-f-* in Umbrian (probably Oscan as well, but no examples have yet been recovered; word-final **-nss* < **-nts* becomes *-f* in both languages) must postdate the Italic change of inherited dental-plus-dental clusters to **-ss-*. The rounding of **k^wenk^{w}e* 'five' to **k^wonk^{w}e* followed the Italic or pre-Italic change of **p ... k^w* to **k^w ... k^w*. The Sabellic assimilation of **nd* > *nn* is found in the gerundive, an Italic innovation. If Jasanoff's

(2006) analysis of the gerundive suffix as continuing *-*ntno*- < *-*ntino*- is correct, this statement might need to be modified, depending on how *-*ntno*- was treated in pre-Sabellic (simplification to **nn*- without an intermediate *-*nd*- stage?).

1.5.2. The difference between Latin nom. sg. -*iō* ~ oblique -*iōn*- vis-à-vis Sabellic *-*iō* ~ *-*īn*- represents paradigm leveling on the Latin side (Sabellic *-*īn*- < *-*i(i)en*- after heavy syllable, then generalized), and the suffix is a post-PIE conglomeration in any case.

1.5.3. The differences in declension are relatively trivial, and both branches share the changes enumerated above in 1.2.2.1.

1.5.4. The most significant differences are in conjugation, but it is not clear that they require an especially remote common ancestor. They would appear to indicate several centuries of independent development. Proto-Italic had not yet supplied all secondary presents with corresponding perfects, leaving its descendants to cobble together independent solutions to this problem. The task was still in progress in the historical period; witness U. **purtiius** alongside morphologically younger **purtinçus** in Tables I and II but only *purdins(i)*- in the younger tables. Rarely do Sabellic and Latin agree on the formation of a given perfect; but it should be noted that such disagreements are found between Latin and Faliscan as well. In fact, of the four securely attested Faliscan perfect stems, three differ from their Latin counterparts: Fal. *porded* with dereduplicated -*ded* vs. Lat. -*didit*; Fal. *fifiked, f[if]iqod* vs. Lat. *fīnxit*; Fal. *faced, facet* vs. *fēcit* or Praenestine *vhevhaked*. Only Fal. *pepara[i]* and Lat. *peperī* agree, and the Faliscan pattern *faciō* : **facī*, familiar also from Sabellic, is not even attested in Latin outside of composition. The generalization in Sabellic of (originally athematic?) *e*-grade 3pl. **-ent(i)*/**-en(d)* where Latin and Faliscan have **-ont(i)*/**-on(d)* is due to trivial leveling: a form like Osc. **sent**, U. *sent* is an archaism while Lat. *sunt*, Fal. *zot* has taken over thematic **-ont*; contrariwise, Osc. **fiíet** has generalized **-ent* at the expense of **-ont* (Lat. *fiunt*). The generalization of aorist endings in Sabellic over against perfect endings in Latin simply means that the old aorist and perfect were still formally distinct in Proto-Italic, much as in Old Irish (see in detail Meiser 2003). Faliscan continues an additional aorist ending (3pl. **-ont*) not found in Latin, unless -*ērunt* is a cross of -*ēre* and aorist **-ont*, but that would go against the inscriptional evidence, which lacks any trace of aorist **-ont* in early Latin. The fleshing-out of the perfect system was independently carried out in each branch but is most easily understood under the assumption of an already shared category merger (Meiser 2003: 84–85 and passim thinks the category merger did not happen until late in Proto-Italic). Thus in primary verbs Latin was more prone to generalize *s*-aorists, and Sabellic, root aorists; both preserve a certain number of reduplicated perfects and long-vowel aorists; and both have innovative formations for creating perfects to secondary presents.

1.5.5. The *s*-future houses an interesting formal difference between Latin and Sabellic. Besides the well-known fact that Latin *s*-futures are thematic while in Sabellic they are athematic, outside of the 1st conjugation they are almost always deradical in Latin (*ad-empsit* < **-em-s-*, *rupsit*, *faxit*, etc.) while in Sabellic they have generalized a formant -*es*- that is presumably depresential **-e-s-* in origin (O. *pertemest*; deradical only *fust*

and perhaps *e[e]st* 'will go'). The thematic inflection of the Latin *s*-future is probably secondary (cf. Jasanoff 1988: 233 n. 15); taking the formation as a subjunctive of a desiderative (or, for that matter, of the *s*-aorist) needlessly multiplies entities at the pre-Latino-Faliscan and/or Italic level. The Sabellic sequence *-es-* was generalized to the 2nd and 4th conjugations, whence U. *heriest*, *habiest* < **hab-ē-es-t* (but U. **staheren** 'they will stand' could be just **stā-i̯ē-sent*); Bantian *herest* is ambiguous between /herrest/ < **her-i̯e-st*, the traditional interpretation, and athematic *her-* plus *-es-* (on the inheritance of old athematic *her-* into Oscan see Nussbaum 1976: 252). Note interestingly that in these same two conjugations in Latin, the formation is not found (except for *prohibēs-si[n]t* a few times in Cicero), and it is rather rare in the 3rd (except for 3rd-*iō* verbs). There are no such gaps in the corresponding subjunctives in *-sī-*. Importantly, in both subbranches, the purely future function of these formations is innovative vis-à-vis PIE. (For a very different analysis of the Sabellic future, see Meiser 1993: 176.)

1.5.6. Traditionally the two branches have been seen as having completely different infinitives. This is true in the active (Lat. **-si*, Sab. **-om*), but, as noted above, the Sabellic passive infinitive is likely cognate with Lat. *-rier*, both from **-δiē(r)* (see 1.2.1.7). This appears to have been a true infinitive suffix all the way back (Rix 1976; Fortson 2012), but the other formations are nominals that underwent different generalizations in each branch, as is typical of IE infinitives.

1.5.7. The pronominal systems are also markedly different, but this is not terribly surprising either, given how frequently such systems are renewed cross-linguistically. Most of the elements making up the various stems are found throughout Italic; the arrangements and combinations of these elements are particular to each subgroup. Comparable situations are found in Celtic and Balto-Slavic, for example; and even two quite closely related languages like Old English and Old High German have some striking differences in the pronouns. Indeed, the diversity of forms and usages of personal and demonstrative pronouns simply across modern regional varieties of English is considerable.

1.5.8. The many lexical differences between Latino-Faliscan and Sabellic should not surprise: if one compares the Gothic and the various Old English and Old High German versions of the Lord's Prayer, almost every lexical item is different in at least one, and sometimes all, versions (identical or near-identical across all the versions are only 'our', 'thou', 'heaven', 'thy', 'name', '[be]come', 'earth', 'give', 'us', 'we', 'not', and 'evil').

2. Internal subgrouping of Sabellic

2.1. According to a widespread view, Sabellic, not unlike Gaul, is divided into three parts: Oscan (consisting of Oscan proper plus the "North Oscan" varieties Paelignian, Marrucinian, Vestinian, and Hernican), Umbrian (consisting of Umbrian proper plus Volscian and Marsian; the sole supposed Aequian inscription [*ST* VM 8] is a forgery, see *Imagines* 1: 16 and 59 [item 3]), and a third group containing South Picene and Pre-Samnite.

2.1.1. Wallace (1985: 99–100 n. 16, 2004: 814) has objected to a strict internal division of Sabellic, preferring to view "Oscan" and "Umbrian" as situated at the ends of a dialect continuum. This view has now been given detailed and supportive treatment by Clackson (2015), who concludes that almost all the subgrouping criteria that have been proposed are problematic and that subgrouping is thus currently impossible.

2.1.2. Dialect continua in themselves are not incompatible with subgrouping if enough evidence is available documenting the relative chronology and direction of diffusion of features (for a clear and thorough demonstration of this, see Toulmin 2009). For Sabellic, such information is generally lacking. However, I believe some of the evidence dismissed by Clackson (2015) is more revealing of subgroups than he claims, as will be seen below. I agree with Wallace on general principles that labels like "Oscan" and "Umbrian" do not cleanly correlate with the messier situation on the ground; this is of course true of all language labels. But the evidence Wallace (1985) adduced in support of a dialect continuum is not persuasive. Marrucinian, he claimed, shares features with both Oscan (RC-epenthesis) and Umbrian (*-*ns* > *-f*). Marrucinian actually does not exhibit RC-epenthesis; his example *salaus* is not from **salwos*, but from **salawos* with syncope (cf. Weiss 2009: 162). As for *-*ns* > *-f*, most people now follow Rix's (1986) claim that this occurred in the prehistory of Oscan, too. Wallace also claims that Paelignian, normally considered an Oscan dialect, has several Umbrian features, including *-rf-* < syncopated *-*rVs*-, *$\bar{u}$ > $\bar{\imath}$, palatalization of **k* before *i*/*y*, and *-*ns* > *-f* (99–100 n. 16). But *-rf-* only occurs in one form in one inscription (*cerfum* Pg 9), against plenty of examples of *-rr-* as in Oscan; *$\bar{u}$ > $\bar{\imath}$ is highly doubtful for Paelignian (Meiser 1986: 53; Untermann 2000: s. v. *clisuist*); and palatalization in Paelignian is not attested with velars, as in Umbrian, but with dentals, as in Oscan.

2.2. Clackson considers a much broader range of features traditionally thought to be unique to one or another Sabellic language, as well as a host of putative isoglosses that indicate an Umbrian–South Picene/Pre-Samnite subgroup. He is surely correct that most of those isoglosses are weak or flat-out wrong (these points are also already laid out in Adiego Lajara 1990: 78–79): initial **l*- > *w*- (not surely attested in Pre-Samnite, and **l*- sometimes becomes *y*- rather than *w*- in South Picene), monophthongization of **ei* and **ou* (usually preserved in South Picene and Pre-Samnite), lenition of final **-d* (preserved in Pre-Samnite and on the Tortora stele), *$\bar{u}$ > $\bar{\imath}$ in final syllables or more generally (South Picene evidence unclear), and creation of a demonstrative stem **esto*- (also in Latin, so older than Sabellic). In so doing, he strengthens the case for a taxonomic separation of South Picene from Umbrian.

2.2.1. To my mind, Clackson does not sufficiently consider the isoglosses that may unite Oscan and Umbrian, and the general cloak of doubt that he casts on the material is sometimes needlessly opaque. In his estimation, only the innovated 3pl. secondary ending *-ns* shared by Osco-Umbrian to the exclusion of South Picene holds up to scrutiny as a possible subgrouping criterion within Sabellic (Clackson 2015: 30, 33; SPic. **údiíns** is not likely to be a 3pl. contra *Imagines* 1: 190–191, see Fortson and Weiss 2013). This change is usually understood as *-*nd* > *-*n(n)* → *-*n* plus plural *-*es*, but he disputes the supposed weakening of *-*nd* because of preserved *-d* (perhaps spelling *-nd*) in *fʊfꝼoδ* etc. in the Pre-Samnite Tortora inscription (Clackson 2015: 18–19). But this does not mean that *-*nd* could not have assimilated to *-nn* in the prehistory of Oscan and Umbrian,

and it definitely did intervocalically in U. *ponne* < **k^{w}onde*, pace Clackson (2015: 19 n. 58; correct his reference to p. 606 of Untermann 2000; the **k^{w}om-ne* there is an outdated suggestion of Thurneysen's that is not otherwise lent any credence by Untermann). That *-ns* is only attested in the material from after 400 BCE (Clackson 2015: 30) is an accident.

2.2.2. Clackson presents the rounding-cum-raising of word-final **-ā* to *-ō* as one of the changes that "appear to have taken place in Oscan and in Umbrian, but are questionable for the minor varieties lying between them" (2015: 23); although his treatment is a little unclear to me, he seems to count it among a small series of changes that in his estimation affected the general Sabellic area only after 400 BCE (Clackson 2015: 28). In the case of **-ā* > *-ō*, he bases this on the absence of direct evidence for the change in Umbrian prior to the later period of that language. But I see no account taken of the traditional view that there was early rounding of **-ā* to **-å̄*, which was not reflected in the script, followed later by raising of **-å̄* to *-ō*, which was. The first stage has to have happened prior to the loss of **-d* in Umbrian, since the abl. sg. in *-ā* < **-ād* never shows rounding, and we know that loss of **-d* predates the sixth century BCE (**face** Um 4, mid-500's). The simplest scenario is the traditional one, to assume **-ā* > **-å̄* in the ancestor of Oscan and Umbrian, followed later (but still prehistorically) by **-å̄* > **-ō* in central and southern Oscan (Paelignian evidences it in one inscription (Pg 9), against many others without. Marrucinian does not show it; Vestinian is silent on the matter). Raising in Umbrian is reflected in the script only starting in the 2nd c. BCE and could in theory have spread there from Oscan; unfortunately we do not have relevant material from the large area between Samnite Oscan and Umbria, and it might be sociolinguistically a bit peculiar if the raising spread from Samnium all the way up through Umbroid Marsian and Sabine while having but limited effect on the Oscans' close Paelignian and Marrucinian kin to the east. (I have no idea how best to account for the handful of word-internal cases, mostly before *(t)s* or *t*, of rounding/raising in later Umbrian: *Prestote* vs. older **Prestate**, *anderuacose*/**antervakaze**, *Casilos*/**Kaselate**, *pihos*/**pihaz**, *subotu*/*subator*/**subahtu**, and (before *k*) *Tesenocir*/**Tasenakes**.)

2.2.3. As per Fortson (2012: 90), I do not agree with the view, reflected in Clackson (2015: 25), that Oscan has innovated the addition of mediopassive *-r* to the imperative *censamur* and the passive infinitive **sakrafír** by contrast with U. **persnimu** and *pihaf(e)i.* The views and data of Rix (1976: 328 with n. 66**,** 1986: 328), in part cited by Clackson (2015), with respect to the writing of final *-r* in Umbrian are wrong, as noted above (1.2.1.7.). Although I only discuss the passive infinitive in this context in Fortson (2012), I would extend those deliberations to the mediopassive imperative and reconstruct **-mōr* already at least as far back as Proto-Osco-Umbrian.

2.2.4. Oscan and Umbrian also share the innovation of the demonstrative stem **ekso-*. In Oscan, this stem is confined to the oblique cases, with the others furnished by **eko-*; in Umbrian, **ekso-* is the stem of the whole paradigm. Insofar as evidence is available, all varieties of Oscan agree on the distribution.

2.3. In some cases, Clackson and others have attempted to cast doubt on the validity of certain traditionally proposed Proto-Sabellic changes by claiming they happened later and diffused but not all the way to South Picene. I think such doubts are not warranted

for the first of these changes below; the others are unclear, but if Clackson should be right, then they only add potentially to the list of shared Osco-Umbrian features.

2.3.1. SPic. **opesa[?]úom** Sp RI 1 is generally taken as an infinitive of *opsā-* 'make' without syncope of the second syllable, leading to doubts about the validity of medial syncope as a pan-Sabellic sound change. But it is very uncertain what this form is (doubts voiced at Weiss 2010: 326 n. 266; and see now Clackson 2015: 10 with n. 28). There is a lot of damage, with the **p** barely visible and perhaps a missing character between the **a** and **ú** (see *Imagines* 1: 167–168, and cf. Marinetti 1985: 249). Furthermore, the Sabellic infinitive ending was **-om*, a sequence almost always written **-úm** in South Picene, not **-om.** Clackson (2015: 10 n. 28) seems implicitly to endorse the view that the perfects **opsút** and [**o**]**psúq** are built to a different stem or root and therefore are no evidence of a syncopated **op(e)s-*. The stem in question, **ops-* or **ōps-*, is taken by Untermann (2000: s. v. **úpsannúm**) as the *s*-aorist of the root **h₃ep-*. But given that e.g. U. *portā-* 'carry' (**purtatu,** etc.) had a perfect stem *port-* (*portust* VIIb 3), I see no reason why *opsā-* could not simply have produced a perfect *ops-* in the same way. For the type, see Rix (1992: 239) and Dupraz (2010: 363); *ops-* would thus be a pseudo-root aorist, broadly comparable to Osc. **kúmbened,** Proto-Umbrian **face** (usually regarded as dereduplicated **fefak-*), U. *habe*, and **purtiius**, where the present differed from the perfect only in having a present-stem-forming suffix. Osc. **ekḷelled** Cp 42 (reading from *Imagines* 1: 440), if to the same **kellā-* as pf. **kellaked** Sa 10, 12, may be a further example. An analogically lengthened **ōps-*, evidenced by spellings like **upsed, uupsens,** ουπсενс from Alfedena, Pompeii, and Messina, respectively, is an Oscan innovation from Samnium and points south. To my knowledge there are no secure examples of SPic. <**o**> representing inherited **ō* except in final syllables before *-m* or *-h*, and in the otherwise deviant spelling **peṭeronis** AP 5 (reading of *Imagines* 1: 187; expected **petrúnis** AP 4). Vestinian has *ośens* MV2, probably with short *o*, cf. *fadatruni[es]* in the same inscription with *-u-* < **ō-*. Presumably the vocalism of the perfect passive participle **upsatuh**, attested multiple times from Teanum (Si 4–6 and 20–1), was influenced by the perfect stem. U. *opset[a]* Um 6, *oseto* Um 7 are ambiguous. The refashioned U. perfects **usaçe, usaiie** IIa 44, Ib 45 surely had the short *o-* of the present; on these forms see now Willi (2010: 2). Compare also SPic. pres. **praistaít** : perf. **adstaeoms** (I take this as a perfect, not present, following Rix 1992: 337–338), **adstaiúh**, where the present and perfect stems may not in fact have been distinguished except in the endings. In short, nothing stands in the way of assuming that SPic. **ops-** evidences syncope.

Even if **opesa[?]úom** is an unsyncopated form, it does not vitiate attributing syncope to Proto-Sabellic, any more than, say, the unexpectedly unrhotacized *s* of **asa** 'altar' disproves the validity of positing rhotacism for Umbrian. Note anyway SPic. **amgenas** AP 3, whose *-mg-* can hardly have arisen except through syncope; similarly the consonant cluster in **úflfú**[**h**?] CH 2 (reading of *Imagines* 1: 2011: 251). Admittedly, forms like **iokipedu, haligatú, rakinevíi** give the impression of being unsyncopated, but with little idea as to what they mean – and the possibility that <**i**> represents *ī* – we cannot draw conclusions from them. It is most unlikely that **matereíh patereíh** AP 2 are unsyncopated by contrast with Osc. **maatreís**, U. **matres**, that is, preserve an original internal *-e-* (Meiser 1986: 131, followed by Tikkanen 2011: 15): the kinship terms should have inherited oblique stems in *-tr-*. Here we have anaptyxis of that cluster; anaptyxis is characteristic of this inscription. Alternatively, we could be dealing with generalized full-grade **-ter-* from the nominative, as perhaps also in Venetic **vhraterei.**

2.3.2. Oscan and Umbrian agree on spreading the *o*-stem acc. sg. to consonant stems. Whether South Picene shared in this development is not clear. It is possible that preservation of older consonant-stem *-*em* < *-*m̥* is seen in **d[i]kdeintem**, which certainly looks much more like the accusative of an *nt*-stem than a 1sg. verb form like **knúskem** or maybe **pdufem**. On the other hand, **aúdaqum**, normally taken as equivalent to Lat. *audācem*, shows *-*om*. But, as pointed out by Weiss (2010: 63−64), Fortson and Weiss (2013:190−191), and now Clackson (2015: 10), the connection of SPic. **aúdaqum** with Lat. *audāx* is difficult because of the traditional derivation of *audāx*/*audēre* from *auidus*, whose *-d-* derives from *-*dh*-; we would thus expect §**aúfaqum** if this derivation is correct and the Latin and Picene forms were cognate. For more on these words, see now Fortson (2016), also with some remarks on *-em* vs. *-um*.

2.3.3. Clackson (2015: 28−29) disputes the traditional claim that stops were spirantized before **t* in Proto-Sabellic, citing possible counterexamples from South Picene and the Tortora inscription. But he notes that the two instances of apparent *kt* in the latter − *fri{ }qto[d]* and *takiosqtod* − are probably 3sg. imperatives: the second has been argued to be syncopated from *-*ske-tōd*, rendering it irrelevant, and of course that could be true of *fri{ }qto[d]* as well, mutatis mutandis. The South Picene material is more difficult, consisting of the form **deíktam** CH 1 and the reasonably secure restoration **molk[t]a[h]**. Phonological or morphological restoration of the stop is always possible, as happened also in e.g. Osc. **fruktatiúf** 'utilization' < **frūktātiōns*; but it is not easy, especially in **molk[t]a[h]** (for **deíktam**, Weiss 2002: 356 with n. 27 notes that a syncopated **deikVtam* is at least theoretically possible). On the other hand, positive evidence for the spirantization rule in South Picene may be found in **oftorim**, also CH 1; it is difficult not to connect this with the Paelignian gentilicium *ofturies* Pg 48 (Meiser 2013: 36 with n. 7), which is probably based on either an **optōr*- or an **ok^{w}tōr*. (The only difficulty that I see is that we might expect a spelling ***oftúrim**, but sure examples of **ō* before *r* are lacking. **múreis** CH 1 is of disputed meaning and etymology, and]**rtúr** TE 7 could reflect either *-*tor* or *-*tōr*.) But as that inscription was discovered a mere 40 km. away from the South Picene one, we may be dealing with a regional term that diffused from outside South Picene (and that stayed in the area for many centuries).

2.4. In sum, we are left with possibly a half-dozen innovations that support an Osco-Umbrian subgroup.

3. Internal subgrouping of Latino-Faliscan

3.1. There is no question that Faliscan is the closest relative of Latin; at issue has been whether to treat Faliscan as a Latin dialect or a separate language, and how to evaluate the features Faliscan shares with Sabellic against Latin. For an exhaustive recent treatment see Bakkum (2009). The language/dialect question is not interesting or evaluable from a purely structural point of view (and the informal yardstick of mutual comprehensibility is not available to us). On the sociolinguistic status of Faliscan and on Faliscan self-identification, see Bakkum (2009: 341−342). The differences between Faliscan and Latin are mostly minor but not quite minimal, reflecting maybe a couple of centuries of prehistoric independent development. This would jibe with Rix's (2005: 563) statement

that the Latino-Faliscan speech area was cloven in twain by the Etruscans moving into Veii in the 9th/8th c. BCE.

3.2.1. The only phonological deviation from Latin is in the word-internal treatment of the voiced aspirates, where Faliscan preserves the inherited Proto-Italic fricatives against the Latin stop outcomes. It is striking that *-*δ*- (from *-*dh*- and in some cases *-*s*-) became labialized to -*β*- in both Sabellic and Faliscan across the board, but only some of the time in Latin. We could be dealing with a trait that diffused from Sabellic territory into Faliscan and (incompletely) Latin territory. This makes it all the more likely that Fal. *efîl*- 'aedile' is not an early borrowing from Latin. For additional arguments see Bakkum (2009: 179).

Discrepancies on the side of Faliscan over against the rest of Italic in word-initial *f*- for expected *h*- (e.g. *foied* 'today' alongside Lat. *hodie*) are best explained as due to a general weakening of *f*- to *h*- in the 4th century with retention of *f*- in spelling; this resulted in an orthographic reanalysis whereby *f* could be interpreted as spelling [h], whence hypercorrect spellings like *foied*. See Wallace and Joseph (1991) and Bakkum (2009: 79–81).

3.2.2. Possibly more complicated is the history of **ghu*-, which becomes *fu*- in Latin (*fundō*) but *hu*- in (6th c. BCE) Fal. *huti[c]ilom* '*futicillum, little vessel' from **ghu-ti*- or **ghū-ti*-. The interpretation of this form is not assured, but the *h*- can only continue an aspirate and that aspirate should have become *f*- if the outcomes were as in Latin. Stuart-Smith's (2004: 206) suggestion that *hu*- here is weakened from earlier **fu*- is disputed by Bakkum (2009: 72) because of the later date of general *f*- > *h*-. But perhaps the weakening happened earlier before *u* than before other vowels, by a kind of rounding dissimilation; a parallel to this can be found in dialectal Albanian (Kümmel 2007: 104). If the labialization of **χu*- to *fu*- is a Latin-specific change, as usually assumed, note that means that the weakening of **χ*/**γ* > *h* was independent in Latin and Faliscan (**χ* > *h* was probably not Proto-Italic given U. **-veitu** < **u̯ek-tōd* < **u̯egh-e-tōd*, not **u̯eχ-tōd* which would have produced §**-vehtu** or §**-veetu**; Buck 1928: 98).

3.2.3. The <c> of Fal. *lecet* 'lies' from **legh*- has been phonetically interpreted by some as [γ], by others as [g]. It must be the latter; nowhere else to my knowledge does <c> stand for [γ]. But that would appear to mean that **gh* > *g*, uniquely in Italic (so most recently Stuart-Smith 2004: 58, 62–64). Bakkum (2009: 75) is surely right to doubt this. *lecet* should be considered together with the Italic 'law' word (Lat. *lēg*-, Osc. *lig*-), whose traditional derivation from **leg*- 'choose, gather' has never been semantically comfortable. The occasionally proposed alternative derivation from **legh*- 'lay down' (see the references in Walde and Hofmann 1938–1953: s. v. *lēx*) is much more attractive and easy to parallel, cf. ON *lǫg*, OE *dōm*, Gk. θέμις, OHG *gisezzida*, Lat. *statūtum*, Latv. *likums*, etc. Thus *lecet* and *lēg*- support each other and suggest that, for whatever reason, the root as inherited into Italic was **leg*- and not **legh*-. The absence of Lachmann's-Law lengthening in *lĕctus* 'bed' is unremarkable in a non-paradigmatic form.

3.3. There is no morphology (in our limited corpus) that Faliscan shares with Sabellic to the exclusion of Latin. The Faliscan 3pl. perfect is of aorist rather than perfect origin, as in Sabellic, but with different vocalism. Latin has traces of the aorist endings in the singular (*feced*), so Faliscan has simply held on to one aorist ending longer than Latin

did. (I do not think it likely that Italic or pre-Latin inherited both an *-*e* and an *-*ei* in the 3sg. perfect, contra Leumann 1977: 606–607. The latter is assured [→ *-ei-t* > *-īt* etc.], and the survival of the aorist is assured, so parsimony dictates taking *-ed* from the aorist, later losing out in Latin to *-eit* [and probably also in Faliscan, whence *-et*]. The curiosity in all this is why *-ei[t]* does not appear in early inscriptions if it had been in competition with *-ed* the whole time. One possibility, of course, is that *-ed* still retained a vestige of its aoristic sense in the early historical period: *fifiked* 'fashioned' rather than 'has fashioned', etc. Note the interesting development in Lucanian Oscan, which replaced 3sg. *-ed* with *-et* and perhaps even, as in Latino-Faliscan, with *-eit* [Bakkum 2009: 160 with n. 85], e.g. δεδετ, αναφακετ, and perhaps λιοκακειτ.) As long as Fal. 2pl. *ues* and U. *uestra* are unexplained, they cannot be used for subgrouping. (Possibly *ues* represents a replacement of **wōs* with the cons.-stem nom. pl. This ending might also have spread to *salues*; Bakkum's [2009: 196] hesitant lemmatization of this under an *i*-stem *saluis* is, as he himself says, odd since the adjective is everywhere an *o*-stem in Italic [and cf. p. 413, where he suggests *-es* was imported from another declension]. The only assured *o*-stem nom. pl. is *lete* 'beds', which, purely theoretically, could have the same ending with omitted *-s*. Differently on *ues* Vine 1993: 179 n. 11.) The occasional agreement in stem-formation between Faliscan and Sabellic, principally in the perfect stem *fifik-* vs. Lat. *fīnx-*, point to different generalizations of perfect vs. aorist stems, if they point anywhere at all; there were several productive processes throughout Italic for forming perfect stems, and parallel independent developments (as is quite possibly the case in Fal. perf. stem *fac-*) cannot be ruled out.

3.4. None of the material surveyed suggests closer kinship of Faliscan with Sabellic; the two subbranches had clearly been distinct for many centuries before documentation begins.

4. References

Adiego Lajara, Ignacio-Javier
1990 Der Archaismus des Südpikenischen. *Historische Sprachforschung* 103: 69–79.

Agostiniani, Luciano, Alberto Calderini, and Riccardo Massarelli (eds.)
2011 *Screhto est: Lingua e scrittura degli antichi Umbri. Catalogo della mostra.* Perugia: Università degli Studi di Perugia.

Bakkum, Gabriël Cornelis Leonides Maria
2009 *The Latin Dialect of the Ager Faliscus: 150 Years of Scholarship.* Ph.D. dissertation. Amsterdam: Amsterdam University Press.

Beeler, Madison
1966 The interrelationships within Italic. In: Henrik Birnbaum and Jaan Puhvel (eds.), *Ancient Indo-European Dialects: Proceedings of the Conference on Indo-European Linguistics Held at the University of California, Los Angeles April 25–27, 1963*. Berkeley: University of California Press, 51–58.

Brugmann, Karl and Albert Thumb
1913 *Griechische Grammatik: Lautlehre, Stammbildungs- und Flexionslehre, Syntax.* 4th edn. Munich: Beck.

Buck, Carl Darling
1928 [1904] *A Grammar of Oscan and Umbrian.* 2nd edn. Boston: Ginn.

Byrd, Andrew Miles
2015 *The Indo-European Syllable.* Leiden: Brill.
Clackson, James
2015 Subgrouping in the Sabellian branch of Indo-European. *Transactions of the Philological Society* 113: 4–37.
Cowgill, Warren
1973 Latin *stāre. The Journal of Indo-European Studies* 1: 271–303.
Debrunner, Albert
1954 *Altindische Grammatik.* Vol. 2, part 2: *Die Nominalsuffixe.* Göttingen: Vandenhoeck & Ruprecht.
Dupraz, Emmanuel
2010 *Les Vestins à l'époque tardo-républicaine: Du nord-osque au latin.* Mont-Saint-Aignan Cedex: Publications des universités de Rouen et du Havre.
Dupraz, Emmanuel
2012 *Sabellian Demonstratives: Forms and Functions.* Leiden: Brill.
Fortson, Benjamin W. IV
2012 Latin *-rier* and its Indo-Iranian congeners. *Indogermanische Forschungen* 117: 75–118.
Fortson, Benjamin W. IV
2016 Latin *audēre* and related forms. In: H. Craig Melchert and Brent Vine (ed.), *Proceedings of the 26th UCLA Indo-European Conference*. Bremen: Hempen, 13–26.
Fortson, Benjamin W. IV
To appear A cover-up: Latin *amiciō*. To appear in a festschrift.
Fortson, Benjamin W. IV and Michael Weiss
2013 Review of *Imagines*. *Bryn Mawr Classical Reviews* 2013.06.17.
de Grummond, Nancy Thomson
2006 *Etruscan Myth, Sacred History, and Legend.* Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
Hajnal, Ivo
1993 Das oskische Cognomen *Pukalatúí.* In: Helmut Rix (ed.), 125–142.
Harðarson, Jón Axel
2011 The 2nd line of the Duenos inscription. In: Giovanna Rocca (ed.), *Atti del Convegno Internazionale Le lingue dell'Italia antica: Iscrizioni, testi, grammatica* / *Die Sprachen Altitaliens: Inschriften, Texte, Grammatik. In memoriam Helmut Rix (1926–2004) 7–8 marzo 2011, Libera Università di Lingue e Comunicazione, IULM, Milano* (= *Ἀλεξάνδρεια* / *Alessandria* 5), 153–163.
Hock, Hans Henrich
2007 Morphology and *i*-apocope in Slavic and Baltic. In: Karlene Jones-Bley, Martin Huld, Angela Della Volpe, and Miriam Robbins Dexter (eds.), *Proceedings of the 18th UCLA Indo-European Conference, Los Angeles, Nov. 3–4, 2006*. Washington, DC: Institute for the Study of Man, 65–76.
Imagines = Michael H. Crawford (ed.)
2011 *Imagines Italicae: A Corpus of Italic Inscriptions.* 3 vols. In collaboration with William M. Broadhead, James Clackson, Federico Santangelo, S. Thompson, Margaret Watmough with computing by Errietta M. A. Bissa and Gabriel Boddard. London: Institute of Classical Studies, University of London.
Jannot, Jean-René
2005 *Religion in Ancient Etruria.* Transl. by Jane Whitehead. Madison: University of Wisconsin Press.
Jasanoff, Jay
1988 PIE **ĝnē-* 'recognize, know'. In: Alfred Bammesberger (ed.), *Die Laryngaltheorie und die Rekonstruktion des indogermanischen Laut- und Formensystems*. Heidelberg: Winter, 227–239.

Jasanoff, Jay
2006 The origin of the Latin gerund and gerundive: A new proposal. In: Harvey Goldblatt and Nancy Shields Kollman (eds.), *Rus' Writ Large: Languages, Histories, Cultures. Essays Presented in Honor of Michael S. Flier on his Sixty-Fifth Birthday* (= *Harvard Ukrainian Studies* 28 [2010]), 195–208.
Jones, D. M.
1950 The relation between Latin and Osco-Umbrian. *Transactions of the Philological Society* 49: 60–87.
Joseph, Brian D. and Rex Wallace
1987 Latin *sum* / Oscan **súm, sim,** ***esum***. *American Journal of Philology* 108: 675–693.
Kloekhorst, Alwin
2014 The Proto-Indo-European "thorn"-clusters. *Historische Sprachforschung* 127: 43–67.
Kümmel, Martin Joachim
2007 *Konsonantenwandel: Bausteine zu einer Typologie des Lautwandels und ihre Konsequenzen für die vergleichende Rekonstruktion.* Wiesbaden: Reichert.
Kümmel, Martin Joachim
2008 Die sabellischen Sprachen. Class handout, University of Freiburg. http://www.indogermanistik.uni-freiburg.de/seminar/pers/kuemmel/umat/die-sabellischen-sprachen
Leumann, Manu
1977 *Lateinische Laut- und Formenlehre.* Munich: Beck.
Livingston, Ivy
2004 *A Linguistic Commentary on Livius Andronicus.* New York: Routledge.
Maier, Bernhard
1987 Latin *sacer* 'sacred' and Welsh *hagr* 'ugly'. *Celtica* 19: 96–97.
Marinetti, Anna
1985 *Le iscrizioni sud-picene.* Vol. 1: *Testi.* Florence: Olschki.
Martzloff, Vincent
2007 Latin *pollinctor*, grec λίπ(α), picénien VEPSES: Phraséologie et élaboration poétique. In: Alain Blanc and Emmanuel Dupraz (eds.), *Procédés synchroniques de la langue poétique en grec et en latin*. Brussels: Safran, 171–189.
Mattiocco, Ezio
1986 *Centri fortificati vestini.* Sulmona: Museo civico di Sulmona.
McCone, Kim
1996 *Toward a Relative Chronology of Ancient and Medieval Celtic Sound Change.* (Maynooth Studies in Celtic Linguistics 1). Maynooth: Department of Old Irish, St. Patrick's College.
McCone, Kim
2006 *The Origins and Development of the Insular Celtic Verbal Complex.* (Maynooth Studies in Celtic Linguistics 6). Maynooth: Department of Old Irish, National University of Ireland.
Meiser, Gerhard
1986 *Lautgeschichte der umbrischen Sprache.* Innsbruck: Institut für Sprachwissenschaft der Universität.
Meiser, Gerhard
1993 Uritalische Modussyntax: Zur Genese des Konjunktiv Imperfekt. In: Helmut Rix (ed.), 167–195.
Meiser, Gerhard
1998 *Historische Laut- und Formenlehre der lateinischen Sprache.* Darmstadt: Wissenschaftliche Buchgesellschaft.
Meiser, Gerhard
2003 *Veni vidi vici: Die Vorgeschichte des lateinischen Perfektsystems.* Munich: Beck.

Meiser, Gerhard
2013 Review of Weiss 2010. *Kratylos* 58: 33–46.
Nussbaum, Alan J.
1976 Umbrian *pisher*. *Glotta* 54: 241–253.
Pisani, Vittore
1963 Oskisch *fufans*. *Zeitschrift für vergleichende Sprachforschung* 78: 101–103.
Rix, Helmut
1976 Die umbrischen Infinitive auf *-fi* und die uridg. Infinitivendung **-d^{h}i̯ōi̯*. In: Wolfgang Meid and Anna Morpurgo Davies (eds.), *Studies in Greek, Indic, and Indo-European Linguistics Offered to Leonard R. Palmer on the Occasion of His Seventieth Birthday*. Innsbruck: Institut für Sprachwissenschaft der Universität, 319–331.
Rix, Helmut
1981 Rapporti onomastici fra il panteon etrusco e quello romano. In: Giovanni Colonna (ed.), *Gli etruschi e Roma: Incontro di studio in onore di Massimo Pallottino Roma, 11–13 dicembre 1979*. Rome: Bretschneider, 104–126.
Rix, Helmut
1986 Die Endung des Akkusativ Plural commune im Oskischen. In: Annemarie Etter (ed.), *o-o-pe-ro-si: Festschrift für Ernst Risch zum 75. Geburtstag*. Berlin: De Gruyter, 583–597.
Rix, Helmut
1992 Zur Entstehung des lateinischen Perfektparadigmas. In: Oswald Panagl and Thomas Krisch (eds.), *Latein und Indogermanisch: Akten des Kolloquiums der Indogermanischen Gesellschaft, Salzburg, 23.–26. September 1986*. Innsbruck: Institut für Sprachwissenschaft der Universität, 221–240.
Rix, Helmut (ed.)
1993 *Oskisch-Umbrisch: Texte und Grammatik. Arbeitstagung der Indogermanischen Gesellschaft und der Società Italiana di Glottologia vom 25. bis 28. September 1991 in Freiburg*. Wiesbaden: Reichert.
Rix, Helmut
2005 Lehnbeziehungen zwischen den Sprachen Altitaliens. In: Gerhard Meiser and Olav Hackstein (eds.), *Sprachkontakt und Sprachwandel: Akten der XI. Fachtagung der Indogermanischen Gesellschaft, 17–23. September 2000, Halle an der Saale*. Wiesbaden: Reichert, 559–572.
Schindler, Jochem
1977 A thorny problem. *Die Sprache* 23: 25–35.
Schrijver, Peter
1991 *The Reflexes of the Proto-Indo-European Laryngeals in Latin*. Amsterdam: Rodopi.
Schrijver, Peter
1992 The chronology of the loss of post-posttonic vowels between identical consonants and the origin of the Celtic first person singular imperfect. *Münchener Studien zur Sprachwissenschaft* 53: 179–196.
Schrijver, Peter
2006 Review of Meiser 2003. *Kratylos* 51: 46–64.
Schumacher, Stefan
2004 *Die keltischen Primärverben: Ein vergleichendes, etymologisches und morphologisches Lexikon*. Unter Mitarbeit von Britta Schulze-Thulin und Caroline aan de Wiel. Innsbruck: Institut für Sprachen und Literaturen der Universität.
Schwyzer, Eduard
1939 *Griechische Grammatik*. Munich: Beck.
ST = Rix, Helmut
2002 *Sabellische Texte: Die Texte des Oskischen, Umbrischen und Südpikenischen*. Heidelberg: Winter.

Stuart-Smith, Jane
2004 *Phonetics and Philology: Sound Change in Italic.* Oxford: Oxford University Press.
Tikkanen, Karin
2009 *A Comparative Grammar of Latin and the Sabellian Languages: The System of Case Syntax*. Ph.D. thesis, Uppsala University.
Tikkanen, Karin
2011 *A Sabellian Case Grammar.* Heidelberg: Winter.
Toulmin, Matthew
2009 *From Linguistic to Sociolinguistic Reconstruction: The Kamta Historical Subgroup of Indo-Aryan.* Canberra: Centre for Research on Language Change.
Untermann, Jürgen
1993 'Urverwandtschaft' und historische Nachbarschaft im Wortschatz der italischen Sprachen. *Incontri linguistici* 16: 93–101.
Untermann, Jürgen
2000 *Wörterbuch des Oskisch-Umbrischen.* Heidelberg: Winter.
Vine, Brent
1993 *Studies in Archaic Latin Inscriptions.* Innsbruck: Institut für Sprachwissenschaft der Universität.
Vine, Brent
2004 New thoughts on an old curse. In: Adam Hyllested, Anders Richardt Jørgensen, Jenny Helena Larsson, and Thomas Olander (eds.), *Per aspera ad asteriscos: Studia Indogermanica in honorem Jens Elmegård Rasmussen sexagenarii Idibus Martiis anno MMIV.* Innsbruck: Institut für Sprachen und Literaturen der Universität, 615–626.
Vine, Brent
2006 On 'Thurneysen-Havet's Law' in Latin and Italic. *Historische Sprachforschung* 119: 211–249.
Vine, Brent
2012 PIE mobile accent in Italic: Further evidence. In: Benedicte Nielsen Whitehead, Thomas Olander, Birgit Anette Olsen, and Jens Elmegård Rasmussen (eds.), *The Sound of Indo-European: Phonetics, Phonemics, and Morphophonemics*. Copenhagen: Museum Tusculanum, 545–575.
Wackernagel, Jacob
1896 *Altindische Grammatik*. Vol. 1: *Lautlehre.* Göttingen: Vandenhoeck & Ruprecht.
Walde, Alois and J. B. Hofmann
1938–1953 *Lateinisches etymologisches Wörterbuch.* 3 vols. Heidelberg: Winter.
Wallace, Rex E.
1985 Volscian *sistiatiens*. *Glotta* 63: 93–101.
Wallace, Rex E.
2004 Sabellian languages. In: Roger D. Woodard (ed.), *The Cambridge Encyclopedia of the World's Ancient Languages*. Cambridge: Cambridge University Press, 812–839.
Wallace, Rex E. and Brian D. Joseph
1991 Is Faliscan a local Latin patois? *Diachronica* 8: 159–186.
Weiss, Michael
1998 On some problems of final syllables in South Picene. In: Jay Jasanoff, H. Craig Melchert, and Lisi Oliver (eds.), *Mír Curad: Studies in Honor of Calvert Watkins*. Innsbruck: Institut für Sprachwissenschaft der Universität, 703–715.
Weiss, Michael
2002 Observations on the South Picene inscription TE. 1 (S. Omero). In: Mark R. V. Southern (ed.), *Indo-European Perspectives*. Washington, DC: Institute for the Study of Man, 351–366.
Weiss, Michael
2009 *Outline of the Historical and Comparative Grammar of Latin.* Ann Arbor: Beech Stave.

Weiss, Michael
2010 *Language and Ritual in Sabellic Italy: The Ritual Complex of the Third and Fourth* Tabulae Iguvinae*.* Leiden: Brill.
Willi, Andreas
2010 The Umbrian perfect in **-nç-**/*-nś-*. *Transactions of the Philological Society* 108: 1–14.
Wissowa, Georg
1912 *Religion und Kultus der Römer.* 2nd edn. Munich: Beck.
Zair, Nicholas
2009 OIr. *biid* < **b^{h}uH-ye/o-* and 'hiatus' verbs. In: Stephanie W. Jamison, H. Craig Melchert, and Brent Vine (eds.), *Proceedings of the 20th UCLA Indo-European Conference, Los Angeles 2008*. Bremen: Hempen, 213–220.

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52. The evolution of Italic

1. Overview

The external and internal history of Italic can be divided into three macro-periods, each of which can be subdivided into three evolutionary steps. Latin, the most prominent member of the family, survived in a twofold manner: as a spoken language, orally transmitted from generation to generation resulting in the different Romance languages; and as a medium of written culture, transmitted by formal training in grammar schools over two millennia. It also survived in the international lexicon of science and technology. The overall evolution of the Italic branch of Indo-European can be summarized in the following diagram:

Proto-Italic
Italic proper
Latin
preclassical
classical — Medieval & modern Latin
postclassical — Graeco-Latin in modern languages
Proto-Romance
Romance proper
Romance creoles

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