Macrorelationships and Microrelationships and their Relationship[*]

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Macrorelationships, i.e. relationships between languages and language families at a time-depth beyond what is normally deemed (easily) reachable with the Comparative Method,[1] have loomed large in both the historical linguistic literature and the popular literature on linguistics in recent years, due largely to the interest in the topic provoked by Joseph Greenberg's 1987 book *Language in the Americas* and other more recent pieces in a similar vein.[2]

These macrorelationships are often speculative though they generally have a ring of truth — or at least, plausibility — about them. What is especially tricky about claims of such "long-distance" relationships is that they are hard to prove. Thus, much of the debate about these claims has concerned the meaning of "proof" in this domain, focusing on how much evidence is enough, what type of evidence is probative, and what the nature is of the methodology that leads to or supports the claimed relationships.

The focus on the evidence and how to evaluate it means that an interesting and revealing comparison can be made between the methods for judging macrorelationships and the methods for determining what can be referred to as microrelationships, i.e. subgroupings within well-established or well-recognized linguistic groups. Especially interesting in this regard are those cases in which the degree and/or nature of the microrelationship is unclear, whether because of a general lack of data, an absence of just those crucial data points needed to clinch the argument one way or the other, or some similar obscuring factor.

There are several reasons for exploring this comparison between microrelationships and macrorelationships and the methods they require. First of all, both types of relationships are exercises in the classification of languages: subgrouping involves family-internal classification, whereas long-distance relationships involve connections among families. The similarity is evident when one considers that if something like "Proto-World" is correct, and all the languages of the world are related to one another,[3] then all relationships would really turn out to be a

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[1]I say "normally deemed" here to reflect a general belief (see, for instance, Nichols 1992: 5-6, 184, Ruhlen 1994: 14 for some discussion and references) that the utility of the comparative method diminishes when comparisons are at a time-depth greater than some rather large number (around 10,000 years is the figure often mentioned). I take no stand on this claim, but note that it may well simply be a practical constraint based on the difficulty of finding reliable comparanda at such a time-depth rather than an absolute constraint inherent in the method itself.
[2]See, for instance, Campbell 1988, Greenberg 1989, Greenberg & Ruhlen 1992, Matisoff 1990, Ross 1991, and Ruhlen 1994, as well as work by the honoree of this volume, e.g. Shevoroshkin 1989a, 1989b, 1989c, 1990a, 1990b, 1991.
[3]More accurately, as noted in Hock & Joseph (1996:488), the issue of Proto-World is really a matter of whether all oral languages are related, for discussions of Proto-World have generally ignored the many signed languages that have developed within the history of the world.

type of subgrouping, for the issue would not be whether two languages are related at all,[4] but rather how closely they are related, i.e. a question of subgrouping.[5]

Second, without getting into the thorny issue of whether reconstruction is necessary to prove a claim of relationship, it is clear that positing a linguistic relationship is intimately connected to being able to reconstruct linguistic features of common ancestor, the proto-language, for the languages in question. Macrorelationships ultimately lead one to attempt reconstruction,[6] but in doing reconstruction at the microrelationship level, i.e. within "lower-order" language families, it is essential to get the subgrouping right. In fact, successful reconstruction depends on the determination of the subgrouping relationships within a family, for it is not possible to judge adequately how widespread an innovation is without a sense of what the finer degrees of relatedness are among members of the family. For example, the labial correspondences within Indo-European, when arranged as in (1), present a primarily even mix of fricatives and stops, thus getting in the way of a clear decision as to what to reconstruct:

1. English **f** = Greek **p** = Irish **Ø** = German **f** = Russian **p** = Armenian **Ø/h** = Gothic **f** = Latin **p** = Avestan **f** (but only before a consonant) = Sanskrit **p** = Albanian **p** = Old Norse **f** = Hittite **p** = Tocharian **p**

However, once subgrouping, based on independent criteria, is taken into account, as in (2), stop reflexes predominate and thus the reconstruction of *f becomes somewhat less plausible[7]:

2. Germanic ***f** (= English **f**, German **f**, Gothic **f**, Old Norse **f** (etc.)) = Indo-Iranian ***p** (= Avestan **f** /__C = Sanskrit **p**) = Greek **p** = Irish **Ø** = Russian **p** = Armenian **Ø/h** = Latin **p** = Albanian **p** = Hittite **p** = Tocharian **p**

Third, given the recent attention to macrorelationships, any new perspective offered by microrelationships on the subject ought to be important, especially since the methodologies in both pursuits are quite parallel. In particular, in doing subgrouping, especially in the unclear cases, the evidence is often quite slim, and open to conflicting interpretations; also, given such evidence, the basic principle of classification, i.e. to pay attention to shared innovations, and especially to shared particularities of development, can often be obscured by mere shared similarities, i.e. by similarities of form that do not necessarily point to a common parentage for the languages involved.

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[4]It is useful here to note that though it is often said that it cannot be shown that two languages are not related, in fact there are pairs of languages that simply cannot be related, specifically Esperanto (especially among those who (reportedly) use it as their first language) and a signed language such as American Sign Language.

[5]As Ruhlen (1994: 272) puts it: "it no longer makes sense to ask if two languages (or language families) are related. *Everything* is related, and the question to be investigated within or among different families is the *degree* of their relationship, not the fact of it".

[6]For example, the extent of reconstruction attempted for Nostratic is a case in point. It has never been enough to simply claim that Indo-European, Uralic, Kartvelian, etc. are related; rather, serious discussion of Nostratic has involved reconstruction of the proto-language as well. See for instance recent works such as Manaster Ramer, Michalove, Baertsch, & Adams 1997 and Bomhard & Kerns 1994, as well as papers in Shevoroshkin 1989b, 1989c, 1990b, 1991.

[7]This is not to suggest that decisions about what to reconstruct are simply a numbers game, with the majority reflex chosen as the proto-language element; rather, a number of criteria need to be taken into consideration. Still, it is safe to assume that most practicing historical linguists would be more inclined to reconstruct a stop when confronted with the correspondences in (2) than with those in (1); thus, there is some safety in numbers in reconstruct but some pitfalls as well.

To be sure, there is still a lot of work to be done on microrelationships. One need only consider the fact that within a relatively well-studied language family like Indo-European, numerous controversies regarding subgrouping remain to be worked out, for instance, whether there was an Italo-Celtic subgroup,[8] what the relationship was between Greek and ancient Macedonian, where Old Prussian fits in within Baltic and more generally within Balto-Slavic, if there even is a Balto-Slavic subgroup, and so on.

The pitfalls of working on microrelationships are illustrated here by the examination of one problematic case in some depth, which then allows for some explicit parallels with the enterprise of hunting for macrorelationships. The case in point is the relationship between Latin and Faliscan, two languages spoken in ancient Italy, though reference to their relationship with Oscan and Umbrian, two other languages of ancient Italy, is also relevant.

Mention of all these considerations should not be taken as support for a view that one cannot proceed with any long-distance relationships until all the details of closer-range relationships are cleared up. On the contrary, both pursuits should proceed for they can feed into one another, but that there are enough parallels in the methodologies — in fact, as noted above, virtually the exact same methodologies are needed — to allow for progress to be made by learning from both enterprises.

To turn first to the relationship between Latin and Oscan-Umbrian, two main claims can be recognized in the literature: one that has Latin and Oscan-Umbrian subgrouped together as an Italic branch of Indo-European, as indicated in (3a), and one that treats Latin and Oscan-Umbrian as separate branches of Indo-European, each on a part with Greek or Indo-Iranian, as indicated in (3b):[9]

3. a. Proto-Indo-European
         /   \
      Greek   Italic   .....
                   /   \
                  /   \
             Latin Oscan-Umbrian

   b. Proto-Indo-European
          / | \
         / | \
      Greek   Latin Oscan-Umbrian ...
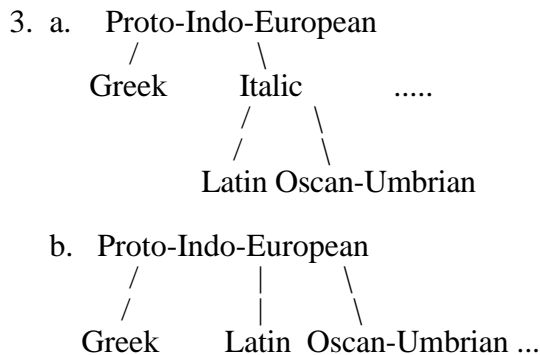
Although there are several potential shared features worthy of investigation as possible evidence to decide between (3a) and (3b),[10] one striking similarity between Latin and Oscan-Umbrian can be explored here: the form of the first person singular (1SG) present indicative of the verb 'be', *sum* in Latin and *súm* (phonetically [som]) in Oscan. This similarity at first glance would suggest a reconstruction for Italic of *som, which would represent a significant deviation, an apparent shared innovation, away from PIE *(H_1)esmi (as defined by the equation of Greek ἐιμι = Sanskrit *asmi* = Gothic *am*,, etc.).

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[8]Or even an Italic branch, as opposed to separate Latin and Oscan-Umbrian branches stemming directly from Proto-Indo-European, a position evaluated below.

[9]See Joseph & Wallace 1987 for discussion of these positions, with literature. Here and elsewhere in this paper, I use the traditional label "Oscan-Umbrian" instead of the now more usual "Sabellian" to allow for a greater point of contact with the previous work cited.

[10]For instance, the organization of the verbal system into four major conjugational classes seems like a significant shared innovation, and numerous others have been proposed, some of which are discussed in Joseph & Wallace 1987.
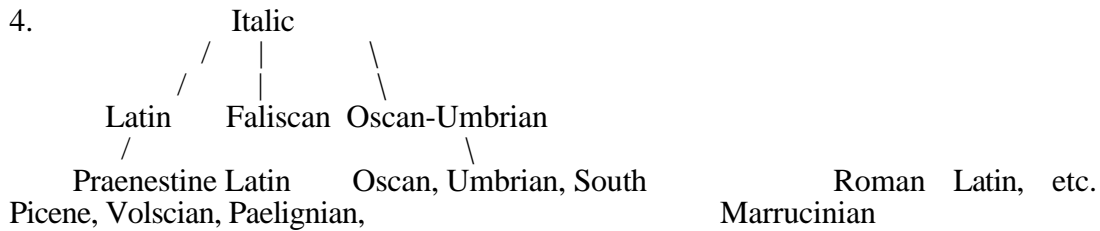
One scholar, however, Bader 1976, has argued instead that the *sum/súm* similarity represents a shared retention between Latin and Oscan, and thus insignificant for subgrouping. Interestingly, from the perspective of methods used in positing some macrorelationships,[11] this claim rests entirely on a false segmentation that Bader made: only if Tocharian B *nasam* 'I am' is analyzed as *na-sam*, with an "empty" preverb *no- (as in the Irish imperfect), does the shared retention hypothesis gain some credibility. However, the Tocharian-internal evidence points to root *nes- and the segmentation *nas-am*: Tocharian A 1SG *nesau*, 2SG *nest*, etc., Tocharian B 1SG *nasam*, 2SG *nast*, etc.

Still, there is one way in which Bader was right, in that the *sum/súm* similarity does not in and of itself represent a shared innovation. Rather, as Joseph & Wallace 1987 argue, the best account takes each form to be an independent outcome of forms that resulted from a few real shared innovations: enclisis of 'be', giving enclitic 1SG *X-esmi*, followed by loss of final *-i in present tense verb forms, giving *X-esm*, and then by epenthesis *cum* rounding to give *X-esom*, all taking place in Common Italic, with the development to Latin *sum* and Oscan *súm* then being the result of similar but distinct processes within each language. In that case, *sum/súm* do point to a Latin-Oscan-Umbrian subgrouping, but not because they are so similar in form; a bit of digging shows that there is a significant shared innovation (actually a few) lurking behind them, but the obvious one is not significant.
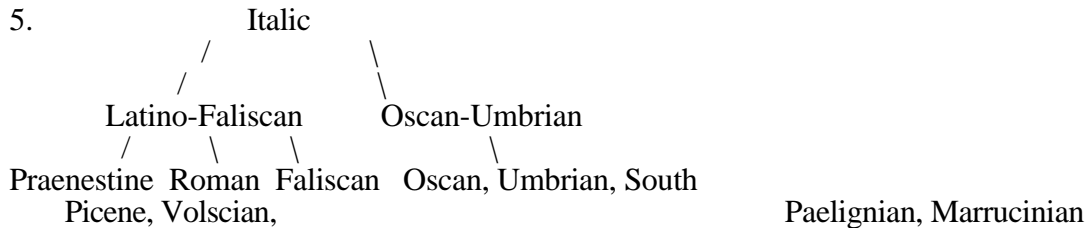
With an Italic branch thus established (and see also footnote 10), the relationship of Latin to Faliscan can be considered. Several proposals for this relationship have been put forth. One is that of Beeler 1956, who treated Faliscan as equal sibling to all of Latinity, i.e. to the collection of various Latin dialects, including the Latin of Rome, of Praeneste, etc., and thus on an equal footing with Oscan-Umbrian, as modeled in (4):
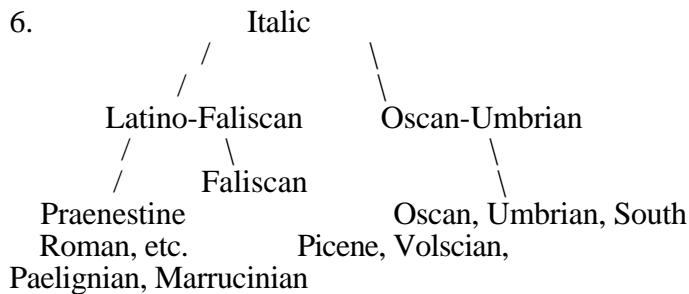
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[11]For instance, Campbell (1988: 605-6) notes that several of the forms Greenberg 1987 cites in support of his Amerind hypothesis, whereby a good many of the languages of the Americas belong to a single language family he calls "Amerind", in fact represent erroneous segmentations on Greenberg's part; see also Rankin (1992: 339).

4.   Italic
                 / | \
               / | \
          Latin   Faliscan Oscan-Umbrian
           /   \
       Praenestine Latin   Oscan, Umbrian, South   Roman Latin, etc.
Picene, Volscian, Paelignian,   Marrucinian

Another position, that of Beeler 1963, Campanile 1961, Eska 1987, Giacomelli 1979, Palmer 1954, Pisani 1962, and Pulgram 1978, treats Faliscan as a dialect of Latin, parallel to the Roman Latin, Praenestine Latin, etc., as illustrated in (5):

5.   Italic
                 /   \
               /   \
        Latino-Faliscan   Oscan-Umbrian
          /   \   \   \
Praenestine Roman Faliscan   Oscan, Umbrian, South
     Picene, Volscian,   Paelignian, Marrucinian

Finally, Faliscan has been considered, e.g. by Leumann 1977 and Sommer 1977, to be a sibling to all of Latinity within a Latino-Faliscan subgroup of Italic, modeled in (6):

6.   Italic
                 /   \
               /   \
        Latino-Faliscan   Oscan-Umbrian
          /   \   \
       /   Faliscan   \
   Praenestine   Oscan, Umbrian, South
     Roman, etc.   Picene, Volscian,
Paelignian, Marrucinian

   There is evidence that can decide among the three possibilities sketched in (4) through (6). Since this evidence is discussed thoroughly in Joseph & Wallace 1991, it is presented here in schematic form. In particular, a couple of innovations shared by Latin and Faliscan argue against (4) and thus in favor of a Latin-Faliscan subgroup; for instance, as indicated in (7a),[12] Faliscan and Latin have a future marker with an initial labial, as opposed to an *s*-marker in Oscan-Umbrian, the apparent inherited Italic norm, to judge from the occurrence of *s*-futures elsewhere, such as in Greek. Similarly, Latin and Faliscan show a *-d suffix in the accusative singular of personal pronouns, where Oscan-Umbrian have *-om*, a marker paralleled elsewhere, e.g. in Sanskrit, as indicated in (7b):

7. a. *f/b*-future: Faliscan *carefo* LF 5, Latin *carebo* 'I will lack' (vs. Oscan-
         Umbrian *-s-* future; cf. Greek *s*-future)
    b. *d in ACC SG of personal pronouns: Faliscan *med* LF 1, Latin *med* 'me'
         (vs. *-om* in Oscan-Umbrian, e.g. Umbrian *tiom* 'you'; cf. Sanskrit *mãm*
         / *tvãm* 'me / you'))

Interestingly, in terms of the quality of the data that can be used here and how frustrating fragmentary evidence can be if strict criteria are adhered to for relatedness and/or subgrouping, two tantalizing lexical parallels can be cited between Latin and Faliscan which prove to be unusable. In particular, the languages agree on the word for 'tomorrow', Faliscan *cra* (LF 5) and Latin *cras*, and on the word for 'today', Faliscan *foied* (LF 5) and Latin *hodie* 'today'. This latter form would be especially interesting if the Faliscan *-o-* were short,[13] but there is no way to tell, due to nature of Faliscan orthography. Even so, neither form can be used for determining an especially close relationship between Latin and Faliscan since the Oscan-Umbrian word for 'tomorrow' and 'today' are not known; thus, even though these forms are unparalleled elsewhere in Indo-European, it is not clear if they represent Latino-Faliscan innovations or Italic ones. In the absence of such information, these parallels remain tantalizing but inconclusive.

Among the evidence that has been invoked to support the position in (5), in which Faliscan is (just) a dialect of Latin, are the features cited in (8), each with an example from Faliscan and one from "dialectal" Latin (i.e. non-Roman Latin), contrasted with a Roman Latin form (simply labeled "Latin" here):

8. a. *erC > irC: Faliscan *loifirtato* LF 25, *[l]oifirta* LF 73, Dialectal Latin *mircurios* CIL 1², 564 [Praeneste] vs. Latin *libertas*
   b. monophthongization of diphthongs: Faliscan *efiles* LF 15, *pola* LF 74, Dialectal Latin *edus* [Varro, *LL* 5, 97]; *plotia* CIL 14, 3369 [Praeneste] vs. Latin *aediles*, *Paulla*, *haedus*, *Plautia*
   c. *iV > eV: Faliscan *hileo* LF 97, *filea* LF 67, Dialectal Latin *fileai* CIL 1², 561 [Praeneste] vs. Latin *filius*, *filia*
   d. loss of word-final consonants: Faliscan *mate* LF 121.1, *cupa* LF 121.1, Dialectal Latin *maio* CIL 1², 76 [Praeneste]; *dedi* CIL 1², 60 [Praeneste], *dede* CIL 1², 47 [Tibur], *[d]edero* CIL 14, 2891 [Praeneste] vs. Latin *mater*, *cubat*, *maior*, *dedit*, *dederunt*
   e. *f* (vs. Latin *b/d*) in medial position from PIE aspirates: Faliscan *efiles* LF 15, *carefo* LF 5, Dialectal Latin *rufus* vs. Latin *aediles*, *carebo*, *ruber*
   f. *f > h* in word-initial position (with hypercorrection of etymological *h* to *f*): Faliscan *hileo* LF 97 (*fe* LF 144), Dialectal Latin *horda* [Varro *RR* 2.5.6] (*faedus* Varro *LL* V, 97) vs. Latin *filius*, *hic*, *forda*
   g. Consonant-stem GEN in *-os* (> *-us*): Faliscan *lartos* LF 4a, *loifirtato* LF 25, Dialectal Latin *salutus* CIL 1², 62 [Praeneste] vs. Latin *libertatis*, *salutis*
   h. *o*-stem GEN in *-osio*: Faliscan *kaisiosio* LF 4b, Dialectal Latin *popliosio ualesiosio* CIL 1² (4) 2832a [Satricum] vs. Latin *Caesi*, *Publi Valeri*

Significantly, however, all of these features in (8a) through (8h) are inadmissible as evidence bearing on subgrouping. They fail to pass muster against criteria for evaluating their utility in judging microrelationships: (i) a shared feature in and of itself is not probative if found in other languages, for if the languages are related, such a feature could be a common inheritance, and if they are not related (or even if they

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[13]The short *-o-* of Latin *hodie* preserves an archaic feature of Indo-European morphology, but in view of the variety of formations in words for 'today' in Indo-European languages (e.g. Greek σήμερον/τήμερον from *ky-āmer-o-, Sanskrit *adya* from *e-dye, etc.), it is likely that the compounding formation seen in the Italic words, if Faliscan has a short vowel and thus the forms are to be directly compared, is an innovation; that would make an agreement between Latin and Faliscan on this point potentially quite significant, dating to a time when their morphology still allowed the short vowel, though the Oscan-Umbrian forms would still be crucial to know.

are) it could be the result of areal diffusion with the appropriate geographical distribution; (ii) a shared feature is significant generally only if it is a shared innovation, as noted already with regard to Latin and Oscan-Umbrian (cf. Hoenigswald 1960); (iii) even so, careful attention must be paid to the chronology of the features in question.

As it turns out, all of the features in (8) are problematic for one reason or another. The chronology of Faliscan features shows that some date to c. 300 B.C. or later, and thus are not old enough to be significant for determining relationship of Latin to Faliscan in Stammbaum terms, for the split of the two would necessarily predate the period of later similarity; these are listed in (9), along with the relevant data and their dates of attestation:

9. a. re (8b) Archaic Faliscan: *karai* LF 1 [c. 650 B.C.], *sociai* LF 3 [6th c. B.C.] Medio-Faliscan: *kaisiosio* LF 4b [5th c. B.C.]
    b. re (8c) Archaic Faliscan: *prauios* LF 1 [c. 650], *rufia* LF 3 [6th c. B.C.], *kalketia* LF 3 [6th c. B.C.]
    c. re (8d) Archaic Faliscan: *porded* LF 1 [c. 650], *f[if]iqod* LF 1 [c. 650], *fifiked* LF 11 [c. 500]
    d. re (8f) Archaic Faliscan: *far* LF 1 [c. 650], *f[if]iqod* LF 1 [c. 650], *huti[c]ilom* LF 1 [c. 650]

Thus these forms come after any period of presumed unity of Latin and Faliscan and therefore not relevant for subgrouping, just as similarities among Greek, Albanian, Bulgarian, and the other modern languages of the Balkans, as members of the Balkan Sprachbund, are irrelevant for their place within the Indo-European family.

Others of these features reflect shared retentions, and thus as inheritances from (dialectal) Proto-Indo-European they are not significant for subgrouping. In particular, consonant-stem genitive singular forms in *–os (see (8g)) are found in Greek, e.g. κυνός 'dog/GEN', and in any case, Faliscan has consonant-stem genitives from *-es, e.g. *f(e)licinate* (LF 73.2), just as Roman Latin does (cf. *libertat-is* in (8g)). Similarly, *o*-stem genitive singular forms in *-osyo occur in Sanskrit, e.g. *devasya* 'god/GEN', in the Homeric Greek GEN.SG ending -οιο, and in the Armenian ending *-oy*.

In addition, the remaining features in (8), as well as some already shown to be irrelevant, are found all over ancient Italy, as indicated in (10), suggesting that they could be the result of areal diffusion or alternatively are relatively common developments; in either case, they would not be significant for subgrouping (the language, the source of the citation, and in some cases the place of attestation are noted):

10. a. re feature (8a): Oscan *amirikum* Ve 3, *mirikui* Ve 136
    b. re feature (8b): Umbrian *tota* VIa 29 < *touta, Volscian *toticu* Ve 222 < *toutikod, Marsian *pucle[s]* Ve 224 < *putlois, Etruscan masculine praenomen *cnaive* TLE 14, Capua > *cneve* TLE 300, Volcii
    c. re feature (8c): Oscan *ionc* Ve 2 < *eyom-ke, Marrucinian *iafc* Ve 218 < *eyans-ke, Umbrian *tursiandu* < *torseyantor
    d. re feature (8d): Umbrian *façia* IIa 17 <*fakyad, Volscian *facia* Ve 222 < *fakyad, Paelignian *dida* Ve 213 < *didad, Marrucinian *pacrsi* Ve 218 < *pakri sid
    e. re feature (8e): all except Roman Latin: Oscan *mefiaí* Ve 1, South Picene *mefiín* (M 1) (cf. Latin *medius*), Umbrian *alfu* Ib 29 (cf. Latin *albus*), Paelignian *loufir* Ve 209 (cf. Latin *liber*), Dialectal Latin *rufus* < *H_1reudhos (Latin *ruber* < *H_1rudhros)

f. re feature (8f): Etruscan gentilicium *fuluna* (TLE 401, Volaterrae III-I) > *hulunias* (CIE 1900, Clusium III-I), cf. *vhulvena* (CIE 4952, Orvieto VI), and with hypercorrection *ferclite* (CIE 1487, Clusium III-I) for *herclite* (CIE 1486, Clusium III-I), from Greek Ηρακλείδης.

A final problem with the features in (8) is that many of them in fact can be found in or attributed to Roman Latin, apparently reflecting a later transformation of original regional dialects into socially determined dialects within Rome itself, as Rome underwent extensive urbanization (see Joseph & Wallace 1992). As such, they are not really probative for determining Latin dialect groups definitively, unless one is able to successfully abstract away from the sociolects of Republican Rome, a difficult task to say the least. The relevant evidence of Roman attestations of these features is given in (11):

11. a. re feature (8b): monophthongization: *Pola* CIL 1^2, 379 [Pisaurum, a Roman citizen colony], *Cesula* CIL 1^2, 376 [Pisaurum]
   b. re feature (8d): loss of word-final consonants: *dedero* CIL 1^2, 59
   c. re feature (8g): C-stem GEN in *-os* (> *-us*): *nominus* CIL 1^2, 581 [Senatus Consultum de Bacchanalibus]

To work towards a solution to the question of how to determine the relationship of Latin and Faliscan, it would be desirable to focus on shared innovations that set Latin and Faliscan off from one another, especially innovations shared by Roman Latin and Dialectal Latin to exclusion of Faliscan, but even some innovations in Faliscan to exclusion of Roman and Dialectal Latin. The first type of situation would show that all varieties of Latin acted as a unity with respect to certain innovations, a unity that Faliscan did not participate in. The second type of situation is, on the face of it, less indicative of a Faliscan - Latin split, since in any of the models sketched in (4) through (6), Faliscan ultimately stands alone and thus can innovate to the exclusion of any other dialects or languages without those other speech communities having any particular unity amongst themselves. Still, under certain circumstances, Faliscan-only innovations can be significant, for instance when the other speech communities in question show a different innovation; in such a case, what is really involved, then, is an elaborated version of the first type considered.

Latin and Faliscan offer two possible examples of the first type, thus pointing to Faliscan being separate from all of Latinity. The first is the development of the PIE palatal voiced aspirate *g'h, for it became *f* before *u* in all attested Latin but shows up as *h* in that position in Faliscan, and significantly, the Faliscan evidence comes from Archaic Faliscan of the 7th century before the Faliscan-internal change of *f* to *h* (see (8f) and (9f)), as shown by Latin *futis* 'water vessel' versus Faliscan *huti[c]ilom* 'vasette', both from PIE *g'hu- 'pour' (whether PIE *g'h went through Proto-Italic *x or *ɣ [14]). A second possibility is the innovative use all throughout Latin of *iacet* for 'lies', in place of inherited *legh-, versus Faliscan *lecet* (LF 85), which is from

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[14]See Wallace & Joseph 1993 for some discussion of the development of PIE *g'h in Proto-Italic. I am assuming here that the change went through a Proto-Italic stage of a voiceless velar fricative, *x, so that the Faliscan *h* reflects essentially no change from Proto-Italic, whereas the Latin *f* constitutes an innovation; if Faliscan *h* is judged to be an innovation (we do not really know what the exact phonetics of the Faliscan grapheme < H > were, after all, any more than we do for early Germanic *h* from Proto-Germanic *x from PIE *k), then this example is actually more like the second type discussed, where both groups show an innovative shift away from the starting point. Still, the import of the example for the ultimate point regarding the relationship of Faliscan and Latin is not affected.

*legh-; the fact that this root is found in Latin in the noun *lectus* 'bed' (cf. Greek λέχος 'bed') is irrelevant, for there is no trace of a verb from *legh- in Latin, and the replacement of the verb is the relevant innovation.

A few words of caution on these innovations are in order. For the first to be significant, it must be assumed that *futis* indeed is proper for all of Latinity and that had some Latin dialect had *hu-* for this word, some mention of it would have been made by some ancient grammarian (as is the case with some such forms known now only through such ancient indirect testimony). While this is not a difficult assumption to make, it nonetheless means that the interpretation is only as secure as this assumption. As for the second one, admittedly it does involve a lexical innovation and that weakens its import; since lexical items are so prone to being the material of borrowing, it cannot be ruled out that the innovative use of *iacet* is proper to just one dialect of Latin and that it was borrowed by others. If that were the case, *iacet* would not be a significant shared innovation in all of Latinity to the exclusion of Faliscan.

Still, overall, this evidence is highly suggestive of a significant separation between Latin and Faliscan, and further, these languages provide a reasonably solid example of the second type as well, strengthening the case even more.[15] In particular, Faliscan shows one innovation and all of Latin shows another, so that both deviate from a common Proto-Indo-European starting point. The development in question again involves PIE *g'h, though this time in medial position. Whether through Proto-Italic *x or *ɣ, it develops into Latin *h*, as in *ueho* 'transport' < *weg'h-, while in Faliscan, the outcome is *g* (spelled < q >,< c >, or < k>), as in *lecet* 'lies' < *leg'h-. The Faliscan development thus sets it off from all of Latinity, which is unified in this instance by its own shared innovation.

The conclusion to be drawn from this discussion is that features typically brought forth in favor of Faliscan as Dialectal Latin are inadmissible for determining the details of the genetic relationship of Faliscan to Latin; at best they show the results of independent changes or geographic diffusion of features. Moreover, if the other features discussed, concerning PIE *g'h in various positions and concerning the verb for 'lie', are innovations not shared by Faliscan and Latin, then, by good dialectological criteria, Faliscan does not equate to some form of (Dialectal) Latin. Consequently, the model in (5) must be rejected in favor of the one in (6).

There are some morals to be drawn from all this discussion, ones that go beyond the microrelationships of Italic subgrouping and apply rather to methodology in general and to the question of macrorelationships. First, similarities alone are not enough to go on — a lot of careful sifting is needed to weed out the formal similarity of Latin *sum* and Oscan *súm*, for instance, and to focus in on the real shared innovations that underlie their formation. Also, similarities between later Faliscan and Latin (cf. (8)) are misleading; however tantalizing they seem, they give a false picture because they are chronologically off and do not come from the oldest available layer of Faliscan. In the end, with all the data to work from, just a few relatively reliable innovations emerged to lead to a conclusive determination about the relationship between Latin and Faliscan, but even those involve less than a handful of relevant forms. If this is what is available for a relatively well-documented group like Italic, how much more work will it take to get the best and most relevant facts for less thoroughly studied languages and language groups?

This concern is not mere idle stone-throwing. It is clearly the case that the shared innovation principle invoked herein cannot be used as a criterion for establishing a relationship between two groups, since shared innovation presupposes a relationship in the first place. However, a lot of what is discussed at the macro-level for language

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[15]As discussed in Joseph & Wallace 1991, the development of the preterite endings in Faliscan and Latin may be yet another example of the second type; it is not presented here as justifying it would involve more extensive discussion than the scope of the present paper permits.

relationships, these days especially, really amounts to doing micro-level subgrouping. For example, Greenberg's claim (1987: 278) that there is an Almosan-Keresiouan group of languages is equivalent to saying that these languages form a subgroup within Amerind, yet among the evidence he cites is "the widespread occurrence of *s* as a second person marker". This "widespread occurrence" is nothing more than a shared similarity,[16] and no judgment is made of what is really the most crucial piece of establishing an Almosan-Keresiouan subgroup, namely whether this *s* is an innovation away from Proto-Amerind, and thus (possibly) significant for establishing such a subgroup, or instead is a shared retention, and thus inconclusive. It would seem that there is much to learn about macrorelationships from the examination of microrelationships, for the two pursuits are indeed related.

References

Bader, Françoise
    1976   Le présent du verbe 'être' en indo-européen. BSL   71:17-111.
Beeler, Madison
    1956   Venetic and Italic. In: Hommages à Max   Niedermann, ed. Georges Redard. Pp. 38-48.   Bruxelles. Latomus
Beeler, Madison
    1963   The Interrelationships Within Italic. In: Indo-European and the Indo-Europeans, eds. H.   Birnbaum & J. Puhvel. Pp. 51-58. Berkeley &   Los Angeles: University of California Press.
Bomhard, Allan R. & John C. Kerns
    1994   The Nostratic macrofamily: A study in distant   linguistic   relationship. Berlin & New York: Mouton de Gruyter.
Campanile, Enrico
    1961   Elementi dialetti nella fonetica e nella morfologia   del Latino. Studi e saggi linguistici 1:1-21.
Campbell, Lyle
    1988   Review article on Greenberg 1987. Language 64.3:591-615.
Eska, Joseph F.
    1987   The Language of the Latin Inscriptions of   Pompeii and the Question of an Oscan Substratum. Glotta 65:146-161.
Giacomelli, Gabriella
    1963   La lingua Falisca. Firenze: Leo S. Olschki.
Giacomelli, Roberto
    1979   Written and spoken language in Latin-Faliscan   and Greek-Messapic. Journal of Indo-European   studies 7:149-175.
Greenberg, Joseph H.
    1987   Language in the Americas. Stanford: Stanford   University Press.
Greenberg, Joseph H.
    1989   Classification of American Indian languages: A   reply   to   Campbell. Language 65.1:107-114.
Greenberg, Joseph H. & Merritt Ruhlen
    1992   Linguistic origins of Native Americans.   Scientific American, November 1992: 94-99.
Hock, Hans Henrich & Brian D. Joseph
    1996   Language history, language change, and language   relationship: An introduction to historical and comparative linguistics. (Trends in linguistics.   Studies and monographs, 93.) Berlin & New   York: Mouton de Gruyter.
Hoenigswald, Henry
    1960   Linguistic Change and Linguistic   Reconstruction. Chicago: University of Chicago   Press.

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[16]See Rankin (1992: 340) for some discussion of problems with the Siouan data cited by Greenberg in this context.

Joseph, Brian D. & Rex E. Wallace
  1987   Latin *sum*, Oscan **súm**, **sim**, *esum*. American   Journal   of   Philology 108:675-693.
Joseph, Brian D. & Rex E. Wallace
  1991   Is Faliscan a Local Latin Patois? Diachronica 8.2:159-186.
Joseph, Brian D. & Rex E. Wallace
  1992   Socially determined variation in ancient Rome.   Language   Variation   and Change 4:105-119.
Leumann, Manu
  1977   Lateinische Grammatik. 1. Lateinische Laut- und   Formenlehre. München: C. H. Beck'sche   Verlagsbuchhandlung.
Manaster Ramer, Alexis, Peter A. Michalove, Karen S. Baertsch, Karen L. Adams
  1997   Exploring the Nostratic hypothesis. In: Nostratic: Sifting the Evidence, eds. Brian D.   Joseph & Joseph C. Salmons. Amsterdam & Philadelphia: John   Benjamins Publishing Co.
Marinetti, A.
  1985   Le inscrizioni sudpicene. Firenze: Leo S.   Olschki.
Matisoff, James A.
  1990   On megalocomparison. Language 66.1:106-120.
Nichols, Johanna
  1992   Linguistic diversity in time and space. Chicago: University of Chicago Press.
Pallottino, M.
  1968[2]   Testimonium Linguae Etruscae. Firenze: La Nuova Italia.
Palmer, Leonard
  1954   The Latin language. New York: Faber & Faber.
Pisani, Vittore
  1962   Il falisco nella formazione del più antico latino   'volgare'.   Ricerche linguistiche 5:55-64.
Pulgram, Ernst
  1978   Italic, Latin, Italian: 600 B.C. to A.D. 1260.   Heidelberg: Carl Winter.
Rankin, Robert L.
  1992   Review of Language in the Americas (Greenberg). International Journal of American Linguistics 58.3:324-351.
Ross, Philip E.
  1991   Hard Words. Scientific American, April   1991:138-147.
Ruhlen, Merritt
  1994   On the origin of language. Studies in linguistic   taxonomy.   Stanford: Stanford University Press.
Shevoroshkin, Vitaly
  1989a   Methods in interphyletic comparison. Ural- Altaische Jahrbücher 61:1-26.
Shevoroshkin, Vitaly (ed.)
  1989b   Explorations in langauge macrofamilies.   Bochum: Universitätsverlag   Dr. Norbert   Brockmeyer.
Shevoroshkin, Vitaly (ed.)
  1989c   Reconstructing languages and cultures. Bochum: Universitätsverlag   Dr. Norbert Brockmeyer.
Shevoroshkin, Vitaly
  1990a   The mother tongue: How linguists have   reconstructed the ancestor of all living languages.   The sciences, May/June 1990:20-27.
Shevoroshkin, Vitaly (ed.)
  1990b   Proto-languages and proto-cultures. Bochum: Universitätsverlag Dr. Norbert   Brockmeyer.
Shevoroshkin, Vitaly (ed.)
  1991   Dene-Sino-Caucasian Languages. Bochum: Universitätsverlag   Dr.   Norbert Brockmeyer.
Sommer, Ferdinand
  1977   Handbuch der lateinischen Laut- und   Formenlehre. Heidelberg: Carl Winter.
Vetter, Emil

1953   Handbuch der italischen Dialekte. Heidelberg: Carl Winter.
Wallace, Rex E. & Brian D. Joseph
1991   On the Problematic *f/h* Variation in Faliscan. Glotta 69:84-93.
Wallace, Rex E. & Brian D. Joseph
1993   On the development of PIE *g'h/gh in Faliscan: A   response   to   Picard.
Diachronica 10.1:144-150.

Abstract

The methodological issues that have arisen in recent years concerning the evaluation of macrorelationships among languages at great time-depths that cut across well-established language-family groupings are compared here with the methods of determining subgrouping, referred to here as "microrelationships". A detailed examination of one microrelationship, the relationship of Faliscan to Latin, reveals that the methods, principles for evaluation, and problems are similar in the two pursuits. Important lessons for macrorelationships can therefore be learned by looking at microrelationships.