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Faliscan

Reflexes of the Indo-European voiced aspirates

The Indo-European stop system

	bilabial	dental	palatal	velar	labio-velar
voiced	b	d	g'	g	g^w
voiceless	p	t	k'	k	k^w
voiced aspirated	b^h	d^h	g'^h	g^h	g^{wh}

Remarks:

voiced aspirates = 'murmured' stops, as in Hindi (vocal folds apart, but vibrating)

system = typologically problematic (absence of voiceless aspirated stops)

alternative reconstructions (glottalic theory) untenable

perhaps a series of voiceless aspirates (p^h etc.) should be reconstructed as well

Sanskrit

Sanskrit has voiceless aspirated stops as an innovation. The inherited stops have partly been assibilated and the labio-velars have lost their labial element. But as far as the features voicing and aspiration are concerned, Sanskrit has by and large preserved the original situation. Cf. for the voiced aspirates:

*$b^h er$-e-ti > *$b^h arati$ 'he carries'

*$H_1 e$-$d^h e H_1$-t > $ad^h āt$ 'he put'

Greek

Greek has merged the palatal and velar stops. The labiovelars have merged with the bilabials, dentals, or velars, depending on the surrounding vowels. As far as voicing and aspiration are concerned, the voiced and voiceless stops are continued, but the voiced aspirates have become voiceless aspirates everywhere, cf.:

*$b^h er$-e-ti > φέρει 'he is carrying'

*$H_2 eid^h$- > αἴθω 'I set fire to'

Germanic

Germanic has merged palatal and velar stops. Voiced stops have become voiceless, voiceless stops have become voiceless fricatives, and voiced aspirates have become voiced stops (sometimes fricatives), cf.:

*deuk- > Gothic *tiuhan* 'drag'

*telH$_2$- 'lift up' > Gothic *θulan* 'bear'

*b^{h}er- > *bear*

Italic languages

All Italic languages have voiceless fricatives (*f-* or *h-*) as reflexes of the voiced aspirates in initial position. In word-internal position the outcomes vary. Note that palatal and velar articulations have merged in all Italic languages, so I shall not distinguish between them.

Latin

In initial position the reflexes are voiceless fricatives:

*b^h- > *f-*: *b^{h}er- > *fero*

*d^h- > *f-*: *d^{h}uH$_2$-mo-s > *fumus*

*g^h- > *h-*: *g$'^h$elH$_3$os > *holus*

*g^{wh}- > *f-*: *g^{wh}or-mo-s > *formus*

In internal position the reflexes are voiced:

*-b^h- > -b-: *neb^{h}eleH$_2$ > *nebula*

*-d^h- > -d-: *med^{h}yo-s > *medius*

*-g^h- > -h-: *ueg$'^h$-e/o- > *ueho*

*-g^{wh}- > -w-: *d^{h}og^{wh}-eye- > *foueo*

Conditioned change:

*-d^h- > -b- after *u*, before *l*, next to *r*: *uerbum* vs. English *word*, *stabulum* vs. German *Stadel* 'stable for cattle'

Simple deaspiration cannot account for this conditioned change or for *-h-* and *-w-* among the unconditioned changes. We have to assume an intermediate fricative stage.

Ascoli and Hartmann

In Oscan and Umbrian the outcomes of voiced aspirates inside words are /-f-/ and /-h-/. These are often regarded as voiceless. Latin must at some point have had voiced fricatives word-internally.

Ascoli (1868): all voiced aspirates were devoiced and became voiceless aspirates, as in ancient Greek. Then they became voiceless fricatives, as in later Greek. In Latin they became voiced word-internally and finally became stops.

Hartmann (1890): all voiced aspirates became voiced fricatives and were then devoiced everywhere except word-internally in Latin.

Hartmann's proposal is phonetically unlikely in word-initial position (no parallels). Ascoli's proposal works better, but there is evidence that /-f-/ was voiced in Sabellic; the voicing of /-s-/ in internal position should in theory be parallel, but follows different patterns, so a different proposal (Stuart-Smith) is more convincing.

Note on -s-:

All reflexes of voiced aspirates in Italic are voiced both between vowels and next to liquids (Stuart-Smith 2004: 114–15). Voiced outcomes are probably as old as Proto-Italic. -s-, on the other hand, also got voiced between vowels, but not necessarily next to liquids. Cf. Umbrian **parfam** (type of bird) < *parezā- < *paresā-, but *tursitu* 'let him drive away' < *torseyetōd without s > z and hence without development to β. Thus, -s- got voiced between vowels in Proto-Italic, but the voicing next to liquids did not take place in all Italic languages. If Ascoli were right, Umbrian should also have voiceless reflexes of voiced aspirates next to liquids, but this is not the case.

Oscan and Umbrian

In initial position the reflexes are voiceless fricatives:

$*b^h$- > f-: O. **fluusaí** = Florae 'to Flora' ($*b^h leH_3 s$-); U. *far* 'grain' ($*b^h ars$)

$*d^h$- > f-: O. **fíísnú** = fanum 'temple' ($*d^h eH_1 s$-no-m); U. **fakust** 'he will have done' ($*d^h H_1$-k-)

$*g^h$- > h-: O. **húrz** = hortus 'garden / grove' ($*g^h ortos$); U. **heris** 'either / or' ($*g^h er$-; for the meaning cf. L. uel)

$*g^{wh}$-: not securely attested

In internal position the reflexes are also fricatives:

$*$-b^h- > -f-: O. **prúfatted** = L. probauit; U. **tefe** = L. tibi

$*$-d^h- > -f-: O. **mefiaí** 'in the middle'; U. **rufru**, cf. ἐρυθρός

$*$-g^h- > -h-: O. **feíhúss** 'walls (acc.)' ($*d^h eig^h$-); U. *mehe* = L. mihi

$*$-g^{wh}- > -w-: meagre evidence; U. **vufru** 'votive' ($*H_1 wog^{wh} ro$-), cf. Skt. $v\bar{a}g^h at$

Pronunciation of Oscan and Umbrian

The fricatives in initial position are generally assumed to be voiceless.

There is — limited — evidence that word-internal f represented a voiced fricative. In two Oscan inscriptions there is a dedication to Mefitis, written μηβιτηι. Similarly, σταβαλανο belongs to a verb *staflā-* 'set up', cf. participle **staflatas**. Similarly, Venafrum can be written [**v**]**enavrum** in the native alphabet.

The Umbrian city Mefania is also rendered as Meuania in Latin, another indication of intervocalic voicing.

Stuart-Smith (2004)

If Latin once had voiced fricatives intervocalically, a state still preserved in Osco-Umbrian, and if all these languages have voiceless fricatives in initial position, the easiest and phonetically most plausible scenario is what Stuart-Smith (2004) outlined: in initial position the voiced aspirates became voiceless aspirates and then fricatives, a development the Greek language underwent as well. In internal position the voiced aspirates became voiced fricatives, a natural development found in various modern Indic languages. In Latin these voiced fricatives then became voiced stops.

Faliscan – intervocalic outcomes

*-b^h- > -f-: **carefo** 'I will abstain' = L. carebo, future formant goes back to *$b^h uH$-

*-d^h- > -f-: **efiles** = L. aediles, root *$H_2 eid^h$-

*-g^h- > -g-: **lecet** 'he lies', root *leg^h-, cf. Greek λέχεται

*-g^{wh}-: no evidence

The velar outcome is probably -g-, spelt -c- because there is no separate letter for the voiced stop; cf. also **eko** for what in Latin is written *ego*. This outcome differs from Latin and Osco-Umbrian, both of which turned the voiced velar fricative into -h-; the Faliscan development is, however, a natural one which does not mean much for subgrouping.

More serious is that the outcomes of bilabial and dental voiced aspirates are fricatives, just as in Osco-Umbrian, and unlike in Latin. However, for linguistic subgrouping this does not mean much either; Latin must also have had fricatives at some point, and here it is Latin which is innovative.

Faliscan – word-initial outcomes

Insofar as there is evidence for the Osco-Umbrian reflexes of voiced aspirates in initial position, they agree with Latin. Bilabial and dental voiced aspirates yield labiodental fricatives, and velar voiced aspirates yield glottal fricatives.

Outcomes of labiovelars are not attested in Osco-Umbrian in initial position, and the same is true of Faliscan.

At first sight Faliscan seems to have random variation between f- and h- in initial position:

*b^h-: **far** 'spelt' = L. far

*d^h-: **fifiked** 'he formed' = L. finxit; **hileo** 'son' = L. filius

*g^h-: **hec** 'here' = L. hic; **fe** = 'here', **foied** 'today' = L. hodie

Earlier explanations of this variation are unconvincing; Etruscan influence has been claimed to exist, and Etruscan does indeed have a sound change *f- > h-*, but this sound change happens in the Etruscan around Clusium, not in the Etruscan spoken in the Ager Faliscus; the Etruscan sound change takes place in the 3rd–1st c., long after the confusion in Faliscan is attested.

Wallace and Joseph (1991) provide the most convincing explanation. In archaic Faliscan (7th and 6th c.) the outcome of voiced aspirates is as in Latin and Osco-Umbrian, thus **far**, **fifiked** etc. After the archaic period we also find this outcome, e.g. **filea** 'daughter', **hec** 'here', but there are also unexpected outcomes: **hileo**, **foied** etc. The most natural explanation is that after the archaic period there was a sound change f > h, which is attested independently in the history of many languages (Etruscan, Spanish etc.). f instead of h is a hypercorrection, either because not all speakers of Faliscan underwent the regular sound change, or because of Latin, which did not undergo it either and which was becoming influential.

One more note on Faliscan

g^h becomes h- in Latin in initial position, but f- next to -u-, cf. *fundere*, root *$g'^h eud$- (Gothic *giutan*). In archaic Faliscan, where there is no confusion between f- and h-, the outcome is h-, that is, Faliscan does not have a conditioned sound change here, which sets it apart from Latin; cf.:

Latin *futis* 'water vessel', Faliscan **huti[c]ilom** 'vasette', both from the same root

A note on Venetic

Venetic is often considered an Italic language, even though occasionally doubts are voiced. One of the reasons for assigning Venetic to the Italic group, and here particularly close to Latin, is that apparently it treats the voiced aspirates in the same way as Latin.

Morphologically Venetic is rather different from the Italic group, and if it is Italic, it probably split off from the other branches first. Sound changes alone are insufficient for linguistic subgrouping.

Let us briefly look at two words:

lo.u.derobo.s = Latin liberis

vha.g.s.to = Latin fecit

The ending *-bos* corresponds nicely to Latin *-bus*, while Oscan and Umbrian have the ending *-fs*. But is Venetic *-b-* a stop?

vha.g.s.to has a word-initial voiceless fricative, like Latin *fecit* or Oscan **fakiiad**. But the Latin k-sound is represented by Venetic <g>. Why? Maybe Venetic -ks- is [-χs-] phonetically. -k- would have marked a voiceless stop. -g- was probably voiced in most positions, but perhaps it was a fricative, in which case its use here makes as much sense as that of -k-; -k- can indicate a voiceless sound, but not a fricative, and -g- indicates a fricative, albeit a voiced one.

If -g- is a fricative, then maybe -d- and -b- in the first word are also fricatives, and Venetic pronunciation is all of a sudden not as close to Latin pronunciation as before.

Note also that even if -b-, -d-, and -g- mark stops, the outcome is not the same as in Latin: lo.u.derobo.s with -d- does not show the conditioned sound change next to -u- which Latin has (-b-!).