



On the specialized semantics of *(s)meuk- in Iranian

1. Introduction

The outcomes in Old Iranian of the Indo-European root *(s)meuk- share a curious feature: they all show an association with feet or shoes in their semantics and usage. By “association” here we mean that forms of this root occur in what appear to be conventionalized uses in collocations with objects or with modifiers or in composite forms where the meanings pertain to feet or foot-coverings of one sort or another.¹ Two forms in Avestan are relevant here, and they constitute the whole of the Old Iranian evidence: *framuxti-* ‘taking off of footwear’ and *paitišmuxta-* ‘having shoes’. Both of these forms are composites made up of a preverb (*fra-* and *paiti-* respectively) with a derivative of the root that can be formulated as *(s)muč-*,² though the root itself is not attested elsewhere in Avestan; that is, there are no other forms of *(s)muč-*, verbal or otherwise, found for this root in the oldest stages of Iranian. The passages in which these words occur are:

- (1) *framuxti-*
āat mraot ahurō mazdā, mat aoθranām *framuxti* mat vastranām
nidhāiti ... (Fragments 6.27)
‘Ahura Mazda answered: ‘Taking off his shoes, putting off his
clothes, ...’

¹ This is not to say that the forms in question contain specifications for ‘shoes’ or ‘feet’ as part of their lexical semantics but rather that they conventionally collocate with words having those meanings.

² We follow Horn (1893: § 994, s.v. *mōze*) in citing the root with a final palatal (he gives the full-grade form *maoč-*) even though no verbal forms to confirm the palatal occur; *muč-* would of course be expected, if a full range of forms were available, given that forms with final palatals were generalized over root-forms with velars in cases where the two consonants alternated, as they would here.





- (2) *paitišmuxta-*
 arədvī sūra anāhita ... nizəŋga aoθra *paitišmuxta*, zaranyōur-
 vīxšna ... (Yashts 5.64)
 ‘Ardvi Sura Anahita ... wearing shoes up to the ankle, having
 golden ties ...’
- arədvī sūra anāhita ... zaranya aoθra *paitišmuxta* ... (Yashts
 5.78)
 ‘ardvi Sura Anahita ... wearing golden shoes ...’
- caθwārō ... tē para-safānghō zaranaēna *paitišmuxta* (Yashts
 10.125)
 ‘Four (stallions) ... the hoofs of their fore-feet are shod with
 gold ...’

Thus three of the four occurrences of this root in Old Iranian have ‘shoe’ (*aoθra-*) as their object (accusative with verbal form *paitišm-uxta* and genitive with the nominal form *framuxti*) and the fourth one has ‘foot’. Inasmuch as these four forms exhaust the Old Iranian evidence for this root, they meet the criterion given above for being characterized as showing an “association” with feet and/or shoes. Moreover, besides the striking connection with whoes and feet evident in these passages, we note further that in all those with *paitišmuxta-*, there are also associations with gold, overtly referring to the footwear itself. This significance of this additional fact is discussed below.

The foot/shoe-related specialization in meaning seems to hold as well for at least some of the later Iranian evidence concerning this root, on into some of the modern languages, as shown by such forms as Pahlavi *močak-* ‘boots’, *mozag* ‘shoe’, and Modern Persian: *moza-* ‘leather socks; shoe’³ Buddhist Sanskrit *mocika-* ‘shoe; shoemaker’ (along with other later Indo-Aryan forms such as Hindi *mochii* ‘cobbler’) is relevant here as well, since it is generally held to be an Iranian loan word (so Mayrhofer (1956: s. v.),⁴ Edgerton (1953: s. v.)).

³ There are verbal forms from this root in later Iranian, e.g. Sogdian *pt-mync-*, Pahlavi *pat-mōxtan*, Modern Persian *pai-mōxtan*, all meaning ‘to dress’, thus with a generalized meaning vis-à-vis the Avestan forms. We take these forms and their meanings to be secondary extensions compared with the Old Iranian evidence.

⁴ Mayrhofer (1994: 2.382) does not mention *mocika-* though there is no reason to believe that he has given up on his earlier identification of it as a Persian loan-word.





These shoe/foot-related collocational and associative semantics for *(s)meuk- in Iranian contrast with meanings found for cognates of this root elsewhere across the Indo-European languages. While this root shows a broad semantic range throughout the whole family, the meanings can be grouped into two main semantic fields (so Mayrhofer 1956,⁵ Pokorny 1959, Rix 2001): meanings pertaining to “slipperiness” (Pokorny’s meaning group A) and to “release” (Pokorny’s group B).⁶ These are exemplified by, for instance, Latin *mūcus* ‘mucus’, *ē-mun-gere* ‘blow one’s nose’; Lithuanian *maūkti* ‘strip off, wipe’, *mūkti* ‘slip away, escape’, Latvian *mukt* ‘flee, disengage’; Tocharian A *muk-*, Tocharian B *mauk-* ‘let go, give up, abandon’; Greek *απο-μύσσειν* ‘wipe the nose’, with a variant with initial *s-* in *σμύσσειται* ‘wipes the nose’ (and cf. also Old Church Slavonic *smykati se* ‘creep’ for further evidence of the possibility of *s-).⁷

These observations raise an interesting question of diachronic semantic development: how did the Iranian forms of this root come to have ‘foot’-related associations, to the point where one can characterize their meanings in these terms,⁸ and thus how did this semantic divergence between Iranian and other branches of Indo-European arise? In particular, it is fair to ask whether Iranian has innovated away from a core non-foot-related sense in earlier stages (e.g. Proto-

⁵ Mayrhofer (1994: 2.382), however, seems to opt more for a single meaning for the root, giving ‘streifen, abstreifen’, in keeping with his ultimate assessment of the meaning in his 1956 work; see also note 6.

⁶ Rix (2001: 443), for instance, lists both ‘abstreifen’ (akin to Pokorny’s Group A) and ‘losbinden’ (akin to Pokorny’s Group B), though no overt reference is made to Pokorny’s meaning groups. We take no position here on whether these two major meaning groups thus represent one (polysemous) root or two separate (accidentally) homophonous roots, and if the latter, just what the “Grundbedeutung” is, though Wackernagel (1902), and Mayrhofer (1956: s. v.; 1994) following him, suggest a basic meaning of ‘abstreifen’ for this root (see Joseph & Karnitis 1999 for some consideration of these issues).

⁷ The presence versus absence of *s-* in these forms is of course a significant concern, one for which we offer no explanation, except to note that it seems to be part of the same well-known but poorly understood phenomenon, the so-called “s-mobile”, that numerous other roots in Indo-European show.

⁸ Indeed, Bartholomae 1904 and others following him (e.g. Mayrhofer, in his glossing of Iranian cognates to Sanskrit $\sqrt{\text{muc-}}$) give meanings for these forms in much the same terms we do at the outset, that is, ‘Losbinden (des Schuhwerks)’ for *framuxti-*, and ‘beschuh’t for *paiti.šmuxta-*.





Indo-Iranian or Proto-Indo-European), and if so, how and why, or whether instead the other languages have innovated away from an original meaning associated with feet.⁹

2. Sanskrit evidence

As is so often the case with regard to matters pertaining to the understanding of Iranian, evidence from Indic, and specifically Sanskrit, seems to be crucial here, for the expected reasons. If ‘shoe/foot’-related associative semantics are found with cognate forms in Sanskrit, then the likelihood increases that such meanings represent a feature of Common Indo-Iranian, inheritable into Iranian therefrom. The divergence noted in § 1 would thus not be an Iranian peculiarity but could instead be one shared with Indic. Caution is of course necessary, since even under such a scenario, the meanings in question could be an innovation that occurred independently in each branch, especially if, for instance, the chronology is such that ‘shoe/foot’ semantics occur only late within Sanskrit.¹⁰ With this background, we turn to the Sanskrit evidence.

The relevant root in Sanskrit is *muc-*, and its meanings appear to mostly fall on the “release” side of *(s)meuk-.¹¹ For Vedic Sanskrit, a basic meaning for *muc-* has been given variously as ‘untie, unfasten, loosen’ (Grassmann 1872, ‘losmachen, losbinden’) or ‘strip off’ (Mayrhofer 1956, 1994, ‘abstreifen’), and Grassmann 1872 gives the meanings for the active voice of ‘untie, loosen, unfasten, set free; re-

⁹ Although the preponderance of non-foot-related meanings in other Indo-European languages might make one automatically think of Iranian as the innovator, in principle that need not be the case; that is, there is not necessarily a “majority rule” that must be followed in doing comparative reconstruction.

¹⁰ It is the case as well that non-foot-related objects and meanings do occur with $\sqrt{muc-}$; our focus ultimately on the foot-oriented uses follows from our taking the parallel with the Iranian facts to be an especially striking circumstance that is in need of a coherent explanation. Given the usual assumptions about the original sense associated with $\sqrt{muc-}$, its other uses do not demand an account in the same way as the foot-/shoe-related uses seem to.

¹¹ Some of the Classical Sanskrit meanings admittedly may not obviously fit this semantic characterization, a point taken up in Joseph & Karnitis 1999, in the context of a general discussion of semantic change with this root. The meaning ‘cheat’, for instance may actually involve a different root, *mac-*, as its basis.





lease (streams); undo, dissolve; cause to disappear' and for the middle voice, 'disengage'. For Classical Sanskrit, Monier-Williams 1899, Macdonell 1929, and Apte 1912 give a range of meanings covering 'loosen, set free, release, let go, let loose, deliver; relax (the throat); slacken (reins); let live, spare; leave, abandon, quit, give up; quit (the body), die; set apart; dismiss, send away; cast, throw, hurl, discharge; emit, drop, shed, let fall; utter, give forth; give away, grant, bestow; put on (middle voice); void (excrement); sacrifice; deceive, cheat'. A comparable set of meanings is to be found in the sizeable entry in the St. Petersburg dictionary (Böhtlingk and Roth 1865–68).

Still, there are, interestingly, some foot-related associations to be found for this root in Sanskrit. These come primarily in Classical Sanskrit, and are in combinations with preverbs, e.g., *vi-ava-muc-* 'to take off (shoes)'. Such uses may well represent relatively natural extensions of *muc-* in conjunction with garments (specifically, *drāpim* and *atkam*) as object,¹² as found fairly frequently in Vedic Sanskrit,¹³ e.g.:

- (3) *jujuruṣo nāsatyota vavrim prámuñcatam drāpim iva cyavānāt* (RV 1.116.10)
'O Ásvins, you two loosened the body from aged Cyavāna, as (you loosen) a garment'

divo dhartā bhuvanasya prajāpatiḥ piśaṅgam drāpim prati muñcate kavīḥ (RV 4.53.2)
'Prajāpati, the supporter of heaven and the world, the wise one, puts on a golden mantle.'

hiranyayān praty atkāṃ amugdhvam (RV 5.55.6)
'You all put on garments abounding in gold.'

pra cyavānāj jujuruṣo vavrim atkam na muñcathah (RV 5.74.5)
'You two loosen the body from aged Cyavāna, as (you loosen) a mantle'

¹² As a typological parallel to this apparent semantic development of 'putting on/off a garment' to 'putting on/off shoes', we note the Turkish noun *çekme*, which means both 'trousers' and 'boots' and is derived from the verbal root *çek-* 'pull (on)', trousers and boots both being extensions of 'things you pull on'.

¹³ Objects other than garments do occur with *muc-* in Vedic; for instance, RV 1.24.9 has *enah pra mumugdhi asmat* 'Release sin from us!'. Still, the several cases of garments as objects are telling.





prati drāpim amuñcathāh pavamāna mahitvanā (RV 9.100.9)
‘O Pavamāna, you have majestically put on the mantle.’

And indeed, when one looks beyond Vedic on into Classical Sanskrit, garments are found as the typical objects when *muc-* occurs with other preverbs, e.g., *vi-muc-* ‘take off clothes’, *vi-apa-muc-* ‘take off (ornaments)’, *ava-muc-* ‘take or cast off one’s clothes, ornaments, etc.’, *ā-muc-* ‘put on (garments, ornaments)’, *ud-muc-* ‘take off garment’, etc. Indeed, it is the combination with preverbs that allows the root $\sqrt{\text{muc-}}$ to be found in seemingly opposite meanings such as ‘take off’ (with *vi-apa-*) and ‘put on’ (with *ā-*).

As suggested above, these uses of *muc* would provide a natural jumping-off point for the development to ‘shoe/foot’-related associative semantics seen in Classical Sanskrit, shoes being one type of object of dress one would often put on or take off. Nevertheless, far more important for the question of the Iranian specialized semantics is that it can be noted that there are even several instances from Vedic Sanskrit where the composite form *upa-muc-* takes as its object, i.e., the item being put on, a foot-related noun, specifically *upānaha-* ‘sandals, shoes’; these examples come from later Samhitas and Brahmanas and are thus admittedly somewhat late in the Vedic tradition, but nonetheless fall within the Vedic period:¹⁴

(4) kārṣṇī upānahau upa muñcate (TS 5.4.4, (repeated at 5.6.6)
‘He puts on (two) black atelope leather sandals’

vārāhī upānahau upamuñcate (TB 1.7.9)
‘He puts on (two) pig’s leather sandals’

vārāhyā upānahā upamuñcate (ŚB 5.4.3.19)
‘He puts on (two) sandals (made) of sow’s leather’

3. Interpreting these facts

We offer the following interpretation of these Sanskrit facts with respect to the Old Iranian facts given in § 1.

¹⁴ We would like to thank T. N. Dharmadikari of the Muktabodha Indological Research Institute (Ganeshpuri) for bringing these important early examples to our attention.





The evidence from (4) of the TS, TB, and ŚB attestations of *upa-muc-* associated with footwear means that the foot/shoe-related usage of *muc-* especially with a preverb was available relatively early on in the Sanskrit tradition. Thus, even if such an association is found to a greater extent in the later (Classical Sanskrit) period and can be seen as a natural extension from certain clearly early uses with garments as objects, its antiquity within Sanskrit cannot be denied. Moreover, the naturalness of the extension means that the conditions for specialization to ‘foot/shoe’ meanings would have been present at an early period, so that the several instances of *muc-* with garments as objects in the Rig Veda take on significance for the overall assessment of these developments.

We note as well that all the relevant instances in Sanskrit of *muc-* with the shoe/foot semantic specialization occur with preverbs (e.g. with *upa-*, *vi-ava-*, etc.), and that is also the case in Old Iranian. The preverbs appear to be critical to the specialization of the meaning of the root and, as noted above, can even lead to opposite meanings.¹⁵

Admittedly, the preverbs for the foot-related uses of this root in Sanskrit and in Iranian do not match up. However, by way of linking the Sanskrit and the Iranian uses, the fact that ‘gold’ is the modifier of objects of *muc-* with the parallel preverbs¹⁶ *paiti-* in Iranian and *prati* in Vedic (cf. above in (3), RV 5.55.6 with *atka-* as object, and RV 4.53.2 with *drāpim* as object, following Grassmann’s definition for *pīsaṅga-*) makes for a suggestive connection, though the Sanskrit collocations are not overtly connected with the shoe/foot object in the way that the Avestan examples with *paitišmuxta* in (2) above are.

Finally, the isolation of the derivatives of *(s)meuk- within Iranian, as shown by the absence of any productive verbal paradigms or other formations, is consistent with relic status for these forms.

¹⁵ In this way, the preverbs are rather like the directional adverbs (“particles”) of English in the verbs *don* and *doff*, from *do on* and *do off*, respectively, both, interestingly, specialized to refer to garments (thus, one can doff a hat, but not the lid of a cooking pot).

¹⁶ We follow Mayrhofer (1956: s.v. *prati*) here in treating these forms as functionally parallel, noting also their parallel morphological make-up (each being an adverbial element with an ending *-ti). The *r/Ø* difference found in the first part *pra-/pa-* is not insignificant, but reflects an Indo-European difference (*pro- vs. *po-; note that both variants occur in Greek) that cannot be addressed here.





We therefore take this evidence collectively to mean that ‘foot’-related specialized associations in uses of *muc-* with preverbs are to be reconstructed for Proto-Indo-Iranian; the source of the semantic specialization seen in Iranian *framuxti-* and *paitišmuxta-* is thus inheritance from a Proto-Indo-Iranian specialized usage.

4. *The Larger Indo-European Picture*

What remains to be considered, then, is the source of this Proto-Indo-Iranian usage for *(s)muč- as the continuation of Proto-Indo-European *(s)meuk-. That is, it is necessary to reconcile the Iranian facts of § 1, the Indic facts of § 2, and the interpretation given in § 3 with the range of meanings found across the Indo-European family, as enumerated above in § 1.

There are two roots that can be reconstructed for Proto-Indo-European that have to do with ‘dressing’: *wes- (as in Sanskrit *vastra-*), and *H₁ew- (as in Armenian *ag-anim* ‘put on clothing’). Following Beekes (1995: 36), the difference between these two (which he formulates as *wes- and *How- respectively) can be characterized in terms of their conventional uses: *wes- was the general verb for ‘putting on clothing’ while *H₁ew- was specialized as ‘putting on footwear’. Beekes’ hypothesis of shoe/foot-specialized usage and ultimately meaning for *H₁ew- in Proto-Indo-European is presumably based on the evidence of primary verbs with such semantics, e.g. the Lithuanian verb *aûti* ‘to put on shoes’, and derivatives such as Armenian *awd* ‘footwear’, from *H₁ew-dh-, and Avestan *aoØra* ‘shoes’, from *H₁ew-tro-, the latter of which, interestingly, is found in 3 of the 4 instances of *(s)meuk- in Old Iranian (see above in (1) and (2)). Given then that there is a verb with such a meaning already indicated for Proto-Indo-European, it is less likely that the original meaning, usage, and associations to be reconstructed for *(s)meuk- would also have involved shoes and feet, especially with the other non-foot/shoe-related meanings this root figures in.

We suggest therefore that the Iranian shoe/foot-related meanings for this root are the result of a Proto-Indo-Iranian innovative specialization of the meaning of *(s)meuk-, possibly transferred from the specialized sense of *H₁ew-, a root that has no verbal uses in Indo-Iranian at all, only a single derived nominal (*aoØra*), and thus presumably not inherited into Proto-Indo-Iranian as a productive verbal





root. As a result, it can be hypothesized that the severe restriction of forms of *H₁ew- created a lexical gap, there being no verb with the appropriate foot-related semantics; Proto-Indo-Iranian then innovatively came to use '(s)muč- in this meaning, as an extension of its use, when accompanied by preverbs, with 'garments' in general – the "naturalness" of this extension noted above would have been played a role at this point – and it was this usage that was inherited into Old Iranian. Within Iranian, this verb itself came to be severely restricted, giving the situation in Avestan with its isolated relic forms, whereas Indic continued this innovation productively in its verbal system, even extending it with other preverbs in Classical Sanskrit.

There is undoubtedly more than can be said about the semantic development of *(s)meuk- in Indo-Iranian and in Indo-European in general,¹⁷ but the detail established here concerning the meaning and use of this root should provide a suitable point of departure for any further investigations.¹⁸

References:

- Apte, Vaman S. 1912. *The Practical Sanskrit – English Dictionary* (Motilal Banarsidas, Delhi), [Second revised and enlarged version; reprinted, 1965].
- Bartholomae, Christian, 1904. *Altiranisches Wörterbuch*. Strassburg: K. J. Trübner.
- Beekes, Robert S. P. 1995. *Comparative Indo-European Linguistics. An Introduction* (John Benjamins Publishing Co., Amsterdam/Philadelphia).
- Böhtlingk, Otto und Rudolph Roth. 1865–68. *Sanskrit Wörterbuch* herausgegeben von der Kaiserlichen Akademie der Wissenschaften. Fünfter Theil. St. Petersburg [Reprinted Motilal Banarsidas, Delhi].
- Egerton, Franklin. 1953. *Buddhist Hybrid Sanskrit Dictionary. Grammar and Dictionary. Volume II: Dictionary*. (American Oriental Society, New Haven) [Reprinted 1998, Motilal Banarsidas, Delhi].
- Grassmann, Hermann. 1872. *Wörterbuch zum Rig Veda* (Otto Harrassowitz, Wiesbaden) (Reprinted, 1964).
- Horn, Paul. 1893. *Grundriss der neupersischen Etymologie* (Karl J. Trübner, Strassburg) [Reprinted 1974, Georg Olms Verlag, Hildesheim].

¹⁷ In Joseph & Karnitis 1999, for instance, we explore the striking parallels between the range of meanings of Sanskrit *muc-* and that of English *slip*.

¹⁸ We would like to thank Dr. H. W. Bodewitz and Dr. O. von Hinüber for very helpful and insightful comments on an earlier version of this paper that we have greatly benefited from. We hasten to add, though, that they do not necessarily endorse all the claims we have made here.





- Joseph, Brian D. & Catherine S. Karnitis. 1999. 'Evaluating Semantic Shifts: The Case of Indo-European *(s)meuk- and Indo-Iranian *muč-'. *Ohio State University Working Papers in Linguistics* 52, pp. 151-158.
- Macdonell, Arthur A. 1929. *A Practical Sanskrit Dictionary* (Oxford University Press, London).
- Mayrhofer, Manfred. 1956ff. *Kurzgefasstes etymologisches Wörterbuch des Altindischen*. (Universitätsverlag C. Winter, Heidelberg).
- Mayrhofer, Manfred. 1994. *Etymologisches Wörterbuch des Altindischen*. II. Band. Lieferung 15. Heidelberg: Universitätsverlag C. Winter.
- Monier-Williams, Sir Monier. 1899. *Sanskrit-English Dictionary* (Munshiram Manoharlal Publishers, New Delhi).
- Pokorny, Julius. 1959. *Indogermanisches etymologisches Wörterbuch* (A. Francke AG Verlag, Bern).
- Rix, Helmut. 2001. *LIV. Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstammbildungen*. Wiesbaden: Dr. Ludwig Reichert Verlag.
- Wackernagel, Jacob. 1902, "Über Bedeutungsverschiebung in der Verbalkomposition". *GN* 1902, pp. 737-757 [Reprinted in *Kleine Schriften* (1969, Vandenhoeck & Ruprecht, Göttingen), pp. 127-147].

Department of Linguistics
The Ohio State University
Columbus, Ohio
USA

Brian D. Joseph

Department of History
University of California
Berkeley, California
USA

Catherine S. Karnitis

