PŪRVĀPARAPRAJÑĀBHINANDANAM
EAST AND WEST, PAST AND PRESENT

Indological and Other Essays
in Honour of Klaus Karttunen

EDITED BY

BERTIL TIKKANEN & ALBION M. BUTTERS

Studia Orientalia 110

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CONTENTS

II CLASSICAL AND INDO-EUROPEAN STUDIES

III HISTORY OF ORIENTAL STUDIES

FOURTEEN INDO-EUROPEAN ETYMOLOGIES IN HONOUR OF KLAUS KARTTUNEN

Jouna Pyysalo

ABSTRACT

My academic career in comparative Indo-European linguistics began with Classical Philology (Greek and Latin) and Indo-Iranian languages (Sanskrit and Avestan). In this regard I have much in common with Klaus Karttunen, my former teacher and a supervisor of my dissertation, now celebrating his 60th birthday. It is my utmost pleasure to contribute to this volume a paper on Indo-European etymologies, related in various ways to Italo-Greek and Indo-Iranian, and dedicate it to Klaus Karttunen.[1]

1. RV. kapilá- 'bräunlich, rötlich'

1.1. The Vedic attestation

RV. kapilá-	(a.) 'bräunlich, rötlich' (WbRV. 313)
OInd. kapiśa-	(a.) 'bräunlich, rötlich' (KEWA 1: 156)[2]
OInd. kapiśā-	(f.) (Flußname, EWA 1: 301)

speaks for the antiquity of the Sanskrit root involved. Accordingly, we may expect an Indo-European etymology to exist, if one is preserved at all.

1.2. Pokorny finds a correlation between these forms and the root "ku̯ēp, ku̯əp, kūp, kup-, etc." 'rauchen, wallen, kochen' (P. 596–597). This is problematic, as no labial semi-vowel is present in RV. kapilá-,[3] and the meanings do not correspond particularly well. Perhaps it is for these reasons that Mayrhofer (EWA 1: 301–302) instead proposes an underlying meaning "affenfarbig" (cf. Tu. 2750), attaching RV. kapilá- to RV. kapí- (m.) 'Affe' (WbRV. 313, KEWA 1: 156) and

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1 In the reconstruction the standard Neogrammarian (= Neogr.) notation with the addition of a 'laryngeal' PIE *ḫ (= Hi. ḫ), is used throughout. The discussed words will be quoted in their stem forms (e.g. RV. kapilá-) with a translation given by the dictionary referred to.

2 On the 'adjectival suffix' OInd. -śa-, see Debrunner & Wackernagel (1954: 919–920). Apparently the suffix RV. -la- had a very similar, if not identical, semantic value.

3 On the problems concerning the root, cf. Persson (Beitr. 1: 126).

Att. κῆπο- (m.) 'langschwänziger Affe' (GEW 1: 836). Understandably, this reconstruction is problematic as well, because 'monkey' is not necessarily derived from 'reddish, brownish'.[4]

1.3. In both recently discovered and traditional material, there can be found hitherto unutilized parallels to resolve the problems of the etymological proposals noted above. The data for the etymology, stemming from multiple directions, can be seen as follows:

(a) In Tocharian the following formation currently lacks etymology:[5]

TochB. kapille-   (n.) 'fever, illness' (DTochB. 140)
TochB. kapilleṃtse-   (a.) 'having a fever/illness' (DTochB. 140)

A prototype PIE *kopilno-, a derivate of PIE *kopilo- (= RV. kapilá-), accounts for this formation in Tocharian.

(b) On the other hand, an exact match confirming PIE *k (vs. PIE *kᵘ) is now present in Old Anatolian, where an original PIE *l is proven by the following formations that currently lack etymology (cf. HEG 1: 492–493):

Ḫi. kapila-   (vb.) 'aufhetzen' (HHand. 72, kap-pí-la-a-ir)[6]
Ḫi. kapilaḫ-   (vb2.) 'zürnen, toben' (Ḫi. kap-pí-la-aḫ-ḫi-ir [3pl])
Ḫi. kapilali-   (a.) 'verhaßt, feindlich' (HHand. 72, kap-pí-la-al-li-iš)
HLu. kapilali-   (c.) 'enemy' (CHLu. III.6.24, ('*314')ka-pi-la-li-na)
CLu. kapilaza-   (vb.) 'in Zorn geraten' (HHand. 72, DLL −)

(c) Furthermore, the unextended verbal root PIE √kep- 'brennen, sengen, braten, backen' (and its nominal counterpart PIE √kop-) exists in:

Li. kèp-   (vb.) 'braten, backen' (LiEtWb. 241, kèpti)
Latv. cep-   (vb.) 'id., sengen, brennen' (LiEtWb. 241, cept)
Gr. ἀρτο·κόπο-   (m.) 'Brotbäcker' (GEW 1: 156, ἀρτο·κόπος)[7]

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4 In the spirit of the *Wörter und Sachen* principle, we would expect the colour associated with the most common Indian monkey (Gray langur), to be 'grey'. However, there are also orangish-red variants of the species (i.e. the traditional connection remains possible unless proven otherwise).
5 The comparison with Lat. capiō 'I take', suggested by Adams (DTochB. 140) and Hamp (*apud* Adams), reflects desperation based on a lack of semantic credibility. Possibly for this reason the items were left unaccounted for by Adams (MA: 788).
6 A semantic parallel for the alternation 'rötlich' (RV. kapilá-) : 'aufhetzen' (Ḫi. kapila-) is provided, for instance, by Li. kárštas 'heiß, glühend, brennend, hitzig, feurig, inbrünstig' (LiEtWb. 223) and Li. káršinti 'beunruhigen, zusetzen, zum Zorn reichen' (LiEtWb. 223). Fraenkel explains the alternation with "Gdbed. 'heiß machen'.", which also fits with RV. kapilá- : Ḫi. kapila- (cf. Latv. cep- 'sengen, brennen').
7 Formerly these forms have been explained with metathesis (e.g. Frisk (GEW 1: 156): "Wohl mit Metathese derselben Art wie in lit. kepù 'backen' für *pekù = aksl. pekǫ"). In the face of abundant parallels such assumption is no longer needed.

From PIE *kopo- (= Gr. κόπο-) the Old Anatolian participle:

 Ḫi. kapant-   (pt.a.) = GE$_6$ 'dunkel, schwartz' (HEG 1: 493)

 Ḫi. kapanti·šanaima- (^{PÚ}pt.) 'schwarz·šanaima-' (OGH. 533)[8]

can be obtained without difficulties.[9]

1.4. Regarding the related root variants, Baltic contains a 'nasal infix' present in:

 Li. kemp-   (pr.) 'braten, backen' (LiEtWb. 241, kempù [1sg])

Furthermore, a 's-mobile' form of the root may be found in *skep *skop (cf. 5.).

2. Go. lagja- 'legen'

2.1. The Germanic verb belongs to numerous *i-extensions of the root. For instance, one finds:

 Go. lagja-   (vb.) 'legen' (: τιθῆναι 'lay', GoEtD. 233)

 TochA. lake   (sb.) 'cubile, lectus' (Poucha 263, lake [sgN])

 Gr. λόχιο-   (a.) 'belonging to child-birth' (LSJ. 1063)

 OIcl. leg-   (n.) 'Liegeplatz, Grabstätte, Öde' (ANEtWb. 349)

2.2. The Proto-Indo-European root of Go. lagjan was securely established already in the 19th century (P. 658–659 *legh-). Some athematic *e-grades of the root are:

 Cyren. λέχ-   (f.) 'one who has just given birth' (LSJ. 1043, λεχός)

 Gr. λέχ-   (aoM.) 'lay down' (GEW 2: 110–112, λέκτο [3sg])

The difficulty of Go. lagjan lies in the ambiguity of the root vowel (Go. a = Neogr. *a or *o). PIE *o cannot be decided solely on a structural basis (i.e. by claiming a 'causative in *o'), because of the '*a-grade' in:

 MidIr. laigi-   (vb.) 'sich legen' (VGK. 2: 271, 559–560, laigid [3sg])

2.3. The etymological match for Go. lagja- is available in one of the numerous semi-analyzed Liddell-Scott compounds without an entry for the main verb:

 Gr. ναυ·λοχέω   (pr.) 'to lie in harbour or creek' (LSJ. 1162)

The Greek formation corresponds exactly with the numerous prefixed verbs in Gothic:

 Go. af·lagja-   (vb.) 'lay aside' (: ἀποθεῖναι, GoEtD. 233)

 Go. ana·lagja-   (vb.) 'lay on' (: ἐπιθεῖναι, GoEtD. 233)

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8 Ḫi. šanaima-, ostensibly a Luwian participle, belongs to Ḫi. ^{PÚ}šanaia- (OGHErg. 209, ^{PÚ}ša-na^i-ia), which also appears in the context of 'schwarz': "'Quelle Š. auf dem Schwarzen Berg' (geschrieben ḪUR.SAG GE$_6$), verehrt in Šaluwataši."

9 A semantic parallel for the meaning 'dunkel, schwartz' (in Ḫi. kapant-) is included in *ḫes- 'brennen' (P. 68–69), cf. RV. ásita- (a.) 'dunkel(farbig), schwarz' and RV. asiknī- (f.) 'dunkle Nacht, Dunkel, Name eines Flusses' (EWA 1: 146).

2.4. In such circumstances we may safely reconstruct a causative

   PIE *loghei̯^{e}/$_o$-   (csA.) 'lay, lie' (Go. lagjan, Gr. λοχέω)

for the parent language.

3. Go. augon- 'Augen'

3.1. The closest cognates of

   Go. augo^n-   (m.) ὀφθαλμός = 'eye' (GoEtD. 48)

are well known within the Germanic group:

   OIcl. auga   (n.) 'Augen' (ANEtWb. 19, auga [sgN])
   OHG. ouga-   (vb.) 'zeichen' (ANEtWb. 107, ougan [inf])
   Go. auga·dauro^n-   (n.) = θυρίς (: 'window', GoEtD. 48)
   Go. augja-   (vb.) 'zeigen' (: 'show', GoEtD. 48, augei [ipv2sg])
   OIcl. eygja   (vb.) 'die augen richten, blicken' (ANEtWb. 107)

3.2. In the past, Go. augo has been associated with the root P. 775–777 (*ok^u-),
exemplified with such forms as

   Gr. ὄπ-   (f.) 'the eye, face' (LSJ 1282, ὄπα [sgA])
   Gr. ἀψίο-   (n.) 'Antlitz' (LSJ. 299, ἀψίον · τὸ πρόσωπον)
   RV. prátīka-   (n.) 'erscheinende Gestalt, Antlitz' (WbRV. 869)

requiring PIE *ḫek^u *ḫok^u-.[10] Though this interpretation persists even today, being
supported still by Vries (ANEtWb. 19) and Lehmann (GoEtD. 48), it introduces
insurmountable difficulties: the Germanic diphthong (Go. au, etc.) does not
match the PIE root structure *ḫeC ḫoC- in Gr. ὄπ-. Nor does the Germanic velar
(Go. g, etc.) match PIE *k^u-. Thus, despite the suitability of the meanings, the
traditional position is unsustainable.

3.3. The etymology of Go. augo can be supplemented by turning our attention to
the root RV. √uh 'sehen', also attested in the oldest Iranian:

   gAv. uz-   (pr.) 'achten' (AIWb. 43, uzəmōhī [1pl])
   RV. óha-   (prM.) 'achten, beachten, gelten für' (WbRV. 276)
   gAv. uzəma-   (a.) 'eherbietig gegen [D]' (AIWb. 413, uzəmēm [sgA])
   RV. óhāna-   (ao.pt.) 'achten, beachten' (WbRV. 277, óhāna-)[11]

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10 In the laryngealist accounts the root is usually reconstructed with "h$_3$" (cf. Mayrhofer IdgGr.
141). Owing to Gr. α, PIE *ḫek^u- is required, however.

11 Mayrhofer (EWA 1: 283) does very well by accounting for the problematic instances of the
root √uh with the meaning 'verkündigen, feierlich aussprechen, rühmen'. Indeed, it is possible
to attach this meaning to Ḫi. ḫug- (vb1.) 'beschwören', HEG 1: 255–257 (cf. Gr. αὐχέω (vb.) 'sich
rühmen, prahlen', GEW1: 192, and Gr. εὐχ- (prM.) 'verkünden, prahlen, feierlich geloben', GEW
1: 595–596, εὖκτο). However, some Rig-Vedic forms appear to have the meaning 'achten', which
corresponds to gAv. √uz- 'achten'. A detailed study of the attestations is required in the future.

Yet another parallel may be preserved in a Centum gloss:

OIr. ugal-   (m.pl.) 'Augen' (LEIA U-16, ugail [pl] : sūli)[12]

Connecting the Germanic words to these presents no difficulties.

3.4. In terms of reconstruction, the root PIE *(h̥)uǵh- remains ambiguous vis-à-vis the presence (or absence) of the initial *h̥, at least until further evidence is found that can resolve the problem.

4. RV. ugrá- 'kräftig, mächtig, gewaltig'

4.1. The group

RV. ugrá-   (a.) 'kräftig, mächtig, gewaltig' (WbRV. 245–246)
RV. ugrá-   (m.) 'der Mächtige' (WbRV. 245–246)
gAv. ugra-   (a.) 'stark, kräftig' (AIWb. 380)
LAv. ugra.bāzu-   (a.) 'starkarmig' (AIWb. 380)

is widely attested in Indo-Iranian (cf. EWA 1: 211, KEWA 1: 98–99).

4.2. Etymologically RV. ugrá- belongs to the well-known root PIE √h̥ug- 'wachsen' (P. 84–85), exemplified here with some of its basic stems:

Li. áug-   (vb.) 'wachsen, größer werden' (LiEtWb. 24, áugti)
Go. ana·aiauk-   (pret.) 'increase' (GoEtD. 50, anaaiauk [3sg])
Lat. augeō   (pr2.) 'wachsen machen, vermehren' (WH 1: 82–83)

However, among the derivates there is no exact match to RV. ugrá- that would settle the character of ambiguous RV. r (= PIE *r or *l).

4.3. The etymology of the Indo-Iranian forms can be obtained by replacing the current segmentations of Go. niuklahs, all erroneously starting from "niu+klah-s" (cf. GoEtD. 268), with the proper analysis:

Go. ni·ukl·ah-   (a.) 'unmündig, kindisch' (GoEtD. 268, niuklahs [sgN])
Go. ni·ukl·ahei-   (f.) 'Kleinmut, Unverstand' (GoEtD. 268)

In this segmentation, Go. √ukl- (= RV. ugrá-, gAv. ugra-) is surrounded by the prefix (Go. ni- 'no, un-') and Go. √ah.[13] Go. ni·ukl·ah- and ni·ukl·ahei- are paralleled by:

Go. in·ah-   (a.) φρόνιμος 'wise' (GoEtD. 11) (i.e. "(of) in·sight")
Go. in·ahei-   (f.) 'Besonnenheit' ('sobriety', GoEtD. 11)

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12 According to LEIA (U-16) OIr. ugail is a loan from Lat. oculī [pl.]. I find this impossible, given the difference of velars (OIr. g : vs. Lat. c) and the vocalisms. Therefore, I would rather connect the Old Irish word to gAv. √uz- 'achten'.

13 Grienberger (apud GoEtD. 268) made the correct cut Go. √ah already back in 1900. To this root belong Go. ·ah-, Go. ·ahei-, Go. aha(n)- (m.) 'Sinn, Verstand' (GoEtD. 11) and several other forms readily found in the dictionaries.

The literal meaning of Go. ni·ukl·ah- thus appears to be 'not·strong·minded' or 'not·grown·minded', a perfect match of its gloss Gr. νήπιος 'childish' (GEW 2: 315).

4.4. With the meaning suggested by the translation, it is tempting to see here a counterpart of the 'Slavonic' preterite participle in *l-:

PIE *h̯ug·lo-   (pt.) 'gewachsen' (a.) 'stark' (in gAv. ugra-, Go. ukl-)

5. Gr. σκέπτο- 'to examine'

5.1. Internally, the verbal stem

Gr. σκέπτο-   (prM.) 'to look about carefully, examine' (LSJ. 1606–7)
is derived from an athematic root noun:

Gr. σκέπ-   (sb.) 'one that watches' (LSJ. 1608, σκέψ [sgN])
Other Greek derivates such as, for instance, the causative in *CoCei̯e/o-

Gr. σκοπέω   (vb.) 'behold, contemplate' (LSJ. 1614–6)
also follow Indo-European patterns (cf. GEW 2: 725). It is likely, therefore, that the formation is inherited and has an etymology (if preserved).

5.2. The current etymological proposition is based on the metathesis of a widely attested root P. 984 *speḱ-, including well-known items such as:

RV. spáś-   (aoM.) 'betrachten' (WbRV. 1608, áspaṣṭa [3sg])[14]
RV. spáś-   (m.) 'Späher, Beschauer' (WbRV. 1608, spáṭ [sgN])
Lat. speciō   (pr.) 'sehen' (WH 2: 570-571)
In addition to the irregular metathesis itself, another problem is presented by the ambiguity of Gr. κ (= PIE *k or *ḱ).

5.3. I am skeptical about the early attempt. A closer look at the material allows us to compare √σκεπ- with Iranian forms such as:

Gr. σκέπτο-   (prM.) 'to look about carefully, examine' (LSJ. 1606–7)
LAv. skapta-   (a.) 'wunderbar, erstaunlich' (AIWb. 1586, skaptəm)[15]
Pahl. škaft   (a.) = 'adbhutaḥ' (AIWb. 1586)
Gr. σκέψι-   (f.) 'viewing, consideration, doubt' (LSJ. 1608, σκέψις)
In addition, the root (without the dental extension) also appears in Slavonic:

OCS. za·skop·ije   (n.) 'Verdacht, Annahme' (Sadnik √816)

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14 Understandably RV. áspaṣṭa could also be a sigmatic aorist and therefore identical with Lat. spexī.
15 It is a mystery why Bartholomae (AIWb. 1586), carefully accounting for multiple Iranian forms, did not present the obvious comparison with Greek.

This should convince even utter skeptics that there were two separate roots: PIE √skep (LAv. √skap) ≠ √speḱ (LAv. √spas).[16] As Avestan preserves both roots and differentiates the velars, metathesis should no longer be assumed in this connection.

5.4. It is possible that the root *skep- 'make light, illuminate' is equipped with '*s-mobile' and belongs to the root *kep- 'light, luminous' (cf. Latv. cep-, 2. above).

6. Gr. κώμη- 'Dorf, Quartier, Viertel einer Stadt'

6.1. The Greek word and its derivatives, including

Gr. κώμη-	(f.) 'Dorf, Quartier, Viertel einer Stadt' (GEW 2: 61)
Gr. κῶματ-	(n.) 'tiefe, ruhiger Schlaf' (GEW 2: 61, κῶμα [sgNA]),

are well known.

6.2. The current etymology goes all the way back to Bezzenberger (cf. GEW 2: 61), who compared the forms with the root P. ḱei-, ḱoi-, ḱi- 'liegen' (P. 539–540), now widely documented in Old Anatolian:

Ḫi. kei-	(vbM.) 'liegen, gelegt sein' (HEG 1: 568–9, ki-it-ta-ri)
Pal. kei-	(vbM.) 'liegen' (DPal. 59, ki-i-ta-ar [3sg])

The semantic connection between 'earth, land, quarter' and the verbal meaning 'liegen' is striking, but the phonetic details remain problematic. Pokorny's (P. 540) explanation, "dehnstufig κώμη f. 'Dorf' (*ḱō[i]mā)", does not account for the critical absence of iota in Greek.

6.3. Since the loss of PIE *i violates the sound laws, an alternative etymology can be sought from the following comparisons:

Gr. κώμη-	(f.) 'Dorf, Quartier, Viertel einer Stadt' (GEW 2: 61–62)
Lat. camā-	(f.) 'kurzes, niedriges Bett, Pritsche' (WH 1: 145, cama)
Cret. κάμα-	(f.) Hes. κάμαν · τὸν ἀγρόν (MycGrV 1: 256)

The related forms carry a basic meaning of "go down to the earth" in various ways, such as 'lie down', 'become tired', 'die', 'serve', and 'worship':

RV. śám-	(n.) 'heilsames Werk, Heil, Segen' (WbRV. 1379)
Gr. ἱππο·κόμο-	(m.) 'groom, esquire' ('Pferdeknecht') (LSJ. 834)
RV. śamāyá-	(dn.) 'wirken, tätig sein, s. Mühe geben' (WbRV. 1380)
Gr. ἀ·κάμαντ-	(pt.) 'unermüdlich, frisch' (GEW 1: 773)

6.4. In a broader perspective it remains possible that Gr. κώμη and Gr. κεῖται [3sg] are ultimately connected. This state of affairs is suggested by PIE *ḱe/o- 'liegen', the shortest preserved form of the root:

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16 See LAv. spas- (m.) 'Späher, Wächter' (AIWb. 1614–1615, spaš [sgN]).

OInd. giri·śa-   (m.) 'inhabiting mountains' (KEWA 3: 304)
From this unextended root it is possible to derive:

(a) The well-known *i-extension P. ḱei-, ḱoi-, ḱi- 'liegen' (P. 539–540):
   OInd. giri·śaya-   (m.) 'inhabiting mountains' (KEWA 3: 304)
   LAv. say-   (aoM.) '(da)liegen' (AIWb. 1571, saēte [3sg])

(b) A feminine in Neogr. *-ā:
   RV. ā́·śā-   (f.) 'Raum, Welt, Weltgegend' (WbRV. 187)

(c) The correspondence required by Gr. κώμη (cf. above)

(d) The extension Neogr. *ḱm(ə)- in:
   AV. śma·śāna-   (n.) 'Leichenstätte' (KEWA 3: 381–2, EWA 2: 659)
   Do. κέκμακ-   (pf.) 'sich mühen, ermatten, sterben' (GEW 1: 773)
   Gr. ἄ·κμητ-   (a.) 'unermüdlich' (GEW 1: 773, ἄκμης [sgN])
It would appear that Neogr. *ḱm̥̄-, usually reconstructed for both (c) and (d),
actually conceals two phonetically separate roots.

7. RV. ágru- 'unvermählt'

7.1. The Indo-Iranian character of the formation
   RV. á·gru-   (a.) 'unvermählt (vom Mann)' (WbRV. 11, ágrus [sgN])
   LAv. a·γrū-   (a.f.) 'unverheiratet, ledig' (vom Mädchen) (AIWb. 49)
   RV. a·grū́-   (f.) 'die Unvermählte, die Jungfrau' (WbRV. 11)
speaks for its antiquity.

7.2. However, the problem of etymology has proven to be persistent. All
suggestions (cf. KEWA 1: 18), including Mayrhofer's semi-internal reconstruction
   LT *n̥gʷr̥(h₂)úH-   (a.) 'nicht schwanger, non gravida' (EWA 1: 46),
are unsatisfactory.

7.3. The etymological vacuum is surprising, since the removal of the privative
prefix (RV. á·gru-, etc.) leaves a root PIIr. *gru- that can be compared to the
equally problematic Albanian forms,[17] also lacking etymology:
   Tosk. grua   (f.) 'Frau' (AlbEtD. 125 grua [sgN])
   Geg. grue   (f.) 'Frau' (AlbEtD. 125, grue [sgN])

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17 Orel (AlbEtD. 125) accepts the comparison with Gr. γραῦς 'old woman'. This, however, is
difficult not only because of differing semantics, but because – as acknowledged by Orel – "The
latter is connected with IE *ǵerə- 'to become old'." The palatal PIE *ǵ is incompatible with the
Albanian initial g-.

RV. á·gru-   (a.) 'unvermählt (vom Mann)' (WbRV. 11)[18]
Following the basic meaning provided by the Albanian, RV. á·gru- is a bahuvrīhi compound meaning 'one who has not a woman', whereas RV. a·grū́- is a tatpuruṣa compound meaning 'one who is not a woman (yet)'.

7.4. The material discussed belongs to the Satəm group, which leaves the initial velar ambiguous (Neogr. $*g^{(u)}$ru-).[19]

8. RV. rudrá- 'glänzend; Rudrá'

8.1. The Vedic deity and the related root are characterized by the stems:
   RV. rudrá-   (m.) 'Name des Vaters des Maruts' (WbRV. 1174)
   RV. rudrá-   (a.) 'glänzend, prächtig, herrlich' (WbRV. 1174)
   RV. ráudra-   (a.) 'dem R. ähnlich, herrlich, prächtig' (WbRV. 1186)
The forms carry the uniform meaning 'light, bright, etc.', suggesting that they are distinct from the root OInd. √rud- 'weinen' (cf. EWA 2: 465–466).

8.2. As to the missing etymology (cf. EWA 2: 452–453), Grassmann (WbRV. 1185) refers to other Sanskrit formations with a resembling meaning:
   RV. ródas-   (f.) 'Himmel und Erde, Welt' (WbRV. 1184–1185)
   RV. ródasī-   (f.) 'Himmel und Erde, Welt' (WbRV. 1185)
On the basis of these forms, he suggests internally a root ⁺rud-. Though a connection is likely, there is no external support for such segmentation. In addition, Rig-Veda suggests a slightly different analysis:

(a) A cut RV. ru·drá- is paralleled by a correct segmentation
   RV. ín·dra-   (m.) 'der Gott des Lichthimmels' (WbRV. 213–214)
since the root obtained (RV. √in-) reappears in the thematic adjective
   RV. iná-   (a.) 'mächtig, stark' (WbRV 211, "häufig von Indra-")[20]

(b) Also, a similar cut of RV. ró·das- 'Himmel·Erde' would lead to the well-known root RV. √das- 'earth, land, pagan' in:
   gAv. daȟyu-   (f.) 'Land, Landgebiet, Landschaft' (AIWb. 706–710)
   OPers. dahyu-   (f.) 'land, province, district' (OldP. 190)
   RV. dásyu-   (m.) 'Götterfeind' (WbRV. 584–585)

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18 It could be reasonably claimed that LAv. ǰagrut- (f.) (EN eines gläubigen Mädchens, AIWb. 602) belongs here. If so, the root is attested without the negative prefix in Indo-Iranian.
19 Though a labiovelar could be established by introducing further evidence, this would lead to a discussion beyond the scope of this paper.
20 Comparatively, the Vedic bases are paralleled by Lyd. in- (pr.) 'machen' (LydWb. 132, int [3pers.]) and Lyd. ina- (pret.) 'machen' (LydWb. 132, inal [3pers.]).

An adjustment of Grassmann's idea, postulating a root RV. √ru- 'heaven; light, bright' instead of the hypothetic ⁺rud-, yields consistent results.

8.3. An external etymology for RV. √ru- is available in Baltic, which confirms a lateral for the Proto-Indo-European root:

(a) PIE *lu 'light' (zero grade):

RV. ru·drá-	(m.) 'N. des Vaters des Maruts' (WbRV. 1174)
Li. pa·lù·dieni-	(f.) 'Vespermahlzeit' (LiEtWb. 534)[21]

(b) PIE *leu *lou *lēu *lōu 'id.' (ablaut):

RV. ró·das-	(f.) 'Himmel und Erde, Welt' (WbRV. 1184–1185)
Li. laū·naga-	(m.) 'Vesper·brot, Nacht·essen' (LiEtWb. 346)[22]
Latv. lau·nag-	(m.) 'Mittagsmahlzeit, Vesperbrot' (LiEtWb. 346)
RV. ráu·dra-	(a.) 'dem R. ähnlich, herrlich, prächtig' (WbRV. 1186)

8.4. The root PIE √lu- 'light, bright' is known for its numerous extensions, including PIE √luk- (P. 687–9), already mentioned by Grassmann (WbRV. 1174):

H̥i. luk-	(vb1.) 'hell werden, leuchten' (HEG 2: 65, lu-uk-zi)
RV. rúc-	(f.) 'Glanz, Licht'; 'Ansehen, Wohlsein' (WbRV. 1172)
Lat. lūc-	(f.) 'Licht, Glanz, Tageslicht' (WH 1: 832, lūx [sgN])
Gr. λευκό-	(a.) 'hell, klar, weiß' (GEW 2: 108, λευκός [sgN])

9. RV. turphári- 'sättigend'

9.1. The two forms

RV. turphári-	(a.) 'sättigend' (WbRV. 542, turphárī [duNA])
RV. turphárītu-	(a.) 'sättigend' (WbRV. 543, turphárītū [duNA])

contain a Sanskrit root √turph- (with an adjectival suffix ·ári-), which is not otherwise attested in the language.

9.2. As to the etymology, Grassmann's early explanation, "von tr̥ph = tr̥p" (WbRV. 542), does not account for the difficult root vocalism (RV. u). An alternative etymology is mentioned by Mayrhofer (KEWA 1: 515): "Scheftelowitz KZ 53, 258 übersetzt (mit Nirukta, Sāyaṇa) 'schnell tötend, hinweggraffend' und vergleicht ahd. sterban, nhd. sterben usw. (?!)." Mayrhofer's reservations are understandable: Nirukta's translation would not constitute an acceptable etymology due to the difference of the root vocalisms.

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21 Li. pa·lu·dieni- does not point to a root ⁺lud- (= RV. ⁺rud-), because Li. ·dieni- belongs to Li. dienà (f.) 'Tag', OPr. deina 'id.' (LiEtWb. 93).

22 For Li. naga- 'Brot', see 12.

9.3. Grassmann's translation is, however, supported by a perfect match with:

ModPers. tulf   (sb.) 'Übersättigung' (P. 1077–1078)

Owing to the collision of liquids in Indo-Iranian, external evidence is required in order to decide between PIE *l and *r.

9.4. The cognates in question (reflecting PIE *r, cf. P. 1077–1078) pose a theoretical problem related to the Neogrammarian reconstruction. The issue, briefly sketched, is as follows.

(a) On one hand, a root PIE *terp-, *torp-, *tr̥p- (without *u) is confirmed by:

RV. tr̥p-   (vb.) 'befriedigt werden' (WbRV. 549, tr̥pán [conj3pl])
Go. þarf-   (pret.pr.) 'need, have to, must' (GoEtD. 356, þarf [1sg])
OIcl. þarf-   (a.) 'nötig, nützlich' (ANEtWb. 606. þarfr [sgN])
Gr. τέρπο-   (prM.) 'genießen, sich sättigen' (GEW 2: 881–882)
OPr. en·terpo-   (pr.) 'nützen' (APrS. 329, enterpo [3sg])
HLu. a(n)ta tarpari- (vb.) 'lack' (CHLu. IX.1.10, ('*218)ta+rᵃ/ᵢ-pa-ri+i-ta)[23]

(b) Simultaneously, a root PIE *turph- (with an original *u) appears in

Go. þaurf-   (pret.) 'have to, must, need' (GoEtD. 356, þaurfta)
ModPers. tulf   (sb.) 'Übersättigung' (P. 1077–1078)
OIcl. þurfa-   (vb.) 'bedürfen' (ANEtWb. 627, þurfa [inf])
RV. turphári-   (a.) 'sättigend' (WbRV. 542, turphárī [duNA])
RV. turphárītu-   (a.) 'sättigend' (WbRV. 543, turphárītū [duNA])

(c) Therefore, there are two externally confirmed roots, √terp- and √turph- (cf. EWA 1: 657), that cannot be interconnected by means of the sound laws. Basically this means that direct comparison (cf. P. 1078) between RV. tŕ̥pti- (f.) 'Sättigung, Befriedigung' (WbRV. 549) and Go. þaurft- (f.) 'necessity, need' (GoEtD. 357), as if from the zero grade, is not correct. The root √turph- has an original PIE *u which does not reflect a former syllabic nasal.

10. TochB. tasemane 'similar, equal, comparable'

10.1. The Tocharian corpus has brought to light the following group of words:

TochB. tasemane   (a.) 'gleich mit –' (Poucha 119)
TochA. tāskmāṃ   (a.) 'similis, aequalis, comparabilis' (Poucha 119)
TochA. tāskmāṃtsum   (a.) 'comparabilis' (Poucha 119)[24]

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23 The suffix of HLu. tarp•ari- is apparently identical with that of RV. turph•ári-, suggesting PIE *•ori- for both.
24 Cf. also TochA. tāskmāṃtsune (sb.) 'aequitas, aequabilitas' (Poucha 119).

10.2. No satisfactory etymology has been proposed, as the forms hardly belong to the root TochA. √tā·(s) 'place, set' (cf. van Windekens, LeTokh. 499 for the details). A semantic parallel within the Indo-European languages is simply lacking.

10.3. The etymology is, however, known to the readers of Liddell-Scott, where an isolated gloss is equally without cognates:

Gr. δωϊα-　　　　　　(a.f.) Hes. δωϊα · ὁμοία (LSJ. 464)

The immediate precedent PGr. *δωσ·ία- 'like, resembling, similar, etc.' is readily comparable with TochA. √tās- 'similar' (with *ō) and its *o-grade TochB. √tas-.[25]

10.4. Based on semantic parallels (cf. e.g. LinB. ʰem- (num.) 'one',[26] OLat. semol (adv.) 'zugleich', WH 2: 538), one may tentatively assume an original meaning 'one' for the Greek and Tocharian words discussed here. This hypothesis is supported by the root P. *deḱm̥ 'zehn' (191-192), including:

Gr. δέ·κα　　　　　　　(n.) 'zehn' (GEW 1: 359, δέκα [plNA])
RV. dá·śa　　　　　　　(n.) 'zehn' (n.) 'zehn Finger' (WbRV. 581, dáśa [NA])
LAv. da·sa　　　　　　 (n.) 'zehn' (AIWb. 700-1, LAv. dasa = gAv. dasā)
TochB. śa·k　　　　　　(num.) 'ten' (DTochB. 619, śak [N])
Arm. ta·san-　　　　　 (num.) 'zehn' (ArmGr. 496, tasn [N], tasanç [G])

The prefix (Gr. δέ·, RV. dá·, LAv. da·, Arm. ta·) can only have the meaning 'one' as is confirmed by such alternating prefixes as:

TochB. (w)i·käm̥　　　 (num.) 'twenty' (DTochB. 61, ikäm̥)
Do. hι·κάτ-　　　　　　(num.) 'zwanzig' (GrGr. I: 591, Ther. Thess. hικάς)

The proto-root behind TochB. tasemane, TochA. tāskmāṃ and Gr. δωϊα reappears in Gr. δέ·, Arm. ta·, etc. without the *s-extension. Due to the wide usage of the prefix, the root is broadly attested in the Indo-European languages.

11. Umbr. uoco- 'aedes'

11.1. An interesting word without clear Italic cognates is preserved in:

Umbr. uoco-　　　　　(sb.) 'Haus, Tempel' (WbOU. 439–440, uocu-com)[27]

11.2. Etymologically the Umbrian form has been connected with the root P. 1131 *u̯iḱ-:

RV. víś-　　　　　　　(f.) 'Haus, Familie, Stamm, Geschlecht' (WbRV. 1295)

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25 Adams (DTochB. 284) does not maintain the distinction between the roots TochB. √tās- 'place, set' and TochB. √tas- 'equal' (in TochB. tasemane [pr.pt.M] and TochB. tasaitär [3sg], DTochB. 284). Given the existence of Greek etymologies for both, this is hardly correct.
26 For LinB. hem- (pron.m.) 'one' (GEW 3: 83, DMycGr. 392, e-me [sgD]).
27 For the problems of the Umbrian form, cf. Untermann (WbOU. 439–440).

gAv. vīs-	(f.) 'Herrenhaus, -burg, adeliger Hof' (AIWb. 1455 ff.)
OPers. viþ-	(f.) 'house, royal house, royal clan, court' (OldP. 208)
Gr. οἶκο-	(m.) 'Haus (und Hof), Heimat' (GEW 2: 360-1, οἶκος)
LinB. woiko-	(m.) 'Haus' (GEW 2: 361, LinB. wo-i-ko)
Lat. uīco-	(m.) 'Dorf, Häusergruppe, Stadtviertel' (WH 2: 782)

While the semantics is plausible, the required loss of semi-vowel *i̯ in Umbrian violates the sound laws.

11.3. An alternative etymology with fully acceptable semantics and morphology is provided by the following comparison involving Iranian, Albanian, Greek and Italic:

Pahl. vas·puhr-	(sb.) 'lawful heir within the clan' (MPahl. 205)
Umbr. uoco-	(sb.) 'aedes' (WbOU. 439, uocu-com)
LinB. woko-	(m.) 'Haus' (Schmitt-Brandt 1967: 27, wo-ke)
Alb. vathë	(f.) 'Gehege, Hof, Hürde, Schafstall' (AlbEtD. 496)[28]

11.4. In other words, we may reconstruct two separate roots, Neogr. √u̯i̯ḱ- (RV. viś-) and Neogr. √u̯oḱ- (Umbr. uoc-) with very similar meanings.[29]

12. ModPers. nān 'Brot'

12.1. ModPers. nān 'bread', a word now in global circulation, has lost a middle velar. This is indicated by historical Iranian data:

Baluch. naɣan	(sb.) 'Brot' (KEWA 2: 126)
Sogd. nɣn	(sb.) 'Brot' (KEWA 2: 126)

12.2. As possible Old-Indo-Aryan cognates, Mayrhofer mentions:

YV. nagnáhu-	(m.) 'Gärungstoff, Hefe' (EWA 2: 6)
OInd. nagnahū-	(m.) 'Gärungstoff, Hefe' (KEWA 2: 126)

These forms, if accepted as cognates (which may very well be correct), would shed important light on the basic semantics of the root (otherwise strictly restricted to 'bread').

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28 Orel (AlbEtD. 496), translating 'sheepfold, pen', reconstructs PAlb. *wartā, comparing TochB. wärto [sic!] 'garden, forest' and OEng. weorð 'yard'. Though the loss of the tremulant would be within the realm of possibilities, Alb. th reflects *ḱ according to the sound laws. Therefore, I have compared Albanian with the above forms instead.

29 It is of interest that Linear B has preserved both LinB. wo-ke [KN L 698] and LinB. wo-i-ko-de [KN As 1519], if the interpretation in Schmitt-Brandt (1967: 27, with literature) is correct.

12.3. The Indo-European etymology is two-fold:

(a) Though not mentioned by Mayrhofer (KEWA 2: 126, EWA 2: 6), an Armenian parallel was presented long ago by Hübschmann:

 Arm. nkan   (sb.) 'Brot' (unter der Asche gebacken) (ArmGr. 1: 204)
 Arm. nkan·ak-   (sb.) 'Brot' (unter der Asche gebacken) (ArmGr. 1: 204)

(b) Furthermore, the following words are available for comparison in Baltic:

 Li. laũ·naga-   (m.) 'Vesper·brot, Nacht·essen' (LiEtWb. 346)
 Latv. lau·nag-   (m.) 'Mittags(mahl)zeit, Vesperbrot' (LiEtWb. 346)[30]

12.4. As to the reconstruction of the proto-root, one should note the following:

(a) Hübschmann (ArmGr. 1: 204) correctly points out that the loss of root vowel in Armenian points to PArm. *nakan (since his *i-root is excluded by comparison).

(b) The correspondence set consists only of Satəm languages, leaving the root-final velar ambiguous. Therefore, we are left with Neogr. *nag$^{(u̯)}$.

(c) A laryngealist reconstruction yields an interesting problem: LT *neḫg$^{(u̯)}$ should have yielded Neogr. *nāg$^{(u̯)}$. LT *n̥ḫeg$^{(u̯)}$ should have resulted in different outcomes than those attested by the syllabification of the initial nasal. Finally, LT *n̥ḫg$^{(u̯)}$ is excluded by the Iranian root vocalism. Currently, there is no acceptable explanation for this discrepancy.[31]

13. Gr. ἐγέλα 'bridle, bit'

13.1. The Hesychios-gloss

 Gr. ἐγέλα   (n.pl.) = χαλινοί 'bridle, bit' (LSJ. 469)

is isolated in Greek.

13.2. Though no internal or external cognates are known,[32] an etymology that readily suggests itself can be inferred through an intermediary step. In Greek a prefix ἐ (also known as 'prothetic vowel') often appears alongside the prefixless basic form (e.g. in Gr. ἐ·θέλω = θέλω, see Schwyzer (GrGr. 1: 411–413) for more examples).[33]

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30 For Li. laũ- 'Vesper, Nacht' and Latv. lau- 'Mittag', see 8.

31 Cf. Nyman's (1985) extremely relevant observations on the class of roots with Neogr. *a.

32 Frisk (GEW) and Chantraine (DELG) do not mention the form at all.

33 A similar prefix is found in Armenian, where, for instance, the stem Arm. k- (ao.) 'kommen' (ArmGr. 1: 441, eki [1sg]) does not have a prefix. However, in the *i-extension, the prefix is added in Arm. ek (sb.) 'Ankunft' (*i-stem ArmGr. 1: 441) and Arm. ek (sb.) 'one that has arrived at' (*ia-stem ArmGr. 1:441). Naturally, such alternations do not have anything to do with root-initial laryngeals.

13.3. By cutting the prefix ἐ·, a root √γελ- is obtained, which in turn can be readily compared to the following forms:

    OEng. cel-   (sb.) 'a basket' (ASaxD. 150, cel, celas [pl])
    AV. jā̆la-   (n.) 'Netz, Kampfnetz, Fanggarn' (EWA 1: 588)

13.4. If Li. galtinis 'maschenform zum flechten der netze' exists,[34] this would point to a plain velar (PIE *g) instead of a palatal. Given the weakness of the Baltic data and possible alternative starting points for Li. g-, I remain doubtful about this.

14. Ḫi. nana- 'treiben, ziehen, fahren'

14.1. In Hittite there is a well-documented stem:

    Ḫi. nana-   (vb2.) 'treiben, ziehen, fahren' (HEG 2: 272)[35]

14.2. As to its etymology, Sturtevant (CGr² 117–118) correctly analyses it as a reduplication of the simplex

    Ḫi. na-   (vb2.) 'wenden, lenken, leiten, richten, schicken'[36]
but no clear cognates have been pointed out for Ḫi. nana- itself.

14.3. A very close cognate to the Anatolian reduplication is preserved in Greek:

    Gr. ἀπο·νένο-   (vb.) ἀπο·νένεται · ἀπο·στρέφεται (LSJ. 210)
Since the meaning of the verb στρέφεται 'wenden, drehen' exactly matches the Hittite, it is possible to reconstruct an *e-reduplication PIE *nen^e/$_o$- as the precedent of the Greek stem. The sole difference between this and Hittite appears to be the quality of the reduplicating vowel (Ḫi. nana- < PIE *nono-).

14.4. Regarding the simple root Ḫi. na- (PIE *no- or *nō-), it is possible to connect this directly to the form

    OInd. na-   (m.) 'gift, welfare' (MonWil. 523, Lex. naḥ [sgN])
if an original meaning 'Geschenk' is assumed (cf. Ḫi. na- 'schicken').

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34 Fortunatov (1881: 217) quotes the Lithuanian form with the reference "angeführt bei Geitler Lit. studien 83", where such a form appears.

35 Among the attestations, one finds, for example, Ḫi. na-an-na-aḫ-ḫi [1sg] and Ḫi. n]a-an-na-i [3sg] 1 UDU ap-pa-an-[zi].

36 The stem Ḫi. na- (usually quoted as Ḫi. nai-) appears, for example, in Ḫi. na-i, na-a-i [3sg], and Ḫi. na-a-ú [ipv.], cf. HEG 2: 253–257.

15. Conclusions

15.1. As some readers may already have noticed, the words discussed in this paper have been specially chosen for to their initials which, taken together, form the sequence k·l·a·u·s·k·a·r·t·t·u·n·e·n. The 'table of contents' reflects not only my modest intentions on the occasion of the 60th birthday of Klaus Karttunen.

From the Indo-European point of view, I would like to highlight the fact that there are hundreds, if not thousands, of unaccounted correspondences even today. This does not apply only to the new material (such as Anatolian and Tocharian), but to the traditional material as well.

15.2. The traditional etymology, including (Walde's and) Pokorny's *Indogermanisches etymologisches Wörterbuch* built on the Neogrammarian basis, as well as the more recent contributions by the laryngeal theory, are more or less affected by the following defects:

(a) The etymology has been partly outdated by the appearance of newly discovered material (Anatolian, Tocharian, etc.), as well as the updated descriptions of the traditional branches (now that etymological dictionaries have become available). Not all the roots are attested in these sources as such; to the contrary, there are unaccounted ones requiring identification.

(b) The etymology was never completed: in addition to material that was never accounted for, numerous items have been given false etymologies with loose semantics (and other improper methodologies), despite the existence of comparative ones. As a result, far fewer roots have been booked than are actually available.

(c) The sound laws have not been exploited with full precision: "metathesis", "analogy" and other "irregular developments" are commonplace. Re-evaluating these early shortcuts with genuine comparison, it turns out that they can often be replaced by regular correspondences.

(d) The "laryngeal problem" involving Ḫi. ḫ and the question of the vocalisms of the cognates have not been satisfactory solved. As a consequence, the laryngeal theories have failed to deliver an unambiguous reconstructive platform, which has contributed to an increasingly chaotic situation in Indo-European studies.

15.3. On the bright side, I would like to mention the following:

(a) Due to the gaps, there exist for those mastering the wide spectrum of Indo-European languages considerable possibilities for the basic comparison and reconstruction of the Indo-European material.

(b) Despite certain defects in the dictionaries at our disposal, they can be used together as a common platform and a basis on which an improved etymological presentation can be safely built through the harmonization of results in a coordinated effort.

(c) Finally, I am optimistic regarding our opportunity to solve certain persistent problems, especially the one involving the laryngeals and the vocalism of the daughter languages, in a scientifically acceptable manner.

ABBREVIATIONS

a.	adjective	DMycGr.	Ventris & Chadwick 1956
A	accusative	dn.	denominative
A.	active	Do.	Dorian (Greek)
AIWb.	Bartholomae 1904	DPal.	Carruba 1970
Alb.	Albanian	DTochB.	Adams 1999
AlbEtWb.	Orel 1998	du.	dual
ANEtWb.	Vries 1961	EWA	Mayrhofer 1986–2000
ao.	aorist	f.	feminine
APrS.	Trautmann 1910	gAv.	Gathā-Avesta
Arm.	Armenian	Geg.	Geg (Albanian)
ArmGr.	Hübschmann 1897	GEW	Frisk 1960-1972
ASaxD.	Bosworth & Toller 1882–1898	Go.	Gothic
Att.	Attic (Greek)	GoEtD.	Lehmann 1986
AV.	Atharva-Veda	Gr.	Greek
Baluch.	Baluchi	GrGr.	Schwyzer 1939
Beitr.	Persson 1912	HEG	Tischler 1977
c.	genus communis	Hes.	Hesychius
CGr²	Sturtevant 1951	HHand.	Tischler 2001
CHLu.	Hawkins 2000	Ḫi.	Hittite
CLu.	Cuneiform Luwian	HLu.	Hieroglyphic Luwian
conj	conjunctive	IdgGr.	Mayrhofer 1986
Cret.	Cretan (Greek)	IE	Indo-European
cs.	causative	inf.	infinitive
Cyren.	Cyrenean (Greek)	ipv.	imperative
D	dative	KEWA	Mayrhofer 1956–1980
DELG	Chantraine 1968–1980	Lat.	Latin
DLL	Laroche 1959	Latv.	Latvian

LAv.	Late(r) Avestan	OPers.	Old Persian
LEIA	Vendryes, Bachellery & Lambert 1959–	OPr.	Old Prussian
		P.	Pokorny 1959
LeTokh.	Windekens 1976	Pahl.	Pahlavi
Lex.	Lexical form	Pal.	Palaic
Li.	Lithuanian	pers.	person
LiEtWb.	Fraenkel 1962–1965	pf.	perfect
LinB.	Linear B (Old Mycenean)	PGr.	Proto-Greek
LSJ.	Liddel & Scott 1940	PIE	Proto-Indo-European
LT	Laryngeal Theory	PIIr	Proto-Indo-Iranian
Lyd.	Lydian	pl	plural
LydWb.	Gusmani 1964	Poucha	Poucha 1955
m.	masculine	pr.	presens
M.	medium	pret.	preterite
MA.	Mallory & Adams 1997	pron.	pronoun
MidIr.	Middle Irish	pt.	participle
ModPers.	Modern Persian	RV.	Rig-Veda
MonWil.	Monier-Williams 1993	Sadnik	Sadnik 1955
MPahl.	Nyberg 1974	sb.	substantive
MycGrV.	Chadwick & Baumbach 1963	sg	singular
n.	neuter	Sogd.	Sogdian
N	nominative	Ther.	Theran (Greek)
Neogr.	Neogrammarian	Thess.	Thessalian (Greek)
num.	numeral	TochA.	Tocharian A
OCS.	Old Church Slavonic	TochB.	Tocharian B
OEng.	Old English	Tosk.	Tosk (Albanian)
OGH.	del Monte & Tischler 1978	Tu.	Turner 1966
OGHErg.	del Monte 1992	Umbr.	Umbrian
OHG.	Old High German	vb.	verb
OIcl.	Old Icelandic (a.k.a. Old Norse)	VGK.	Pedersen 1909-1913
OInd.	Sanskrit	WbOU.	Untermann 2000
OIr.	Old Irish	WbRV.	Grassmann 1996
OLat.	Old Latin	WH.	Walde & Hoffmann 1938
OldP.	Kent 1953	YV.	Yajur-Veda

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