FURTHER EVIDENCE FOR PIE *d > *h_1?
(PIE 'MOUTH', 'TO MILL, GRIND', & 'TO SIT')

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In this talk, I propose to consider whether PIE *d > *ʔ (= *h_1) can be observed 1. in PIE *h_1oh_1-*s*- 'mouth' (MATASOVIĆ 2000: 39, pace *h_3oh_1-*s*- in NIL 387; cf. Hitt. *aiš*, CLuw. *āaš*) (> Skt. *ás*-, Av. *āh*-, L *ōs*, etc.) supposing it is to be compared with PIE *h_1ed- 'eat' (> Skt. *átti*, G ἔδμεναι, L *edō*, etc.) (LIV² 230), 2. in PIE *$melh_1$- 'grind' (BEEKES 2010: 979, pace *$melh_2$- in LIV² 432; cf. Myc. *me-re-ti-ri-ja* 'woman grinder' < PIE *$melh_1$-*tr*-*ih*$_2$-, Myc. *me-re-u-ro* 'flour, wheat-meal' < PIE *$melh_1$-*ur*-*o*-) (> L *molō*, OCS *mlěti*, *mljǫ* etc.) supposing it is to be compared with PIE *meld- 'soft' (:: *mld- ⇒ *mld-u- > Skt. *mṛdú*-, G †βλαδύς, L *mollis*, etc.) (NIL 482); and 3. in PIE *h_1eh_1s- 'sit' (LIV² 232) (> Skt. *áste*, G ἧσται, etc.) supposing it is to be compared with PIE *sed- 'sit' (⇒ *si-sd- > Skt. *sī́dati*, G ἵζω, L *sīdō*, etc.) (LIV² 513) and factoring in some additional assumptions.

Key Words: Proto-Indo-European, Etymology, Glottalic Theory.

1. INTRODUCTION

Ever since it has been established that PIE *dC under specific conditions yields PIE *ʔC (= *h_1C), it has been possible to recover cognates which otherwise wouldn't be deemed comparable with their respective Proto-Indo-European etyma; cf. e.g. PIE *du- 'two', *deḱm 'ten' and *ʔ*u-i*+ʔ*ḱm-t-i-(h$_1$)* 'twenty' (> Av. *vīsaiti*, G ep. ἐεἰκοσι, etc.) (KORTLANDT 1983: 97) (= 2010: 100).

PIE *dC develops into PIE *ʔC: 1. where *C is PIE *$ḱ$, cf. Skt. *dāśvā́ṃs*- 'devout, pious' < PIE pt pf act *de-dḱ-u̯os- (KLINGENSCHMITT 1982: 129), G τριᾰ́κοντα (Ion. τριήκοντα) 'thirty' < PIE num card *tri-h$_2$+dḱom-t-h$_2$, G πεντήκοντα 'fifty' < PIE num card *penkᵘe+dḱom-t-h$_2$, G ἑκατόν 'hundred' < PIE num card *dḱm-t-om (KORTLANDT 1983: 97) (= 2010: 105); 2. where *C is PIE *u (i.e. *u̯) and the following syllable starts with a dental, cf. G εἴκοσι 'twenty' (ep. ἐεἰκοσι /ἐ(ϝ)ίκοσι/, Dor. Boeot. ϝῑ́κατι) < PIE num card *du-i+dḱm-t-i-(h$_1$) (KORTLANDT 1983: 97) (= 2010: 100), Skt. *ávidhat* (scanned long, *āvidhat*) < PIE 3sg ind aor act *h$_1$e-dui+dʰh$_1$-e-t-ø (LUBOTSKY 1994), OCS *vĭtorŭ* 'second(ary)' < PIE nom msg *dui-tor-o-s (DERKSEN 2008: 532), Skt. adv *vitarám* 'further', Av. adv *vītarəm* 'further' < PIE acc nsg *dui-ter-o-m, OPhr. *vitaran* 'second' (?) < PIE acc fsg *dui-ter-eh$_2$-m; 3. where *C is PIE *r, cf. CLuw. *u̯a-a-ar* 'water', Skt. *vār*- id. < PIE *uod-r- (LUBOTSKY 2013).

Also, PIE *dC develops into PIE *ʔC where *C is an obstruent (most likely PIE *t) in a number or verbal roots which appear to show the *…*d*- ~ *…*h$_1$*- variation, cf. PIE *h$_2$ed- (Hitt. *ḫāt-ⁱ* / *ḫat* 'dry up, become parched', G ἄζω 'dry up') (LIV² 255) ~ PIE *h$_2$eh$_1$- (Pal. *ḫāri*, *ḫānta* 'be hot', Av. *āt(ə)r*- 'fire') (LIV² 257); PIE *med- (OIr. *midithir* 'to measure; judge', YAv. *vī-mad*- 'healer; physician', G μέδω 'rule', Go. *mitan*, *miton* 'measure; consider', etc.) (LIV² 423) ~ PIE *meh$_1$- (Skt. *mā*- 'measure; measure out, assign', L *mētior* 'measure', etc.) (LIV² 424); PIE *(*s*)pend- (L *pendō* 'weigh; pay', Lith. *spę́sti* 'set a trap') (LIV² 578) ~ PIE *(*s*)penh$_1$- (G πένομαι 'exert oneself, toil', Lith. *pìnti* 'twist', OCS *pęti* 'stretch', Arm. *henum* 'weave', Go. *spinnan* 'spin', etc.) (LIV² 578); PIE *tend- (L *tondeō* 'cut hair, shear', G τένδω 'gnaw at') (LIV² 628) ~ PIE *temh$_1$- (G ep. τάμνω 'cut', MIr. *tamnaid* 'cut', L *temnō* 'scorn, despise') (LIV² 625). See LUBOTSKY 2013: 162f.

In this paper, I propose to consider whether, by the same token, PIE *h_1oh_1-*s*- 'mouth' is to be compared with PIE *h_1ed- 'eat', PIE *$melh_1$- 'to mill, grind' with PIE *meld- 'soft; soften', and PIE *h_1eh_1s- 'to sit' with PIE *sed- 'to sit'.

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2. PROTO-INDO-EUROPEAN 'MOUTH'

2.1 PROPOSITION

PIE **h₁oh₁-s-* (= **h₁oʔ-s-*) 'mouth' derives from PIE **h₁ed-* 'eat' (IEW 287, LIV² 230, NIL 208, 387).

2.2 MATERIAL

PIE root ***h₁d-*** 'eat' [1] [1]
:: *ø*-grade ***h₁d-*** id. [2]
⟹ *ø*-grade *s*-stem **h₁d-s-* 'mouth' (< 'eat') [3]
·· allomorph **h₁h₁-s-* id. [4]
> Hitt. *iš-* id. (e.g. in gen sg *iššāš* /*iš-ša-a-aš*/) [2] [5]
:: *o*-grade ***h₁od-*** id. [6]
⟹ *ø*-grade *s*-stem **h₁od-s-* 'mouth' (< 'eat') [7]
·· allomorph **h₁oh₁-s-* id. [8]
> PAnat. **ʔoʔ-s-* id. [9]
>> Hitt. nom sg *aiš* /*a-i-iš*/ n. (c.) id. [3] [10]
>> CLuw. nom sg *āaš* /*a-a-aš-ša*/ n. id. [3] [11]
> PIIr. **Hās-* id. [12]
> Skt. *ā́s-* n. id., 'face', abl sg *āsás* [3] [13]
> Av. *āh-* n. id., gen sg *å̄ŋhō* [4] [14]
> PICelt. **ōs-* id.[5] [15]
> PIt. **ōs-* id. (L *ōs* n. id., gen sg *ōris*) [6] [16]
> PCelt. *ās-* (OIr. poet. *á* id., gen sg *á* (in *fer há* 'man of the mouth' (='tooth')) [7] [17]
⟹ *n*-stem derivate **h₁oh₁-s-n-* id. [18]
⟹ *e*-grade *n*-stem noun **h₁oh₁-s-en-* [19]
→ loc sg **h₁oh₁-s-en-ø* 'in mouth' [20]
> Skt. *āsán* id. (in adj *āsánn-iṣu-* 'having arrows in the mouth') [4] [21]
⟹ *o*-stem derivate **pro(H)+h₁oh₁-s-n-o-* (= **pro(H)+h₁oh₁-s-n-o-*) 'facing forward' (< 'with mouth, face forward') [22]
> L adj *pronus* 'leaning forward, bending down, inclined' [8] [23]
⟹ *o*-stem noun **h₁oh₁-s-o-* 'river mouth, estuary' (< 'mouth') [24]
> PGm. **ōsa-* id. (ON *óss* m. id., Far. *ósi* m. id., Nw. *os* m. /n. id.,

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[1] IEW 287, LIV² 230, NIL 208, 387.
[2] KLOEKHORST 2008: 166.
[3] EWAia I 181.
[4] BARTHOLOMAE 1903: 345.
[5] PICelt. **ōs-* can reflect PIE **h₁oh₁-os-* as well; cf. CLuw. *āaš* above.
[6] SCHRIJVER 1991: 55, DE VAAN 2008: 436.
[7] MATASOVIĆ 2009: 44
[8] DE VAAN 2008: 489.

'hole in the ice', OE *ōr* n. 'edge', *ōra* m. id.) [9] [25]

⟹ *eh₂*-stem noun ***h₁oh₁-s-eh₂-*** 'edge' (< 'mouth') [26]

> L *ōra* f. id., 'coast' [27]

⟹ *i*-derivate ***h₁oh₁-s-i-*** id. [28]

⟹ *o*-stem noun ***h₁oh₁-s-i-o-*** [29]

> Skt. *āsya°* id., 'throat' (in adj *āsyá-daghná-* 'reaching up to the mouth') [4] [30]

⟹ *t*-derivative ***h₁oh₁-s-t-*** 'mouth; river mouth (< 'mouth')' [31]

⟹ *o*-stem noun ***h₁oh₁-s-t-o-*** (= ***h₁oh₁-s-t-o-**) id. [32]

> Lith. *úostas* m. id., 'haven', Latv. *uosts* m. id., 'haven' [10] [33]

⟹ *eh₂*-stem noun ***h₁oh₁-s-t-eh₂-***id. [34]

> Lith. *uostà* id., 'haven', Latv. *uõsta* f. id., 'haven' [11] [35]

⟹ *i*-derivate ***h₁oh₁-s-t-i-*** id. [36]

⟹ *o*-stem noun ***h₁oh₁-s-t-i-o-*** id. [37]

> L *ōstium* n. id., 'entrance' (< 'mouth') [7] [38]

⟹ *eh₂*-stem noun ***h₁oh₁-s-t-i-eh₂-*** id. [39]

> L *ōstia* f. id. [7] [40]

⟹ *us*-stem ***h₁od-us-*** 'mouth' (< 'eat') [41]

·· allomorph ***h₁oh₁-us-*** id. [42]

⟹ *t(H)*-derivate ***h₁oh₁-us-t(H)-*** 'mouth; lip' (< 'mouth') [43]

⟹ *o*-stem noun ***h₁oh₁-us-t(H)-o-*** id. [44]

> PIIr. ***Haušt^{h}a-*** 'upper lip' (< 'mouth; lip') [45]

> Skt. *óṣṭha-* m. id. [11] [46]

> YAv. *aošta-* m. id. [12] [47]

> PSl. ***usta*** 'mouth' (OCS pl *usta* n. id., Ru. pl *ustá* n. id., 'lips', Cz. pl *ústa* n. id., Slk. pl *ústa* n. id., Pl. pl. *usta* id., SCr. pl *ústa* n. id., Sln. pl *ústa* n. id., Bulg. *ustá* f. id.) [13] [48]

⟹ *i*-derivate ***h₁oh₁-us-t(H)-i-*** 'mouth; estuary' (< 'mouth') [49]

⟹ *o*-stem noun ***h₁oh₁-us-t(H)-i-o-*** id. [50]

>> PSl. ***ustĭje*** id. (Ru. *ust'e* n. id., 'mouth; orifice', Cz. *ústí* n. id., Slk. *ústie* n. id., Pl. *ujście* n. id., Sln. *ûstje* n. id., SCr. *ûšće* n. id., Blg. *ústie* n. id., 'opening') [14] [51]

⟹ *r*-derivate ***h₁oh₁-us-t(H)-r-*** 'mouth; lip' (< 'mouth') [52]

⟹ *o*-stem noun ***h₁oh₁-us-t(H)-r-o-*** 'lip' (< 'mouth; lip') [53]

> Av. *aoštra-* m. 'lower lip' (< 'lip') [13] [54]

⟹ *eh₂*-stem noun ***h₁oh₁-us-t(H)-eh₂-*** 'mouth' [55]

> OPr. *austo* id. [11] [56]

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[9] KROONEN 2013: 394.
[10] DERKSEN 2016: 481.
[11] EWAia I 282.
[12] BARTHOLOMAE 1903: 44.
[13] DERKSEN 2008: 509.
[14] DERKSEN 2008: 510.

2.3 ARGUMENT

Typically, PIE 'mouth' is reconstructed as **h₃oh₁-s-* (NIL 387); cf. Hitt. *aiš* 'mouth', CLuw. *āaš* 'mouth', Skt. *ás-* 'mouth', Av. *āh-* 'mouth', L *ōs* 'mouth', and OIr. *á* 'mouth', etc.

PIE **h₃oh₁-s-* is an ablauting *s*-stem; it ablauts in both the root and the stem.

In the root, 1. the full *o*-grade, PIE **h₃oh₁-*, is reconstructed by NIL 1a. on the basis of *a-* in Hitt. *aiš* and *ā-* (hyperplene) in CLuw. *āaš*, where the root is followed by the full grade *s*-stem, PIE **h₃oh₁-Vs-*, eventually resulting in a hiatus (which is due to PIE **Vh₁V* yielding PAnat. **V?V*, v. KLOEKHORST 2008: 71), 1b. on the basis of *ā-* in Skt. *ás-* and Av. *āh-*, where the root is followed by the zero-grade *s*-stem, PIE **h₃oh₁-s-*, eventually resulting in an acute length, and 1c. on the basis of *ō-* in L *ōs* and *á* in OIr. *á*, where the root is followed either by the zero-grade *s*-stem, PIE **h₃oh₁-s-*, eventually resulting in an acute length, or by the full grade *s*-stem, PIE **h₃oh₁-Vs-*, eventually resulting in a contracted length; 2. and, the zero-grade, PIE **h₃h₁-*, is reconstructed on the basis of Hitt. gen sg *iššaš*, where, according to RIEKEN 1999: 185ff., the root is followed by the full *e*-grade *s*-stem, PIE **h₃h₁-es-*.

In the stem, 1. the full *o*-grade, PIE **h₃oh₁-os-*, can be reconstructed on the basis of *-aš* in CLuw. *āaš*; 2. the full *e*-grade, PIE **h₃oh₁-es-* or **h₃h₁-es-*, on the basis of *-iš* in Hitt. *aiš* and *išš-* in Hitt. *iššaš*; 3. and, the *ø*-grade, PIE **h₃oh₁-s-*, on the basis of *-s-* in Skt. *ás-* and Av. *āh-*. (Lat. *ōs* and OIr. *á* may reflect either the full *o*-grade *s*-stem, PIE **h₃oh₁-os-*, or the *ø*-grade *s*-stem, PIE **h₃oh₁-s-*; the exact grade cannot be determined because, based on the data, it is unclear whether the length in Lat. *ōs* and OIr. *á* is a contracted length, as though from PIE **h₃oh₁-os-*, or an acute length, as though from PIE **h₃oh₁-s-*. (Incidentally, the length in Skt. *ás-* and Av. *āh-* must be an acute length, and not the contracted one, because one would expect Skt. *ás-* and Av. *āh-* to scan disyllabically if it truly were a contracted length— and they do not. In the Rigveda and the Avesta they scan monosyllabically; cf. e.g. Skt. abl sg *āsás* (= 2 syllables) in RV VII 99, 7 or OAv. gen sg *å̊ŋhō* (= 2 syllables) in Y 31, 3. See GRASSMANN 1873: 190 and KELLENS–PIRART 1988: 113. Therefore, Skt. *ás-* and Av. *āh-* point to PIIr. **Hās-*, not **Haas-*.))

Based on Hittite (nom sg *aiš*, gen sg *iššaš*), RIEKEN 1999: 185ff reconstructs a proterokinetic paradigm; following Rieken, NIL posits the proterokinetic paradigm for Proto-Indo-European as well (nom sg **h₃óh₁-s-ø*, gen sg **h₃h₁-és-os*).

PIE nom sg **h₃óh₁-s-ø* is reflected in L nom sg *ōs* and OIr. nom sg *á* provided these stand for PIE **h₃oh₁-s-ø*; alternatively, if they stand for **h₃oh₁-os-ø* or **h₃oh₁-es-ø*, L *ōs* and OIr. *á* coincide with CLuw. *āaš* and Hitt. *aiš* (qq.v.).

PIE gen sg **h₃h₁-és-os* is reflected in Hitt. gen sg *iššaš* provided NIL is right to reconstruct *iššaš* as **h₃h₁-és-os*.

(PIE **h₃h₁-és-os* would regularly yield Hitt. *ešaš /ésas/*. RIEKEN assumes that *ešaš /ésas/* developed into *išaš /isás/* under the influence of the */gráits*, *gritás/*-type nouns; in this scenario, the accent in */ésas/* is shifted forward leaving *e* unstressed in protonic position, where it regularly yields *i*; see KLOEKHORST 2008: 97. However, this explanation accounts only for the *i-* of Hitt. *iššaš*, not for the *-šš-*.)

PIE nom sg **h₃óh₁-s-ø* is also reflected in Anatolian and Indo-Iranian, though not exactly.

In Anatolian, it is reflected as **h₃oh₁-os-ø* and **h₃oh₁-os-ø* in CLuw. nom sg *āaš* and Hitt. nom sg *aiš*, respectively.

(In Cuneiform Luwian, the full *o*-grade was presumably introduced into the strong proterokinetic stem following other kinetic *s*-stems, such as the hysterokinetic or amphikinetic ones, which have the full instead of the zero-grade in the strong stem; on the other hand, in Hittite, the full *e*-grade must have been introduced into the strong proterokinetic stem from the weak proterokinetic stem, PIE **h₁h₁-és-*. See KLOEKHORST 2008: 167. Therefore, the full grade in both **h₃oh₁-os-ø* and **h₃oh₁-os-ø* is secondary; if so, CLuw. nom sg *āaš* and Hitt. nom sg *aiš* point to PIE nom sg **h₃oh₁-s-ø*.)

In Indo-Iranian, PIE nom sg **h₃óh₁-s-ø* is reflected as PIIr. **Hās-*; cf. Skt. *ās-* and Av. *āh-*.

(In both Sanskrit and Avestan, the Proto-Indo-European nominative singular was remade into a presumably non-ablauting stem, PIIr. **Hās-*, which is recorded in the weak stem cases only, viz. genitive / ablative singular (Skt. abl *āsás*, OAv. gen *å̊ŋhō*) and instrumental singular (Skt. *āsā́*, OAv. *ə̊å̊ŋhā* (*Lentoform*), YAv. *å̊ŋha*).)

The strong proterokinetic stem, PIE **h₃óh₁-s-*, is also reconstructed by NIL in a number of derivates; cf. e.g. PIE **h₃oh₁-s-en-* (Skt. *āsán* 'in the mouth'), PIE **pro*(*H*)*+h₃oh₁-s-n-o-* (L *pronus* 'leaning forward, bending down, inclined'), PIE **h₃oh₁-s-eh₂-* (L *ōra* 'coast'), PIE **h₃oh₁-s-i-o-* (Skt. *āsya°* 'mouth; throat'), PIE **h₃oh₁-s-t-o-* (Lith. *úostas* 'river mouth; haven', Latv. *uosts* 'river mouth; haven'), PIE **h₃oh₁-s-t-eh₂-* (Lith. *uostà* 'river mouth; haven', Latv. *uõsta* 'river mouth; haven'), PIE **h₃oh₁-s-t-i-o-* (L *ōstium* 'entrance'), PIE **h₃oh₁-s-t-i-eh₂-* (L *ōstia* 'river mouth'), etc.

However, PIE **h₃oh₁-s-* can ceteris paribus be reconstructed as **h₁eh₃-s-* or **h₁oh₁-s-* as well; thus e.g. ZUCHA 1988: 135 and MATASOVIĆ 2000: 39, 2009: 44, respectively.

(PIE **h₁eh₃-s-* is also reconstructed by e.g. KLOEKHORST 2008: 166 or KROONEN 2013: 394, who in fact reconstructs **h₁/₃eh₁/₃-s-*.)

Hitt. *aiš* and CLuw. *āaš* point to PAnat. **ʔoʔ-s-*, Skt. *ās-* and Av. *āh-* to PIIr. **Hās-*, and, L *ōs* and OIr. *á* to PICelt. **ōs-*.

PIIr. **Hās-* and PICelt. **ōs-* point to non-Anat. IE **Hōs-*.

Due to laryngeal colouring, PIE **h₁eh₃-s-* develops into **h₁oh₃-s-*; thus, the choice between PIE **h₃oh₁-s-*, PIE **h₁eh₃-s-*, and PIE **h₁oh₁-s-* effectively becomes the choice between PIE **h₃oh₁-s-*, PIE **h₁oh₃-s-*, and PIE **h₁oh₁-s-*.

In Proto-Anatolian, PIE **h₃oh₁-s-*, PIE **h₁oh₃-s-*, and PIE **h₁oh₁-s-* all merge into **ʔoʔ-s-* since both PIE **h₁o-* and PIE **h₃o-* develop into PAnat. **ʔo-* and PIE **-h₁s-* and PIE **-h₃s-* develop into PAnat. **ʔs-*; see KLOEKHORST 2008: 75, 78.

In non-Anatolian Indo-European, PIE **h₃oh₁-s-*, PIE **h₁oh₃-s-*, and PIE **h₁oh₁-s-* all merge into **Hō-s-* since both PIE **h₁o-* and PIE **h₃o-* develop into non-Anat. IE **Ho-* and PIE **-oh₁s-* and PIE **-oh₃s-* develop into non-Anat. IE **-ōs-*.

Therefore, PAnat. **ʔoʔ-s-* and non-Anat. IE **Hōs-* can point to PIE **h₃oh₁-s-*, PIE **h₁eh₃-s-* (**h₁oh₃-s-*), or PIE **h₁oh₁-s-*.

(Some authors reconstruct PIE **h₃eh₁-s-* as well, e.g. SCHRIJVER 1991: 55, RIEKEN 1999: 185, DE VAAN 2008: 489, and KROONEN 2013: 394 (who in fact reconstructs **h₁/₃eh₁/₃-s-*). This, however, is an incorrect reconstruction because PIE **h₃e-* develops into PAnat. **Ho-* (> Hitt. *ḫa-*, CLuw. *ḫa-*) (MELCHERT 1987, KLOEKHORST 2006: 85–96, 2008: 75.); cf. e.g. PIE **h₃eu̯-i-* 'sheep' > Hitt. *ḫāui-* id., CLuw. *ḫāui-* id.)

Based on the data, it is impossible to determine which reconstruction is the correct one: PIE **h₃oh₁-s-*, PIE **h₁eh₃-s-* (**h₁oh₃-s-*), or PIE **h₁oh₁-s-*.

However, if we interpret **h₁oh₁-s-* as **h₁oʔ-s-* and assume that **h₁oʔ-s-* is the correct reconstruction for PIE 'mouth', then it becomes possible to derive PIE **h₁oʔ-s-* from PIE **h₁od-s-*, where, attractively, **h₁od-* seems to be the *o*-grade of the PIE root **h₁ed-* 'to eat' (> Skt. *átti* id., G ἔδμεναι id., L *edō* id., Go. *itan* id., Lith. *ésti* 'feed', OCS *jasti* id., etc.) (IEW 287, LIV² 230).

Compare PIE **h₂eu-* 'to see; to hear' (Hitt. *au-ⁱ*, L *audio*, etc.) and PIE **h₂ou-s-* 'ear' (G οὖς, L *auris*, OCS *uxo*, etc.) (SZEMERÉNYI 1960: 242) or PIE **h₃ek̑u̯-* 'to look' (Skt. *íkṣate*, G ὄσσομαι, etc.) and PIE **h₃ok̑u̯-s-* 'eye' (Skt. *akṣ-*) (LIV² 297, NIL 370).

PIE **h₁od-s-* yields PIE **h₁oʔ-s-* by **dC* developing into **ʔC* (= **h₁C*); see sec. 1 above.

2.4 CONCLUSION

PIE **h₁oh₁-s-* (= **h₁oʔ-s-*) 'mouth' can regularly be derived from PIE **h₁ed-* 'to eat'.

PIE **h₁ed-* [1] ablauts into either the zero-grade, PIE **h₁d-* [2], or the full *o*-grade, PIE **h₁od-* [6], and thence forms an *s*-stem, PIE **h₁d-s-* [3] / **h₁od-s-* [7], where, before the zero-grade stem, PIE **h₁d-s-* / **h₁od-s-* allomorphs into PIE **h₁ʔ-s-* (= **h₁h₁-s-*) [4] / **h₁oʔ-s-* (= **h₁oh₁-s-*) [8], which is reflected regularly as PAnat. **ʔʔ-s-* [5] / **ʔoʔ-s-* [9–11], PIIr. — / *Hās-* [12–14], and PICelt. — / **ōs-* [15–17]; the full *o*-grade allomorph, PIE **h₁oʔ-s-* (= **h₁oh₁-s-*), is also reflected

in its various derivates in Indic [18–21, 28–30], Latin [22–23, 26–27, 31, 36-40], Proto-Germanic [24–25], and Baltic [31–35].

Based on the data, it seems unnecessary to reconstruct a full grade *s*-stem in Proto-Indo-European.

Even though PAnat. **ʔoʔ-s-* is reflected as **ʔoʔ-es-* in Hitt. *aiš* and as **ʔoʔ-os-* in CLuw. *āaš*, these forms, **ʔoʔ-es-* and **ʔoʔ-os-*, are secondary to PAnat. **ʔoʔ-s-*; see sec. 2. Therefore, they do not warrant the reconstruction of a full grade *s*-stem in Proto-Indo-European; cf. e.g. Hitt. *nēpiš-* and CLuw. *tappaš-* next to PIE **nebʰ-s-* 'heaven'. Likewise, the reconstruction of a full grade cannot be justified by PICelt. **ōs-* either, because it is simpler to derive it from the zero-grade, PIE **h₁oʔ-s-* (= **h₁oh₁-s-*); cf. PIIr. **Hās-*. Finally, the zero-grade *s*-stem must be reconstructed on the basis of *šš* in Hitt. gen sg *iššaš* as well because the geminate can only be explained as arising from the cluster **-h₁s-*; cf. Hitt. *āššu-* from PIE **h₁o-h₁s-u-* (KLOEKHORST 2008: 223). (The *i-* in Hitt. *išš-* is a prothesis.)

The exact paradigm, static or kinetic, is difficult to reconstruct because the data is conflicted: the supposed strong stem, PIE **h₁od-s-*, is suggestive of a static noun and the supposed weak stem, PIE **h₁d-s-*, of a kinetic noun (hysterokinetic or amphikinetic).

The structure of the strong stem, PIE **CoC-s-*, is conspicuous, though; it reappears in other *s*-stem neuters which designate body parts, such as PIE **h₂ou-s-* 'ear' or PIE **h₃okʷ-s-* 'eye'.

2.5 MISCELLANEOUS

From PIE **h₁ed-* 'eat' may further derive:

1. PIE **h₁oh₁-us-* (= **h₁oʔ-us-*) 'mouth' [41–56], an old participle (?), which is attested only in various derivates (NIL 390) in Indo-Iranian [43–47, 52–54] and Balto-Slavic [43, 48–51, 55–56], and;

2. G ἦτορ 'heart', supposing it is to be reconstructed as **h₁eʔ-tr-ø* 'stomach' rather than **h₁eʔtr-ø* 'innards' (ON *æðr* 'vein', OHG *ād(a)ra*, MHG *ader* 'vein') (BEEKES 2010: 527); cf. e.g. OFr. *cauldun* 'stomach' > W Co. *calon* 'heart' (BUCK 1949: 249).

3. PROTO-INDO-EUROPEAN 'MILL, GRIND'

3.1 PROPOSITION

PIE ***melh₁-*** (= **mel?-*) 'to mill, grind' derives from PIE **meld-* 'to soften; soft' (IEW 718, LIV² 431, NIL 482).

3.2 MATERIAL

PIE root ***mld-*** 'to mill, grind; to soften; soft' [1] [1]

:: zero-grade ***mld-*** id. [2]

·· allomorph **mlh₁-* 'to mill, grind' [3]

> Arm. *malem* id., 'to crush, break' [2] [4]

> PCelt. **mal-* id. (W *malu* id., MW *malaf* id., 'to whet; to crush', MBret. *malaff* id., Bret. *malañ* id.) [3] [5]

⟹ *t*-participle **mlh₁-t-* 'ground' [6]

> PCelt. **mlāt-* 'ground' (OIr. *mláith* 'soft, tender' (< 'ground'), MW *blawd* 'flour' (< 'ground'), OBret. *blot*, MoBret. *bleud* 'flour' (< 'ground'), Co. *blot* 'flour' (< 'ground')) [4] [7]

>> Umb. **maletu** id. (attribute to salt) [5] [8]

:: full *e*-grade ***meld-*** id. [9]

·· allomorph **melh₁-* 'to mill, grind' [10]

> PICelt. **mel-* id. [11]

> PIt. **mel-* id. (L *molō* id.) [6] [12]

> PCelt. **mel-* id. (OIr. *meilid* id., 'to crush' (< 'to grind')) [3] [13]

> PBSl. **mel?-* id. [14]

> PSl. **mèlti* id., (OCS *mlěti*, 1sg *meljǫ* id., Ru. *molóť*, 3sg *méljet* id., Cz. *mlíti* id., Slk. *mlieť* id., Pl. *mleć*, 1sg *mielę* id., SCr. *mljèti*, 1sg *mèljem* id. , Sln. *mlẹ́ti*, 1sg *mẹ́ljem* id., Blg. *melja* id.) [7] [15]

⟹ *tr*-agent noun **melh₁-tr-* 'grinder' (< 'to mill, grind') [16]

⟹ *ih₂*-feminine **melh₁-tr-ih₂-* 'woman grinder' [17]

> Myc. nom fpl *me-re-ti-ri-ja* /*meletriai*/ id. [8] [18]

⟹ *m*-stem adjective **melh₁-m-* 'soft, gentle' (< 'to mill, grind') [19]

> Arm. *mełm* id. [9] [20]

⟹ *u*-stem **melh₁-u-* 'meal, flour' (< 'to mill, grind') [21]

⟹ *o*-stem **melh₁-u-o-* id. [22]

> PGm. **melwa-* id. (ON *mjǫl* n. id., Far. *mjøl* n. id., Eldf. *myōl* n. id.,

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[1] IEW 716, LIV² 432.
[2] MARTIROSYAN 2010: 443.
[3] SCHRIJVER 1991: 103, 216, MATASOVIĆ 2009: 255, ZAIR 2012: 169.
[4] MATASOVIĆ 2009: 273, ZAIR 2012: 97.
[5] UNTERMANN 2010: 444, DE VAAN 2008: 386.
[6] WATKINS 1965: 185, SCHRIJVER 1991: 103, 216, DE VAAN 2008: 386.
[7] DERKSEN 2008: 307.
[8] BEEKES 2010: 897, 979.
[9] MARTIROSYAN 2010: 461.

OE *melu* n. id., E *meal* id., OFri. *mele* n. id., OS *melo* n. id., Du. *meel* n. id., OHG *melo* n. id., Germ. *Mehl* n. id.) [10] [23]

:: *e*-grade *u*-stem **melh₁-eu-* 'flour' (< 'to mill, grind') [24]

⟹ *r*/*n*-stem **melh₁-eu-r-* id. [25]

⟹ *o*-stem **melh₁-eu-r-o-* id. [26]

> Myc. *me-re-u-ro* /*meleuron*/ id. [11] [27]

:: full *o*-grade ****mold-*** id. [28]

·· allomorph **molh₁-* 'to mill, grind' [29]

> Hitt. 3sg *ma-al-la-i* /*malla-ⁱ*/ id. [12] [30]

⟹ them present stem **molh₁-e-* id. [31]

> PGerm. **malan* id. (Go. *malan* id., ON *mala* id., Far. *mala* id., Elfd. *målå* id., OS *malan* id., Du. *malen* id., OHG *malan* id., Germ. *mahlen* id.) [13] [32]

> PBSl. **molʔ-* id. (Lith. *málti* id., 'mill' (< 'grind'), Latv. *malt̃* id., 'mill' (< 'grind')) [14] [33]

⟹ *eh₂*-stem **molh₁-eh₂-* 'mill' (< 'grind') [34]

> G μύλη f. 'mill; millstone' (< 'mill') [8] [35]

> L *mola* f. 'millstone' [6] [36]

:: long *e*-grade ****mēld-*** id. [37]

·· allomorph **mēlh₁-* 'to mill, grind' [38]

⟹ *i*-stem **mēlh₁-i-* id. [39]

> PBSl (*s*-)*mēlʔ-i-* 'sand; powder' (< 'to grind') [40]

> PSl. **mělĭ* f. id. (Ru. *mel'* f. 'sand bank, shoal' (< 'sand'), OCz. *měl* m. / f. 'sand bank shoal; pebble; powder, dust' (< 'sand; powder'), OPl. *miel* f. 'sand bank' (< 'sand')) [15] [41]

> Lith. *smẽlis* 'sand', Latv. *smēlis* 'sand' [16] [42]

⟹ PSl. *io*-stem **mę̌lŭ* f. id. (Čak. *mêlj* 'fine sand' (< 'sand'), Sln. *mẹ̑lj* 'sand bank' < 'sand') [15] [43]

⟹ *o*-stem **mēlh₁-o-* id. [44]

> PBSl (*s*-)*mēlʔ-o-* 'sand; powder' (< 'grind') [45]

> PSl. **melŭ* id. (OCS gen msg *měla* 'lime' (< 'powder'), Ru. *mel* 'chalk' (< 'powder')) [15] [46]

3.3 ARGUMENT

PIE 'to mill, grind' is typically reconstructed as **melh₂-* (LIV² 432); cf. Hitt. *malla-ⁱ*, L *molō* id., OIr. *meilid* id., PGm. **malan*, PSl. *mèlti* itd., etc.

PIE **melh₂-* is an ablauting root attested in the zero-grade, the full *e*-grade, the full *o*-grade and long *e*-grade.

The zero-grade, PIE **mlh₂-*, can be reconstructed on the basis of *al* in Arm. *malem*, PIt. **mal-* (> Umb. **maletu**), and PCelt. **mal-* (e.g. > W *malu*), where *al* is the regular reflex of PIE **lh₂V*.

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[10] KROONEN 2013: 365.
[11] BEEKES 2010: 897.
[12] KLOEKHORST 2008: 547.
[13] KROONEN 2013: 351.
[14] DERKSEN 2015: 302.
[15] DERKSEN 2008: 310.
[16] DERKSEN 2015: 414.

The full *e*-grade, PIE *$melh_2$-, can be reconstructed on the basis of *e* in Myc. pl *me-re-ti-ri-ja* /*meletriai*/and Myc. *me-re-u-ro* /*meleuron*/, PIt. *mel- (> L *molō*, with the regular rounding of *e* in front of velar *l*), PCelt. *mel- (> OIr. *meilid*), PSl. *mèlti (> e.g. OCS *mlěti*), and PGm. *melwa- (e.g. > OE *melu*), where *e* is the regular reflex of PIE **e*.

The full *o*-grade, PIE *$molh_2$-, can be reconstructed 1. on the basis of *o* in L *mola*, where *o* is the regular reflex of PIE **o*; 2. on the basis of υ in G μύλη, where υ is the conditioned reflex of PIE **o* (= Cowgill's Law); and, 3. on the basis of *a* in Hitt. *malla-^{i}* and PGerm. **malan* (e.g. > Go. *malan*) and Lith. *málti*, where *a* is the regular reflex of PIE **o*.

The long *e*-grade, PIE *$mēlh_2$-, can be reconstructed 1. on the basis of *ė* in Lith. *smẽlis,* where *ė* is the regular reflex of PIE **ē*; and, 2. on the basis *ě* in PSl. *měl- (e.g. > OCS gen sg *měla*), where *ě* is the regular reflex of PIE **ē*.

The reconstruction of the laryngeal is, however, conflicted; it can be identified as *h_2 on the basis of *ḫ* in CLuw. 3sg praet *ma-a-la-ḫu-u-ta* /*mālḫūta*/ (MELCHERT 1988: 216) but as *h_1 on the basis of *e* in Myc. *me-re-ti-ri-ja* /*meletriai*/and *me-re-u-ro* /*meleuron*/(BEEKES 2008: 897, 979).

In Mycenaean, we find nom fpl /*meletriai*/ spelled as *me-re-ti-ri-ja* on PY Aa 01 and as *me-re-ti-ra_2* on PY 789; see VENTRIS—CHADWICK 1973^2: 399. Both forms point to /*meletriai*/; see BARTOŇĚK 2003: 575. (Also, we find gen fpl *me-re-ti-ra_2-o* which points to /*meletriā(h)ōn*/.)

PIE *$melh_2$- is reconstructed by e.g. LIV^2 432, DE VAAN 2008: 386, KLOEKHORST 2008 547, and PIE *$melh_1$- by e.g. BEEKES 2010: 897, 979, KROONEN 20123: 351, SCHRIJVER 1991: 103.

Others reconstruct PIE **melH*-, e.g. Derksen 2008: 307, 2015: 302 or MARTIROSYAN 2010: 443.

Since it is difficult to explain either of these forms, CLuw. *mālḫūta* and Myc. *meletriai*, as secondary (see e.g. VAN BEEK 2011: 51), it is preferable to posit two separate roots, PIE *$melh_1$- 'to mill, grind' and PIE *$melh_2$- 'to break, crush'.

However slight the difference between 'breaking' and 'grinding' might seem, it is possible to clearly differentiate between the two roots, *$melh_1$- and *$melh_2$-, using this distinction.

The material for *$melh_1$- 'to mill, grind' is listed in sec. 3.2 above.

(The appurtenance of some attestations to *$melh_1$- 'to mill, grind' is dubious due to the possible conflation of *$melh_1$- 'to mill, grind' with *$melh_2$- 'to break, crush' ; this, for instance, is the case of Arm. *malem* 'to mill; to crush, break', MW *malaf* 'to mill, to whet; to crush', OIr. meilid 'to mill; to crush'.)

The material for *$melh_2$- 'to break, crush' is listed below.

PIE root ***(s-)mlh_2-*** 'to crush, to break'[17] [47]
:: zero-grade ***mlh_2-*** id. [48]
⟹ them present stem *mlh_2-*e*- [49]
> Umb. 3sg ipv II **-maltu** / **-multu** / *-moltu* id.[18] [50]
⟹ *i*-present stem *mlh_2-*i*- id. [51]
> PGm. **muljan* id. (ON *mylia* id., OHG *mullen* id.)[19] [52]
⟹ *n*-present stem *ml-n-h_2- id. [53]
⟹ *e*-grade *n*-present stem *ml-ne-h_2- id. [54]
> Skt. *mr̥ṇáti* id.[20] [55]

[17] IEW 716, LIV^2 432.
[18] UNTERMANN 2010: 410.
[19] BEEKES 2010: 979.
[20] INSLER 1971, EWAia II 320.

⟹ *k*-derivate **mlh₂-k* ‘weak’ [56]
> G βλάξ ‘stolid, stupid’ (< ‘weak’) [21] [57]
:: *e*-grade *k*-derivate **mlh₂-ek* id. [58]
> G μαλακός id., soft (< ‘weak’) [22] [59]
:: full *e*-grade ***melh₂-** id. [60]
> CLuw. 3sg praet *ma-a-la-ḫu-u-ta /mālḫūta/* id. [61]
:: full *o*-grade ***molh₂-** id. [62]
⟹ *u*-present stem **molh₂-u-* id.[23] [63]
⟹ causative **molh₂-u-eie* ‘cause to break’ (< ‘break’) [64]
> PGerm. **malwjan* ‘pound’ < ‘cause to break’ (Go. *ga-malwjan* id., ON *mølva* id.) [24] [65]
> TA *malyw-*, TB *mely-* id., ‘squeeze, lay waste’ [25] [66]
⟹ *tl*-instrument noun **molh₂-tl-o-* ‘hammer’ [67]
> PIt. **molklo-* id. (Lat. *marculus* ‘small hammer’ (< ‘hammer’)) [26] [68]
> PSl. **moltŭ* id. (OCS *mlat* id., Ru. *mólot* id., Pl. *młot* id., SCr. *mlât* [69]
‘big hammer’ (< ‘hammer’), Sln. *mlât* id.) [27] [70]

If we interpret **melh₁-* as **melʔ-* and assume that **melʔ-* is the correct reconstruction for PIE ‘to mill, grind’, then it becomes possible to derive PIE **melʔ-* from PIE **meld-* (IEW 718, LIV² 431, NIL 482)

Compare PIE **mld-* > Skt. *mr̥du-* ‘soft’, G †βλαδύς ‘powerless’, L *mollis* ‘soft; gentle’, W *blydd* ‘soft’; PIE **mld-* :: **meld-* > G μέλδομαι ’melt’, OIr. *mell* ‘pleasant, delightful’; PIE **mld* :: **mled-* (= Schwebeablaut?) > Skt. *ví mradate* ‘soften’; PIE **mld-* :: **mold-* > OPr. nom mpl *maldai* ‘boys’, PSl. **moldŭ* ‘young’ (e.g. > OCS *mladŭ* id.), etc.

PIE **meld* yields PIE **melʔ-* by **dC* developing into **ʔC* (= **h₁C*); see sec. 1 above.

3.4 CONCLUSION

PIE **melh₁-* (= **melʔ-*) ‘to mill, grind’ can regularly be derived from PIE **meld-* ‘to soften; soft’.

PIE **meld-* [1] ablauts into the zero-grade, PIE **mld-* [2], the full *e*-grade, PIE **meld-* [9], the full *o*-grade, PIE **mold-* [28], and the long *e*-grade, PIE **mēld-* [37], where it allomorphs into PIE **mlh₁-* [3–8], **melh₁-* [10–27], **molh₁-* [29–36], **mēlh₁-* [38–46] and whence it forms different verb stems (**mlh₁- / *melh₁-*, **mlh₁- / *molh₁-*), verb forms (**melh₁-ti*, **mlh₁-t-*) and derivates (**melh₁-tr-*, **melh₁-u-*, **molh₁-eh₂-*, etc.), supposedly all before an original consonant.

[21] BEEKES 2010: 218.
[22] BEEKES 2010: 896.
[23] LIV² 433.
[24] KROONEN 2013: 352.
[25] ADAMS 2013 : 505.
[26] DE VAAN 2008: 360.
[27] DERKSEN 2008: 324.

4. PROTO-INDO-EUROPEAN 'SIT'

4.1 PROPOSITION

PIE ***h₁eh₁s-*** (= *ʔeʔs-) 'to sit' (IEW 324, LIV² 232) derives from PIE ***sed-*** 'to sit' (IEW 884, LIV² 513).

4.2 MATERIAL

PIE root ***sd-*** 'sit' [1] [1]

:: zero-grade *sd- id. [2]

⟹ reduplicated present stem *se-sd- id. [3]

·· allomorph *se-sdˢ- id. [4]

>> dissimilated allomorph *se-ds- id. [5]

·· allomorph *se-h₁s- id. [6]

→ 3sg *se-h₁s-toi, 3pl *se-h₁s-ntoi id. [7]

> G 3sg ἧσταϊ, 3pl ἥαται id. [2] [8]

⟹ re-reduplicated stem *h₁e-h₁s- id. [9]

→ 3sg *h₁e-h₁s-o id. [10]

> Hitt. 3sg *e-ša* /eša/ id. [3] [11]

→ 3sg *h₁e-h₁s-toi, 3pl *h₁e-h₁s-ntoi id. [12]

> Skt. 3sg *āste*, 3pl id. *āsate* id. [4] [13]

→ 3sg *se-h₁s-toi, 3pl *se-h₁s-ntoi id. [14]

⟹ them present stem *h₁e-h₁s-e- id. [15]

> YAv. 3pl *āŋhāire / āŋhəṇte* id. [5] [16]

4.3 ARGUMENT

In Proto-Indo-European, there are two verbs which are used to describe the action of sitting down and/or the state of being seated; they are usually reconstructed as *sed- and *h₁eh₁s-.

PIE *h₁eh₁s- is a non-ablauting root attested exclusively in the full *e*-grade.

The full *e*-grade, PIE *h₁eh₁s-, made acute by to the following laryngeal, can be reconstructed 1. on the basis *ē* in Hitt. *eša*; 2. on the basis of *ā* in Skt. *āste*, *āsate* and *å* in YAv. 3pl *åŋhāire / åŋhəṇte*; and, 3. on the basis of η in G ἧσται, ἥαται.

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[1] IEW 324, LIV² 232.
[2] BEEKES 2010: 518.
[3] KLOEKHORST 2008: 252.
[4] EWAia I 181.
[5] BARTHOLOMAE 1904: 344, KÜMMEL 1996: 146, CHEUNG 2007: 153.

Starting from a form such as **se-sd-toi* or **se-sd-to*, it is possible to derive PIE **h_1eh_1s-* from PIE **sed-*, if we admit the following two assumptions.

Firstly, that PIE **se-sd-toi* would develop into PIE **se-sd^s-toi*, where **s* is regularly inserted to break up the dental cluster; cf. e.g. PIE **u̯id-t-o-s* > **u̯id^s-t-o-s* > Av. *vistō*.

And secondly, that PIE **se-sd^s-toi* would develop into PIE **se-d^s-toi*, where **$C_1C_2C_1$* is dissimilated into **C_2C_1*; cf. e.g. PIE **prḱ-sḱ-o-h_2* > **pr-sḱ-o-h_2* > L *posco*.

PIE **se-d^s-toi* yields PIE **se-ʔs-toi* (= **se-h_1s-toi*) by **dC* developing into **ʔC* (= **h_1C*); see sec. 1 above.

4.4 CONCLUSION

PIE **h_1eh_1s-* 'to sit' can be regularly, if tentatively, derived from PIE **sed-* 'to sit'.

PIE **sed-* [1] allomorphs into zero-grade, PIE **sd-* [2], whence it forms reduplicated present stem, PIE **se-sd-* [3], which is subject to *s*-insertion before endings beginning with a dental, giving rise to **se-sd^s-* [4], and dissimilation, giving rise to **se-d^s-* [5], which finally allomorphs into PIE **se-h_1^s-* (= **se-ʔ^s-*) [6], reflected in Greek [7–8]; elsewhere, on the other hand, PIE **se-h_1^s-* (= **se-ʔ^s-*) is apparently re-reduplicated into **h_1e-h_1^s-* (= **ʔe-ʔ^s-*) [9] and reflected as such in Anatolian [10-11] and Indo-Iranian [12-16].

5. CONCLUSION

In conclusion, I observe:

1. that PIE *h_1oh_1-s- (= *$h_1oʔ$-s-) ‘mouth’ may be derived from PIE *h_1ed- ‘eat’ on the condition that PIE ‘mouth’ is to be reconstructed as *h_1oh_1-s-;

2. that PIE *$melh_1$- (= *$melʔ$-) ’to mill, grind’ may be derived from PIE *meld- ‘to soften; soft’ on the condition PIE ‘to mill, grind’ is to be reconstructed as *$melh_1$-;

3. that PIE *h_1eh_1s- (= *$ʔeʔs$-) ’to sit’ may be derived from PIE *sed- ‘to sit’ on the condition PIE *sd- is allowed to develop into *sd^s- before a following dental and *sd^s- is allowed to dissimilate into *d^s.

ABBREVIATIONS

*	–	reconstructed form	→	–	*forms*
:	–	*is in ablaut with*	←	–	*is formed from*
::	–	*is in ablaut gradation with*	>	–	*regularly yields*
··	–	*is an allomorph of*	<	–	*regularly derives from*
⟹	–	*derives into*	>>	–	*irregularly yields*
⟸	–	*is derived from*	<<	–	*irregularly derives from*

1, 2, 3	–	tres verbi personae	ipf	–	imperfectum
abl	–	ablativus	ipv	–	imperativus
acc	–	accusativus	loc	–	locativus
act	–	activum	m	–	masculinum
adj	–	adjectivum	med	–	medium
adv	–	adverbium	mp	–	mediopassivum
aor	–	aoristum	n	–	neutrum
athem	–	athematicus	nom	–	nominativus
c	–	commune	num	–	numerale
card	–	cardinale	pass	–	passivum
dat	–	dativus	pf	–	perfectum
du	–	dualis	pl	–	pluralis
f	–	femininum	praet	–	praeterium
fut	–	futurum	pt	–	participium
gen	–	genitivus	sg	–	singularis
ind	–	indicativus	them	–	thematicus
int	–	instrumentalis	voc	–	vocativus

Arm.	–	Armenian	OCS	–	Old Church Slavonic
Av.	–	Avestan	OCz.	–	Old Czech
Blg.	–	Bulgarian	OE	–	Old English
Boeot.	–	Boeotian	OFr.	–	Old French
Bret	–	Breton	OFri.	–	Old Frisian
CLuw.	–	Cuneiform Luwian	OHG	–	Old High German
Cz.	–	Czech	OIr.	–	Old Irish
Co.	–	Cornish	ON	–	Old Norse
Čak.	–	Čakavian	OPhr.	–	Old Phrygian
Dor.	–	Doric	OPl.	–	Old Polish
Du.	–	Dutch	OPr.	–	Old Prussian
E	–	English	OS	–	Old Saxon
Elfd.	–	Elfdalian	PAnat.	–	Proto-Anatolian
ep.	–	epic	PBS.	–	Proto-Balto-Slavic
Far.	–	Faroese	PCelt.	–	Proto-Celtic
G	–	Greek	PGm.	–	Proto-Germanic
Germ.	–	German	PICelt.	–	Proto-Italo-Celtic
Go.	–	Gothic	PIE	–	Proto-Indo-European
Hitt.	–	Hittite	PIIr.	–	Proto-Indo-Iranian
IE	–	Indo-European	PIt.	–	Proto-Italic
Ion.	–	Ionic	Pl.	–	Polish
L	–	Latin	PSl.	–	Proto-Slavic
Latv.	–	Latvian	Ru.	–	Russian
Lith.	–	Lithuanian	SCr.	–	Serbo-Croatian
MBret.	–	Middle Breton	Skt.	–	Sanskrit
MHG	–	Middle High German	Slk.	–	Slovak
MoBret.	–	Modern Breton	Sln.	–	Slovene
MW	–	Middle Welsh	TA	–	Tocharian A
Myc.	–	Mycenaean	TB	–	Tocharian B
Nw.	–	Norwegian	Umb.	–	Umbrian
Pal.	–	Palaic	Ved.	–	Vedic
OAv.	–	Old Avestan	W	–	Welsh
OBret.	–	Old Breton	YAv.	–	Young Avestan

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