PIE	Gloss	Cognates	Notes	Gram. Form	Related Forms	Semantic Domain	Source
*-kʷe	and	OIr na-ch 'not' Lat -que 'and' Goth -h Mycenaean Grk -qe Grk te 'and' Arm -k' 'and' Hit -ki 'and' Skt ca 'and'				Conjunctions	JPM
*-wē	or	OIr nō Lat -ve Grk ē-(w)é Skt vā Toch B wat				Conjunctions	JPM
*-yo	and	Myc jo- 'and' Hit -ya- 'and' Toch A -yo 'with'				Conjunctions	JPM
*(d)ḱm̥tóm	100 (one-)hundred	OIr cēt Lat centum NEhundred Lith šim~tas OCS sŭto Grk hekatón Av satəm Skt śatám Toch B kante	{1} A derivative of *deḱm 'ten'.		'a hunderd cows': Skt. śata-gv-ín-[adj] 'consisting of a hundred cows' (RV) — OP θata-gu- [m] 'Sattagydia' — Gr. ἑκατόμβη [f] 'great sacrifice' (< *-gwu-eh₂-) 'lord over a hundred, centurio': Skt. śatá-pati- [m] (TB) — Elam.-OP *θata-pati- [m]	Numbers	JPM Beekes IIAL
*(d)ui-dʰh₁-	put in two		{1} [AL] The augment is always scanned long in the RV, which points to the Ilr. reconstruction *Ha-Hui-dhH-a-, cf. Lubotsky 1994a. The aorist ávidhat originally supplied the aorist for the root dāś, cf. Garcia Ramón XXX. {2} The root is due to the univerbation of the preverb ví and dhā (cf. Hoffmann 1969 = Hoffmann 1975: 241). The aorist stem is primary.	Present VI<VII: vindháte [3sg.med.] (RV) (secondary present stem based on the aorist stem vidh-á-) Aorist A: ávidhat [3sg.act.] (RV, YV) {1}			IIAL
*(dʰ)ǵʰyes	yesterday	OIr indē Lat herī NE yester- Alb dje Grk khthés Av zyō Skt hyá-				Time	JPM
*(h₁)seuio-	left, left hand		{1} [AL] The laryngeal is based on the asssumption that the word is derived from the adverb *h₁su 'well', being an old taboo replacement. For the different words for 'left' in Indo-European see Beekes 1994.				IIAL

*(h₁)su-	good	OIr so- 'good' OCS sŭ-dravŭ 'healthy' Grk hu-giḗs 'healthy', eu- 'good' Av hu- 'good' Skt su- 'good' Toch B saswe 'lord' [< *h₁su-suh□ó- 'well-born']	{1} Most probably, a derivative of *h₁es- 'to be'.		'well-made': Skt. sú-kr̥ta- [adj] (RV+) — OAv. hū.kərəta-, YAv. hu-kərəta- [adj] 'with good mental power': Skt. su-krátu- [adj] (RV+) — Av. hu-xratu- [adj] 'of good dominion': Skt. su-kṣatrá- [adj] (RV+) — Av. hu-xšaθra- [adj] — Elam.-OP (Med.) *hu-xšaθra- PN 'generous': Skt. su-dā́nu- [adj] (RV+) — Av. hu-dānu- [adj] 'well-treated': Skt. sú-bhr̥ta- [adj] (RV+) — YAv. hu-bərəta- [adj], OP ubrt- /u-br̥ta-/ [adj] 'of good mind': Skt. su-mánas- [adj] (RV+) — YAv. hu-manah- [adj] 'with fighting spirit' — Gr. (Myc.) /Eumenēs/ PN, εὐ-μενής [adj] 'well-disposed, favourable' 'famous': Skt. su-śrávas- [adj] (RV+) — Elam.-OP *u-çau̯ah- PN, (Med.) *hu-srau̯ah- PN, MP hu-sraw [adj] 'famous' — Gr. εὐ-κλεής [adj] (< *h₁su-ḱleues-) 'well-spoken': Skt. sūktá- [adj] (RV+) — Av. hūxta- [adj] 'of good work': Skt. sv-ápas- [adj] (RV+) — Av. huuāpah-, YAv. huuapah- [adj], Sogd. (Man.) xwp [adj] 'good', MP xub [adj] 'id.' 'having good horses': Skt. sv-áśva- [adj] (RV) — YAv. huu-aspa- [adj] — OP uv-aspa- [adj]	Values	JPM IIAL
*(h₁)uper(i)	over, above						IIAL
*(h₁)upo	under						IIAL
*(h₁)yḗro/ehₓ-	year, new season	Lat hōrnus 'of this year' NE year OCS jara 'spring' Grk hǒros 'time, year' Luv āra/i- 'time' Av yārə 'year'	{1} Based on *pari-yāram 'a year long'.			Time	JPM IIAL
*(h₂)wer-	± attach	Lith vérti 'thread a needle' Rus verátĭ 'prick' Alb vjerr 'hang up' ?Grk aeírō 'attach'				Binding	JPM
*(h₂/₃)wobʰséh□-	wasp	MWels gw(y)chi 'drones' talic Lat vespa OPrus wobse OCS osa MPers vaβz-	From the verbal root *h₂/3webh- 'weave'			Bug	JPM Celt.

*(h₂u-)bʰohₗ	both			[du.m.] ubhā́, ubháu (RV+) [du.f.] ubhé (RV+)			IIAL
*(h₃)bʰi	towards						Beekes
*(h□)mauros	dark	Rus (s)muryj 'dark grey' Grk amaurós 'dim, faint'	West Central			Light & Dark	JPM
*(h□)merh□gʷ-	dark	ON myrkr 'darkness' [which was borrowed as NE murk] Lith márgas 'variegated' Alb murg 'black' Grk amorbós 'dark'	West Central			Light & Dark	JPM
*(h□)wiselo-	weasel	NIr fial 'ferret' NE weasel Grk aiélouros ??	North-Western			Fauna	JPM
*(h□)ieu-	bearded wheat, perhaps						Beekes
*(h□)io-	who, which		{1} [AL] The initial laryngeal is not quite certain. It is based on the Greek aspiration (if it reflects *Hi-) and on the possible derivation of this pronoun from the pronoun *hₗe / hₗi- (see s.v. ay- [2], a- [2]).	yáḥ [nom.sg.m.] (RV+) yā́ [nom.sg.f.] (RV+) yát [nom.sg.n.] (RV+) yám [acc.sg.m.] (RV+) yásmai [dat.sg.m.n.] (RV+) etc.	'whoever, whichever': Skt. yá- ca (RV+) — Av. ya- cā̆ 'whoever, whichever': Skt. yáḥ káś cit (RV+) — OAv. yahmāi … kahmāicīt_ 'whenever': Skt. yác cid (RV+) — YAv. yat_-cit_, OP yciy /ya-ciy/		IIAL
*(h□)mei-s-	close the eyes		{1} extension of IE root *(H)mei-. {2}[AL] MoHG miseln 'to rain lightly' is hardly cognate. Janda 1998: 18ff. argues that the original meaning of the uncompounded root miṣ- is 'to close the eyes, to blink', which is a distinctive possibility. He further suggests an assimilation *ni-muṣ- ('to close', see s.v. muṣṭí-) > ni-miṣ-. I would rather assume contamination of two roots, viz. *h₂meigh- 'close the eyes, blink' (Lith. miegóti 'sleep', SCr. mȉgati 'blink, twinkle, move', etc.) and meus- 'close the mouth'.	Present VI: miṣáti [3sg.act.] (RV) Aorist RED: amīmiṣat (Up.)			IIAL
*(h□)ndʰero-	lower						IIAL
*(h□)ndʰes	below						IIAL
*(h□)ndʰmh□o-	lowest						IIAL
*(h□)neid-	insult	Goth ga-naitjan 'treat shamefully' Lith níedėti 'despise' Grk oneidízō 'revile' Arm anēc 'curse' Av naēd- 'insult' Skt níndati 'insults'				Love & Hate	JPM

*(h□)rōs-	dew, moisture	Lat rṓs 'dew' Lith rasà 'dew' Rus rosá'dew' Alb resh 'it is precipitating' Skt rása- 'sap, juice	underlies a number of river names in Indo-Iranian, including the mythical world river of the ancient Indians (Rasā) {1} Originally, a root noun. The Greek name of Volga 'Pã presumably comes from Iranian.			Water	JPM IIAL
*(k)(s)weḱs	6 six	Av xšvaš *kseḱs >> Lith šeši OCS šestĭ dialectal Grk kséstriks krithḗ'six-rowed barley' Skt ṣáṣ *(s)weḱs >> OIr sē NWels chwech Grk héks (dialectal Grk wéks) Arm vec *seḱs >> Lat sex NE six Alb gjashtë ?Toch B ṣkas *weḱs >> Grk héks Arm vec'	The complex, and otherwise unexampled, initial consonant cluster *ksw- has suggested to several investigators that we may be looking at a word that was originally borrowed from some non-Indo-European source. Foreign parallels to the Proto-Indo-European forms have been noted since the time of Franz Bopp who compared the Proto-Indo-European form with Proto-Kartvelian (a language group of the Caucasus composed of Georgian and closely related languages) *ekšw- 'six' other comparisons are Hurrian (an extinct language of eastern Anatolia) šeeže, Akkadian ši/eššum (the form used to modify deWnite feminine nouns) 'six'. These are variously explained as borrowing into or from (in the Kartvelian case) Proto-Indo-European. However, with the exception of the Kartvelian forms, the proposed models for the Proto-Indo-European word are only vaguely similar phonetically and there is no good reason why a foreign š- or the like should generate a Proto-Indo-European*ksw-. One might also note that the	ṣáṭ [nom.sg.] (RV+) ṣaḍbhíḥ [instr.pl.] (RV+) ṣaṇṇā́m [gen.pl.] (AVP+) ṣaṭsú [loc.pl.] (KS+)	'Dāsa/Dahāka with six eyes': Skt. dā́sa-… ṣaḷakṣá- (RV 10.099.06) — YAv. dahākəm … xšuuaš.ašīm (Y 9.8) 'six months old, taking six months': Skt. ṣáṇ-māsya- (ŚB+) — YAv. xšuuaš.māhiia-	Numbers	JPM IIAL
*(k)(s)weḱs-ḱomt(h□	60 sixty	OIr sesca Lat sexāgintā Grk eksḗkonta Arm vat'sun Toch B ṣkaska				Numbers	JPM
*(k)sweid-	milk	Lith svíestas 'butter' Av xšvīd- 'milk'		?		Meals	JPM
*(nh₃)-we	we both			older nom. vā́m (RV 06.055.01), acc. āvā́m (Br.+) (sometimes also nom.), instr. āvā			IIAL
*(ni-)mno-	downwards						IIAL
*(p)ḱórmos	± grief, shame	NE harm Rus sórom 'shame' Av fšarəma- 'shame'	The questionable ascription of *(p)ḱórmos to Proto-Indo-European rests on a Germanic-Slavic-Iranian isogloss	?		Health&Sickness	JPM
*(s-)h₄upér(i)	over	OIr for- 'over' Lat super 'over' NE over Grk hupér 'over beyond' Av upairi 'over' Skt upári 'over				Position	JPM Beekes
*(s)bʰond-neh□	strap sling	Lat funda 'sling' Grk sphendónē 'sling'	West Central from *bhendh- 'bind'			Textiles	JPM

*(s)grebʰ-	scratch, cut	NE carve ON skrapa > NE scrape OPrus gīrbin 'number' OCS žrěbŭ 'lot' Grk gráphō 'scratch'	West Central			Reductive Activities	JPM
*(s)greh□b(ʰ)-	hornbeam	Umb Grabovius 'oak god' OPrus wosi-grabis 'spindle-tree' Lith skrõblas 'hornbeam' Rus grab 'hornbeam' Modern Grk grabúna 'hornbeam' Lat carpīnus 'hornbeam'				Trees	JPM
*(s)kamb-	curve	OIr camm 'curve' Grk skambós 'curve'	West Central			Shape	JPM
*(s)kand-	moon	Alb hēnë 'moon' Skt cándra- 'moon'	from the verb *(s)kand- 'shine'			Air	JPM
*(s)kand-	shine, glitter	NWels cann 'white, bright' Lat candeō 'glitter, shine' Skt cándati 'shines, is bright' Alb hēnë Skt candrá- 'shining; moon' Grk kándaros 'coal' [< presumably from *'glowing'] Lat candidātus 'candidate for office' because of the white toga which was worn				Light & Dark	JPM
*(s)ked-	scatter	NE scatter Lith kedė´ti 'burst' Grk skídnēmi 'scatter, strew, sprinkle' Toch AB kätnā- 'scatter, strew, sow'				Throw	JPM
*(s)ḱegos	sheep/goat	NE sheep OE hēcen 'kid' Oss sæɣ 'she-goat' Skt chãga- 'he-goat'		?		Fauna	JPM
*(s)ḱeh₁w(e)r-	north wind	NE shower Lat caurus 'north wind' Lith šiáure 'north wind' šiū́ras 'cold, northern' OCS sěverŭ 'north' Arm c'urt 'cold shower'				Air	JPM
*(s)kel-	crooked	OE scēolh 'crooked' OPrus culczi 'thigh' Bulg kúlka 'thigh' Alb cˌalë 'lame' Grk skélos 'thigh'	West Central			Shape	JPM

*(s)kel-	split (apart), cut	Grk skállō 'hoe, stir up' Arm skalim 'split, be splintered' Hit iskalla- 'slit, slash, tear' MIr scoiltid 'chips' Lith skeliù 'chip' ON skil 'distinction'				Reductive Activities	JPM
*(s)keng-	crooked	OIr scingim 'spring' ON skakkr 'skewed, distorted' OHG hinken 'go lame' Grk skázō 'limp, go lame' Skt kháñjati 'limps'				Shape	JPM
*(s)keng-	limp	OHG hinkan 'limp' Grk skázō 'limp' Skt kañj- 'limp'				Health&Sickness	JPM
*(s)ker-	cut apart, cut off	Hit karsmi 'cut off, castrate' OIr scaraid 'separates, divides' NE shear Lith skiriù 'separate, divide' Rus krojú 'cut' Alb shqerr 'tear apart' Grk keírō 'cut' Arm k'erem 'scrape off, scratch off' Skt kṛṇā́ti 'wounds, kills'				Reductive Activities	JPM
*(s)ker-men-	flayed skin		{1} Attested is OP čarmā 'on leather, on parchment'.				IIAL
*(s)kerb- (s)kerbʰ-	shrink, shrivel; waste-away	ON skorpna 'shrivel' Lith skur̃bti 'suffer a decline, wither; mourn' Rus skórblyj 'shrivelled' Grk kárphō 'let shrivel, dry out'				Health&Sickness Reductive Activities	JPM
*(s)kerbʰ-	shrink, shrivel		West Central			Reductive Activities	JPM
*(s)kert-	cut	Lith kertù 'hew' Arm k'ert'em 'skin' Hit kartai- 'cut off' Av kərəntaiti 'cuts' Skt kṛntáti 'cuts' ON skor 'notch' i.e. 'what has been cut'	Extended from *(s)ker-	Present VI<VII: kṛntáti [3sg.act.] (RV+) Aorist A: ákṛtas [2sg.act.] (RV) kartīs [2sg.inj.act.] (Br., Sū.) Perfect: cakarta [3sg.act.] (RV+) Fut: kartsy° (AV) Abs: vikṛ́tya (RV) TA-Ptc.: kṛttá- (RV+)			JPM IIAL
*(s)keu(hₓ)-	cover, wrap	Lat ob-scūrus 'dark, obscure', i.e. 'covered' Skt skunā́ti 'covers' NE hide (derived from this root with a t-extension) Grk skúlos 'pelt, skin' Grk skûtos 'leather'				Motion	JPM

*(s)keub^h	make beautiful		{1} [AL] Since the root structure T…Dh is impossible in PIE, we must assume a root with s-mobile. It is therefore attractive to connect our root with PIE *(s)keu(h₁)- (Gr. κοέω [verb] 'to notice', OHG scouwōn [verb] 'to look at', Go. skauns [adj] 'beautiful', see s.v. kavi). For the phonetic and semantic sides of this etymology see Lubotsky 2001a: 51.	Present I: śóbhate [3sg.med.] (RV+) Present VII: śúmbhāna- [ptc.med.] 'purifying (his own body / himself)' (RV 08.044.12) Present VI<VII: śumbháti [3sg.act.] 'to beautify, to make beautiful' (RV) Present I<VII: śúmbhate [3sg.med.] 'to adorn oneself' (RV+), śúmbhati [3sg.act.] 'to purify' (AV+) Present AYA: śubháyå 'to be beautiful, splendid' (RV) Caus: śobhay° (AV+)			IIAL
*(s)keud-	throw, shoot	NE shoot Rus kidátĭ 'throw' Alb hedh 'throw' Skt códati 'incites' Toch B kaume 'shoot of a plant'				Throw	JPM

| *(s)keud[h] | purify | | {1} [LK] Built on the quasi-root śundh extracted from the nasal infixed present see Jamison 1983: 158, Kulikov 2001: 470f. {2} [AL] Since the root structure T…Dh is impossible in PIE, we must assume a root with s-mobile. It is therefore attractive to connect our root with PIE *(s)keu(h₁)- (Gr. κοέω [verb] 'to notice', OHG scouwōn [verb] 'to look at', Go. skauns [adj] 'beautiful', see s.v. kavi). For the phonetic and semantic sides of this etymology see Lubotsky 2001a: 51. | Present I<VII: śundhati [3sg.act.] 'cleanses' (RV 10.085.35), śundhata [2pl.impv.act.] (RV 10.017.14), YVm+ Present IV: śudhyatu [3sg.impv.act.] 'let it become clean' (VS+), śudhyate [3sg.med.] 'becomes clean' (ŚB+) Caus {1}: śundhayantu [3pl.impv.act.] (RV 10.017.10) TA-Ptc.: śuddhá- 'purified, pure, clean' (RV+) | | | IIAL |
| *(s)keuh₁- | perceive see, seer | Lyd kaweś'priest' Av kavā 'seer' Skt kaví- 'wise, seer' Extended: NE hear Grk akoúō 'hear' Lat custōs 'watchman' NE show Arm c'uc'anem 'show' Lat caveō 'take heed' OE hāwian 'look at' OCS čujǫ 'note' Grk koéō 'note' | | | | Sight | JPM |

*(s)keuk	shine		{1} [AL] For the phonetic and semantic sides of this etymology see Lubotsky 2001a: 51.	Present I: śócanti [3pl.act.] (RV+) Present IV: śúcyati [3sg.act.] (Br.) Aorist A: aśucat [3sg.act.] (RV+) Aorist S: śocīḥ [2sg.inj.act.] (VS) Aorist mediopass: áśoci (RV) Perfect: śuśóca [3sg.act.] (RV, ŚB), śuśucāná- [ptc.med.] (RV) Intensive: śóśucan [3pl.inj.act.] (RV+), śóśucāna- [ptc.med.] (RV+) Caus: śocáy° (RV+) Inf: śucádhyai (RV)			IIAL
*(s)keup-	bundle	NE sheaf Rus čup 'tuft head of hair, crest'	North-West			Measure & Quantity	JPM
*(s)koitrós	bright, clear	OEhādor 'clear' Lith skaidrùs 'bright, clear [of weather], limpid [of water]' Av čiθra- 'clear' Skt citrá- 'excellent, bright'	Indo-Iranian may all derive from an otherwise unattested noun *(s)kóit-.			Light & Dark	JPM
*(s)koli-	young dog	Lith kãle 'bitch' Alb këlysh 'young dog' Grk skúlaks 'young dog young animal'				Fauna	JPM
*(s)kolmo/eh□-	boat	OHG skalm Toch B kolmo	Derived from *(s)kel- 'cut'			Transport	JPM
*(s)kōlos	stake	Grk skôlos 'pointed stake'	from *(s)kel- 'strike, hew'			Construction	JPM
*(s)kou-no-	luminous		{1} [AL] The cerebral nasal is unexpected and may point to borrowing, which makes the etymology doubtful. See further s.v. śobh. {2} [AL] The possible cognates mentioned by Mayrhofer are most probably unrelated: ToA koṃ, ToB kauṃ 'day, sun' is a loanword from Turkic (Lubotsky - Starostin 2003: 257f.) MW cun 'noble, fine' must rather be connected with Olr. cúanna 'dear, fine' and derived from *kupnos (Schrijver 1995: 348).				IIAL

*(s)ku(n)t-	shake, jolt	NE shudder Lith kuntù 'recover, get better' [i.e. 'shake something off'] OCS skytati sę 'wander'	North-West			Motion	JPM
*(s)kubʰ-ró-	clean, beautiful		{1} [AL] Since the root structure T…Dh is impossible in PIE, we must assume a root with s-mobile. For the phonetic and semantic sides of this etymology see Lubotsky 2001a: 51. {2} [AL] Most probably, an Iranian LW.				IIAL
*(s)ḱup-	shoulder	MLG schuft 'shoulder blade of cow or horse' Alb sup 'shoulder' Av supti- 'shoulder' Skt śúpti- 'shoulder'				Body (Upper)	JPM
*(s)ḱup-ti-	shoulder, withers		{1} [AL] Since the s-mobile is only attested in Germanic, it is attractive to assume that it is due to the influence of the word for 'shoulder'.	śúptau [loc.sg.]			IIAL
*(s)kʷálos	sheatfish, wels	NE whale OPrus skalis 'sheatfish' Grk áspalos 'fish' Av kara- 'a kind of fish'	Difficult			Fish	JPM
*(s)kʷéh□tis	skin, hide	NWels es-gid 'shoe' [< 'foot-hide'] NE hide Lith kiáutis 'skin' Grk skûtos 'skin, leather, hide' Toch A kāc 'skin'				Body (Upper)	JPM

*(s)kʷeit-	consider, appear		{1} [AL] Mayrhofer, following Gotō 1987: 137ff. distinguishes cet [1] 'to consider' and cet [2] 'to appear, to shine'. The semantic distinction is clearly artificial (cf. German scheinen), whereas the lack of labialization in the Germanic cognates is probably due to the loss of the labial feature in front of o in this branch. {2} [LK] See Kümmel 2000: 174ff. {3} Translations 'appearance' or 'splendour', given for the Rgvedic attestations by some scholars are less plausible, but not impossible. {4} [AL] For this form cf. recently Jasanoff 1997.	Present I: cétati [3sg.act.] (RV+) Present AYA: citáyante [3pl.med.] (RV+), citáyant- [ptc.act.] (RV+) Aorist mediopass: áceti [3sg.], céti [3sg.inj.] 'has/is appeared, has/is shown (oneself)' (RV) Aorist S (< Aorist R): acait [3sg.act.] 'has perceived' (RV 06.044.07) Aorist R: cítāna- [ptc.med.] 'making oneself perceptible, drawing attention to oneself' (RV 09.101.11) Perfect: cikéta [3sg.act.], cíketa [3sg.act.], cikitvā́ṃs- / cikitúṣ- [ptc.act.] 'to see, pay attention, respect' (RV+), cikité [3sg.med.] 'to appear, show (oneself) be known' (RV-YVm) {2} Desiderative ̃ʔt	to appear in (his/her/its/their) greatness': Skt. mahinā́ cikitré (R'	IIAL
*(s)lagʷ-	take, hold	NE latch Grk lázomai 'take, hold'	West Central			Give & Take	JPM
*(s)lei-	sticky, slimy, slippery	OIr as-lena 'pollute' Lat linō 'anoint' OCS slina 'spit' Grk alínō 'anoint' OIr slemon 'slippery, slick, polished' Lat līmus 'mud', līmax 'slug' NE slime Rus slimák 'slug' Grk leímaks 'slug, snail' NHG bleiben 'remain, stay' Lith lìpti 'stick, be sticky' OCS pri-lĭpjǫ 'stick on/to' Skt limpáti 'smears' Toch A lip- 'remain'				Qualities	JPM

*(s)lei-	tench	Lith lýnis Rus linĭ Grk lineús 'blemy' ? OE slīw 'mullet'	Built on the root of the same shape meaning 'slimy'			Fish	JPM
*(s)leidʰ-	slide	NE slide Lith sly´stu 'slide, slip' OCS slĕdŭ 'track [in the grass]' Grk olisthaínō 'slip' Skt srédhati 'fails, errs' < *'slides off?'				Crawl, Slide, Fall	JPM
*(s)m(e)ug(ʰ)-	smoke	NE smoke Grk smū́khō 'burn in a smouldering fire' Arm mux 'smoke'				Fire	JPM
*(s)me(-th□)	middle, among	OE mid 'with' Alb me 'with' Grk metá 'with, among' Av mat '(together) with' Skt smat 'with'				Position	JPM
*(s)mel-	deceive	Lith mẽlas 'lie' Arm meł 'sin' Av mairya- 'deceitful' Toch A smale 'lie'				Values	JPM
*(s)mel-	give off light smoke, smould	Middle Irish smā l NE smoulder, smell Lith smilékti 'give off light dust or smoke' Sorbian smaliś 'singe'				Fire	JPM
*(s)meld-	melt	NE melt Grk méldomai 'melt'				Fire	JPM

*(s)mer-	remember, be concerned	NE mourn Lith merė´ti 'worry about' Grk mérimna 'thought, care, anxiety', mártus 'witness' [>NE martyr] Av maraiti 'observes' Skt smárati 'remembers, longs for' reduplicated in Lat memoria 'remembrance' OE mimorian 'remember' Arm mormok' 'care'		Present I: smárāthas [2du.subj.act.] (RV 10.106.09), smarethām [2du.impv.med.] (RV 07.104.07), smáranti [3pl.act.] (RV-Kh., AV+) Perfect: sasmara [1sg.act.] (AVP 5.11.7) Passive: smaryáte [3sg.] (TĀm, DhSū.+) TA-Ptc.: smṛta- (Sū.+) á-smṛta-dhrut- 'with whom no deception can be remembered' (RV 10.061.04)		Knowledge & Thought	JPM

*(s)meuk	brush, take off (of bridles, bindings, clothes and snot)		{1} [LK] With the secondary suffix accentuation (see Kulikov 1998). {2} Secondary present, probably based on the desiderative stem (Gotō 1987: 246, fn. 547).	Present VI<VII: muñcā́mi [1sg.act.] (RV+) Present IV: múcyate [3sg.med.] (RV+), mucyáte [3sg.med.] (AV, ŚB) {1} Present I: mókṣamāṇa- [ptc.med.] (KSp-MSp) {2} Aorist R: ámugdhvam [2pl.med.] (RV) Aorist A: ámucat [3sg.act.] (RV+) Aorist S: mukṣata [3pl.inj.med.] (RV+) Perfect: mumucmáhe [1pl.med.] (RV+), mumucaḥ [2sg.inj.act.] (RV), múmocati [3sg.subj.act.] (RV 08.018.12), mumóca [3sg.act.] (TĀm, ŚB+) Fut: mokṣyati [3sg.act.] (AVP+) Desid: múmukṣamāṇa-			IIAL
*(s)meuk/g-	slick, slippery	OIr mocht 'soft, tender' Lat mungō 'blow the nose' ON mjūkr 'soft, malleable' Grk mússomai 'blow the nose' Lat mūcus 'mucus' Lith mùkti 'slip away from' Skt muñcáti 'looses, frees' Toch B mauk- 'to let go'	West Central			Qualities	JPM

*(s)meuk/g-	slip	OE smūgan 'slide, slip' Lith munkù 'slip away from' Lat ē-mungō 'blow, wipe one's nose' Grk apomússō 'blow, wipe one's nose' Skt muñcáti indicates 'lets loose, frees' OCS mŭčati 'chase' Toch B mäk- 'run'			Crawl, Slide, Fall	JPM
*(s)neh₁(i)-	twist fibres into thread	MIr snīid 'twists, binds' Lat neō 'spin' OHG nā(w)en 'sew, stitch' Latv snāju 'twist loosely together, spin' Grk néō 'spin' with the suffix *-teh□- : NE snood OIr snāth 'thread' Latv snāte 'linen shawl, cape' NE needle < *(s)neh□(i)-tleh□-			Textiles	JPM
*(s)ner-	fasten with thread or cord	Lith neriù 'thread (a needle)', Toch B ñare 'thread' OE snēr 'harpstring bind close together'> NE narrow			Textiles	JPM
*(s)nh₁(e)u	without					Beekes
*(s)nh₁i	without					Beekes
*(s)p(e)iko/eh□-	bird, woodpecker	Lat pīcus 'woodpecker' Lat pīca 'jay magpie' OHG speh 'woodpecker' Skt piká-			Bird	JPM

*(s)peḱ-	observe see	Lat speciō 'see' OHG spehōn 'spy' Grk sképtomai 'look at' Av spasyeiti 'spies' Skt páśyati 'sees' Toch AB päk- 'intend'	{1} Synchronically distinct from, but genetically related to the root variant spaś- (see Jamison 1983: 167, Kümmel 2000: 586f.). {2} [LK] According to Kümmel 2000: 586, fn. 1261, the interpretation of this form as a sigmatic aorist is supported by its durative meaning. {3} Gr. σκοπός replaces IE *speḱ-s.	Present IV: páśyati [3sg.act.] (RV+) Aorist R/Aorist S {2}: áspaṣṭa [3sg.aor.med.] (RV 01.010.02) Perfect: paspaśé [3sg.med.] 'to look at, to guard, to notice' (RV) Caus: spāśáyasva [2sg.impv.med.] 'to make visible, spied out' (RV 01.176.03) TA-Ptc.: ánu-spaṣṭa- 'guarded' (RV 10.160.04), spaṣṭá- '(clearly) perceived, clear, visible' (TSp+)	Sun, the spy': Skt. sū́ryam … spáśaṇ	Sight	JPM IIAL
*(s)pel-	say aloud, recite	NE spell Alb fjalë 'tale' (also 'word, statement') Arm aṙa-spel 'saying, riddle' Latv peľt 'revile, slander' Grk apeiléō 'hold out in promise or in threat' Toch AB päl- 'praise'				Formal Speech & Song	JPM
*(s)pel-	tear off, split	Skt phálati 'bursts, splits in two', phā́la- 'ploughshare' (< *'splitter')				Reductive Activities	JPM
*(s)pelt-	split	OHG spalten OCS ras-platiti Skt spháṭati Skt páṭati 'splits apart, bursts' NE split				Reductive Activities	JPM
*(s)pen-	draw, spin	NE spin Lith pinù 'weave' OCS pĭnǫ 'tighten, strain' Alb pe 'thread' Grk pénomai 'toil [at household tasks]' Arm hanum □ henum 'weave' Toch B pänn- 'draw [out], stretch'				Textiles	JPM

*(s)peud-	push, repulse	Lat pudet 'shames', 'casting off divorce' Lith spáudiu 'press, squeeze' Alb punë 'work' Grk speúdō 'urge on, hasten' Arm p'oyt' 'zeal' NPers poy 'haste, speed'				Conflict	JPM
*(s)pingo-	finch	NE finch Grk spíggos Skt phingaka 'shrike' ?				Bird	JPM
*(s)plend-	shine	OIr lēs 'light' Lat splendeō 'shine, glitter' Lith spléndžiu 'light' Toch plāntā- 'rejoice, be glad' as cognate, i.e. 'be shining'		?		Light & Dark	JPM
*(s)pondʰ(n)os	wooden vessel	ON spann 'pail' Lith spandis 'pail' OCS spǫdŭ 'measure [of grain]' Arm p'und 'pot'	West Central			Containers	JPM
*(s)pornóm	wing, feather	NE fern Lith sparñas 'wing' Av parəna- 'feather' Skt parṇá- 'feather' OCS pero 'feather' Toch B parwa [pl.] 'feathers'				Body (Upper)	JPM
*(s)pre(n)g-	wrap up, constrict	Greek spárgō 'swaddle' Lith springstù 'choke, become choked or constricted' MHG phrengen 'oppress' Toch AB pränk- 'restrain oneself, hold back'				Motion	JPM
*(s)preg-	speak	NE speak Alb shpreg 'express, voice, utter'	West Central			Speech	JPM

*(s)preus(h□)-	sprinkle		{1} Nonce formation, perhaps class VI present (see Joachim 1978: 112f.).	Present V: pruṣṇuvánti [3pl.act.] (RV), pruṣṇute [3sg.med.] (RV) Present IX: pruṣṇắ° (YV) Present IV: vy-ápruṣyat (ŚB 4.5.10.4) Present ĀYÁ: pruṣāyá° (RV) Aorist A: pruṣā [1sg.subj.act.] (RV 10.077.01) {1} Fut: proṣiṣyánt- [ptc.act.] (KS+) TA-Ptc.: pruṣitá- 'sprinkled' (RV)			IIAL
*(s)prh□g-	crackle, sputter	Grk spharagéomai ON spraka Lith spragé´ti Skt sphū́rjati 'thunders'				Human Sounds	JPM
*(s)py(e)uh□-	spew, spit	Lat spuō 'spit' NE spew NE spit Lith spiáuju 'spew' OCS pljujǫ 'spew' Grk ptúō 'spit out, disgorge' Skt ṣṭhī́vati 'spews'				Vital Functions	JPM
*(s)reg	paint, dye		{1} [AL] Jamison 1983: 151 suggests to read +rājaya, but since the same form is attested in the AVP and since the cadence of the uneven pādas in the AV anuṣṭubh is irregular, the emendation is unlikely (cf. also rajayitrī́- [f] 'paintress').	Present IV: arajyata [2pl.impf.med.] (AV 15.8.1), -rajyante [3pl.med.] (ŚB 5.6.2), rajyate [3sg.med.] (Ep.+), rajyati [3sg.act.] (Ep.+) Present I<IV: lajjamāna- [ptc.med.] 'become shy' (< 'become red') (AB 3.22.7 +) Caus: rajaya [2sg.impv.act.] (AV 1.23.1 = AVP 1.16.1) {1} TA-Ptc.: raktá- 'dyed, red' (Br.+)			IIAL

*(s)teg-	cover	Lat tegō 'cover' NE thatch Lith stíegiu 'put on a thatch roof' Grk stégō 'cover' ?Sanskrit sthagayati 'covers'	Possible Sanskrit cognate in sthagayati 'covers' which, if accepted (the -th suggests to some a non-Indo-European origin for the word in Indic), would point to Proto-Indo-European status.			Motion	JPM Beekes
*(s)teg-	pole, post	Lat tignum 'wooden beam' NE stake				Construction	JPM
*(s)téges-	roof	OIr tech 'house' Lat tectum 'roof, ceiling', tēgula 'roof-tile' NE thatch Grk (s)tégos 'roof, house'				Construction	JPM
*(s)teh₂-	stand (up)	OIr -sissedar 'stands' Lat sistō 'stand up' Grk hístēmi 'stand' Av hištaiti 'stands' Skt tíṣṭhati 'stands'	{1} The aspiration in Skt. has arisen in the present *(s)ti-sth₂-e-.	Present III>I: tíṣṭhati [3sg.act.] (RV+) Perfect: tastháu [1,3sg.pf.act.] (RV+) Aorist R: ásthāt [3sg.act.] (RV+) Precative: stheṣur [3pl.act.] (AV), stheṣam [1sg.act.] (VS) Fut: sthāsyati (Br.+) Passive: sthīyate [3sg.] (KSp+) Caus: sthāpay° (RV+) TA-Ptc.: sthitá- 'standing, determined' (RV+)	standing on the chariot': Skt. rathe-ṣ	Placement Verbs	JPM IIAL
*(s)teh₂ist	dough; bread?	OIr taís 'dough' OE þǣsma 'leaven' OCS těsto 'dough' Grk staís 'dough of spelt flour'	This is a neuter noun of a very archaic shape and that archaic shape might argue for a greater antiquity for the concept 'dough', and hence bread-making in general, than its restriction to the West Central groups might otherwise suggest. That it would appear to be derivative of *(s)teh₂- 'stand' suggests that we may well be reconstructing a term originally meaning 'leavened dough' rather than 'dough' in general.			Meals	JPM
*(s)teh₄-	steal	OIr tāid 'thief' OCS tajǫ 'hide' Grk tētáomai 'deprive, rob' Hit tāyezzi 'steals' Av tāyu- 'thief' Skt (s)tāyú- 'thief' Toch B ene-stai 'in secret'				Exchange & Property	JPM IIAL

*(s)teig-	sting, be pointed			Present I: tejate [3sg.med.] (RV+) Intensive: tétikte [3sg.med.] (RV 04.023.07), tétijāna- [ptc.med.] (YVm) TA-Ptc.: ní-tikta- 'urged on, sharpened' (RV) tigitá- 'sharp, pointed' (RV)		IIAL
*(s)tel-	be still, quiet	OIr tuilid 'sleeps' NE still Lith tylà 'quiet person'	North-West		Speech	JPM
*(s)tenh₂	thunder		{1} With the root variant without s- (tan-). {2} Non-causative (intransitive) in early Vedic the causative usage is attested in TS 1.6.11.4. {3} [LK] Reduplicated aorist according to Hoffmann 1976: 568, Werba 1997: 442 (Kümmel 2000 does not include this form into his corpus of perfect formations either) perfect (subj.) according to Lubotsky 1997a: 583. {4} Or ptc.act. (ins.sg.) of present IV (tanyati). {5} Based on the stem of the -ya-present. {6} Laryngeal-derivative of *sten 'to moan, to groan'? (cf. Skt stan).	Present AYA: stanáyati [3sg.act.] (RV+) {2} Present IV: tanyati [3sg.act.] (RV 06.038.02) Aorist R: stanihi [2sg.impv.act.] (RV 06.047.30), stan [3sg.inj.act.] (RV 10.092.08) Aorist RED: atatanat [3sg.act.] (AVP 2.58.4), tatánat [3sg.inj.act.] (RV 08.021.18), tatanas [2sg.inj.act.] (RV 01.038.14) {3} Intensive: taṃstanīhi [2sg.impv.act.] (AV 5.20.1) TA-Ptc.: stanita-, also [n] 'thunder' (Sū.+)		IIAL
*(s)tenh□-	groan thunder	Lat tonāre 'to thunder' OE þunor 'thunder' (> NE thunder) OCS stenǫ 'groan' Grk sténō 'thunder' Skt stanáyati 'thunders'			Air	JPM
*(s)ter-	stork	NE stork Hitt tarlā ?			Bird	JPM

*(s)ter ǵʰ-	crush	Hit istarninkzi 'afflicts' Skt tṛṇéḍhi 'crushes, bruises'				Reductive Activities	JPM
*(s)terh₁-	stiff	NE stare Lith starinù 'tighten, stretch, make stiff' OCS strada 'hard work' Grk stereós 'stiff, firm' Toch B ścire 'hard, rough'				Qualities	JPM
*(s)teud-	push, thrust	OIr do-tuit 'makes to fall' Lat tundō 'push, strike' with the s-, Lat studeō 'strive' (i.e. 'push oneself'), studium 'zeal' Goth stautan 'push' Alb shtyj 'push' Skt tudáti 'pushes, strikes'	{1} Isolated and unclear form perhaps arisen under the influence of tunná- [ppp].	Present VI: tudáti [3sg.act.] (RV+) Present VII>I: tundate [3sg.med.] (RV 01.058.01), tundāná- [ptc.med.] (AV 6.22.3) {1} Perfect: (-)tutóda [3sg.act.] (RV 01.162.17, 10.016.06) na-ptc.: tunná- 'crushed, ground' (RV+)		Convey	JPM IIAL
*(s)teuros	large (domestic) animal	NE steer Av. staora- 'large [domestic] animal [i.e. horse, cow, camel]' Alb ter 'bullock'	In meaning this word has been drawn to the phonetically similar *tauros 'aurochs, bull').			Fauna	JPM
*(s)tig-mo-	sting (A) be pointed (M)			téjīyas- [comp] 'sharper' (RV+)			IIAL
*(s)trep-	± cry out, dispute	Lat strepō 'cry loudly, make noise' OE þrafian 'restrain, reprove urge, demand'	North-West			Speech	JPM
*(s)wehɡʰ-	± cry out resound	Lat vāgiō 'cry, squall [of babies], scream' NE sough Lith svagéˊti 'sound' Grk ēkhḗ 'noise', ēkhéō 'sound, ring'	West Central			Speech	JPM
*(s)weig-	deceive	OE swīcan 'betray' Toch A wek- 'to lie'				Values	JPM

*(s)wer-	say, speak	OPrus wertemmai 'we swear' Rus vru 'lie' Grk eírō 'say' Hit wer(i)ye- 'call, summon' Lat sermō 'conversation, lecture' [> by borrowing NE sermon] NE swear OCS svariti 'despise battle' Lyd śfarwa- ' oath' Toch B ṣarm 'origin'	Greek employs *(s)wer-, i.e. Grk eírō, in the present and *wekʷ–, i.e. Grk eîp̌on, in the aorist and it is possible that such a paradigm from two different roots derived from a still earlier period. In derived form, *(s)wer- also yields NE word (cf. also Lat verbum 'word' and Lith var̃das 'name').			Speech	JPM
*(t)persneh₂-	heel		{1} [AL] Since the other Iranian languages point to an ā-stem, we may also consider an original ā-stem for Avestan, which is attested at V 2.31 and V 23.2 pāšnābiia, whereas pāšnaēibiia at V 8.70, V 8.71, V 9.25, V 9.26 is likely to be due to the preceding or following uzgərəptaēibiia aŋguštaēibiia. {2} [AL] The word for 'heel' seems to be related to the family of the root sphari- 'to kick with the foot', which also points to a heavy initial cluster (*pd-sperhᵢ– ?), cf. YAv. (V 2.31) aiŋhā̊ zəmō pāšnābiia vīspara 'trample this earth with your heels'. {3} [AL] It is improbable that OE fiersin [f] 'heel' contains lengthened grade (pace Pok. 823, EWAia 124) because ē would have been shortened in Proto-Germanic anyhow due to Osthoff's Law. For the etymology see				IIAL
*(t)sel-	sneak up on, crawl up on	Lith selù 'sneak, prowl, step softly' Arm solim 'crawl' Av srvant- 'crawling' Skt tsárati 'creeps up on, sneaks' Alb shligë 'snake' OIr selige 'turtle or snail'				Crawl, Slide, Fall	JPM
*(ud-)tnh₂-no-	stretched		{1} [AL] For the etymology see Beekes 1982-3: 206, fn. 1 and Beekes 1985.		'with outstretched hands': Skt. uttāná-hasta- [adj] (RV) — Av. ustāna-zasta- [adj], ustānāiš … zastāiš (Y 29.5) 'with outstretched hands in reverence': Skt. uttānáhasto námasā (RV 06.016.46) — OAv. nəmaŋhā ustānazastō		IIAL
*(w)rep-	turn, incline	Grk hrépō 'incline oneself, be inclined to' Toch A rapurñe 'desire, cupidity'		?		Motion	JPM
*(y)ebʰ-	elephant		Probable Wanderwort	??		Fauna	JPM

*alogʰ-	thorn	SC glog 'thorn' Grk glôkhes [pl.] 'beard of grain' Grk glōkhĭs 'point, end' Grk glôssa 'tongue'	West-Central			Plants (Wild)	JPM
*ālu-	± esculent root	Lat ālium ☐ allium 'garlic' Skt ālú- 'Arum campanulatum (an esculent root)'	Reconstruction difficult			Plants	JPM
*ānos	circle, ring	OIr āinne Lat ānus Arm anur	West Central			Ornament	JPM
*ar	and, also / thus	OPrus ir 'and, also' Prākrit ira 'and' Grk ára 'now, thus'				Conjunctions	JPM
*at-	father	Lat atta Grk atta Goth atta 'father' Rus otéc 'father' Alb atë 'father' Hit attas 'father'				Kinship	JPM
*b(e)u-	owl	Lat būbo Bulg buk Grk búas Arm bu ☐ bueč NPers būm				Bird	JPM
*b(ʰ)(o)mb(ʰ)-	± muffled noise	ON bumba 'drum' Lith bambė´ti 'roar' Rus búben 'drum' Alb bumbullit 'it thunders' Grk bómbos 'muffled noise' Lith bam~balas 'bee' Grk bombúlē 'bee' Skt bambhara- 'bee'	West Central			Animal Noises	JPM
*b(ʰ)e ǵ ʰ	without	Lith bè 'without but' OCS bez 'without' Skt bahí- 'outside'				Position	JPM
*baba-	babble	Lat babit NE baby, babble Grk babázō,				Human Sounds	JPM
*badyos	(yellow) brown	OIr buide 'yellow' Lat badius 'bay (of a horse)'	Celtic-Italic isogloss			Color	JPM
*baitéh☐-	cloak	Goth paida 'tunic, shirt' Grk baítē 'shepherd's cloak of skins'	West Central With its very rare initial *b-, has suggested to some a loanword from a non-IE language			Textiles	JPM
*bak-	club	OIr bacc 'staff' Lat baculum 'staff' Grk báktron 'staff'	West Central the initial *b- has been explained either as the mark of a 'popular word' (i.e. one apparently used only in informal contexts and subject to the possibility of special phonological changes) or a loanword from some non-Indo-European language.			Weapons	JPM

*balba-	stammer	Lat balbus 'stammer' NE babble Lith blebénti 'stammer' Czech beblati 'stammer' Grk bárbaros 'non-Greek speaker' [whence via Latin to NE barbarian] Skt barbara- 'stammerer, non-Indic speaker'				Human Sounds	JPM
*baub-	bark, low	Lat baubor 'bark' Lith baũbti 'low [of cows]' Grk baúzō 'bark'	West Central			Animal Noises	JPM
*bélos	strong	Lat dēbilis 'weak, infirm' OCS bolĭjĭ 'larger' Grk bélteros 'better' Skt bálam 'power, strength'	Problematic requires a Proto-Indo-European *b- which is exceedingly rare (some would argue non-existent)			Health&Sickness	JPM
*bʰ(e)rh□ǵos	birch	Lat farnus/fraxinus 'ash' NE birch Lith béržas 'birch' Rus berëza 'birch' Oss boerz 'birch' Skt būrjá- 'birch'	Derived from an adjective meaning 'bright, shine' and has a long association in several Indo-European groups with virginal purity. Gamkrelidze and Ivanov have used this connection to suggest that Hit parku- 'ritually pure innocent' actually derives from the word for 'birch' although the Hittites had lost the arboreal term itself.			Trees	JPM IIAL
*bʰabʰeh-	bean	Lat faba 'bean' NE bean [< PIE *bhabhneha-] OPrus babo 'bean' Rus bob 'bean' Alb bathë 'bean'				Plants	JPM
*bʰag-	apportion	Phrygian Bagaîos is an epithet of Zeus Skt bhága- 'apportion' was deified as one of the Vedic gods Av baga- 'good fortune' Toch B pāke 'share'				Exchange & Property	JPM
*bʰag-	divide, distribute	Grk phageiun 'eat' Av bag- 'distribute' Skt bhájati 'divides, distributes, enjoys' Rus bog 'god' Av baaa- 'god' Skt bhága- 'lord' Toch B pāke 'share, portion'				Measure & Quantity	JPM
*bʰāǵʰus	(fore)arm, foreleg	OE bōg 'shoulder, arm, bough' [> NE bough] Grk péḱhus 'elbow, forearm' Av bāzu- 'arm foreleg' Skt bāhú 'forearm, arm, forefoot of an animal' Toch B pokai- 'arm limb'				Body (Upper)	JPM

*bʰagos	apportioner	Skt Bhága- Phrygian Bagaîos, epithet of Zeus				Dieties	JPM
*bʰakó/ehₐ-	bean	Grk phakós 'bean'				Plants	JPM
*bʰar-ko-	pointed?	Mlr barc 'spear shaft' SC br̂k 'point'	North-West from *bʰar- 'projection'			Shape	JPM
*bʰardʰ-ehₐ-	beard	Lat barba NEbeard Lith barzdà Rus borodá 'beard, chin'	North-West			Hair	JPM
*bʰárs	grain	NE barley Lat fār 'grain coarse meal' Rus bórošno 'ryemeal' Grk pher̂os 'food of the gods' Albanian bar 'grass'	North-Western it has been derived from both the Near East and a European substrate			Plants	JPM
*bʰébʰrus	beaver	Gaul bebru- Lat fiber NE beaver Lith bebrùs Rus bobr Av bawra-				Fauna	JPM IIAL
*bʰedʰ-	bend (ones body)	Toch B pauto 'honour' NE bid < 'request on bended knee' Alb bind means 'convince'				Bend and Press	JPM
*bʰedʰ-	dig, burrow	Lat fodiō 'dig' Hit padda- ▢ pidda- 'dig' NWels bedd 'grave' TochA pāt- 'plough'				Reductive Activities	JPM

*bʰeg-	break	OIr boingid Arm bekanem Skt bhanákti Lith beñgti 'finish, end', perhaps from 'breaking off'.	{1} [LK] There are semantic reasons to group this formation with class IV presents and to presume fluctuating accentuation, i.e. bhájyate in RV-Kh. / bhajyáte in AV see Kulikov 1998 Kulikov 2001: 361, 543. {2} Connection uncertain.	Present VII: bhanákti [3sg.act.] (RV+) bhañjánt- [ptc.act.] (RV+) bhaṅdhi [2sg.impv.act.] (RV+) nir-ábhanaḥ (for *-ábhanak-s) [2sg.impf.act.] (AV 3.6.3) Perfect: babháñja [3sg.act.] (RV 08.004.05) Present IV/Passive: ní … bhajyate [3sg.] (RV-Kh. 5.5.10), bhajyantām [3pl.impv.] (AV 8.8.3, 8.8.4), bhajyamāna- [ptc.] (AB 3.22.7) {1} na-ptc.: bhagna- 'broken' (Br.+)		Reductive Activities	JPM IIAL
*bʰe ǵʰ-	outside		{1} Connection with bahíṣ uncertain. {2} [AL] Jasanoff (Acts Copenhagen, XXX) explains the ending -is as an original instr.pl. ending (cf. PIE instr.pl. *-ōis < *-o-is), cf. further āvís, nís.				IIAL
*bʰegʷ-	run	Lith bė́gu 'run, flee' Rus begú 'run, flee' Grk phébomai 'flee' Hindi bhāgnā 'flee'				Run & Jump	JPM
*bʰeh₂	truly						Beekes
*bʰeh₂-	shine				'the shining dawn': Skt. uṣás- vi-bhātī́ (RV) — YAv. ušā̊ṅhəm … vi-uuaitīm — Gr. φάε… Ἠώς 'the dawn appeared' (Hom.) 'shines with shine(s)': Skt. bhānúbhir / bhānúnā … vibhā́ti (RV) — YAv. viiāuuaiti bānubiiō (Yt 17.6)		IIAL
*bʰeh₂-	shine	OIr bān 'white' OE bōnian 'ornament, polish' Alb bej 'do' [< *'bring to light'] Grk phaínō 'bring to light' Luv piha- 'splendur' Av bā- 'shine' Skt bhā́ti 'shines' bhā́s- 'light, splendour'		Present II: bhā́ti [3sg.act.] (RV+) Fut: bhāsyáti [3sg.act.] (Br.+) TA-Ptc.: bhāta- 'shining' (Up.+)		Light & Dark	JPM IIAL

*bʰeh₂-mo-	shine, splendour			{1} bhā́ma- [m] 'passion, wrath, anger' (RV+), with derivetives bhāmín- [adj] 'angry' (RV 01.084.16), bhāmitá- [adj] 'enraged' (RV 01.114.08, TS), is most probably identical with this word.			IIAL
*bʰeh₂-nu-	ray of light						IIAL
*bʰéh₂(e)s-	light	Grk phôs Skt bhās- 'light'	Graeco-Aryan from *bʰeh₂- 'shine'			Light & Dark	JPM
*bʰeh₂ǵ-	become as a share, get distributed		{1} [LK] The long root vowel in these two forms is probably secondary and has nothing to do with the causative stem bhāj(ay)- see Kulikov 2001: 125ff.	Present I: bhájati [3sg.act.] (RV+) Aorist S: ábhakṣi [1sg.med.] (RV) abhakta [3sg.med.] (RV), abhākta [3sg.med.] (AB), abhākṣam [1sg.act.] (YV) SI-impv: bhakṣi (RV) Perfect: babhā́ja [3sg.act.] (RV, ŚB) bhejé [3sg.med.] (RV+), bhejiré [3pl.med.] (RV+) Passive: vi-bhājyámāna- {1} [ptc.] 'being shared out' (AV 12.5.28), vi-bhājyánte {1} [3pl.] 'are distributed' (MSp 2.2.13:25.13) ví bhajyate [3sg.] (YVp+) Fut: bhakṣyati [3sg.act.] (Br.) Caus: bhājayata [2pl.impv.act.] 'to make share, to make partake' (RV 10.009.02+) Desid: bhíkṣate			IIAL
*bʰeh₂ǵʰu-	arm			bāhávā [nom.acc.d arm-strong': Skt. bāhv-òjas- [adj] (RV) — YAv. bāzuš.aojah- [adj]			IIAL
*bʰéh₂tis	light	Grk phásis 'star rise' Skt bhā́ti- 'splendour'	Graeco-Aryan from *bʰeh₂- 'shine'			Light & Dark	JPM
*bʰeh₂-	speak	Lat for 'speak' NE ban Rus báju 'relate' Grk phēmí 'say' Arm bay 'says'	West Central			Speech	JPM

*bʰehₐ-mehₐ-	saying	Lat fāma 'talk, reputation, fame' Grk phḗmē 'saying, speech'	West Central			Speech	JPM
*bʰehₐǵós	beech	Gaul bāgos '?beech' Lat fāgus 'beech' OE bōc 'beech book' [> NE book], bēce [> NE beech] Alb bung 'durmast oak [Quercus petraea]' Grk phēgós 'Valonia oak [Q. aigilops]') perhaps Rus buz 'elder'				Trees	JPM
*bʰeid-	split break	Lat findō 'split' Skt bhinádmi 'bite' Grk pheídomai 'spare'	{1} [LK] With the secondary suffix accentuation (see Kulikov 1998). {2} [LK] See Scarlata 1999: 355f. {3} [JC] Wa. zŭbŭt- 'to break' (cited in EWAia, following IIFL II: 556) = Wa. z(ə)bəθ-, z(ə)bət-, must derive from *uz-pat-. The Wa. form has a (voiced) stop -b-, which cannot refelct old Ir. *b in this position, cf. Steblin-Kamenskij, l.c.	Present IX: bhinátti [3sg.act.] (RV+) Present IV: bhidyáte [3sg.med.] (RV-Kh. 2.1.6, TS) bhidyéta [3sg.opt.med.] {1} (MSp), bhidyáte [3sg.med.] {1} (ŚB, KạthĀ 3.234:100.15) bhidyate [3sg.med.] (AVŚ, AVP, YVp+) Aorist A: abhedam [1sg.act.] (RV) Aorist S: abhaitsam [1sg.act.] (AVP) bhitthās [2sg.inj.med.] (KS+) Perfect: bibhéda [3sg.act.] (RV+), bibhide [3sg.med.] (AVP 5.9.5) Fut: bhetsyati [3sg.act.] (Sū.+) Desid: bibhitsa° (RV 10.061.13) Abs: bhittvắ (RV+), vi-bhídyā (RV+)		Reductive Activities	JPM IIAL
*bʰeidʰ-	persuade, compel, confide	Lat f īdō OE bædan 'urge' OCS běditi 'constrain' Alb be 'oath' Grk peíthō 'persuade'	West Central			Speech	JPM

*bʰeih₂-	fear		{1} [AL] bhāyante (AVP 2.57.5) is corrupt (cf. Zehnder 1999: ad loc.).	Present I: bhayate [3sg.med.] (RV) Aorist R: bhema [1pl.inj.act.] (RV), bhes [2sg.inj.act.] (YVp+) bhiyāná- [ptc.med.] (RV) Aorist S: bhaiṣīḥ [2sg.inj.act.] (AV+) Perfect: bibháya [3sg.act.] (RV+) bibhīvā́ṃs- [ptc.act.] (RV+) Present III<Perfect: bíbhyat- [ptc.act.] (RV+), bibhītás [3du.act.] (AV+), abibhet [3sg.impf.act.] (YVp+) TA-Ptc.: bhītá- 'frightened, afraid' (RV+) {1}			IIAL
*bʰeih₂-os-	fear			bhiyásam [acc.sg.] (disyllabic /bhyasam/ in 2.28.6a and 9.19.6b), bhiyáse [dat.sg.]			IIAL
*bʰeih□-	strike	OIr benaid 'strikes' Lat perfinō 'break through, shatter' OCS bijǫ 'strike' Av byente 'they struggle, strike'				Conflict	JPM
*bʰel-	± marten; wildcat	NWels bele 'marten' Lat fēlis 'small carnivore' Skt bharuja- 'jackal'		?		Fauna	JPM
*bʰel-	blow, blow up, swell	NE blow Lat flō 'blow' Lat follis 'leather sack inflated with air' OIr ball ferda 'penis' Grk phallós 'penis' Skt bhāṇḍa- 'pot'				Blow Up	JPM
*bʰel-	coot	Lat fulica OHG belihha				Bird	JPM
*bʰel-	henbane	Gaul belénion OE beolone Rus belena	North-West			Plants (Wild)	JPM

*bʰel ǵʰ-	swell	OIr bolgaid 'swells' OHG belgan 'swell up'	{1} With -iš- instead of -aš- due to the influence of *stariš- 'straw'.		'fuel and straw': Skt. idhmā́-barhiṣ- (RV) — YAv. aēsma … barəsma 'to spead the straw': Skt. prá stṛṇīte … barhíḥ — YAv. barəsma (fra-)star-	Blow Up	JPM IIAL
*bʰelh₁-	white	NWels bal Lith bãlas Grk phalós OCS bělŭ Lat flāvus 'blond' NE ball (horse with white blaze) Skt bhālam 'gleam, forehead' Lith bálti 'grow white, pale'				Color	JPM
*bʰélh□ ǵ s	plank, beam	NE balk Lat fulciō 'prop up, support'				Construction	JPM
*bʰels-	yelp, howl	OE bellan 'roar, howl' Skt bhaṣati 'barks, yelps'				Animal Noises	JPM

*bʰendʰ-	bind	NE bind, Grk peîsma, Skt badhnā́ti	NE bind Av bandayeiti 'binds' Skt badhnā́ti 'binds' Grk peîsma 'rope' Lith beñdras 'companion' Grk pentherós 'father-inlaw' Skt bándhu- 'kinsman connection, kinship'	Present IX: ábadhnāt [3sg.impf.act.] (RV+), -badhnīmas [1pl.act.] (AV+), badhāná [2sg.impv.act.] (AV+), abadhnata [3pl.impf.med.] (AV+) Perfect: babándha [3sg.pf.act.] (AV+) -bedhúr [3pl.pf.act.] (AVŚ 09.03.06 ˘ AVP 16.39.06), bedhé [3sg.med.] (AV) Passive: badhyáte [3sg.] (RV+) Fut: bhantsyā́mi [1sg.act.] (YVm+) Caus: bandhay° (ŚB+) Inf: ā-bádhe (AVŚ 05.28.11 = AVP 02.59.9) Abs: baddhvā́ (AV+) TA-Ptc.: baddhá- (RV+)		Binding	JPM IIAL
*bʰendʰ-u-	relative						IIAL
*bʰendʰr̥ros	± relation	Lith beñdras 'companion' Grk pentherós 'father-in-law' Skt bhándhu-				Kinship	JPM
*bʰen ǵʰ-	grow, increase	Skt baṃhayate 'causes to grow'				Vital Functions	JPM
*bʰén ǵʰus	thick, abundant	Lat pinguis 'fat' [with mysterious initial p-] OHG bungo 'bump' Latv bìezs 'thick' Grk pakhús 'thick, compact' ?Hit panku- 'total, entire, general' ?Skt bahú- 'much, many numerous, compact abounding in'				Measure & Quantity	JPM

*bʰer-	± cure with spells and/or he	Lith bùrti 'cast a charm, spell' Alb bar 'grass, herb, drug, medicine' Grk phármakon 'something that brings health or harm, drug, medicine'	with problematic Baltic cognates			Health&Sickness	JPM
*bʰer-	brown	*bhruh□nos NE brown Grk phrûnos 'toad' *bʰebʰru- Mitanni papru- 'brown [of horses]' Skt babhrú- 'reddish brown' *bʰēro- Lith bė́ras 'bay [of horses]'	Quite productive in that it underlies the Proto-Indo-European word for 'beaver' (Section 9.1) and the Germanic words for 'bear' (Section 9.1) it also renders 'toad' in Greek and is a horse colour in Mitanni. The colour words from this root come in many diVerent formal shapes.			Color	JPM
*bʰer-	carry	OIr beirid Lat ferō NE bear Alb bie Grk phérō Arm berem Skt bhárati Toch AB pär- Rus berú 'take' Lith beriù 'strew'	{1} Nonce formation, as well as bíbhramāṇa-10.031.06. {2} [LK] The only subjunctive form of a present passive in early Vedic cf. also the Old Avestan 3pl. form and see Kulikov 2001: 131, 552ff. XXX seṭ-forms, jabhara	Present I: bhárati [3sg.act.] (RV+) 'to bring' Present III: bíbharti [3sg.act.] (RV+ once bibhárti 04.050.07), abibhran [3pl.impf.act.] (RV, with a unique ending) 'to carry' Present II: bhárti [3sg.act.] (RV 01.173.06, 06.013.03) {1} Aorist S: abhārṣam [1sg.act.] (RV+), abhār [3sg.act.] (RV+) Aorist mediopass: bhāri [3sg.inj.] (RV) Perfect: jabhā́ra [3sg.act.] (RV+), jabhriré [3pl.med.] (RV+), babhre [3sg.med.] (RV) Passive: bhriyáte [3sg.] (RV+), bhriyāte [3sg.subj.] {2} (RV 05.031.12+) Fut: ábhariṣyat	'to promote to offer': Skt. prá-bhar- [verb] 'to offer, present' (RV+) — YAv. fra-bar- [verb] 'to bring (forward)' — OP fra-bar- [verb] 'to transport, carry over' — Khot. haur-, hūr- [verb] 'to give' Skt. prá-bhartar- [m] 'promotor' (RV) — YAv. frabərətar- [m] a type of priest (cf. Umb. ařfertur [m] title of a priest < *ad-fertor) Skt. prá-bhṛti- [f] 'offering' (RV+) — YAv. hu-frabərəiti- [f] 'good offering' 'to carry the speech, voice (in mind)': Skt. vā́cam mánasā bibharti 'carries the speech in mind' (RV 10.177.02), vácas … bhar- 'to bring the word' (RV) — OAv. vācəm baraitī [manaŋhā] 'raises his voice (in accordance with his mind)' 'to bring existence': Skt. ásum … ā́ bhar- (AVŚ 8.2.1) — YAv. ahūm ā bar- 'to support Truth': Skt. ṛtám bhar- (RV+) — OIran. *ṛtam-bara- PN 'to bring homage': Skt. námas … bhar- (RV+) — YAv. nəmo bar- — NP (poet.) namāz burdan 'to offer a praise': Skt. stómam (prá-)bhar- (RV+) — YAv. staomāca … barəntu 'to foster well, to treat well': Skt. sú-bhṛtam bhar- (RV+) — YAv. hubərətąm barāt_, OP ubrtm abrm /	Convey	JPM IIAL

*bʰer-	seethe, bubble	MIr fobar 'well' Lat fermentum 'ferment, leaven' OE beorma 'yeast, leaven' Grk porphū́rō 'bubble' Skt bhuráti 'moves rapidly, quivers'				Food Prep	JPM
*bʰer-	strike (through), split	MIr bern 'gap, chasm' Lat feriō 'strike, pound' Lith bar(i)ù 'revile, abuse' Rus borjú 'subdue, throw down', Grk pharóō 'plough' Arm brem 'dig up, hollow out, bore' NPers burrad 'cuts' Skt br̥ṇắti 'wounds' OE borian > NE bore OCS borjǫ 'fight, struggle'				Conflict Reductive Activities	JPM
*bʰére/o-	bear (a child)	OIr beirid 'bears' Lat ferō 'bear' NE bear OCS berǫ 'gather' Alb bie 'bring, take' Grk phérō 'bear' Arm berem 'bear' Av baraiti 'bears' Skt bhárati 'bears' Toch AB pär- 'bear NE bairn 'child'				Vital Functions	JPM
*bʰerg-	± bark, growl	NE bark Lith burgé´ti 'spurt, splash, splutter, howl'	North-West			Animal Noises	JPM
*bʰergʰ-	keep, protect	OE beorgan 'keep' Lith bìrginti 'be parsimonious' Slavic OCS brěšti 'care for'	North-West			Conflict	JPM

*bʰer ǵʰ-	become high, rise		{1} These forms may belong to a different PIE root, *bhelǵh- 'to swell, to put underneath smth. swelling', cf. s.v. barhíṣ-.	Present AYA/Caus: ní barhay° 'to lay low' (RV+) Present VI<VII: °br̥ṃha° (ŚB+) (created on the model of dr̥ṃha°) Aorist IS: ní barhīt [3sg.inj.act.] (RV) Intensive: upa bárbr̥hat [3sg.subj.act.] 'to underlay, to put underneath' (RV 05.061.05), úpa barbr̥hi [2sg.impv.act.] (RV 10.010.10) {1} TA-Ptc.: pári-br̥dha- 'firm, strong' (ŚB+)		IIAL
*bʰer ǵʰ-	high; hill	Mlr brī 'hill' NE barrow OHG burg 'fortress' NHG Berg 'mountain' Rus béreg 'river-bank' Av bərəz- 'hill'	West Central Greek and Armenian cognates show unexpected forms, e.g. Grk púrgos (and not the expected **párkhos) which some suggest may derive from a Near Eastern word, e.g. Urartian burgana- 'fortress', or others suggest may come from some other Indo-European language that may have preceded Greek into the Aegean area but whose population was subsequently assimilated to Greek		Earth Dwelling	JPM
*bʰerh₂	quiver, hurry		{1} [AL] For Lat. fervō [verb] 'to boil, bubble', Mlr. berbaim [verb] 'to boil' see XXX.	Present VI: bhurántu [3pl.impv.act.] (RV), bhuránta [3pl.inj.med.] (RV) Present ANYA: bhuraṇyáti [3sg.act.] (RV) Intensive: járbhurīti [3sg.act.] (RV), járbhurāṇa- [ptc.med.] (RV)		IIAL
*bʰerh□ ǵ -	shine, gleam	NWels berth 'shiny' NE bright, Lith bré̇kšta 'dawns' Pol brzask 'dawn' Alb bardhë 'white'			Light & Dark	JPM

*bʰérmn-	load	OCS brěmę 'load' Grk férma 'fruit' Skt bhárman- 'load'				Convey	JPM
*bʰertōr	priest	Umb ars-fertur 'priest' Av fra-bərətar- 'priest'	From root *bʰer- 'carry' possibly independant creations	?		Sacred	JPM
*bʰerug-	gullet	Lat frūmen Grk pháru(g)ks 'gullet' Arm erbuc 'breast'	West Central			Organs	JPM
*bʰes-	± blow	Grk psūkhḗ 'breath, spirit' Skt psu- 'breath'				Vital Functions	JPM
*bʰes-	blow	Grk psűkhō 'cool off' [<*'cool off by blowing'?] Skt bábhasti 'blows' Toch B pās- 'whisper'	Greek-Indic-Tocharian isogloss			Blow Up	JPM
*bʰes-	rub	Alb fshij 'sweep, wipe, brush' Grk psáō 'rub' Skt bábhasti 'chews thoroughly, devours', psā́ti 'chews, swallows'				Reductive Activities	JPM
*bʰeu(h□)-	come into being, be grow	OIr -bíu 'become' Lat fīō 'become' Lith bűti 'be' OCS byti 'be' Grk éphūn 'would be' Skt ábhūt 'was' ?Lat fuī 'was, have been' OCS by 'was'	this form tends to supply the aorist forms in a number of Indo-European groups			Being & Doing	JPM
*bʰeud-	strike, beat	OIr bibdu 'guilty enemy' Lat fūstis 'cane, cudgel' NE beat	North-West			Conflict	JPM

| *bʰeudʰ- | become attentive {3}, be awake, perceive | | {1} According to Insler 1972: 560ff., subjunctive of the root aorist see Gotō 1987: 217451 for a discussion.
{2} The transitive nasal present *bhu-n-(e)dh- 'to hear someone in court, to summon someone before court, to announce in court, to decree' is not preserved in Old Indo-Aryan, but may have left traces in New Indo-Aryan.
{3} [LK] See Kümmel 2000: 332f. | Present I {1}: bódhati [3sg.act.] 'to perceive, to notice' (RV+)
Present IV: búdhyamāna- [ptc.med.] 'to wake (intr.), to be awake' (RV+), 'to perceive, to notice' (AV+)
Aorist R: budhánta [3pl.inj.med.] (RV)
Aorist IS: ábhutsi [1sg.med.] (RV+), abhutsata [3pl.med.] (AV+), ni-bódhiṣat [3sg.subj.act.] (RV 02.016.07)
Perfect: bubodhas [2sg.subj.act.] (RV), bubudhāná- [ptc.med.] (RV, Br.+)
Fut: bhotsy° (TS, Br.+)
Caus: bodháy° 'to wake (tr.), to make wake up' (RV+)
Aorist mediopass: ábodhi 'to be awake' [3sg.], abudhran [3pl.] | | | IIAL |
| *bʰeudʰ- | pay attention, be observant | Rus bljudú'observe, pay attention to'
Grk peúthomai 'examine, experience'
Av baoδaiti 'notices, observes',
Skt bódhati 'is awake, wakes up observes, understands'
OE bēodan > NE bid | | | | Sight | JPM |

*bʰeug-	bend		{1} [LK] Depending on whether abhog- is connected with bhoj [1] 'to bend' (thus Kiehnle) or bhoj [2] 'to enjoy' (thus AiGr II,2: 27) see Scarlata 1999: 682. {2} Connection uncertain because of the final consonant (PGm. *-g- < PIE *-gh-). On the other hand, the connection with YAv. baoxtar- [m] 'liberator', MP bōxtan [verb] 'to free, to release', Gr. φεύγω [verb] 'flee' Lat. fugiō [verb] 'id.' is difficult because of the semantics.	Present VI: bhuját- [ptc.act.] (RV 06.062.06), pari-bhuját [3sg.subj.act.] '(it) embraces (both worlds)' (RV 01.100.14 +) Perfect: pári … ábubhojīḥ [2sg.ppf.act.] '(you) have embraced (both worlds)' (RV 01.033.09) na-ptc.: bhugna- 'bent, curved' (Sū.+)		IIAL
*bʰeug-	bend (an object)	OHG biogan 'bend' Skt bhujáti 'bend' Goth biugan 'break' Latv bauga 'hill'			Bend and Press	JPM

*bʰeug-	enjoy		{1} [LK] Optative in the function of injunctive (Lubotsky 1997a: 984, following Hoffmann 1967: 95ff.), with secondary thematicization (Insler's type gamema see Insler 1975b). {2} [LK] See Jamison 1983: 173.	Present VII: bhuñjaté, bhuñjáte [3pl.med.], bhunájāmahai [1pl.subj.med.] (RV+) -bhuñjant- [ptc.act.] (RV+) Aorist R: mā́ bhojam [1sg.inj.act.] 'may I not atone (for other people's deed)' (RV 02.028.09), (mā́) bhujema [1sg.opt.act.] {1} 'may we (not) atone (for smth.)' (RV) bhójate [3sg.subj.med.] '(people) lives on (cows)' (RV 01.072.08) Aorist SIṢ: +bhukṣiṣīmahi [1pl.med.] (MS) Perfect: bubhujmáhe [1pl.med.] (RV 08.067.16), bubhujriré [3pl.med.] (RV 01.138.03)	'providing many nourishments': Skt. puru-bhójas- [adj] (RV) — YAv. pouru.baoxšna- [adj] 'rich in refreshments (?)' 'atone(ment) for the transgression': Skt. énas … bhujema (RV) — OAv. aēnaŋhō … būjəm (Y 31.13)		IIAL
*bʰeug-	flee	Lat fugiō 'flee' Grk pheúgō 'flee'	West Central {1} Possibly connected with bhoj [1].			Run & Jump	JPM IIAL
*bʰeug-	use	Lat fungor 'am engaged in, perform' Skt bhunákti 'aids, serves, protects', bhuṅkté 'enjoys, uses, consumes'				Being & Doing	JPM
*bʰi-kʷó-	bee, stinging insect	OIr bech OE beo > NE bee OCS bĭčela Lith bìtė (with suffix *-tiha-)	North-West Underlying etymology is *bhei(hx)- 'strike, attack'			Bug	JPM
*bʰibʰóihe	is afraid	OE beofian 'tremble' NHG beben 'tremble' Skt bibhā́ya 'is afraid'				Values	JPM

*bʰidʰ-	large pot	Lat fidēlia 'earthenware pot' Icelandic biða 'small tub'	North-West possibly from an otherwise unattested *bheidh- 'bend' (from either coil-built pottery or basketry)			Containers	JPM
*bʰla ǵ -	strike	Lat flagrum 'whip' ON blekkja 'strike' Lith blaškaũ 'throw, fling'	North-West			Conflict	JPM
*bʰla ǵ ʰmēn	priest	Lat flāmen 'priest' Messapic blamini 'priest' OPers brazman- 'appropriate form, appearance' Skt brahmán- 'priest'	Latin-Messapic-Indo-Iranian isogloss primarily challenged because the - ǵ ʰ- of the reconstructed form is nowhere evident in the Latin word nor can one find any further evidence of a root *bʰla ǵ ʰ- in any of the other Indo-European languages.			Sacred	JPM
*bʰleg-	burn, shine	Lat fulgō Lat flamma 'flame', fulmen 'lightning' NE black, i.e. 'burned' Grk phlégō 'burn' Av brāzaiti 'gleams, shines' Skt bhrā́jate 'gleams, shines, glitters' Toch AB pälk- 'shine'				Light & Dark	JPM
*bʰleh₁-	bleat	Lat fleō 'weep, cry, lament shed tears' MHG blæjen 'bleat' Latv blēju 'bleat' Rus bléju 'bleat'	North-West			Animal Noises	JPM
*bʰlei-	± become inflated	Latv blīstu 'become thick' Grk phlidáō 'overflow of moisture'	an enlargement on Proto-Indo-European *bhel- 'blow'			Blow Up	JPM
*bʰlendʰ-	be/make cloudy	NE blind, blunder Lith blandùs 'unclean' Rus blud 'unchastity, lewdness'	North-West			Light & Dark	JPM
*bʰleu-	swell, overflow	Lith bljaúju 'roar' OCS bljujǫ 'spew' Grk phléō 'gush, teem, overflow' with *-d- extension: Toch B plutk- 'swell' Grk phludáō 'have an excess of moisture' with *-g- yields Lat fluō 'flow', flūmen 'river' Grk phlúzō 'boil up, boil over'				Blow Up	JPM
*bʰlh□d-	leaf	NE blade Toch B pilta 'leaf '	Restricted to Germanic and Tocharian			Trees	JPM
*bʰlih□ ǵ -	strike	Lat fligō 'strike' Latv blaizît 'crush, strike' Grk phíbō 'press'	West Central			Conflict	JPM
*bʰloh□dʰo-	flower	MIr blāth 'flower' OHG bluot 'fower', a derivative gives us NE blossom	North-West			Plants (Wild)	JPM
*bʰodh□rós	deaf	OIr bodar Skt bhadirá-				Health&Sickness	JPM

*bʰōg- *bʰ(o)hₓǵ-	bake, roast	NE bake Grk phṓgō 'roast, toast, parch'	West Central			Food Prep	JPM Beekes
*bʰólǵʰis	(skin) bag bolster	OIr bolgr 'sack' Gaul bulga 'leather sack' OE bel(i)g 'bag' [> NE belly] OHG balg 'skin' Slovenian blazína 'feather bed' Av bərəziš 'bolster, cushion' Skt upa-bárhanī- 'cover, bolster'	Derives from the verbal root *bʰelǵʰ- 'swell'			Textiles	JPM
*bʰóliom	leaf	Lat folium Grk phúllon 'leaf plant'				Trees	JPM Celt.
*bʰólom	forehead	OPrus ballo Alb ballë Skt bhālam				Head	JPM
*bʰorgʷo-	angry, violent	OIr borb 'stupid, violent' Latv bar̃gs 'hard, unfriendly' Arm bark 'angry, violent'	West Central			Values	JPM
*bʰosós	bare, naked bare(footed)	NE bare Lith bãsas 'barefoot' OCS bosŭ 'barefoot' Arm bok' 'barefoot'				Health&Sickness	JPM Beekes
*bʰōu	both	Lat ambō 'both' OE bēgen 'both' [NE both is an Old Norse loanword] Lith abù 'both' OCS oba 'both' Grk ámphō 'both' Av uba- 'both' Skt ubháu 'both' Toch B antapi				Numbers	JPM
*bʰoudʰéye/o-	waken, point out	Lith baudžiù 'waken' OCS buditi 'waken' Av baoδayeiti 'indicates' Skt bodháyati 'wakens'				Sight	JPM
*bʰrak-	squeeze together	Grk phrássō 'push together' Toch B prākre 'firm' Lat fartus 'thick' OIr barc 'storm, fury'				Bend and Press	JPM
*bʰreǵ-	break	Lat frangō 'break' NE break	North-West			Reductive Activities	JPM

*bʰreh₁ǵ -	shine			Present I: bhrā́jate [3sg.med.] (RV+) Aorist R: ábhrāṭ [3sg.act.] (RV), bhrājyāsam [1sg.opt./prec.act.] (AV 17.1.20) Aorist mediopass: ábhrāji [3sg.] (RV 05.054.06) Aorist IṢ: bhrājiṣīya [1sg.opt.med.] (MS)		IIAL
*bʰreh₁wr̥	spring	OE brunna 'spring' [> NE burn] Grk phréār 'fountain' Arm ałbiwr 'spring'	r/n Heteroclitic		Water	JPM
*bʰréh₂t(ē)r	brother					Beekes
*bʰréh☐ter-	± brother	OIr brāthair Lat frāter NE brother OPrus brāti OCS bratrŭ Grk phrḗtēr Arm ełbayr Av brātar- Skt bhrā́tar- Toch B procer			Kinship	JPM Beekes
*bʰreh☐triyom	brotherhood	Grk phrātríā Skt bhrātryam OCS bratrĭja			Kinship	JPM
*bʰreh☐i-	destroy, cut to pieces	Lat friō 'tear apart' Rus britĭ 'shave' Skt bhrīṇánti 'injure, hurt' OIr ro-bria [subj.] 'may spoil, destroy'			Conflict	JPM
*bʰreih☐	cut off, shave			Present IX: bhrīṇánti [3pl.act.] (RV) Aorist S: bhreṣate [3sg.subj.med.] (RV)		IIAL

*bʰrem-	flicker		{1} Most probably, an aniṭ-root seṭ-forms (bhrāmyate, bhrānta-) are secondary and/or late.	Present I: bhrámasi [2sg.act.] (BĀU+), bhramyāt [3sg.prec.] (Sū.) Present IV: bhrāmyate [3sg.med.] (Up.+) Caus: bhramay° (Sū.+) Intensive: bambhramyamāṇa- [ptc.med.] (Up.+) TA-Ptc.: bhrānta- 'having wandered about, transmigrating' (Ep.+)			IIAL
*bʰrem-	make a noise (of animals)	OE bremman 'roar' Skt bhramará- 'bee' Lat fremō 'growl, roar' NHG brummen 'growl, grumble, hum' Pol brzmiec´ 'resound'				Animal Noises	JPM
*bʰrenḱ-	fall off		{1} [LK] Thus Gotō 1987: 231. Lubotsky 1997a: 1006, who takes bhraśat as pres. inj., must be corrected. The causative bhrāśayan (RV 10.116.05) probably belongs to another root, bhraś 'to be/make sharp', contra Lubotsky 1997a: 1006 see Jamison 1983: 86 Gotō 1987: 232. {2} [AL] bhraṣṭākṣa- [adj] 'having fallen eyes [demon]' (AVP), cited by EWAia, does not exist (AVP(O) 6.24.3 reads trastākṣa-). {3} [AL] Despite Adams' criticism (s.v.), this etymological connection, for the first time suggested by Jasanoff, seems semantically and phonologically cogent. The nasal in the root must be old, since the apparent forms without a nasal belong to another root, see fn. 1.	Present I: bhraṃśate [3sg.med.] (AVP 6.23.1+) Present IV: bhra(ṃ)śyate [3sg.med.] (TĀ+) Aorist A: bhraśat [3sg.inj.act.] {1} (RV 10.173.01) TA-Ptc.: bhraṣṭá- 'fallen down' (AV 20.136.7, 20.136.8 (?), TSp+) {2}		IIAL
*bʰrentós	stag				Fauna	JPM
*bʰreu-	seethe	OIr berbaid 'boils, seethes' Lat ferveō 'boil' NE brew Alb brumë 'dough' Skt bhurváṇi- 'restless, excited' Lat dēfrutum Thracian brûtos 'a kind of beer'	The meaning 'brew' is found only in the Germanic outcomes of *bʰreu- but there are nominal forms in Italic (Lat dēfrutum) and Thracian brûtos 'a kind of beer' that indicate an alcoholic drink.		Food Prep	JPM

*bʰreus-	break, smash to pieces	OIr bruid 'breaks, crashes' Lat frustum 'piece' NE bruise Alb breshër 'hail'	West Central perhaps an enlargement of *bher- 'strike (through), split'			Reductive Activities	JPM
*bʰreus-	swell	OIr brū 'belly, breast' NE breast Rus brostĭ 'bud'	West Central			Blow Up	JPM
*bʰrg- *bʰr ǵʰ–sk-	roast	Lat frīgō 'roast, bake, fry' Grk phrū́go 'roast' Skt bhrjjáti 'roasts'	{1} [LK] A hypersanskritized form of the regular 3pl.opt., i.e. +bhrjjéyur (Hoffmann 1992: 813f.) or a 3pl. form of yet-optative (Kulikov 2001: 608). {2} [AL] The only feasible option is to start from an sk-present. Since the resulting cluster is voiced, the root-final stop must be a voiced aspirate. For the further development (cf. Skt. majján- < *mazǰ(h)an-) see Lubotsky2001a.	Present VI: bhrjjắti [3sg.subj.act.] (RV 04.024.07+), bhrj(j)yéyur [3pl.opt.act.] {1} (MSp 1.10.11:151.6 = KSp 36.6:73.1) TA-Ptc.: bhrṣṭa- 'fried, roasted, baked' (GrṢū.+)		Food Prep	JPM IIAL
*bʰr ǵʰṇtih̥-	high one	OBrit Brigantia OHG Burgunt Skt bṛhatī 'high, lofty'				Dieties	JPM
*bʰr ǵʰús *bʰr ǵʰént-	high	Arm barjr 'high' Hit parku- 'high' Toch B pärkare 'long' Av bərəzant- 'high' Skt bṛhánt- 'high, great' Lat for(c)tis 'strong'	A nominal form *bher ǵʰs gives both NE barrow and borough (as well as NHG Berg 'mountain' and Burg 'fortress' and Av barš 'height')	bṛhatĭ- [f] (RV+), bá	'to bring out a loud word': Skt. váco … bharatā bṛhát (RV 03.010.05) — YAv. bərəzəm barāt_ … vācim (Yt 10.113 Yt 17.61) 'high mountain': Skt. bṛhad-giri- 'coming from the high mountains' (RV) — YAv. garaiiō bərəzaṇtō 'high(est) sun': Skt. svàr bṛhát (RV) — OAv. barəzištəm barəzimanąm … huuarə̄ 'the sun, the highest of the heights' (Y 36.6), YAv. huuarə barəzištəm barəzimanąm (Vr 19.2)	Position	JPM IIAL
*bʰris- *bʰers-	fast	NWels brys 'haste, speed' Lat festinō 'hurry oneself' Lith burzdùs 'fast' Rus borzój 'fast'	North-West			Time	JPM
*bʰrodʰnós	pale	OCS bronŭ 'white, variegated [of horses]') Skt bradhná- 'pale red, yellowish, bay [of horses]' Kashmiri bodur̥ 'tawny bull'	It is noteworthy that the two traditions that reflect this word largely restrict it to animals.			Color	JPM
*bʰrṣtís	point	OIr barr 'point, tip' Lat fastīgō 'make pointed, bring to a point' NE bristle Rus boršč 'hogweed' Skt bhrṣṭí- 'point'				Shape	JPM

*bʰr̥tís	carrying	Lat fors 'luck' NE birth Skt *bhr̥tí- 'carrying'			Convey	JPM
*bʰrúh□s	eyebrow	OIr forbrū- NE brow Lith bruvìs Rus brovĭ Maced abroûtes Grk ophrûs Av brvat- Skt bhrū́- Toch B pärwāne			Head	JPM
*bʰr̥w-	(bolt of) cloth	Lith bùrva 'piece of cloth' Grk phâros '[bolt of] cloth'	West Central probably derived from a verbal root such as *bher- 'weave, twine';		Textiles	JPM
*bʰseh□-	chew			Present II: psāhi [2sg.impv.act.] (AV, ŚB+) Abs: -psāya (BAU) TA-Ptc.: psātá- 'chewed, eaten, consumed' (KS, ŚB)		IIAL
*bʰudʰ-n-o-	ground		{1} *bhudh-n-ó- probably from *bhudh-mn-ós, gen.sg. of *bhudh-men-. {2} [AL] For the Germanic reflexes of this word see Kroonen XXX.			IIAL
*bʰudʰnó-	bottom	MIr bonn 'sole of foot' Lat fundus 'bottom' OE botm [> NE bottom] Grk puthmḗn 'bottom, foot' Skt budhná- 'bottom, foot') Av būˇna- 'ground'	In the south-east of the Indo-European world derivatives of this word are used to name the archetypical monster, i.e. the Greek Pūthṓ and Sanskrit áhir bhudhnyás 'snake of the deep'		Construction	JPM
*bʰu ǵ os	buck, he-goat	OIr boc 'buck' NE buck Arm buc 'lamb' Av būza- '[he-]goat' Skt bukka- '[he-]goat'			Fauna	JPM
*bʰuto-	dwelling	OIr both 'hut' NWels bod 'dwelling' OPrus buttan 'house' Lith bùtas 'house'	from *bʰeu(h□)-		Being & Doing	JPM
*bukk-	howl	SC búkati 'howl' Grk búktēs 'howling' Av buxti- 'howling' Skt bukkati 'barks'			Animal Noises	JPM
*bulis	± rump	Lith bulìs 'rump' Skt buli- 'vulva anus'			Body (Lower)	JPM
*d(e)h₃-ti-	give		{1} The zero-grade is original it is quite probable that full grade was introduced independently in Indo-Aryan and Iranian.	Only in compounds		IIAL

*d(ʰ)bʰen ǵʰ-	make dense		{1} [AL] This root is clearly a "Reimbildung" to *h₂emǵh- 'to tie in' or even a compound, cf. PSl. *debelъ [adj] 'fat' PSl. *doblь(jь) [adj] 'strong' or Skt. dabhrá- 'small' (?) {2}[AL] Iranian shows secondary semantic development along the lines 'to make dense' > 'to make strong, sturdy' > 'to be helpful, supportive'.	Caus: baṃhayate [3sg.med.] (KS, MS, Br.) TA-Ptc.: bāḻhá- (RV 01.181.07) ní-bāḻha- (RV 01.106.06)		IIAL
*d(ʰ)bʰn ǵ ʰ-u-	dense			bahvī́- [f] báṃhīyas- [comp] 'very fat' (MS) báṃhiṣṭha- [sup] 'strongest, most' (RV+);		IIAL
*d(ʰ)ekʷ-s-	show	Hit tekkussa- 'show' Av daxša- 'teach, show'			Speech	JPM
*d(ʰ)erbʰ-	?		{1} [AL] The connection with W.Russ. dórob (< IE *d(h)orbh-ó-) 'basket, box', etc. seems highly doubtful to me.	Present VI: dr̥bháti [3sg.act.] (ŚB) TA-Ptc.: sáṃ-dr̥bdha- 'bundled together, tied into a bunch' (ŚB)		IIAL
*d(h₃)eu-	be favourable to	Skt dúvas- 'worship', duvasyáti 'honours' OIr de(i)n 'strong' Lat bonus 'good' < OLat duenos			Sacred	JPM
*d(o)lh₁(-i-)gʰo-h₂iu-	with a long life					IIAL
*daih☐wěr	husbands brother	Lat lēvir Grk dāḗ r Skt devár- OE tācor Lith dieverìs OCS děverï Arm taygr	{1} The Iranian forms reflect PIr. *θaiu̯ar- with unexplained θ-.		Kinship	JPM IIAL
*dapnom	± ritual meal	Lat daps 'sacrificial meal' ON tafn 'sacrificial animal' Grk dapánē 'ostentatious expenditure, consumption' Arm tawn 'feast' Hit tappala- 'person responsible for court cooking' Toch A tāp- 'eat'	derives from *dap- 'apportion'		Food & Drink	JPM
*das-	lack	Hittite, i.e. das(u)want- 'blind' dialectal Norw tasa 'unravel' Skt dásyati 'suffers want, becomes exhausted'			Exchange & Property	JPM
*dē	away (from)	OIr di 'away' Lat dē 'away'	North-West		Position	JPM

*dedrús	tetter, skin eruption, leprosy	OE teter (> NE tetter) Skt dadrú- 'skin eruption, a kind of leprosy'	Apparently derived from *der- 'split'.			Health&Sickness	JPM
*deg-	touch	ON taka 'touch' Toch B täk- 'touch'				Sensation	JPM
*deh₁-	bind	Alb duaj 'sheaves' Grk déō 'bind' Skt dyáti 'bind'	{1} [LK] See Kulikov 2000b.	Present IV/VI {1}: adyaḥ [2sg.impf.act.] (RV 02.013.09+) Perfect: °dadé [3sg.med.] (RV) Passive: °dīyámāna- [ptc.] (YVm+) Aorist mediopass: saṃ-dā́yi [3sg.] (RV 01.139.01) TA-Ptc.: ní-dita- 'bound on' (RV) na-ptc.: á-saṃ-dina- 'unbound' (RV 08.102.14)		Binding	JPM IIAL
*déh₁mn̥	band	Grk diádēma 'diadem' Skt dāman- 'band'	from *deh₁- 'bind'			Textiles	JPM
*deh₂-	track down		{1} [AL] Gr. δίζημαι [1sg.med.] 'to search, to investigate' < PIE *dieh₂- can hardly be connected.	Present II: abhi-dā́ti [3sg.act.] (SV 1.336=1.4.1.5.5) Present I: abhi-dā́sati [3sg.act.] (RV+) (based on the subjunctive of the sigmatic aorist)			IIAL
*deh₂-w-	far	Gr. dḗn 'far' (Adv.) Lat. dū-dum 'some time ago'					Celt.
*deh₂u-	burn			Present V: dunóti [3sg.act.] (AV+) Passive: dūyate [3sg.] (RV-Kh. 7.7.2, ChUp.+) na-ptc.: dūná- 'burned, tormented' (AV+), duna- (ŚrSū.) TA-Ptc.: duta- 'burned' (AĀ)			IIAL

*deh₃-	give				'to give life': Skt. ásum … dadātu (RV 10.059.07) — Av. ahūm dadāt_ (Y 46.13) dātar- aŋhəuš (Y 50,11)		IIAL
*deh₃-	give	Lat dō 'give' Lith dúoti 'give' OCS dati 'give' Arm tam 'give' Hit dā- 'take' Grk dídōmi 'give' Av dadāiti 'gives' Skt dádāti 'gives' Lat reddō [< *re-didō] 'give back'	{1} On the basis of pf.med. dadé, a secondary root dad- 'to keep' (RV+) has been formed, cf. Gotō 1987: 171f.: dádate [3sg.], -dadyámāna- [ptc.]. {2} [AL] Unclear remain the following forms, which are sometimes considered to belong to this root: OAv. vīdīšəmna- (Y 51.1), vī dąm (Y 32.6), dāiietē (Y 31.11). {3} [AL] In Iranian, the PIIr. roots *daH- 'to give' and *dhaH- 'to put' have largely merged into PIIr. *daH-. Except for dazdē [3sg.pres.med.] (Y 30.4), dazdā [3sg.pres.inj.med.] (Y 27.13), which unambiguously belong to PIIr. *dhaH- because of Bartholomae's Law, the forms are indistinguishable. For this reason, all forms are given here together.	Present III: dádāti [3sg.act.] (RV+) dádat [3sg.subj.act.] (RV+), dehí [2sg.impv.act.] (RV+), daddhi [2sg.impv.act.] (RV), datte [3sg.med.] (RV+) Aorist R: ádāt [3sg.act.] (RV+), dā́ti [3sg.subj.act.] (RV), deyā́m [1sg.opt.act.] (RV 08.001.05), ā́di [1sg.med.] (KS-MS) Aorist A: ā́dat (ā́-adat) [3sg.act.] (RV) (a secondary formation on the basis of 3sg.med. root-aor. *a-dH-a) Aorist S: dāsat [3sg.subj.act.] (RV), adiṣi [1sg.med.] (AV) Aorist mediopass: dāyi [3sg.] (RV) Perfect: dadáu [3sg.act.] (RV+), dadé [3sg.med.] (RV+) {1} Passive: dīyáte		Give & Take	JPM IIAL
*déh₃r/n-	gift	OIr dān Lat dōnum Lith duonìs OCS danĭ, darŭ Grk dôron Arm tur Skt dāna-	{1} [AL] There are no indications for the neuter gender of this word. dána- [m, n] 'gift liberality' (RV+), dā́na-vant- [adj] 'bestowing gifts, liberal' (RV 08.032.12) contain suffix -ana- (cf. Lubotsky 1988: 84f.) and do not belong here.		to give a gift': Skt. dānam dā- (Mn.,	Exchange & Property	JPM IIAL
*déh₃tōr-h₁wesuom	those who give boons						Beekes

*deh□(i)-	cut up; divide distribute	Alb pĕr-daj 'distribute, divide, scatter' Grk daíomai 'divide feast on' Skt dắti 'cuts up, divides' OIr dām 'host, retinue' Grk dēmos 'people' NE tide and time Arm ti 'age, time'	{1} [LK] Possibly, the same root as dā [2] 'to mow, to cut off' and day [1] 'to destroy' see Kulikov 2001: 494ff. {2} See Kulikov 2000b. {3} Uncertain. [AL] YAv. vīδātu- [m] 'decay, decomposition' may rather be connected with dā [3] 'to bind'.	Present I: dáyate [3sg.med.] (RV+) (< PIE *dh₂−eie-), Present IV/VI {2}: ava-dyáti [3sg.act.] (YV+) Aorist S: áva … diṣīya [1sg.opt.med.] (RV 02.033.05) Aorist R: avắdāt [3sg.act.] (MS+), áva … adīmahi [1pl.med.] (VS), dīṣva [2sg.imp.act.] (VS+) TA-Ptc.: (nir-)áva-tta- '(completely) distributed' (KS+)		Measure & Quantity	JPM IIAL
*déh□mos	(segment of) people	OIr dām 'troop, company, retinue' Grk dēmos 'people'	West Central from the verbal root *deh□- 'cut, divide'			Social Organization	JPM
*deh□nu-	river	Av dānu- 'river'	unclear most famously attested in the river names 'Danube' and 'Don'			Water	JPM
*deh□u-	kindle, burn	Oir doud Grk daio 'kindle, burn' Skt dunoti "kindles, burns '	Possible "getting a fire started"			Fire	JPM
*dei-	shine, be bright	ON teitr 'glad' Grk déato 'is seen' Skt dīdeti 'shines is bright' Lat dīum 'sky' Skt dyáuṣ 'sky'				Light & Dark Air	JPM
*dei-no-	day	Goth sinteins 'daily' Lith dienà 'day' OIr trēdenus 'three-day period' Lat nundinae 'the ninth [market] day' OCS dĭnĭ 'day' Skt dínam 'day'	from *dei- 'shine'			Time	JPM

*deih₂-	shine			Perfect: dīdā́ya [3sg.act.] (RV+), dī́dayat [3sg.subj.act.] (RV+), ádīdet [3sg.ppf.act.] (RV+) (the pres. meaning accounts for the ptc. dī́diyant-) Caus.: -dīpayas [2sg.inj.act.] (RV 06.022.08 +), dīday° (JB)			IIAL
*deiḱ-	rule, canon, measure	Skt diś- □ diśā- 'direction' Grk díke 'justice' ON teigr 'plot of land' OHG zeiga 'directions' Skt deśá- 'direction, region'	The base meaning of the word has been explained as 'norm' or 'fixed point' which might then develop into meaning 'direction', a 'Wxed area' such as a plot of land, etc.			Direction	JPM
*deiḱ-	show	Lat dīcō 'say' OE tēon 'accuse' Grk deíknumi 'show' Av disyeiti □ daēsayeiti 'shows' Skt diśáti □ deśayati 'shows'	{1} [AL] The parallel, given in EWAia, viz. Skt. ásūn dideśa (AV 12.2.55) ˜ YAv. disiiāt_ … aŋuhe (V 9.44) seems coincidental to me. The Avestan passage reads: disiiāt_ ahmāi naire auuat_ miždəm parδ.asnāi aŋvhe vazduuarə vahištahe aŋhəuš 'As a reward there in the future life, the [continuous] duration of Good Existence will be indicated for this man'. There is therefore no immediate connection between the verb and aŋvhe 'in the (future) life'.	Present III: dídeṣṭu [3sg.impv.act.] (RV), didiḍḍhi [2sg.impv.act.] (RV), dídeśati [3sg.subj.act.] (RV) Present VI: diśánt- [ptc.act.] (RV 10.110.07 +), diśámāna- [ptc.med.] (RV 03.031.21 +) Aorist S (secondary): adikṣi [1sg.med.] (RV), ádiṣṭa [3sg.med.] (RV) Perfect: didéśa [3sg.act.] (AV+) Intensive: dédiśant- [ptc.act.], dédiṣṭe [3sg.med.] (RV) dediśyá° (RV-Kh., AV+) TA-Ptc.: diṣṭá- 'shown (direction)' (RV+)		Speech	JPM IIAL
*deiu-ih₂-	goddess				goddess dawn': Skt. devī́m uṣásam (RV) — Gr. (Hom.) 'Ηόα δῖαν, 'Ηὼς … δῖα		IIAL

| *deiwós | god | OIr dīa
Lat deus
Lith diẽvas
Hit sius
Skt devá-
Av daēva- 'demon' | an o-stem derivative of *dyeu- 'sky, day' < *dei- 'shine, be bright' and it is widely attested across the Indo-European groups | | 'god(s) and mortal(s)': Skt. devá-mártya- (RV+) — Av. daēuua-mašiia-
'all gods / daēvas': Skt. víśve deváḥ (RV+) — Av. daēuuā vīspā̊ṇhō
'most divine among the gods / most daēvic among the daēvas': Skt. devā́nām devátama- (RV 02.024.03) — YAv. daēuuō daēuuanąm daēuuō.təmō
'to worship the gods / daēvas': Skt. devayajñá- [m] 'sacrifice to the gods' (KS+)
devayáj- [adj] 'sacrificing to the gods' (VS+) — YAv. daēuua-iiasna-[adj], daēuua-iiaz- [adj] 'worshipping the daēuuas'
'surrounded by gods/daēvas': Skt. devávant- [adj] (RV) — YAv. daēuuauuaṇt-
'all gods/daēvas': Skt. víśve deváḥ — OAv. daēuuā vispā̊ṇhō (Y 32.2)
'agreeable to the gods / daēvas': Skt. devájuṣṭa- [adj] (RV) — OAv. daēuuō.zušta- [adj] (Y 32.4), OP *baga-dušta- [m] PN, Med. *baga-zušta- [m] PN | Dieties | JPM
IIAL |

*deḱ-	take, accept ?to take hesitantly	Lat decet 'it is proper', doceō 'seem, appear' OE teohhian 'determine, consider think, propose' ORus dositi 'find' Grk dék(h)omai 'take, accept receive graciously expect' Hit takki 'is the same as' Skt dāśnóti 'brings an offering'	{1} [AL] The present dāṣṭi may derive from an original reduplicated present *di-déḱ-ti, *dé-dḱ-nti > *deh₁ḱ-nti with generalization of the weak stem. The aorist is supplied by vidh, cf. Garcia Ramón XXX. {2} The stem dīkṣa- has given rise to the secondary root dīkṣ-, which forms a separate paradigm after the RV: caus. dīkṣáy° (KS, TS+), sigm. aor. ádīkṣiṣta (YV+), pf. didīkṣé [3sg.med.] (Br.+), TA-Ptc. dīkṣitá- (AV+).	Present II: dāṣṭi [3sg.act.] (RV 01.127.04 (bis)), dā́śat- [ptc.act.] (RV 07.014.03, 07.017.07 dā́śataḥ [nom.pl.]) {1} Present I: dā́śati [3sg.act.] (RV+) Present V: dāśnóti [3sg.act.] (RV 08.004.06) Perfect: dadā́śa [3sg.act.] (RV+), dāśvā́ṃs- [ptc.act.] (RV+) (< *de-dḱ-) Desid: dī́kṣate [3sg.med.] 'to dedicate oneself, to consecrate oneself' (YVp+) (< *di-dḱ-) {2}	to worship with an excellent praise': (	Give & Take	JPM IIAL
*deḱ-	thread, hair	OIr dūal 'lock of hair' NE tail Goth tagl 'a single hair' ON tāg 'thread, fibre' Khot dasa- 'thread' Skt daśā- 'fringe' Toch A śāku 'head hair'				Hair Textiles	JPM
*deḱes-	honour	Lat decus 'honour' Av dasəma- 'defence, respect' Skt daśasyáti 'serves, obliges' OIr dech 'best'				Give & Take	JPM
*déḱm̥(t)	10 ten	OIr deich Lat decem NE ten Lith dešimtìs OCS desętĭ Alb dhjetë Grk déka Arm tasn Av dasa Skt dáśa Toch B śak	The form with a final *-t appears most clearly in the formation of the decades and of the word for 'hundred'. It is probably the original form from which the shorter variant was created by the loss of the final *-t in the otherwise very rare cluster *-m̥t.	dáśa [nom.acc.pl.],	ten months (pregnancy, foetus)': Skt	Numbers	JPM IIAL

*deḱm̥(t)-os	10th tenth	OIr dechmad Lat decimus NE tenth Lith dešim~tas OCS desętĭ Alb dhjetë Grk dékatos Av dasəma- Skt daśamá- Toch B śkante				Numbers	JPM
*déḱs-i-no-s	right	OIr dess Lat dexter OHG zeso Lith dẽšinas OCS desnŭ Alb djathtë Grk deksiós Av dašina- Skt dákṣina- 'right, south'				Direction	JPM
*del-	carve, split, cut	OIr dello 'form' Lat dolō 'hew' ON telgja 'carve' Lith dalti 'divide' Alb dalloj 'cut' Grk daidállō 'work cunningly' ?Skt dálati 'bursts, cracks'	As we see, it means 'cut' in Germanic, 'divide' in Baltic, but shows extended meanings associated with manufacture in Greek (cf. Daedalus who invents wings for himself and his too high-flying son Icarus) and in Celtic 'form'.			Reductive Activities	JPM
*del-	flow	NE tallow				Liquid Motions	JPM

*del ǵʰ-	hold			Present I<VII: dṛṃhata [2pl.impv.act.] (RV+) Present VI<VII: dṛmhéthe [2du.impv.med.] (RV, AV) Present IV: dṛ́hya [2sg.impv.act.] (RV), dṛ́hyasva [2sg.impv.med.] (RV) Aorist IS: adṛṃhīt [3sg.act.] (KS+) Perfect: dādṛhāná- [ptc.med.] (RV), ádadṛhanta [3pl.ppf.med.] (RV 10.082.01) Caus: adṛṃhayata [3sg.impf.med.] (AV 4.11.7), dṛṃhayati [3sg.act.] (Sū.) TA-Ptc.: dṛḍhá- (< *dṛẓdhá-) 'fixed, firm, solid' (RV+) dṛṃhitá- 'firm, fastened' (RV)			IIAL
*dem(h□)-	build (up)	Grk démō 'build' HierLuv tama- 'build' OHG zeman 'be fitting' NE timber Khot pa-dīm- 'make' Toch AB tsäm- 'increase, grow'				Dwelling	JPM
*demelís	worm	Alb dhemjë 'larva, caterpillar, maggot' Grk demeléas 'leeches'				Bug	JPM

*demh₂-	tame			Present ĀYA: damāyáti [3sg.act.] (RV+) Present ANYA: damanyat [3sg.inj.] (RV 10.099.06) dámyata [2pl.impv.act.] (ŚB=BĀU) Aorist A: dánaḥ [2sg.inj.] (RV 01.174.02) (with irregular -n-) Caus: damáyati [3sg.act.] (RV+) TA-Ptc.: dāntá- (Br.+)			IIAL
*demh- -	tame, subdue	OIr damnaid 'binds, breaks [a horse']) Lat domō 'break, tame' NE tame Grk dámnēmi 'break' Hit damaszi 'presses, pushes' NPers dām 'tamed animal' Skt dāmáyati 'subdues'	The meanings also extend to other animals, e.g. OIr dam 'ox', and frequently refer to the subduing of human opponents in Greek and other groups			Fauna	JPM
*dems-pot-	master of the house	Grk despótēs Skt dám-pati-	Greek-Indo-Iranian Structurally part of the same set that gives us 'master of the clan', i.e. *wiḱ (-ā)-pot- (in Baltic, Albanian, and Indo-Iranian)	dámpatī [nom.acc.du.] 'husband and wife' (RV+)		Marriage	JPM IIAL

*denḱ-	bite	NE tongs Alb darë 'tongs' Grk dáknō Skt dáśati Toch B tsāk-		Present I<VI: dáśanti [3pl.act.] (MS+), dáśa [2sg.impv.] (RV+), dáśant- [ptc.act.] (RV+) Aorist S: ? dáṅkṣur [3pl.inj.act.] (MGS 2.16.3) Perfect: dadaśvā́ṃs- [ptc.act.] (RV 04.038.06, AVP 3.16.6) Caus: daṃśay° (Sū.+) Intensive: dándaśāna- [ptc.med.] 'snapping (of horses)' (RV 10.095.09) Abs: daṃṣṭvā (Br.+) TA-Ptc.: daṣṭá- (AV+)	Vital Functions	JPM IIAL
*dens-	teach, inculcate a skill have miraculous power, be capable of smth. wondrous	Grk didáskō 'teach' Av dīdainhē 'am instructed'	Graeco-Aryan isogloss	Caus: daṃsáyas [2sg.inj.act.] 'make capable' (RV 10.13	Knowledge & Thought	JPM IAL
*dens-os-	miraculous ability			from *dens- 'teach, inculcate' ? (SGM)		IIAL
*dephₕ-	strike	SC depiti 'strike' Arm topʻem 'strike'	West Central		Conflict	JPM
*der-	sleep	Lat dormiō 'sleep' OCS dremljǫ 'doze' Grk édrasthon 'slept' Skt drā́ti 'sleeps'			Knowledge & Thought	JPM

*der-	tear off, flay	NE tear Lith diriù 'flay' OCS derǫ 'flay' Grk dérō 'skin, flay' Arm teṙem 'flay, strip bark' Av darədar- 'split' Skt dṛṇā́ti 'causes to burst, tears' Toch AB tsär- 'separate'	{1} [LK] The seṭ-forms are secondary and cannot serve as evidence for the final laryngeal see now Praust 2000. {2} [LK] With the secondary suffix accentuation (see Kulikov 1998). {3} Thus Oldenberg, Geldner, Kümmel the form may also belong to drā 'to run' (thus Grassmann, Lubotsky) see Kümmel 2000: 230f. {4} The form cannot serve as evidence for the seṭ-character of the root. {5} Based on the aniṭ-variant of the -ya-present, probably preserved in the late Vedic -driyáte (only with ā́) 'to heed, care' (Br.+, but cf. also OAv. Y 46.5 ā … drītā [3sg.aor.opt.med.] 'to respectfully receive', Insler 1975: 266) the genetic relationships between dīryáte 'to crack, to break, to burst' and -driyáte 'to heed, to care' (< *'to make/become available' < 'to open' ?) are unclear see Kulikov 2001: 96f. and 298f. {6} [AL] A nonce form, see Praust 2000: 425, fn. 2. {7} [AL] For a discussion of this form, see Praust 2000: 438, fn. 40.	Present IV: dī́ryeta [3sg.opt.med.] (YVp+), dīryáte [3sg.med.] (ŚB) {2} Present IX: dṛṇīyāt [3sg.opt.act.] (ŚB) Aorist R: dárt [3sg.inj.act.] (RV) Aorist S: darṣasi [2sg.subj.act.] (RV) darṣīṣṭa [3sg.opt.med.(prec.)] (RV 01.132.06) SI-impv: dárṣi (RV) Perfect: dadā́ra [3sg.act.] 'has burst, has scattered (intr.)' (RV 06.027.04) dadṛvā́ṃs- [ptc.act.] 'to burst' (tr.) (RV 04.001.14), dādṛhí [2sg.impv.act.] 'to burst' (tr.) (RV 01.133.06), -dadrur [3pl.act.] (RV 04.019.05) {3} Caus: daráy° 'to storm, to attack'		Reductive Activities	JPM IIAL
*derbʰ-	turn, twist	OE tearflian 'turn, roll, wallow' Arm toṙn 'cord' Av dərəβδa- 'bundle of muscles' Skt dṛbháti 'knots, ties'				Motion	JPM
*dergʰ-	grasp	MIr dremm 'troop, band of people' ON targa 'shield' NE targ Grk drássomai 'lay hold of, grasp with the hand' Arm trcʻak 'bundle of brushwood	West Central			Give & Take	JPM
*derh□-	work	Lith dar(i)aũ 'do, make' Grk dráō 'make, do'	West Central			Being & Doing	JPM

*derḱ-	glance at	OIr ad-con-darc 'have seen' Goth ga-tarhjan 'distinguish, note' Alb dritë 'light' Grk dérkomai 'see' Skt dr´ṣṭi- 'sight' reduplicated Perfects: Grk dédorka Av dādarəsa Skt dadárśa	This verb may have been the expression par excellence of the baleful look of the dragon or monster of Proto-Indo-European mythology. Both Greek (drákōn whence, via Latin, NE dragon) and OIr (muirdris '+sea-dragon') have derivatives of this root as the word for 'dragon' (though the formations are different and independent: *dṛḱónt- and *dṛḱsi- respectively). {1} In suppletive relation with the root paś, which supplies present forms. {2} Nonce formation. {3} [LK] For the relationship between these two meanings, see Scarlata 1999: 234ff.	Aorist R {1}: dṛśan [3pl.inj.act.] (RV+), dárśan [3pl.subj.act.] (RV+) Aorist S: ádṛkṣata [3pl.med.] (RV), dṛkṣase [2sg.subj.med.] (RV 01.006.07) {2} adrākṣam [1sg.act.] (Br.+) Perfect: dadárśa [3sg.act.] (RV+), dadṛkṣé [3sg.med.] (RV+) Passive: dṛśyáte [3sg.] (RV 10.146.03 +) Aorist mediopass: ádarśi [3sg.], ádṛśran, ádṛśram [3pl.] (RV+) Fut: drakṣyáti [3sg.act.] (Br.+) Caus: darśáyati [3sg.act.] (AV+) Desid: dídṛkṣ° (RV+) Abs: dṛṣṭấya (RV 10.034.11), dṛṣṭvấ (AV) Inf: drấṣṭum 'to see' (AV+) TA-Ptc.: dṛṣṭá- 'apparent, visible' (RV+)	'visible over a long distance': Skt. dūre-dṛ́ś- 'visible far and wide' (RV) — Av. dūraēdarštəma- 'looking far' 'looking like sun / seeing sun-light': Skt. svar-dṛ́ś- [adj] 'looking like sun seeing sun-light' (RV) {3}¯ Av. huuarə.darəsa- [adj] 'looking like sun'	Sight	JPM IIAL
*derḱetos	visible	Grk -dérketos Skt darśatá-	West Central			Sight	JPM
*des-	enemy	Grk doûlos 'slave' [< *dos-e-lo-] Av dahyu- 'region' Skt dāsá- 'demon, enemy barbarian slave' Skt dásyu- 'demon, enemy of the gods, impious man'				Social Organization	JPM

Sheet1

*deu(s)-	be lacking	OE tēorian 'faint, grow weary fade [of colurs]' > NE tire Grk déomai 'lack' Skt doṣa- 'crime'	{1} [AL] For this form see Kulikov 2001. {2} [AL] In spite of Mayrhofer's opinion to the contrary, the verbal root is clearly derived from duṣ- 'bad'. The long vocalism can easily be secondary. The oldest attested form of the verb is the red. aorist dūduṣat (RV 03.003.01), on the basis of which the caus. dūṣáyati with analogical long ū was created (type ádīdharat : dhāráyati).	Present IV: duṣyet [3sg.opt.act.] (AB+) {1} Caus.: dūṣáyanti [3pl.act.] (RV 07.104.09+) {2} Aorist RED: dūduṣat [3sg.inj.act.] (RV 03.003.01+) TA-Ptc.: duṣṭa- (Up., Sū.+)		Exchange & Property	JPM IIAL
*deuh₁-	leave, go far away	Grk dḗn 'long, far' Hit tūwa 'to a distance' Skt dávati 'goes', dūrá- 'distant, remote'				Travel	JPM
*deuk-	pull ?carry to	Toch A tkā- 'will stir, consider' Lat dūcō 'lead' NE tow, tie Alb nduk 'pull hair out' Lat dūcō may also mean 'deduce' Grk deúkei 'considers'				Convey	JPM Beekes
*dǵʰuh□-	fish (for eating?)						Beekes
*dʰ(e)h₁-ti-	position		{1} [AL] In Iranian, full grade has been introduced into the root in accordance with the usual procedure (cf. Insler 1971).				IIAL
*dʰ(e)h₁-tr-	creator		{1} [AL] It is conceivable that all these words represent independent productive formations.				IIAL
*dʰ(o)ngu-	dark	Hit dankuis 'dark' NWels dew 'mist, smoke' NHG dunkel 'dark'				Light & Dark	JPM
*dh₂éḱru *h₂éḱru	tear	Lith ašara Hit ishahru Av asrū- Skt áśru- Toch B akrūna [pl.] OIr dēr OLat dacruma Lat lacrima NE tear Grk dákru	Problematic and some groups indicate an initial *d- and others give no indication of such a form. There is roughly an East–West dialectal split. The *d- may either be a prefix or a misdivision, e.g. *tod h₂éḱru 'this tear' (cf. NE newt from a misdivision of the earlier an ewte). {1} [AL] The IE word most probably represented a compound *drḱ-h₂éḱru- 'eye-bitter' (Kortlandt 1985b).			Vital Functions	JPM IIAL
*dh₃ǵʰ-mo-	athwart From side to side across.		{1} ON keikr [adj] 'bent backwards' is not related to jihmá-, but reflects PIE *ǵeiǵ(h)-.				IIAL
*dh₃ǵʰmós	aslant	Grk dokhmós 'slanting, oblique' Skt jihmá- 'athwart, oblique'	Greek-Indo-Iranian isogloss			Position	JPM
*dh₃tos	given						Beekes
*dʰabʰros	craftsman	Lat faber 'workman, artificer, smith' Arm darbin 'smith'	From the root *dʰabʰ- 'put together'			Occupations	JPM

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*dʰal-	sprout	NWels dail 'leaf' Alb dal 'arise, appear, emerge' Grk thállō 'bloom' Arm dalar 'green'				Trees	JPM
*dʰe-dʰh₁-	(sour) milk				In the RV, only oblique cases (from the stem dadhán-) are attested, nom.sg. dádhi		IIAL
*dʰeb-	thick, packed	OHG tapfar 'weighty, strong' OPrus debīkan 'large' Rus debělyj 'strong' Hitt tabarna- 'ruler' Luvian tapar-'rule' NE with dapper < MDutch				Shape	JPM
*dʰebʰ-	deceive, humble			Present V: dabhnuvanti [3pl.act.] (RV 01.055.07 +) Aorist R: ā-dabhúr [3pl.inj.] (RV), dabhan [3pl.inj.] (RV), dábhat, dabhāti [3sg.subj.act.] (RV), dabhanti [3pl.subj.act.] (RV) Aorist A: adabhat [3sg.act.] (YV+) Perfect: dadábha [3sg.act.] (RV), debhur [3pl.act.] (RV) dadámbha [3sg.act.] (AV) (with secondary m in the root under the influence of the semantically close root dambh) Passive: dabhyate [3sg.] (RV 01.041.01) Desid: dípsati [3sg.act.] (RV+) Inf: ā-dábhe (RV 08.021.16) TA-Ptc.: á-dabdha- 'undeceivable, unharmed,	'undeceivable eye': Skt. cákṣur … mitráyor … váruṇayor ádabdham 'undeceivable eye of Mitra and Varuṇa (= sun)' (RV 06.051.01), ádabdha-cákṣus- (AV 13.2.44) — Av. dōiθrābiiō … aδaoiiō … miθrō (Yt 10.82) 'with infallible mental power': Skt. ádbhuta-kratu- [adj] (RV) — Av. aδaoiiō.xratu- [adj]		IIAL
*dʰebʰ-	harm	Lith dobiù 'beat, hit, kill' Skt dabhnóti 'hurts, injures deceives abandons') Hitt tepnu- 'belittle' Av dab- 'deceives'				Conflict	JPM

*dʰédʰ₁i	coagulated (sour) milk	OPrus dadan 'milk' Alb djathë 'cheese' Skt dádhi 'coagulated milk, thick sour milk, curds and whey'				Meals	JPM
*dʰedʰrs-i-	be bold		{1} The vowel length is secondary.				IIAL
*dʰéǵʰōm	earth, perhaps earthly	OIr dū 'place, spot' Lat humus 'earth' Lith žēme☐ 'earth' OCS zemlja 'earth' Alb dhe 'earth' Grk khthṓn 'earth' Hit tēkan 'earth' Skt kṣam- 'earth' Toch A tkaṃ 'earth'				Earth	JPM
*dʰegʷʰ-	burn						IIAL
*dʰegʷʰ-	burn	OIr daig 'flame' Lat foveō 'heat, cherish' Lith degù 'burn',OCSžegǫ 'burn' Alb djeg 'burn', ndez 'kindle' Grk téphrā 'ash' Av dazaiti 'burns' Skt dáhati 'burns' Toch tsäk- 'burn'	{1} [LK] Although some occurrences show passive meaning, the suffix accent may be secondary and dahyate should be treated as a class IV present see Kulikov 2001: 292ff.	Present I: dáhati [3sg.act.] (RV+) nír dahante [3pl.med.] (TS) Aorist S: adhāk [3sg.act.] (RV+) dhákṣat-, dákṣat- [ptc.act.] (RV), SI-impv: dhákṣi (RV) Aorist SIS: dhākṣīt [3sg.inj.act.] (GB+) Perfect: dadā́ha [3sg.act.] (Br.+) Present IV/Passive: dáhyase [2sg.med.], dáhyamāna- [ptc.med.] (RV-Kh. 3.15.20), dahyante [3pl.med.] (AV 12.4.3 +), dahyámāna- [ptc.med.] (YVp+) {1} Fut: dhakṣy° (RV+) TA-Ptc.: dagdhá- (AV+) with -eh₁- extension Present VI: kṣā́yati [3sg.act.] (KS+)		Fire	JPM IIAL

*dʰegʷʰ-	miss the right moment, be off the mark			Present V: daghnuyāt [3sg.opt.act.] (KS, KpS) Aorist R: -dhak [2,3sg.inj.act.] (RV) daghyās [2sg.opt.act.] (RV 01.123.05) Fut: -daghiṣyante (JUB)			IIAL
*dʰeh₁-	put		{1} [AL] In Iranian, the PIIr. roots *daH- 'to give' and *dhaH- 'to put' have largely merged into PIIr. *daH-. Except for dazdē [3sg.pres.med.] (Y 30.4), dazdā [3sg.pres.inj.med.] (Y 27.13), which unambiguously belong to PIIr. *dhaH- because of Bartholomae's Law, the forms are indistinguishable. For this reason, all forms are given here together.	Present III: dádhāti [3sg.act.] (RV+); dhattháḥ [2du.act.] (RV+); dadhmási [1pl.act.] (RV+); dádhati [3pl.act.] (RV+) ádadhuḥ [3pl.impf.act.] (RV+); dadhé [1sg.med.] (RV+); dhatsé [2sg.med.] (RV+); dhatté [3sg.med.] (RV+) dadhre [3pl.med.] (RV+); dádhat [3sg.subj.act.] (RV+); dhehí [2sg.impv.act.] (RV+); dhatsva [2sg.impv.med.] (RV+) dádhat- [ptc.act.] (RV+) Aorist R: ádhāt [3sg.act.] (RV+); ádhuḥ [3pl.act.] (RV+); adhita [3sg.med.] (RV+); dhat, dhā́ti [3sg.subj.act.] (RV) dheyām /dheya?am/ [1sg.opt.act.] (RV)	'to put down the feet': Skt. padó ní dadhāti (RV 01.146.02) — YAv. pāδa nidaθaite (Yt 17.6) 'to put inside': Skt. antár dhā- 'to hide, cover' — Lat. inter-ficiō 'to destroy, kill' 'to give a name': Skt. nā́ma dhā- (RV+) — OAv. nāmąm dadāt_ (Y 38.4+) — Gr. ὄνομα τίθεσθαι — Lat. nōmen indere — Hitt. ŠUM-an daiš		IIAL

*dʰehₗ-	put, place	Grk títhēmi 'I set' Hit tittiya- 'establish' Av dadāiti 'puts, brings' Skt dádhāti 'puts, places, lays' Toch B tattaṃ 'will put' Lat facere NE do Lith dė́ti 'lay' OCS děti 'lay' Arm dnem 'put, place' Hit dā i 'puts, places', tēzzi 'says' Toch AB tās- ☐ täs- 'put, lay'				Placement Verbs	JPM
*dʰehₗ-	suck	OIr denid 'sucks' Lat fēlō 'suck' OHG tāju 'suck' Latv dêju 'suck' OCS dojǫ 'suckle' Grk thḗsato 'sucked' Arm diem 'suck' Skt dháyati 'sucks, suckles'	{1} [LK] Present I if derived from root dhayi (*dheihₗ-e- thus Mayrhofer) or present AYA if derived from root dhā (*dhhₗ-eiе̯- thus Gotō 1987: 44f., Lubotsky 1989). {2} [LK] The form may also mean 'they have prepared' and thus belong to dhā- [1] 'to put' see Kümmel 2000: 275.	Present AYA {1}: dháyati [3sg.act.] (RV+) Aorist SIS: adhaiṣīt [3sg.act.] (HirGS 1.17.5) Perfect: dadhúr [3pl.act.] 'they have sucked' (RV 09.099.03) (?) {2} Caus: dhāpáy° (RV) Inf: dhā́tave 'to drink' (RV), Abs: dhītvā́ (ŚB) TA-Ptc.: dhītá- (AV+)		Food & Drink	JPM IIAL
*dʰehₗ-	uncle	Lith dė̃dė 'uncle' Rus djádja 'maternal uncle' Grk theîos 'uncle'	West Central			Kinship	JPM
*dʰehₗ-i-os-	suckle				caring for the cows': Skt. gó-dhāyas- [adj] (RV 10.067.07) — O		IIAL
*dʰehₗ-lu-	suckling (in both meanings)		{1} Connection with dhārú- is not very certain.				IIAL
*dʰehₗ-mn	placement		{1} [AL] The idioms are doubtful: Skt. r̥tásya dhā́man 'abode of R̥ta' (RV) does not seem to correspond to OAv. (Y 48.7) aṣ̌ā … dāmąm where the two words are not combined Skt. víśvā … dhā́ma 'all abodes' (RV 09.109.04) and YAv. vīspanąm dāmanąm (Yt 10.54) 'id.' are no standing expressions.	{1}		IIAL
*dʰehₗi-nu-	suck(le)						IIAL
*dʰehₗlus	nourishing, suckling	Lat fēlix 'fruitful, prosperous, happy' Grk thḗlus 'nourishing' Skt dhārú- 'suckling' MIr deil 'teat' OE delu 'nipple, teat'	Derivative of the verb *dhehₗ(i)- 'suckle'			Body (Upper)	JPM

*dʰéh₁mi-/men-	what is established, law	Grk thémis 'law' Skt dhā́man- 'law'	Derives from *dʰéh₁- 'put, establish'		Law & Order	JPM
*dʰēh₁s	god ??holy	Grk theós Arm dik' 'the gods' Lat fēriae 'festival day' Skt dhiṣána- (epithet of various gods) Skt dhiṣā́ 'with impetuosity'			Dieties	JPM Beekes
*dʰéh₁tis	what is established	Lat conditiō 'basis' NE deed Grk thésis 'order' Skt -dhiti- 'position'			Law & Order	JPM
*dʰeiǵʰ-	work clay; build up smear, plaster form, knead	Lat fingō 'fashion' Skt déhmi 'smear, anoint' Toch AB tsik- 'fashion [pots, etc.]') NE dough Av pairi-daēzayeiti 'build a wall around' OIr con-utainc 'builds' Lith díežti 'whip, beat' Arm dizanem 'heap up'	{1} [AL] The same form is used as 3sg.inj.med. at V 15.36, which is most probably nonce (Kellens 1984: 14). {2} [AL] Middle and Modern Iranian lgg. show secondary -s-. {3} Forms with -gh- in Sanskrit (-degdhi, digdhá-, etc.) are analogical.	Present II: pári … déhat [3sg.subj.act.] (RV 07.050.02), adihan [3pl.impf.act.] (JB), dihāná- [ptc.med.] (RV 10.087.04), -degdhi [3sg.act.] (KauśS) Aorist SA: adhikṣan [3pl.act.] (JB) TA-Ptc.: digdhá- (AV+)	Being & Doing	JPM IIAL
*dʰeigʷ-	stick, set up	Lat fīgō 'fasten' NE dike Lith díegiu 'prick plant, sow'	North-West		Placement Verbs	JPM
*dʰelbʰ-	dig	NE delve Lith dálba 'crowbar'	North-West		Reductive Activities	JPM
*dʰelg-	pin	OIr delg 'thorn, pin, brooch', OE dalc 'bracelet, brooch'	North-West		Textiles	JPM
*dʰelg-	sting, pierce	OIr delg 'needle, pin' Lat falx 'curved blade' OE dalc 'bracelet, brooch' Lith dilgùs 'stinging, smart'	North-West		Reductive Activities	JPM

*dʰemh□-	blow		{1} [LK] The short root vowel is not borrowed from the class I present stem (contra Gotō 1987: 181, fn. 320), but may represent the regular development of *-m̥Hi̯- in an unaccented syllable (cf. Lubotsky 1997b), the accent being on the suffix in the passive (see Kulikov 2001: 99f.).	Present I: dhámati [3sg.act.] (RV+) Aorist S: adhmāsam [1sg.act.] (AVP) Passive: dhamyate {1} [3sg.] (RV 10.135.07) dhmāy° (JB, Up.) TA-Ptc.: dhmātá- 'blown up' (RV 07.089.02, Br.+) dhamitá- 'fanned' (RV 02.024.07)			IIAL
*dʰen-	run, flow	Skt dhanáyati 'runs, sets in motion' exists alongside dhánvati 'runs, flows' OPers danuvatiy 'flows' Toch AB tsän- 'flow' Lat fōns 'spring'				Run & Jump	JPM
*dʰen-ur	bow		{1} The two words dhánuṣ- and dhánvan- originally formed one paradigm, an r/n-stem. {2} [AL] The initial θ- is explained by Hoffmann as being due to the influence of the Iran. verb θang- 'to pull (the string)', but since its θ- is also in need of explanation (its IE cognates point to *ten-gh-), the influence probably went in the other direction. Ir. θ < *dh occurs in several other cases (cf. also Ir. f < *bh), but its origin is obscure. {3} [AL] Janda 1998: 1ff. connects OHG tenar [m], tenra [f] 'flat hand', Gr. θέναρ 'palm of the hand, foot sole', Av. danarə 'handful' (V 16.7), tarō.danan- 'more than a handful' (N).				IIAL

*dʰenh₂-	run, flow		{1} Extracted from the VA-present dhánva-. {2} Synchronically, class I present from the secondary root dhanv. {3} Derived from the secondary root dhanv.	Present VA: dhánva (< IE *dhenh₂-ue-) [2sg.impv.act.] (RV+) {2} Perfect: dadhanyur [3pl.opt.act.] (RV 04.003.12), dadhánat [3sg.inj.act.] 'set in motion' (trans.) (RV 10.073.01), dadhanvā́ṃs- [ptc.act.] (both intr. and trans.) (RV) dadhanvé [3sg.med.] (RV) {3} Aorist IS: adhanviṣur [3pl.opt.act.] (RV, ŚB) {3} Caus: dhanáyan [3pl.inj.act.] 'to make run, to set in motion' (RV 01.071.03), dhanayante [3pl.med.] (RV)			IIAL
*dʰénr̥	palm (of the hand)	OHG tenar 'palm' Grk thénar 'palm, sole [of the foot]'				Body (Upper)	JPM
*dʰer-	be immobile support	Lat firmus 'solid, firm' OE darian 'lie motionless, lurk' Av dārayat 'holds fast' Skt dhāráyati 'holds'				Give & Take	JPM

*dʰer-	hold		{1} [LK] With the secondary suffix accentuation (see Kulikov 1997), attested only in the ŚB. {2} [AL] As indicated by Jamison 1983: 96, the active pf. appears only in the sg. non-past indicative, whereas dhāráya-has a large number of imperfect and modal forms, as well as a participle.	Causative (Present X): dhāráyati [3sg.act.] (RV+) Present IV: dhriyate (< *dhr-ie-) [3sg.med.] (RV 05.034.07 +), dhriyéran [3pl.opt.med.] (ŚB) {1} Aorist R: dhṛthās [2sg.inj.med.] (AV 3.25.1) Aorist RED: ádīdharat [3sg.act.] (RV+) Perfect: dādhā́ra [3sg.act.] (RV+) = present in later texts rebuilt into a reduplicated present dādharti [3sg.act.] (JB), dādhrati [3pl.act.] (YVp) (Kümmel 2000: 261ff.) {2} dadhré [3sg.med.] (RV+), intrans. Intensive: dárdharṣi [2sg.act.] (RV 05.084.03) ví adardhar [3sg.inj.act.]	'to uphold the Truth': Skt. ṛtám ... dhāray° (RV) — OAv. ašəm dar- 'to uphold the Earth': Skt. kṣā́m dādhā́ra (RV 01.067.05) — OAv. dərətā ząm (Y 44.4) 'to provide goods': Skt. vásūni dhāraya (RV 09.063.30) — OP dāraya-vau- [m] PN 'Dareios' (< PIIr. *dhārayat-vasu-) 'to support the pillar': Skt. sthū́ṇām ... dhārayantu (RV 10.018.13) — YAv. stunā̆ vīđāraiieiti (Yt 10.28)		IIAL
*dʰer-	leap, spring	MIr dar- 'spring' Grk thrṓiskō 'leap, spring, attack, assault' Skt dhā́rā 'flood' Grk thorós 'semen'				Run & Jump	JPM
*dʰer-	shit	Lat foria [pl.] 'swine dung', foriō 'defecate' Lith derékti 'besmirch with filth'	North-West			Vital Functions	JPM
*dʰergʰ-	sloetree, blackthorn	OIr draigen 'sloetree' OHG dirn-baum 'cornel cherry' Rus derën 'cornel cherry'				Trees	JPM
*dʰerǵʰ-	bind fast	Skt dhṛ8hyati Lith diřža 'belt' Av darəzayeiti 'fetters'				Binding	JPM

*dʰers-	attack -> venture		{1} [LK] Isolated forms with the long reduplication syllable, probably metrically conditioned see Kümmel 2000: 268.	Present V: dhṛṣṇuhí [2sg.imp.act.] (RV 01.080.03+) Aorist A: adhṛṣas [2sg.act.] (ŚB), dhṛṣánt- [ptc.act.] (RV), dhṛṣámāṇa- [ptc.med.] (RV) Aorist IS: adharṣiṣur [3pl.act.] (TA¯ 5.1.3) Perfect: dadhárṣa [3sg.act.] (RV+), dādhṛṣuḥ [3pl.act.] (AV) {1}, dadharṣīt [3sg.inj.] (RV) Caus: dharṣay° (KS+) TA-Ptc.: ádhṛṣṭa- 'irresistible' (RV+), dhṛṣitá- 'bold, brave, daring' (RV+) Inf: °dhṛ́ṣ-e, ā- dhṛ́ṣaḥ (RV)	courageous mind': Skt. dhṛṣán mánas (RV), dhṛṣan-manas- [a IIAL		
*dʰers-	brave	NE dare Lith dręsù 'dare' Grk thérsos 'bravery' Skt dhṛṣṇóti 'is bold, dares'				Conflict	JPM
*dʰers-	venture, be bold undertake	Lith dręsù 'dare' Skt dhṛṣṇóti 'is bold, dares' Germanic *dorso- > NEdare Grk thérsos 'bravery' Av darši- 'brave').				Being & Doing	JPM
*dʰeu-	die	OIr díth 'death, end' Lat fūnus 'burial' Goth diwans 'mortal' OCS daviti 'strangle' Arm di 'corpse' ON deyja → NE die	It is possibly related to *dhwes- 'breathe' as in 'expire'			Health&Sickness	JPM

*dʰeu-	run ?walk	Grk théō 'run' MPers dawīdan 'run' Skt dhávate 'runs' ??NE dew	Greek/Indo-Iranian {1} In prose, the present dhávati forms a suppletive paradigm with sar-, which supplies aorist and perfect. {2} The distribution points to act. dhávati vs. med. dhávate, which can be explained from thematicization of the original static present.	Present IA: dhávati [3sg.act.] (RV+), dhāvate [3sg.med.] Present IB: dhavante [3pl.med.] (RV) Aorist IS: adhāviṣṭa [3sg.med.] (RV 09.070.08) Aorist RED: adadhāvat [3sg.act.] (RV 09.087.07, intrans., probably nonce) Caus: dhāváy°'to drive' (RV 10.146.02+) {1}		Run & Jump	JPM IIAL
*dʰeu-	walk, run						IIAL
*dʰeu(h□)-	be in (com)motion	Lat suf-fiō 'smoke' ON dýja 'shake' Goth dauns 'dust, smoke' Lith dujà 'dust' OCS dunǫ 'blow' Alb deh 'intoxicate, make drunk' Grk thúō 'rush on' Arm dedevim 'shake' Av dvažaiti 'flutters' Skt dhūnó ti 'shakes, moves about kindles a flame', dhūli- 'dust' Toch B tweye 'dust				Movement	JPM
*dʰeub-	deep	NWels dufn 'deep' NE deep Lith dubùs 'deep'), OCS dŭno 'ground, floor' dŭbrŭ 'ravine, valley' Alb det 'sea' Toch B tapre 'high'	For the semantic change in Tocharian, we might compare NE 'high seas' It is a much discussed word since it offers evidence for the elusive (and very rare) Proto-Indo-European *b- otherwise, if the Tocharian and Albanian forms are not accepted, it has been seen as a north-west European substrate term, borrowed possibly from a non-Indo-European language.			Position	JPM

| *dʰeugʰ- | be good for smth., fit | | | {1} Secondary from áduha (+t).
{2} [AL] In spite of Mayrhofer's reservations, the connection must be correct, the semantic development being '(cow) fits' > '(cow) yields milk' (stative). | Present II: dógdhi [3sg.act.] (TSp+), duhánti [3pl.act.] (RV+), ádhok [3sg.impf.act.] (RV, AV), dohat [3sg.subj.act.] (RV+), dugdhi [2sg.impv.act.] (AVP-Sū.m), duhé [3sg.med.] (RV+), dugdhe [3sg.med.] (Br.+), duhré [3pl.med.] (RV+), duhaté [3pl.med.] (RV+), duhraté [3pl.med.] (RV-TSm) áduha [3sg.impf.med.] (MSp), áduhat [3sg.impf.med.] (RV+) {1}, dóhate [3sg.subj.med.] (RV+) dhukṣva [2sg.impv.med.] (RV+), duhā́m [3sg.impv.med.] (RV-Br.m), dohatām [3sg.impv.med.] (KSm, TBm) Aorist S: adhukṣata [3sg.aor.med.] (RV | | | IIAL |
| *dʰeu ǵʰ- | be useful, produce somethi | OIr dúal 'fitting'
OE dugan 'be useful'
NE doughty
Rus dúžyj 'strong, healthy'
Grk teúkhō 'prepare'
Skt dóhati 'extracts, milks' | | | | | Being & Doing | JPM |

*dʰeuh□-	shake		{1} [AL] There are two more (synchonically separate) presents in Vedic from this root, which have a different meaning: Present I: ắ dhắvati [3sg.act.] (RV+) Passive (or Present IV, cf. Kulikov 2001: 356): sam-dhāvyete [3du.] (KS) 'to rinse, clean, rub, polish' Passive: ā-dhūyámāna- [part.] 'being cleansed' (TSm 4.4.9.1) Present VI: ní dhuvāmi [1sg.act.] (AVŚ) upa dhuva [2sg.impv.] (AVP 2.20.2) ni dhūveyur [3pl.opt.act.] (KS) Passive: ní dhūyatām [3sg.impv.] (AVŚ 1.14.2) 'to throw down, shake down'. {2} [AL] For the analysis of this form see Narten 1981: 3-5 = Narten 1995: 235-7 and Kümmel 2000: 269.	Present V: dhūnoti [3sg.act.] (RV+) dhūnuthá [2pl.act.] (RV+) later dhunoti [3sg.act.], dhunute [3sg.med.] (Br.+) with secondary short vowel {1} Aorist S: adhūṣata [3sg.med.] (RV 01.082.02), adhūṣṭa [3sg.med.] (AVP) Perfect: dudhuvīta [3sg.opt.med.] (RV 08.070.11), dudhuve [3sg.med.] (AV 12.1.57) Intensive: dodhavīti [3sg.act.] (RV) dódhuvat, dávidhvat- [ptc.act.] (RV) davidhāva [3sg.pf.act.] (RV 01.140.06) dūdhot [3sg.inj.act.] (RV) {2} TA-Ptc.: dhūtá-			IIAL
*dʰǵʰ(e)m-en	on(to) the ground	Lat humī Grk khamaí Skt jmán			Construction	JPM
*dʰǵʰies	yesterday					Beekes
*dʰǵʰm̥-on-	man	Lat homō 'person' OIr duine 'human' OE guma 'man' Lith žmuõ 'person'	North-West *dh ǵ hom- 'earth' Survives in NE bridegroom where the element 'groom' derives from OE guma 'man' which was changed to 'groom' by way of (erroneous) folk etymology.		Family	JPM
*dʰǵʰuh□-	fish	Lith žuvìs Grk ikhthûs Arm jukn	West-Central exhibits an archaic shape that suggests it may have been the word for 'Wsh' in Proto-Indo-European but was replaced by other words on the extremities of the Indo-European world.		Fish	JPM

*dʰgʷʰ-ehᵢ	burn		{1} [AL] The Pāli (and other MI and NI) forms clearly point to a voiced initial cluster, which makes connection with dah very attractive. I reconstruct *-ehᵢ – because otherwise we cannot account for the Indo-Aryan reflexes. The appurtenance of OAv. dōjāmāspa-, LAv. jāmāspa- remains uncertain, since we seem to have Av. γžar- / žgar- < *dhgwher- (see s.v. kṣar).				IIAL
*dʰgʷʰei-	destroy	Grk phthínō 'destroy'; 'dwindle' Av dəj īt.arəta- 'destroying Arta' Skt kṣináti 'destroys' OIr tinaid 'vanishes' Lat situs 'abandonment'	{1} With the secondary seṭ-variant of the root (kṣayi) extracted from the -ya-present. {2} Derived from the secondary seṭ-variant kṣayi. {3} With the secondary suffix accentuation (see Kulikov 1998). {4} Iranian cognates are uncertain (OAv. aγžōnuuamnəm [neg.ptc.med.] 'undamaged (?)' (Y 28.3), OAv. dōjīt_.arəta- [adj] 'violator of Truth' (Y 53.9) ?)	Present IX {2}: kṣiṇāti [3sg.act.] (RV+) kṣiṇánti [3pl.act.] (RV+) Present V: kṣiṇómi [1sg.act.] (AV+) Present IV: kṣīyante [3pl.med.] 'to be destroyed, perish' (RV+) kṣīyáte {3} [3sg.med.] (AV, ŚB, TB) Aorist S: kṣeṣṭa [3sg.inj.med.] (AV+), kṣeṣṭhās [2sg.inj.med.] (VS+) Aorist mediopass: kṣāyi [3sg.] (TS-MSm) Caus: kṣāpáyati [3sg.act.] (AV) TA-Ptc.: kṣitá- 'exhausted, decreased' (RV, KS+) á-kṣita- (RV+) na-ptc.: kṣīṇá- {2} (AV, Br.+)		Conflict Health&Sickness	JPM IIAL
*dʰgʷʰer-	flow (away)	Grk phtheírō 'ruin, waste' Av azaraiti 'flows' Skt kṣárati 'flows, perishes'	Greek-Indo-Iranian			Liquid Motions	JPM
*dʰgʷʰi-ti-	perishing, decrease				imperishable fame': Skt. ákṣiti śrávaḥ, śrávas- … ákṣita- (RV) –		IIAL
*dʰhᵢileh□-	teat, breast		Derivative of the verb *dhehᵢ (i)- 'suckle'			Body (Upper)	JPM
*dʰh₂elh₁-	blossom, come into being	Gr. thállō 'blossom' [Verb] Alb. dal					Celt.

*dʰíǵʰs	wall, fortification	Grk teîkhos 'wall' Skt sa-diḥ ;mound, heap, wall' Skt dehī- 'wall, bank' OPers didā '(town) wall, fortiWcation' Av pairi-daēza- 'enclosure'	In the North-West languages it refers to claylike substances, e.g. NE dough, and suggests that the original concept relates to an 'earthen bank'.			Construction	JPM
*dʰlgʰ–	debt	OIr dligid 'is entitled to, is owed' Goth dulgs 'debt' OCS dlŭgŭ 'debt'	North-West			Law & Order	JPM
*dʰóh☐us-	wolf	Phryg dáos 'wolf' Grk thṓs 'jackal wild dog panther'				Fauna	JPM
*dʰoh☐-néh☐-	(harvested) grain	Lith dúona 'bread' NPers dāna 'grain') Skt dhānā́s [pl.] 'kernels of grain, fried grain reduced to powder' Toch B tāno 'grain, kernel'	{1} [AL] Hardly a LW from Iranian. because its inflection is not productive. Most probably, contains zero-grade of the root (*dhH̥-neh₂ –).			Plants	JPM IIAL
*dʰólh₂os	valley vault	NWels dôl 'valley, meadow' NE dale Rus dol 'valley, under side' Grk thólos 'vault' [a sort of 'upside-down valley']	has reflexes across the geographical spectrum of Indo-European			Earth	JPM
*dʰonu-	fir	OHG tanna 'fir' [> NHG Tannenbaum] Hit tanau 'fir'	German-Hittite correspondence			Trees	JPM
*dʰreg-	precipitate lightly	NE dark Lith dérgti 'be slushy, sleety' ORus padorog 'stormy weather' Toch B tarkär 'cloud'				Water	JPM
*dʰreǵ-	glide, pull (something)	ON drak 'stripe' Lith drežóti 'tear apart' Skt dhrájati 'move'				Convey	JPM
*dʰregʰ-	pull, tear (out)	NE draw Latv dragāju 'tear' Rus dërgatĭ 'pluck, tear' Lat trahō 'pull'				Convey	JPM
*dʰregʰ-	run	Latv drãžu 'run fast' Grk trékhō 'run' OIr droch 'wheel' Grk trokhós 'wheel' Arm durgn 'wheel'	West Central			Run & Jump	JPM
*dʰreibʰ-	drive	NE drive, drove (of cattle) Lith drimbù 'slowly drop down'	Both Old Norse and Lithuanian employ this verb to describe the fall of snow.			Convey	JPM
*dʰreid-	shit	OE drītan NE dirt [<*drit- <*dhrid-] dialectal Russian dristá tĭ 'suffer from diarrhea'	North-West			Vital Functions	JPM

*dʰren-	rumble, drone buzz	NE drone Lith trānas Grk thrȏnaks MIr dresacht 'creaking noise' Lat drēnsō 'cry [of a swarm]' Grk thrȇnos 'funeral lamentation' Arm drnč'im 'toot, resound' Skt dhráṇati 'resounds' ?Toch B treṅk- 'speak'				Human Sounds Bugs	JPM
*dʰreugʰ-	deceive	OHGtriogan 'deceives' Skt drúhyati 'harms, is hostile to' MIr aur-fraich 'ghost' ONdraugr 'ghost' Av draoga- 'lie' ON draumr 'dream'		Present IV: drúhyati [3sg.act.] (AVP+) Aorist A: druhan [3pl.inj.act.] (RV+) Aorist S: adrukṣas [2sg.inj.act.] (Br.+) Perfect: dudróha [3sg.act.] (RV, AV, JB) Fut: dhrokṣyati [3sg.act.] (MS) TA-Ptc.: drugdhá- 'deceitful, false' (RV+)	'destroyer of evil': Skt. druhó hantā́ (RV 02.033.17) — YAv. jaṇta … drujō 'breaking agreement, betraying friends, treacherous': Skt. dróghamitra- (RV 10.089.12), mitra-drúh- (MS+) — YAv. miθrō.drug-miθrəm družiṇti (Yt 10.45), Parth. drwxt-myhr, MP mihr-drōz	Values	JPM IIAL
*dʰrigʰ-	± a (coarse) hair	MIr gairb-driuch 'bristle, rough hair' Grk thríks 'a single hair' Khot dro 'hair'				Hair	JPM
*dʰrogʰ-	dregs	ON dregg Lith drãgės [pl.] OCS droždĭje Alb dra Lat fracēs [pl.]				Meals	JPM
*dʰrogʰós	wheel	OIr droch Grk trokhós Arm durgn 'potter's wheel'				Transport	JPM
*dʰrougʰ-o-	deceit		{1} [AL] drógha- in RV 06.062.09d dróghāya cid vácasa ánavāya is the first member of a compound in tmesis, see Lubotsky 1988: 64f.		telling lies': Skt. drogha-vā́c- [adj] 'saying deceitful words' (RV) -		IIAL Beekes
*dʰrougʰós	companion, comrade	OE ge-drēag 'troop' Lith draũgas 'friend' OCS drugŭ 'friend, companion'	North-West			Social Organization	JPM
*dʰrougʰós	phantom	Skt drógha- OIr airdrech 'phantom' ON draugr	As a personalized form it is limited to the North-West but it is cognate with Skt drogha- 'deceiving' and derives from *dʰreugʰ- 'deceive'			Dieties	JPM
*dʰrs-nt-	dare						IIAL

*dʰu-en-h₂-	smoke		{1} Or 3sg.impf.act. of the root present, type bráviti (Jamison 1983: 115).	Aorist IS<R: ádhvanīt [3sg.act.] (RV 08.006.13) {1} Caus: ádhvānayat [3sg.impf.act.] (RV 06.018.10) dhvanayīt [3sg.inj.] (RV 01.162.15 nonce) TA-Ptc.: dhvāntá-, also [n] 'darkness' (RV+), [m] 'name of a wind' (VS+)			IIAL
*dʰúbʰos	wedge, peg	NE dowel dialectal Grk túphos 'wedge'	West Central			Tools	JPM
*dʰu ǵ (h□)tḗr	daughter	Gaul duxtir Osc fuutír NE daughter OPrus duckti OCS dŭšti Grk thugátēr Arm dustr Lyc kbatra Av duaədar- Skt duhitár- Toch B tkācer	{1} [AL] Both forms must have been present in PIIr., most probably forming one paradigm.		daughter of heaven/Zeus': Skt. duhit	Kinship	JPM IIAL
*dʰu ǵ h□tḗrdiwós	sky daughter	Lith diẽvo duktė~ 'Saulytė' who was Grk thugátēr Diós Skt duhitā́ diváh Grk thugátēr Diós, Skt duhitā́ diváh				Dieties	JPM
*dʰuh₂mós	smoke	Lat fūmus Lith dū́mai OCS dymu Skt dhūmá Grk thūmós 'spirit'				Fire	JPM Beekes IIAL
*dʰūnos	???	Gael dun NE down(s) NE town (from Celtic)	North-West *dʰuh□nos?			Dwelling	JPM
*dʰurh₁-	chariot pole				dhū́r [nom.sg.], dhúram [acc.sg.], dhurā́ [instr.sg.], dhūrṣú [loc.pl.], etc.		IIAL
*dʰwen-	sound	NE din Lith dundéti 'rumble, roar, thunder' Skt dhvánati 'sounds, roars'				Human Sounds	JPM

*dʰwenh₂-	cover over, darken	Skt dhvāntá- 'covered, veiled, dark darkness, night' Grk thnḗskō 'die' Grk thnētós 'mortal' Grk thánatos 'death'	Graeco-Aryan from *bʰeh₂- 'shine'			Light & Dark	JPM
*dʰwens	pulverize			Present I: dhváṃsate [3sg.med.] (AVP+) Present IV: -dhvasyati [3sg.act.] (Br.) Present X: dhvasayaḥ [2sg.inj.act.] (RV) dhvasáyant- [ptc.act.] (RV) Aorist A: -dhvasán [3pl.inj.act.] (RV 08.055.05) Perfect: -dadhvase [2sg.med.] (RV 10.113.07), dadhvasat [3sg.subj.act.] (AVP) vi-dadhvaṃsur [3pl.act.] (Up.) Caus.: dhvaṃsáy° (YVp+) TA-Ptc.: dhvastá- (AVP+)			IIAL
*dʰwer-	pierce	Lith duriù 'thrust, stab' Grk túrkhē 'two-pronged fork' Arm dur 'tool, gimlet' an enlarged *dʰwerh□ Hit dwarnai- 'break, shatter' Skt dhvárati 'bends, causes to fall, shatters'				Reductive Activities	JPM
*dʰwerh□-	harm	Hit duwarnai- 'break, shatter' Skt dhvárati 'bends, cause to fall, hurts'	Possibly from *dʰwer- 'pierce'			Conflict	JPM
*dʰwerh□-	yoke	Hit tūriye- 'harness' Skt dhū́r 'yoke', dhúriya- 'draft animal' Toch B trusk- 'harness', probably also pyorye 'yoke' Grk théraps 'comrade servant'				Transport	JPM

*dʰwes-	breathe, be full of (wild) spir	OIr dāsacht 'rage fury' Lat furō 'rage' MHG tuster 'ghost, spectre' Lith dvasià 'ghost, spirit' Lith dvesiù 'gasp, expire'	There is the suggestion of some form of animated breathing, a suffusion of wild spirits derivatives give us general names for 'wild animals', including NE deer, Lat bēlua 'wild animal'	Root present ? (SGM)		Vital Functions	JPM
*dʰwes-	spirit	Gaul dusios 'type of demon' MHG getwās 'fantom' Lith dvasià spirit'	from the verb *dʰwes- 'breathe'			Dieties	JPM
*dʰwŏr	door, gate	OIr dorus Lat foris NE door Lith dùrys, OCS dvĭrĭ Alb derë, Grk thúrā Arm dur-kʻ Skt dvằras Toch B twere Hit andurza 'within' (literally 'in-doors')	Often the word for 'door' occurs in the dual and indicates two leaves of a door. {1} [AL] The unexpected *d- in Indo-Aryan is usually explained by the influence of the numeral 'two'.	In the RV only du. and pl.: dvắrā, dvắrau [nom.acc.du.], dvắras [nom.pl.], dúras [acc.pl.] dvắr [nom.sg.] (AV+). From Br. on, dvắra- [n].		Construction	JPM IIAL
*di-n-	day						IIAL
*dibʰro- *dībʰro-	(sacrificial) animal	Gothic tibr 'sacrifice' OE tīber 'offering' MHG ungezibere 'vermin' [< 'unsuited for the sacrifice']) OHG zebar 'offering' [the only form requiring *dibhro-] Arm tvar 'male sheep, herd of cattle'	West-Central			Fauna	JPM

*dieu-	shine		{1} Old is root-aorist, which supplies the aorist forms to roc. The present is secondary. See also jyot.	Present I: dyótamāna- [ptc.med.] (RV 10.177.02), dyótate [3sg.med.] (AV+) Present AYA: dyutayanta [3pl.inj.med.] (RV 02.034.02) Aorist S<R: ádyaut [2,3sg.act.] (RV+) Aorist R: dyutant- [ptc.act.] (in dyutád-yāman- [adj] 'with shining driving' (RV), dyutá(d)dyu- [adj] 'with shining days' (MS)), dyútāna-, dyutāná- [ptc.med.] (RV+) Perfect: (ví) didyute [3sg.med.] (RV+) ádidyutat [3sg.ppf.act.] (RV) didyóta [3sg.act.] (AV) Caus: dyotay° (RV, AV) Intensive: dávidyot [3sg.inj.act.] (RV+) dávidyutat			IIAL
*dieu-t-	shine		{1} [AL] For the phonetic development *diaut- > jyot- see aan de Wiel 2000.	Present I: jyotatām [3sg.impv.med.] (MS) Passive: ava-jyotyámāna- [ptc.] (ŚB) Caus: jyotáy° (AV) Abs: ava-jyótya (Br.+)			IIAL
*diēus-ph₂tēr	Father Sky, the king-god						Beekes
*di ǵ (ʰ)-	tick	Mlr dega 'stag beetle' OE ticia Arm tiz				Bug	JPM

*dih₁-	fly move swiftly	Skt dī́yati 'flies' Grk díō 'run away' Latv diêt 'dance' OIr dīan 'fast'				Run & Jump	JPM Celt.
*díks	goat	OE ticcen 'kid' Alb dhi 'she-goat' ?Grk díza 'shegoat' Ishkashmi dec 'goatskin bag'				Fauna	JPM
*dis-	apart, asunder	Lat dis- 'asunder' Goth dis- 'apart' Alb sh- 'apart' Grk diá'through, on account of'	West-Central from the numeral 'two'			Position	JPM
*diu-ih□o-	heavenly			/div(i)yá-/			IIAL
*diwyós	divine	Lat dīus Grk dĩos and Skt divyá-				Dieties	JPM
*dl̥h₁gʰós	long	Lat in-dulgeō 'long-suffering' Goth tulgus 'firm' Lith ìlgas OCS dlŭgŭ Alb gjatë Grk dolikhós Hit daluki- Skt dīrghá-	{1} [AL] MP drang, NP dirang 'delay, lateness' does not reflect IE *dl-on-gh-o-, but is rather a derivative of the Iranian verb *drang- 'to fix, hold'.	drā́ghīyas- [comp] 'lasting longer, longer (in length)' (RV+) drā́ghiṣtha- [sup] 'longest' (RV+)	'long-lasting darkness': Skt. dīrghá-támas- 'long-lasting darkness' (RV), dīrghá-tamas- [m] N. of a r̥ṣi (RV) — OAv. darəgə̄m āiiū təmaŋhō 'long life-time of darkness' (Y 31.20) 'long life-time': Skt. dīrghá- ā́yu(ṣ)- (RV) — OAv. darəgə̄m āiiū (Y 31.20) 'long-lived': Skt. dīrghā́yu- [adj] (RV) — OAv. darəgāiiu- [adj] — Gr. δολιχαίων [adj.] 'with a long life' (with analogical -α-) 'long-armed': Skt. dīrgha-bāhu- [adj] (Ep.+) — OAv. darəgō.bāzu- [adj], YAv. darəγō.bāzu- [adj] 'whose fame reaches far and wide': Skt. dīrghá-śravas- [adj] (RV), dīrgha-śrút- [adj] (RV+) — OP *darga-çavah- [m] PN	Shape	JPM IIAL
*dlongʰos	long	Lat longus NE long MPers deran				Shape	JPM
*dm-n-éh₂-ti	subdue		Nasal Present				Beekes
*dmpedom	floor	ON topt 'place for building' Grk dápedon 'floor'	West Central a compound derived from *dem- 'build' and *ped- 'foot'			Construction	JPM

*dn̥ǵʰuh□- *dn̥ǵʰweh₂–	tongue	OIr tengae OLat dingua NE tongue Lat lingua Old Latin dingua Lith liežùvis Arm lezu Toch A käntu Toch B kantwo OPrus insuwis OCS językŭ Av hizū- Skt jihvắ-	Widely remodelled, probably by the initial sound in the verb 'to lick' Tocharian forms exhibit metathesis. Both OPrus insuwis and OCS jfi ezykŭ show the loss of the Proto-Indo-European *d-before *n, while Av hizū-and Skt jihvắ- show even more reformation.			Head	JPM IIAL Beekes
*do *de	to, toward	OIr do Lat dō-nec 'up to' NE to Lith da 'up to' OCS do 'up to' Grk -de 'toward' Av -da 'to'				Position	JPM
*dŏm	house(hold), nuclear family	Grk dŏ̑ Arm tun Av dam- Skt dăm	The structure and the social unit of the house are combined under a single term. {1} nom.sg. *dōm , gen.sg. *dém-s, cf. the verbal root *dem- 'to build'.	pátir dán [gen.sg.] (RV also śíśur dán RV 10.061.20), dáṃ supátnī (RV 06.003.07), damắm [gen.pl.] (RV 10.046.07), probably dáṃsu [loc.pl.] (RV 01.134.04, 01.141.04)		Family	JPM IIAL
*dóm(h□)os	house(hold)	Lat domus 'house' Lith nãmas 'house' OCS domŭ house' Grk dómos 'house' Skt dáma- 'house'	Ultimately derived from *dem(ha)- 'build' on which is formed the noun for 'house(hold)' Latin also shows the extended form dominus 'master of the house'.			Dwelling Family	JPM
*dom(h□)u-no-s	master	Lat dominus Skt dámuna-	A clear derivative of the word for 'house' (cf. *dom(ha)os above) with the suffix *-no- which is used to create words 'leader of'			Marriage	JPM
*domh□yos	one to be tamed	Alb dem 'bull, steer' Skt damya- '[young bull] to be tamed'		?		Fauna	JPM
*don-	reed	Latv duonis 'reed' Grk dónaks 'reed'	West-Central			Plants (Wild)	JPM
*dórkʷom	evening meal	Alb darkë Grk dórpon Alb drekë 'breakfast' Bret dibri 'lunch'	West Central			Food & Drink	JPM

*dóru	tree	Olr daur 'oak' Grk dóru 'tree trunk wood spear' Hit tāru 'tree, wood' Av dāuru 'tree, tree trunk wooden weapon' Skt dā́ru 'wood' Toch AB or 'wood' NE tree Grk drûs 'tree, oak' OCS drŭva 'wood' Alb dru 'wood, tree' drushk'oak' OCS drĕvo 'tree'	Hitt. tāru, Gr. dóry 'tree, trunk, spear', ToAB or 'wood', Av. dāuru	dróṣ, drúṇaḥ [gen.sg.] 'wood' (RV+), drúṇā [instr.sg.] (RV	Trees	JPM IIAL
*dous-	(upper) arm, shoulder	Olr doē 'arm' Latv pa-duse 'armpit' [< 'that under the arm'] Slovenian paz-duha 'armpit' Av daoš- 'upper arm, shoulder' Skt dóṣ 'forearm, arm'		dóḥ [nom.acc.sg.] (RV, ŚB), doṣṇáḥ [gen.sg.] (ŚB), doṣ	Body (Upper)	JPM IIAL
*dr-ti-	tear					IIAL
*drap- *drop-	clothes, cloak	Gallo-Roman drappus 'clothes', ith drāpanos [pl.] 'clothes' Skt drāpí- 'cloak'	may come from *drep- 'split off', i.e. it originally indicated a skin garment.		Textiles	JPM
*dreh₂-	sleep		{1} Attested also with other root extensions: *-em- (in Lat. and ORu.) and *-dh- (in Gr.).	Present II: ni-drāyắt [3sg.opt.act.] (Br.) Fut: drāsyáti [3sg.act.] (Br.)		IIAL
*drem-	run	OE trem 'footstep' Grk drameîn 'run' Skt drámati 'runs about'	{1} Probably root enlargement of the root *der- 'run', preserved also with other extensions (and similar meanings): *dr-eu-, *dr-eh₂-.	Intensive: dandram meeting': YAv. han-dramana- [n] '(pl	Run & Jump	JPM IIAL
*drep-	scratch, tear ?cut off	Rus drjápati 'scratch, tear' Grk drépō 'pluck' Toch A räp- 'dig' Toch B rāp- 'dig' Hit tēripzi 'ploughs'			Reductive Activities	JPM IIAL

*dreu-	run		{1} [LK] Or pluperfect and perfect subjunctive (see Kümmel 2000: 252f.). {2} [AL] All these Avestan forms have been explained from the root dru- 'to deceive' by M. Schwartz, JRAS 1966: 119-122. This analysis is also accepted by Kreyenbroek 1985 (Sraoša). {3} [AL] THe root *dreu- may be a root enlargement of the root **der- 'run', preserved also with other extensions (and similar meanings): *dr-em-, *dr-eh₂-, etc., although it seems disquieting that there are no certain cognates outside Indo-Iranian. The European river names (Dravos, Druentia, Druta, etc.) can hardly be cognate, cf. especially the typical a-vocalism.	Present I: drávati [3sg.act.] (RV+) Perfect: dudrāva [3sg.act.] (Br.+) Fut: droṣyati [3sg.act.] (Br.) Aorist RED: ádudrot [3sg.act.] (RV 02.030.03), dudrávat [3sg.subj.act.] (RV) {1} Caus: drāváyati (RV+) Present AYA: dravayanta [3pl.inj.med] (RV 10.048.05) Intensive perfect: dodrāva [3sg.act.] (TS) TA-Ptc.: (úd-)druta- 'run (away)' (VS)			IIAL
*dreuh□-	cut ?			Present IX: drūṇāná- (metrically, druṇāná-) [ptc.med.] (RV 04.004.01), druṇáti, drū			IIAL
*drewentih₂-	(river name)		Gaul (Druentia) India (Dravantī)			Water	JPM
*dr̥ḥ□weh□-	± grain ?tare	Gaul dravoca 'darnel, ryegrass' NDutch tarwe 'wheat' Skt dū́rva- 'panic-grass' [related to millet]				Plants	JPM
*dr̥ḱ-	dragon	MIr muirdris 'sea-monster' Grk drákōn 'dragon'	derives from the verbal root *derḱ- 'see' as the dragon fixes its opponent with its baleful gaze			Fauna	JPM
*du(e)h₂-ro-	far, lasting long {4}		{1} This OP superlative reflects PIIr. *duaH-išto- and is more archaic than Skt. daviṣṭhá-. {2} [AL] Usually, this adjective, attested in Yt 1.12 and Yt 12.7, is rendered 'seeing far', but 'visible from afar' also seems possible. {3} daureśruta- [m] PN is already attested in the Br. {4} The meaning of the root seems to be 'to extend in space and time'.	dávīyas- [comp] (R	'visible far and wide': Skt. dūre-dŕ̥ś- [adj] (RV) — YAv. dūraē-darš(təma)- [adj] {2} 'far-renowned': dūre-śravas- [adj] (ŚrSū.) {3} — YAv. dūraē-srūta- [adj], MP dūrēsraw [m] PN		IIAL
*duh₂-to-	far away		{1} Lat. dautia / lautia 'welcome of foreign guests and messengers' is hardly related.				IIAL
*duh□ros *dweh□ros	long (of time, space)	Lat dūrāre 'to last' Grk dērós 'long' Arm erkar 'long' Av dūire 'far' Skt dūrá- 'far' Hit tūwa- 'far, distant' (with a different suffix)				Shape	JPM

*dui-h₂p-ó-	having water on two sides		{1} [AL] The Avestan form is acc.pl. and not loc.sg., cf. Oettinger 1983: 91, de Vaan 2003: 492. Mayrhofer reconstructs PIIr. *duai-Hp-a-, but it is more likely that the Avestan form is due to the introduction of the productive Iranian form *duai- 'two-, bi-', cf. Av. baē-ərəzu- 'length of two fingers'.				IIAL
*dus-	bad	prefix: OIr do- 'bad, mis-' OE tor- 'un-' NHG zer- [verbal prefix] Grk dus- 'bad, mis-' Av duš- 'bad, mis-' Skt duṣ- 'bad, mis-' Lat dif- may be cognate here Rus doždǐ 'rain, bad weather', originally 'bad-sky'.			'wrongly done': Skt. duṣ-kṛtá- [adj] 'wickedly done', [n] 'evil action' (RV+) — OP duš-kṛta- [adj] 'badly done' 'speaking badly, insulting, slandering': Skt. duḥ-śáṃsa- [adj] (RV+) — YAv. duš.saŋha- [adj] 'difficult to reach': Skt. dur-āpaná- [adj] (RV), dur-ắpa- [adj] (ŚB+) — YAv. duž-āpiia- [adj] 'difficult to access', 'hardship, danger': Skt. dur-itá- [adj, n] (RV+) — YAv. duž-ita- [adj, n] 'wrongly performed sacrifice': Skt. dúr-iṣṭi- [f] (AV+) — YAv. duž-iiašti- [f] 'bad, inauspicious word': Skt. dur-uktá- [n] (RV+) — YAv. duž-uxta- [adj] 'badly spoken' — MP dušhūxt 'bad words' 'evil-minded': YAv. duš-mainiiu- [adj] 'evil-minded', [m] 'enemy' — MP dwšm(y)n' /dušmen/, Parth. dwšmyn, NP dušman 'enemy' 'evil-minded': Skt. dur-mánman- [adj] 'evil-minded' (RV) — OAv. duž-manah-, YAv. duš-manah- [adj] — Gr. (Hom.) δυσ-μενής [adj] cf. also Skt. dur-matí- [f] 'evil mind, hatred' (RV+), YAv. duš-mata- [adj] 'badly thought'	Values	JPM IIAL
*dus-menēs	hostile (literally: bad-thoug	Grk dusmenḗs 'hostile' Av dušmanah- 'hostile' Skt durmanās 'sad'	West Central			Conflict	JPM
*dw(e)i-plos	2x double, twofold	OIr dīabul Lat duplus Grk diplós				Numbers	JPM
*dwei-	fear	Grk deídō 'fear' Arm erknč'im' 'frighten' Luv kuwaya- 'fear' Av dvaēš- 'be hostile, provoke' Skt dvéṣṭi 'hates, is hostile' Toch A wi- 'be frightened'	It appears to derive from the numeral *dwi- 'two' and its etymology may have been something like 'be of two minds' or, in the hindsight of modern psychological theory, express the natural decision-making process between 'fight and flight' when confronted with a danger			Values	JPM

*dwei(s)-	be inimical		{1} The IIr. root *duaiš- may be related to PIE *duei- 'to threaten' and be eventually based on the adverb *duis 'twice, (split) in two' (see s.v. dvíṣ). Also OAv. duuaēθa- [adj] 'inimical' in the formula āiθiš duuaēθā 'inimical threat' (Y 32.16, Y 48.9) may belong to the unextended root *duei-.	Present II: dvéṣṭi [3sg.act.] (RV+) dviṣmás [1pl.act.] (RV+) -dviṣáte [3pl.med.] (AV+) Aorist SA: dvikṣat [3sg.inj.act.] (AV) Aorist RED: -adidviṣat [3sg.act.] (AVP) Perfect: didveṣa [3sg.act.] (ŚB) TA-Ptc.: (índra)dviṣṭa- (RV 09.073.05+)			IIAL
*dwi-	2x bi-; two-	Lat bi- NE twi- Grk di- Av bi- Skt dvi-			'two-footed, biped': Skt. dvi-pád- [adj] (RV+) — Sogd. (Buddh.) ðyβ-p'ð'kw — Khot. śi-vāva- [adj] (< *dvi-pāda-) — Gr. δί-πους [adj] — Lat. bi-pēs [adj] — OE twu-fēte [adj] 'double-tongued': Skt. dví-jihva- [adj] (AV+) — Sogd. (Buddh.) ðyβzβ"k — Lat. bi-linguis [adj] 'two-legged': Skt. dví-pratiṣṭha- [adj] (Br.) — YAv. bi-paitištā̆na- [adj]	Numbers	JPM IIAL
*dwi-yos *dwi-tos	second	Alb dytē Av daibitya- □ bitya- [< pre-Av *dwitya-] Skt dvitī́ya- [cf. also dvitā́ 'doubly so'] Toch B wate Hit duyanalli- ' second officer' < *dwiy-o-	{1} [AL] It is probable that the form is analogical after the word for 'third', cf. Skt. tr̥tī́ya-, Umb. terti 'for the third time', but this analogy may be of IE date.		for the second time': Skt. dvitī́yam [adv] (RV+) — OAv. daibitīm [adv] (Y 45.1), YAv. bitīm, āt̲_bitīm [adv] — OP <duuviitiym> [adv] — Umb. duti 'iterum'	Numbers	JPM IIAL
*dwis	2x twice	Olr fo di Lat bis NE twice Grk dís Av biš		/d(u)vís/		Numbers	JPM
*dwṓdeḱm̥(t) *duoh₁dekm	12 twelve	NWels deuddeg Lat duodecim Grk dṓdeka Arm erkotasan Av dvadasa Skt d(u)vādaśá		/duvā́daśá/		Numbers	JPM IIAL

*dwóh₃(u) *duo-	2 two	OIr dāu [m.], dī [f.], dā [nt.] Lat duo [m./nt.], duae [f.], NE two Lith dù [m.], dvì [f.] OCS dŭva [m.], dŭvě [f./nt.] Alb dy Grk dúō Arm erku Av dva [m.], baē [f./nt.] Skt dvā́[m.], dvé[f./nt.] Toch A wu [m.], we [f.]	neuter: *dwoih	The forms in the RV are: d(u)vā́, d(u)váu [nom.acc.m.],		Numbers	JPM IIAL
*dwoi-	2 two, group of two	OIr dīas 'couple' Hit tān 'for the second time'				Numbers	JPM
*dwoyos ?*duoih os	2x double(d), twofold	Grk doiós 'doubled' Skt dvayá- 'duplicity'		dvayī́- [f]		Numbers	JPM IIAL
*dye(u)-	day day(light), heaven	OIr dīa 'day' Lat diēs 'day' Grk éndīos 'at mid-day' Arm tiw 'day' Hit sīwatt- 'day' Skt divasá- 'day'	from *dei- 'shine'	dyáuḥ [nom.sg.], dy	'father heaven': Skt. dyáuṣ pitā́, dyàuṣ pítar [voc.] (RV+) — Gr. Ζεὺς (…) πατήρ, Ζεῦ πάτερ [voc.], Umb. Iupater [voc.], Lat. Iup(p)iter, Gr. Δειπάτυρος˙ θεὸς παρὰ Στυμφαίοις 'time and again': Skt. pra-div-í [adv] (RV) — OAv. fraidiuuā [adv] (Y 32.14)	Time	JPM IIAL
*dyḗusph tḗr	sky father	Lat Jūpiter Illyr Dei-pátrous Grk Zeús patḗr Skt dyáuṣpitā				Dieties	JPM
* ǵ (e)m(h)ros * ǵ (e)mh -ōr	sisters husband	Lat gener Grk gambrós				Kinship	JPM Beekes
*g(e)ulo-	fire, glowing coal	OIr gūal 'coal' NE coal	Celtic and Germanic only			Fire	JPM
* ǵ (ʰ)ombʰros	bison	Lith stum~bras Latv subrs Rus zubr OPrus wis-sambris 'bison'				Fauna	JPM
*g(ʰ)rewom	reed, rush	Av grava- Toch A kru	Eastern			Plants (Wild)	JPM
*g(ʰ)ru(n)(d)-	grunt	Lat grunniō grundiō 'grunt' NE grunt Grk grúzō 'grunt'	West Central			Animal Noises	JPM
* ǵ (l)ákt	milk	Lat lac Grk gála Hit galaktar 'milky fluid from trees and plants soothing substance, balm, nutriment' Grk gála 'milk' Lat lac 'milk' Waigali zōr 'milk'	The underlying verb is present only in Hit kala(n)k- 'soothe, satisfy'.			Meals	JPM Beekes

*g(ʷ)elbʰ-u-s *gʷolbʰ-o-	womb	Grk delphús Av garəwa- Skt gárbha- Av gərəbus 'newly borb animal' OE cilfor-lamb 'ewe-lamb' NE calf				Body (Lower)	JPM IIAL
*g(ʷʰ)eh₂ǵʰ-	wade			Present I: gā́hate [3sg.med.] (RV+) TA-Ptc.: ava-gāḍha- 'penetrated into the water, dived in' (ŚrSū.+)			IIAL
*ga/ondʰ-	wheat	Hit kant- [einkorn?-] wheat' Av gantuma- 'wheat' Toch B kanti 'bread'	Possibly a loan from other Eurasian peoples			Plants	JPM
*gag-	cackle	NE cackle Lith gagù Rus gogolátĭ Arm kakač'em	West Central			Human Sounds	JPM
*gal-	be physically able	NWels gallu 'is able' Lith galiù 'am able'	North-West			Being & Doing	JPM
*gal-	call out, speak	OIr gall 'swan' NWels galw 'call' Lat gallus 'cock' OE ceallian 'call' NE call (from ON) ON kalla Lith galͭsas 'echo' OCS glasŭ 'voice' Oss ɣalas 'sound'				Speech	JPM
*ǵar-	shout, call	OIr do-gair 'call' Lat garriō 'chatter, prattle' OE cearu 'care, sorrow, mourning' [> NE care] Grk gḗrus 'voice, call' Oss zarun 'sing'	Its meanings generally indicate a calling out or 'shout' (in Armenian we again find it forming bird names, cicaṙn 'swallow', cicaṙnuk 'nightingale'). The Germanic meaning 'mourn' may give some indication of Proto-Indo-European, or at least Pre-Germanic, mourning customs involving wailing by the mourners.			Speech	JPM
*garǵos	frightening, threatening	OIr garg 'rough' OCS groza 'shudder, horror' Arm karcr 'hard' Grk gorgós 'terrible, frightful, savage'	West Central			Values	JPM
*ǵe	because						Beekes

*geh₁- *g(ʷ)eh□-i-	sing	Skt. gā 'sing', gāthā 'song' Av. gāθā 'song' Lith giedóti 'sing' OE gieddian 'sing' giedd, gidd 'song, poem, riddle, tale'	{1} [AL] Parth. ng'y- [verb] 'to pray, supplicate' rather belongs to the Ir. verb *ǰad- 'to ask, demand'.	Present IV: gā́yanti [3pl.act.], gā́ye [3sg.med.] (RV+) Aorist S: gāsi [1sg.inj.med.] (RV) Aorist SIS: agāsiṣur [3pl.act.] (RV+) Perfect: jagau [3sg.act.] (Br.+) Fut: gāsy° (Br.+) Passive: gīyámāna- [ptc.med.] (RV+) TA-Ptc.: gītá- (RV+: RV only abhígīta-)		Poetics	JPM IIAL
*geh₁(i)-	sing	Lith giedóti 'sing [hymns]' ORus gajati 'crow' Av gāθā- 'metre, line of poetry' Skt gā́ti □ gā́yati 'sings', gāthā- 'song'				Formal Speech & Song	JPM
*geh□dʰ-	rejoice	Grk gēthéō 'am happy, rejoice' Toch AB kātk- 'rejoice' OIr gūaire 'noble' Lat gaudeō 'am happy, rejoice'				Values	JPM
*geh□u-	rejoice	Lith džiaugúos (<*gaudžiúos) 'am happy' Grk gánumai 'rejoice', gaûros 'proud'	West Central			Values	JPM
*geh□ǵʰ-	enter water, wade	Slov gáziti 'wade' Skt gā́hate 'wade'				Swim	JPM
*geid-	tickle	OE citelian Arm kcem	Germanic-Armenian Isogloss			Reductive Activities	JPM
*gel-	cold, to freeze	Lat gelū 'cold, frost' NE cold	North-West			Qualities	JPM
*ǵel-	swallow					Food & Drink	JPM
*ǵelu-	leech	OIr gil Skt jalūkā-	Derives from a verbal root *ǵel- 'swallow'			Bug	JPM Celt.
*gem-	press, squeeze together, so	MIr gemel 'fetters' Umb gomia 'pregnant' OE cuml 'swelling, wound' Lith gùmstu 'seize, grasp' OCS žimǫ 'press' Grk gémō 'am full' Arm čmlem 'press together'	West Central			Bend and Press	JPM
*ǵem-	weep, lament, moan	NIr geamh 'prattle' Lat gemō 'sigh, moan, lament, groan' Arm cmrim 'grieve'	West Central			Human Sounds	JPM

* ǵembʰ-	bare ones teeth			Aorist IS: jambhiṣat [3sg.subj.act.] (RV 10.086.04) Intensive: abhi-jáñjabhāna- [ptc.med.] (AV), jañjabhyáte [3sg.med.] (TS)			IIAL
* ǵembʰ-	destroy			Present AYA: jambháyati [3sg.act.] (RV+) Aorist RED: ajījabham [1sg.act.] (AV 7.56.5)	grind up the two jaws (of the wolf)': Skt. hánū … jambhaya (AV		IIAL
* ǵemh□-	marry	Grk gaméō Lat gener 'son-in-law' Grk gambrós 'son-in-law' Av zāmātar- 'son-in-law' Skt jāmātar- 'son-in-law' Alb dhëndër 'suitor' Skt jārá- 'suitor'	In later Greek, and perhaps already in earlier Greek, this word was used also of the sexual act by which a marriage was consummated.			Marriage	JPM
*gen-	± compress	NE knock, knife dialectal Grk knuzóō 'draw together'	West Central			Bend and Press	JPM
*genh₁-	lineage, clan						Beekes

*ǵenh₁-	beget a child be born	OLat genō 'beget' Lat gignō 'produce' OE cennan 'beget' Grk gennáō 'beget' Skt jánati 'begets' Lat gnāscor 'am born' (intr.) Grk gígnomai 'am born' (intr.) Skt jajána 'am born' (intr.)		Present I: jánāmi [1sg.act.] (RV+) Present IV: jā́yate [3sg.med.] 'be born' (RV+) Aorist R: ajani [1sg.med.] (RV 08.006.10 later ajñi TB) Aorist IS: ájaniṣṭa [3sg.med.] (RV+), jániṣva [2sg.impv.med.] (RV+) Aorist RED: ájījanat [3sg.act.] 'has produced, has created' (RV+) Aorist mediopass: ájani [3sg.] (RV), jáni [3sg.inj.] (RV 01.141.01), jā́ni [3sg.inj.] (RV 08.007.36) Perfect: jajā́na [3sg.act.] 'has produced, has given birth (to)' (RV+), jajñé [3sg.med.] 'is born' (RV+) Fut: janiṣyáte [3sg.med.] 'will be born' (RV 01.081.05+) Caus: janáyati		Vital Functions	JPM
*ǵenh₁-men-	offspring			{1} [AL] The distribution of jániman- and jánman- is not quite clear. One of the options is *ǵénh₁-mn̥ [nom.acc.sg.] > jánima, *ǵénh₁-mn-éi [dat.sg.] > jánmane (thus G. Schmidt, M. Peters), but the opposite is likewise possible.			IIAL
*ǵenh₁-tōr	father; procreator	Lat genitor Grk genétōr Skt janitár-		{1} OAv. zn̥θā (Y 44.3) can hardly be misspelled for *zan̥tā = Ved. janitā́.		Kinship	JPM IIAL
*ǵenh₁-tro-	birth-place						IIAL
*ǵenh₁-tu-	tribe						IIAL
*ǵénh₁es- *ǵénh₁-os-	family ??race	Lat genus 'family' Grk génos 'family' Arm cin 'birth' Skt jánas- 'family'		Which derives from *ǵenh₁- 'be born'		Family	JPM IIAL
*ǵenh₁trih₂-	mother, procreatrix	Lat genetrīx Grk genéteira Skt jánitrī-				Kinship	JPM IIAL

*ǵénu-	jaw	OIr gin 'mouth' Lat gena 'cheek' NE chin Grk génus 'chin, jaw' Phryg azěn 'beard' Av zānu- 'jaw' Skt hánu- 'jaw' Toch A śanwem [dual] 'jaws'	{1} The origin of Skt h- (instead of expected *j-) is unknown.		grind up the two jaws (of the wolf)': S	Head	JPM IIAL
*ǵeP-	± eat, masticate	OIr gop 'muzzle, snout, beak' OE ceafl 'jaw, jowl' [> NE jowl] Lith žebiù 'masticate, eat slowly' Rus zobátĭ 'eat' Av zafar- □ zafan- 'mouth of a demonic being'				Food & Drink	JPM
*ger-	± hiss, howl	OE ceorran 'creak' Lith gùrti 'yell' Alb nguron 'howls [of the wind]'	West Central			Human Sounds	JPM
*ger-	herd, crowd	MIr graig 'horse herd' Lat grex 'herd, company' Grk gárgara 'crowd'	West Central			Social Organization	JPM
*ger- *ǵerh₂no-	crane	NWels garan Lat grūs NE crane Lith gérvė Rus žeravlĭ 'crane, goose' Arm kṙunk Oss zyrnæg	Clearly onomatopoeic and the root vowel is unclear			Bird	JPM Celt.
*gerg-	crack, resound	OE cearcian 'creak, gnash' NE crack Lith gìrgždžiu 'creak' Skt gárjati 'roars, howls' Arm karkač 'noise'				Human Sounds	JPM

* ǵ erh₂-	make decayed, make old			{1} [LK] Treated as a thematic aorist by Whitney 1885, Narten 1964: 121 and Joachim 1978: 83, as a class VI present by Gotō 1987: 152). {2} [AL] In RV 01.179.01, jaráyantīḥ must probably be scanned with a long root vowel, see Jamison 1983: 154. {3} [AL] The distribution RV -ūr- : AV -ĭr- is unparallelled. Since -ūr- only occurs in the RV (ajuryá- in later texts is a loanword from the RV), this reflex must be due to a specific development in this text. It is therefore reasonable to assume that the verb jūrv 'to destroy, eradicate', most probably derived from the same root and only attested in the RV, played a crucial role. For a similar -ūr- / -ĭr- interplay see tari. {4} [AL] RV jívri-, AV jírvi- [adj] 'helpless, weak, decrepit', often connected with this root, can hardly reflect PIIr. *ǰrH-u- (+ -i-), because the latter would most probably have yielded **juru-.	Present I: járanti [3pl.act.] (RV) 'to make age' Present IV: jū́ryati [3sg.act.] (RV), jĭ́ryati [3sg.act.] (AV+) 'to become decrepit' Aorist IS: jāriṣur [3pl.inj.act.] (RV) Aorist A or Present VI {1}: jurátam [2du.impv.act.] 'make decrepit!' (RV 01.182.03) juránt- [ptc.act.] (RV) 'old, decrepit' Perfect: jajā́ra [3sg.act.] 'has become old' (AV 10.8.26), jujurvā́ṃs-, jujurúṣ- [ptc.act.] (RV) Caus: jaráy° 'to make age' (RV+) {2} na-ptc.: jūrṇá- (RV), jīrṇá- (AV+) {3}			IIAL
* ǵ erh₂-nt-	be old				[f] járatī- (RV, AV).			IIAL
* ǵ erh□-	grow, age, mature ?ripen	OCS zŭrĕti 'ripen' Grk gēráskō 'age, grow old' Skt jĭ́ryati □ jūryati 'grows old, becomes decrepit' Toch AB kwär- 'age, grow old' Grk gérōn 'old man' Arm cer 'old man' Skt járant- 'old man'				Vital Functions	JPM
* ǵ erh□-o-s	old man	Arm cer NPers zar			Already in the RV (2x) acc.sg. jarám, from where jarā́- [f	Family	JPM IIAL
* ǵ erh□-ont-	old man	Grk gérōn 'old man' Oss zærand 'old' Skt járant- 'old man'	Greek and Indo-Iranian			Family	JPM

* ǵes-	be hungry		{1} [AL] Khot. ysah-, quoted by EWAia, cannot be related as it means 'to be quiet', rather than 'to cease' OKhot. yseh- means 'to make quite', and not 'to give up' (see Cheung XXX for the references).	Present IV: jasyata [2pl.impv.] (RV), Aorist A: jásamāna- [ptc.med.] (RV), Perfect: jajāsa [3sg.act.] (AV), jajastám [3du.impv.] (RV) Caus: jāsay˚ (Br.+), Aorist RED: ajījasaḥ [2sg.act.] (AVP+)			IIAL
* ǵeus-	taste (A) be pleased (M)		{1} [LK] Reduplicated present, probably based on perfect (Kümmel 2000: 671f.).	Aorist A: juṣánta [3pl.inj.med.] (RV+) Aorist R: ajuṣran [3pl.med.] (RV 01.071.01), jóṣat [3sg.subj.act.] (RV), juṣāná- [ptc.med.] (RV) SI-impv: jóṣi (RV) Aorist IS: jóṣiṣat [3sg.inj.act.] (RV 02.035.01) Perfect: jujóṣa [3sg.act.], jujuṣé [3sg.med.] (RV+) Caus: joṣáyate [3sg.med.] 'to enjoy (mutually)' (RV) Abs: juṣṭvī́ (RV) TA-Ptc.: juṣṭá-, júṣṭa- 'welcome, wished, agreeable' (RV+)	'to enjoy according to the wish': Skt. uśán … jujoṣa (RV 04.025.01) — YAv. uštīm zaošəmca 'to be agreeable to the gods': Skt. devá-juṣṭa- (RV), júṣṭaṃ devébhiḥ (RV 10.125.05) — OAv. daēuuō.zušta- 'desired by the Daēuuas, favourite of the Daēuuas' 'of the same wish': Skt. sa-jóṣa(s)- [adj] 'being in harmony with, united' (RV+) — OAv. ha-zaoša- [adj]		IIAL
* ǵeus-	taste, enjoy	OIr do-goa 'choose' Lat dēgunō and gustō 'taste' NE choose Grk geúomai 'taste' Av zaoš- 'be pleased' Skt juṣáte ☐ jóśati 'enjoys'				Food & Drink	JPM
* ǵʰ(e)utreh☐-	± pot	Thrac zetraía 'pot' Grk khútra 'pot'	Greco-Thracian Isogloss			Containers	JPM
* ǵʰ(h₁)iy-eh☐-	yawn	Lat hiāre OHG gīēn NE yawn Lith žióju Rus zijátĭ Toch B kāyā- 'yawn, gape'				Human Sounds	JPM

* ǵ ʰ(o)l(h□)-	gold, yellow, silver						Beekes
*gʰabʰ-	take, seize	OIr gaibid 'takes' Lat habeō 'have' Lith gabenù 'present' Pol gabac´ 'seize' Skt gábh-astin- 'hand'	{1} [AL] The meaning of gábhasti- in the compound syũmagabhasti- (RV), which is an epithet of a chariot, is not quite certain. Also the passage RV 01.054.04d -śitắṃ gábhastim aśánim pṛtanyási 'you fight the sharp …' remains unclear. {2} [AL] The etymology remains uncertain because of -a- in Latin and the interchange Skt. -bh- : Ir. -u̯-. Also the remarkable make-up of the Indo-Iranian word (suffix -sti- ?) does not inspire confidence in the connection with the European lgg.			Give & Take	JPM IIAL
*gʰabʰlo/eh□-	fork, branch of tree	OIr gabul 'fork' OE gafol 'fork' [> NE gavel]				Trees	JPM
* ǵ ʰai-só-s	throwing spear	OE gār 'spear' [cf. gār + lēac 'leek' > NE garlic] Grk khaîos 'herdsman's staff' Skt héśas 'missile'	It would appear to be from * ǵ ʰi- 'throw'			Weapons	JPM
*gʰaidos	goat	Lat haedus NE goat				Fauna	JPM
*gʰait(so)-	hair, mane	MIr gaīsid 'stiff hair' Grk khaítē 'mane' Av gaēsa- 'curly hair'				Hair	JPM
* ǵ ʰalgʰeh□-	pole, stake	NE gallows Lith žalgà 'long thin pole'				Construction	JPM
* ǵ ʰalh□ros	evil, unpleasant, unhealthy	OIr galar 'sickness, distress' Hit kallara- 'something unpleasant' NE gall [on the skin] Lith žalà 'damage, loss injury wrong' Ukrainian zolok 'painful place of a wound'				Values	JPM
* ǵ ʰan-s	goose	OIr gēis Lat ānser NE goose Lith žąsìs Rus gusĭ Grk khḗn Skt haṃsa- 'waterfowl'	some have derived it from the verbal root * ǵ han- 'gape, yawn'			Bird	JPM
*gʰasdʰ-	spear, shaft	Lat. hasta 'spear-shaft, lance' Goth. gazds 'goad'					Celt.
* ǵ ʰasdʰos	rod, staff	Lat hasta 'spear' OE gierd 'staff, measuring pole' NE yard	North-Western			Construction	JPM

*gʰe(n)dʰ-	seize, take in	OIr ro-geinn 'finds a place in' Lat pre(he)ndō 'grasp' NE forget, begin Lith godóti 'guess, suppose' OCS gadati 'imagine, guess' Alb gjej 'find, obtain' Grk khandánō 'take in, comprise'	West Central			Give & Take	JPM
*gʰebʰōl	head	ON gafl 'gable, gable-side' [whence, via Old French, comes NE gable] Grk kephálē 'head' Toch A śpāl 'head'	Yields the meaning 'gable' as well as 'head' or 'skull' in the Germanic languages.			Head	JPM
* ǵʰed-ye/o-	defecate	Alb dhjes Grk khézō Skt hadati				Vital Functions	JPM
*gʰedʰ-	join, fit together	NE together Lith guõdas 'honour, respect' OCS godŭ 'appointed time' Skt gádhya- 'what really holds fast, what suits one'	Yields an o-grade *gʰōdʰo- in Germanic whence we have NE good.			Binding	JPM

* ǵʰehₗ-	leave	NE go Grk kikhā́no 'meet with' Av zizāmi 'leave off' Skt jáhāti 'leaves'	{1} [LK] Or, rather, 1sg.pres.subj.act. 'I will abandon you' (see Kümmel 2000: 608f.).	Present III: jáhāti [3sg.act.] (RV+), jíhīte [3sg.med.] (RV+) Present IV: hī́yate, hīyáte [3sg.med.] (RV+) Perfect: jahúr [3pl.act.] (RV+), jahā́ [3sg.act.] 'he has abandoned' (RV 10.071.08) {1} Aorist S: ahās [2,3sg.act.] (RV+), ahāsata [3pl.med.] (RV) Aorist SIS: hāsiṣṭam [2du.inj.act.] (AV+) Fut: hāsyanti [3pl.act.] (AV+) Caus: ví hāpayāmasi [1pl.act.] 'to make open, to spread apart' (AV+) Aorist RED: áva jīhipas [2sg.inj.act.] (RV 03.053.19) na-ptc.: hīná- (RV+) Abs: hitvā́ (RV+)		Travel	JPM IIAL
*gʰeh□-	yawn	ON gan 'yawn' Grk kháskō 'yawn'	West Central			Human Sounds	JPM
*gʰéh□(u)-mr̥	interior of mouth (gums, pal	NE gums Lith gomurỹs 'palate'	North-West			Head	JPM
* ǵʰei-	impel, drive		{1} As clearly indicated by the Skt. form, *ǵheimen was originally loc.sg. of the word for 'winter', so that an n-stem is secondary.			Fauna	JPM

* ǵʰeim- * ǵʰiem-	winter, snow	Gaul Giamonios [name of a winter month] Lat hiems 'winter' Lith žiemà 'winter' OCS zima 'winter' Alb dimër 'winter' Grk kheiuma 'winter' Arm jiwn 'snow' Hit gimmant- 'winter' Av zyām- 'winter' Skt héman 'in winter' ON gymbr 'ewe lamb one year old' dialectal English gimmer 'ewe between the first and second shearing'				Time	JPM IIAL
* ǵʰeis-	frighten	NE ghost ON geiska-fullr 'full of fear' Av zaēša- 'horrible' Skt héḍa- 'anger'				Values	JPM
*gʰel-	cry out, sing	NE yell Rus na-gálitĭ 'cry, sing' Grk khelīdṓn 'swallow' [the bird]	West Central			Speech	JPM
* ǵʰel-	plough	Lith žúolis 'sleeper, tie' Arm jlem 'plough' Skt halá- 'a plough'				Tools	JPM
* ǵʰel- *gʰel-	yellow	Olr gel 'white' NWels gell 'yellow' Lat helvus 'honey yellow' NE yellow Lith geĺtas 'yellow' žeĺvas 'golden' Av zairi- 'yellow' Skt hári- combines both 'yellow' and 'green' OCS zelenĭ 'green' Grk khlōrós 'green' Skt hári- 'yellow, green' NE gold Latv zèlts OCS zlato Av zaranyam Skt híraṇyam				Color Metals	JPM
*gʰel(h₂)d-	hail	OCS žlědica 'freezing rain' Grk khálaza 'hail' NPers žāla 'hail'.				Water	JPM
*gʰeldʰ-	desire	OCS žlĭděti 'desire', gladŭ 'hunger' Skt gŕ̥dhyati 'is envious', gardha- 'envy'				Desire	JPM
*gʰel ǵʰeh□-	gland	Rus železá 'gland' Arm gełjk' [pl.] 'gland'	West Central			Organs	JPM

*gʰéluh□s	tortoise	OCS žely Grk khélus			Fauna	JPM
*gʰeluneh□-	lip	ON gjǫlnar 'jaws' Grk khelǘnē 'lip' Arm ǰełun 'palate'	West Central		Head	JPM
* ǵʰengʰ- ?* ǵʰengʷʰ-	step, walk	OIr cingid 'steps' OE gangan 'go' Lith žengiù 'stride, step' Av zanga- 'ankle' Skt jáṃhas- 'step, wingbeat'	{1} [AL] The reconstruction of an ā-stem for Pllr. follows from Ossetic (D. zængæ points to Plr. -ā). {2} [AL] The rendering 'shank', often found in the dictionaries, is imprecise, at least for older Vedic.		Come & Go	JPM IIAL
* ǵʰengʰ-os-	wing (?)					IIAL
*gʰḗr	hedgehog	Lat ēr Grk khḗr	West-Central		Fauna	JPM
*gʰer-	cry (of animals or birds)	Lat hirrīre 'howl like a rabid dog' ON garpr 'warlike man' RusCS gŭrkati 'coo' Skt gharghara- 'gurgling'			Animal Noises	JPM
* ǵʰer-	shine, glow	NE grey Lith žeriù 'shine' OCS zĭrjǫ 'glance, see'	North-West		Light & Dark	JPM
*gʰerdʰ-	gird, surround	NE gird, girdle			Textiles Dwelling	JPM
* ǵʰerh□	like			Present IV: háryati [3sg.act.] (RV-TBm, ŚB=BAU), háryamāṇa- [ptc.med.] (RV) Caus: harayanta [3pl.inj./subj.med.] (RV 04.037.02)		IIAL
* ǵʰers	be stiff, be excited		{1} [AL] Contrary to what is stated in the EWAia, it is unnecessary to assume that in harṣ/ghṛṣ, two Ilr. roots have fallen together, viz. *ǰharš- and *gharš-. Since the IE facts unequivocally point to *ǵhers-, we must rather assume that in zero-grade *ǵhṛs-, the palatovelar was depalatalized (Weise's Law). Forms like hṛ́ṣīvant- can easily be restored.	Present I: hárṣate [3sg.med.] (RV+) Present IV: hṛṣyati [3sg.act.] (RV 10.086.07, Br.+) Perfect: jāhṛṣāṇá- [ptc.med.] (RV 01.101.02) Intensive: jarhṛṣanta [3pl.inj.med.] (RV) Caus: harṣáyati [3sg.act.] (RV+) TA-Ptc.: hṛṣitá- 'glad, excited' (RV+)		IIAL

* ǵʰers-	stiffen (of hair), bristle	NE gorse Lat horreō 'bristle' Av zaršayamna- 'feathers upright' Skt hárṣati 'bristles, becomes erect or rigid becomes sexually excited'				Qualities	JPM
*gʰérsos	asp	Norw gjørs 'pikeperch' zérekh 'asp' Skt jhaṣá- 'a kind of large fish'				Fish	JPM
* ǵʰes-l-dḱomth₂	1000 thousand						Beekes
* ǵʰés-r- ?* ǵʰes-to-	hand	Lat hīr 'hollow of the hand' Alb dorë 'hand' Grk kheír 'hand' Arm jeřn 'hand' Hit kissar 'hand' Toch B ṣar 'hand'				Body (Upper)	JPM Beekes IIAL
* ǵʰesl(iy)os	1000 thousand	Grk khī́lioi [pl.] Av hazaŋra- Skt sa-hásram	Greek-Indo-Iranian isogloss the first element * ǵʰes- is probably related to the word for 'hand' and the number is possibly an expression of a handful or two handfuls of grain.			Numbers	JPM
* ǵʰeu-	pour	Grk khé(w)ō 'pour' Toch AB ku- 'pour' Lat fūtis 'pitcher' Av zaoθra- 'libation' Skt hótar- 'priest' who juhóti 'pours out the sacrificial libation'	{1} [AL] As made probable by Beekes 2000a, Germanic word for 'god' (Go. guÞ [n] 'god', etc.) is not related. {2} [AL] See Scarlata 1999: 702f.	Present III: juhóti [3sg.act.] (RV+) Perfect: juhvé [3sg.med.] (RV) Aorist S: hauṣam [1sg.inj.act.] (TS+), ahauṣur [3pl.act.] (KS) SI-impv: hoṣi (RV 06.044.14) Aorist mediopass: áhāvi [3sg.] (RV) Fut: hoṣyáti [3sg.act.] (AV+) Passive: hūyáte [3sg.] (RV+) TA-Ptc.: hutá- 'poured worshipped with a sacrifice' (RV+)		Liquid Motions	JPM IIAL
* ǵʰeu-ter-	pourer						IIAL
* ǵʰeu-tr-eh₂-	libation						IIAL

* ǵʰeu(hₓ)-	call to, invite, invoke	OIr guth 'voice' OCS zovǫ 'call' Av zavaiti 'calls' Skt hávate 'calls, invokes' Toch B kuwā- 'call, invite' Gmc 'god' as 'what is invoked' (* ǵʰutóm) Toch B ñakte 'god' < *ní- ǵ huto- i.e. 'the one invoked downward'				Speech	JPM Beekes
* ǵʰeud-	pour	Lat fundō 'pour' NHG giessen	North-West an enlargement of * ǵʰeu- 'pour'			Liquid Motions	JPM Beekes
*gʰeu ǵʰ-	protect, hide	Lith gū̃žti 'cover with something warm' Av gūzra- 'hidden, secret' Skt gū́hati 'conceals'				Conflict	JPM
* ǵʰeumn-	libation	Grk kheûma 'that which is poured' Phryg zeumán 'libation' Skt hóman- 'libation'				Meals	JPM
* ǵʰéyos	horse	Arm ji 'horse' Skt háya- 'horse'	from * ǵhei- 'impels, drives'			Fauna	JPM
* ǵʰh₂ens-	goose		{1} Derivation from the PIE root for 'to yawn' *ǵhh₂–en- (Gr. ἔχανον, etc.) seems probable.				IIAL
* ǵʰhₓwos	gaping hole	Grk kháos 'chaos' Toch A ko 'mouth'				Dwelling	JPM
* ǵʰi	surely, indeed						IIAL
*gʰlehₓdʰ-(ro)-	smooth	Lat glaber 'smooth' NE glad Lith glodùs 'smooth(ed)' OCS gladiti 'to smooth'	North-West from *gʰel- 'shine'			Qualities	JPM
*gʰleu-	revel	NE glee Lith gláudoti 'joke' Rus glum 'joke' Grk khleúē 'joke'	West Central			Values	JPM
* ǵʰlh₃-en-	gold						IIAL
* ǵʰngʰéno/ehₓ-	± buttock	Grk kokhṓnē 'crotch' Skt jaghána- 'hind end, buttock, pudenda'	Greek-Indic isogloss			Body (Lower)	JPM
* ǵʰō-	behind	Lith až(ù) 'behind' Rus za 'by, to' Arm z- 'with regard to'	West-Central			Position	JPM
* ǵʰóhₓros	gap, empty space	Grk khôros 'free space, area between, land' Toch B kāre 'pit, hole' Grk khḗrā 'widow'				Space	JPM
* ǵʰóln- * ǵʰólos	gall	Lat fel NE gall Grk khóloskholḗ Avzāra-	A transparent derivative from * ǵhel- 'yellow'			Organs	JPM
* ǵʰor-	young pig	Alb derr 'pig, hog, swine' Grk khoîros 'young pig swine'				Fauna	JPM

* ǵʰor(ye/o)-	desire	Lat horior 'exhort, incite' NE yearn Grk khaírō 'rejoice' Skt háryati 'finds pleasure in, desires' Toch B ker(y)- 'laugh'				Desire	JPM
*gʰórdʰos	fence, hedge; enclosure, pe	NWels garth 'pen, fold' Rus górod 'town' Hit gurtas 'citadel'				Dwelling	JPM Beekes
* ǵʰorh☐neh☐-	entrails	NE yarn Grk khordḗ 'string of gut sausage' Skt híra- 'band, strip' Lat haruspex 'entrail-seer' ON gǫrn 'guts' Lith žarnà 'guts'	Suggests the connotation 'string of gut'			Organs	JPM
* ǵʰós-to-s	hand	Lat praestō [< *prai-hestōd] 'a hand' Lith pa-žastìs 'armpit' Av zasta- 'hand' Skt hásta- 'hand'				Body (Upper)	JPM
*gʰostis	guest; stranger, enemy	Lat hostis 'stranger, enemy' Lat hospēs 'foreigner, guest host' [< *ghosti-pot- 'guest-master'] OE giest 'stranger, guest' [the related NE guest is a loanword from ON] OCS gostĭ 'guest', gospodĭ 'master'	North-West			Social Organization	JPM
*gʰou-	perceive, pay heed to	Lat faveō 'favour' ON gā 'pay attention to' OCS govějǫ 'honour' Arm govem 'praise'	West Central			Knowledge & Thought	JPM
*gʰou-ro-	awful ?						IIAL
*gʰoyso-	spear	Skt. héṣa- 'arm' OE gār					Celt.
*gʰrebʰ-	dig	NE grave Lith grė́bti 'rake' OCS pogrebǫ 'bury'	North-West			Reductive Activities	JPM
*gʰrebʰ-	grasp, take, enclose	Middle Dutch, MHG grabben 'seize' Latv grebju 'seize' OCS grabiti 'snatch up' Hit k(a)rap- 'devour' Av gǝrǝwnā iti 'takes' Skt gr̥bhnā́ti 'grabs'				Give & Take	JPM
*gʰredʰ-	step, go	OIr in-greinn 'pursue' Lat gradior 'stride', gradus 'step' Goth griþs 'step' Lith grìdyju 'go, wander about' Rus grjadú 'go'				Come & Go	JPM
* ǵʰreh☐d-	hail			also ⁀hī- [f] (TS+), hlāduni- [f] (Br.)			IIAL

*gʰrei-	touch lightly	Lith gr(i)ejù 'skim [cream]' Grk khríō 'touch the surface of a body lightly, graze [hence] rub or anoint with oil, coat with colour'	West Central			Sensation	JPM
*gʰreib-	grip, grasp	NE grip, gripe, and grope Lith griẽbti 'seize'	North-West			Give & Take	JPM
*gʰrendʰ-	grind	Lat frendō 'gnash the teeth' NE grind Lith gréndu 'scrape, scratch (off)' Grk khóndros 'grain'				Agriculture	JPM
* ǵ ʰres	shorten			Caus: hrāsay° (Gobh.+) TA-Ptc.: nir-hrasta- (ŚrSū.)			IIAL
*gʰres-	± threaten, torment	Toch AB krās- 'vex, torment' Lith gresiù 'threaten, menace'				Values	JPM
* ǵ ʰrésdʰ(i)	barley	Lat hordeum German Gerste Grk krî krīthḗ Hitt karas 'wheat' Alb drithĕ 'cereal grain'				Plants	JPM Beekes
*gʰromos	thunder	OCS gromŭ 'noise' vŭz-grĭmĕti 'to thunder' Grk khrómos 'noise'	from the verb *ghrem- 'groan'			Air	JPM
* ǵ ʰuh☐-éie	call						Beekes
* ǵ ʰutóm	that which is called/invoked	NE god NHG Gott *ní- ǵ hutos Toch B ñakte Toch A ñkät				Dieties	JPM
* ǵ ʰwáks	torch	Lat fax 'torch' Lith žvākė 'candle'	West Central			Tools	JPM
* ǵ ʰwēr	wild animal	Lat fera 'wild animal' Lith žvėrìs 'wild animal' OCS zvěrĭ 'wild animal' Grk thḗr 'wild animal				Fauna	JPM
* ǵ ʰwonos	a sound, voice	OCS zvonŭ 'noise' Alb zë 'voice' Arm jayn 'voice'				Human Sounds	JPM
*gla ǵ ʰ-	cry out, lament	OHG klagōn 'bewail, complain about' Av gərəzaiti 'laments, cries' Skt gr̥háte 'lament'				Human Sounds	JPM
*gleh☐-u-	ball, bump		{1} The appurtenance of the Iranian words, especially because of their -l-, is uncertain.	gláuḥ [nom.sg.] (AV), glāvam [acc.sg.] (AVP), glāvaḥ [nom.pl.] (AB 1.25.13), glaub	IIAL
*gleubʰ-	cut off, cut out	Lat glūbō 'peel' NE cleave Grk glúphō 'carve out' whence glyph	West Central			Reductive Activities	JPM

*gl̥h₁ís	dormouse?	Lat glīs 'dormouse' Grk galéē 'weasel' [< *'mouser'] Bakhtiari girza 'rat' Skt girí- 'mouse'				Fauna	JPM
* ǵlh₂-i-	husbands sister		{1} [AL] Slav. *z- clearly points to an initial palato-velar, but it is unclear why it became depalatalized in Skt. It seems improbable to me that FU *kəлə > Fin. käly 'sister of the husband or the wife' is a borrowing from PIIr. (!) *gəlh₂ím (acc.sg.) (as argued for in Katz 2003: 179). This word might be of Nostratic origin. {2} [AL] The word has been identified by Eichner-Kühn 1976: 28-32 in a late mantra (ĀpMB 2.22.5). In spite of Eichner-Kühn's argumentation that girer in this mantra must be abl.sg. of the word for 'sister-in-law' rather than of the word for 'mountain', the late attestation makes the identification doubtful.				IIAL
* ǵl̥h₃-wos- * ǵelh₂-ōu	husbands sister	Lat glōs 'sister-in-law' OCS zŭlŭva 'husband's sister' Grk gálōs 'sister-in-law' Arm tal 'husband's sister' Skt girí- 'brother's wife'				Kinship	JPM Beekes
*gloiwos	clay	NE clay Grk gloiós 'clay'	Limited Distribution			Earth	JPM
* ǵn(e)h₃-tēr	knower	Lat nōtor Grk gnōstḗr (with analogical –s-) Av žnātar- Skt jñātár-				Knowledge & Thought	JPM

* ǵneh₃-	know, be acquainted with	Present: * ǵn̥h₃-neh□- OIr ad-gnin 'recognizes' OE cunnan 'know, be able to' Lith žinóti 'known' Av zānāiti 'knows' Skt jānā́ti 'knows, recognizes' Toch A knānā- 'know' formed with the suffix *-sḱe/o- Lat (g)nōscō 'know' Alb njoh 'know' Grk gignṓskō 'know'	{1} Isolated form, probably built analogically on the model of deyā́m, dheyā́m (Narten 1964: 122). {2} [AL, LK] Most forms tradionally taken as perfects of jñā (weak stems) belong in fact to jani 'to be born' see Kümmel 2000: 203f. Also pra-jajñivā́ṃs- (RV 03.002.11) rather belongs to this root. {3} See jārá-.	Present IX: jānā́ti [3sg.act.] (RV+) (< *jn-n-aH- with restored laryngeal in the root) jānīté [3sg.med.] (RV+) Aorist R: jñeyā́s [2sg.opt.act.] (RV 02.010.06) {1} Precative: jñeṣam [1sg.act.] (AV, VS) Aorist S: ajñāsthās [2sg.med.] (AV+) Aorist SIS: ajñāsiṣma [1pl.act.] (JB) Perfect: vi-jānúṣ- [ptc.act.] (RV 10.077.01 nonce), jajñau [1sg.act.] (late Br.+) {2} Passive: ví jñāyante [3pl.] (RV 04.051.06), +saṃ jñāyate [3sg.] (AV 20.129.11), - jñāyáte [3sg.] (YVp+) Aorist mediopass: ájñāyi [3sg.] (RV 06.065.01) Caus: sáṃ jñāpay		Knowledge & Thought	JPM IIAL
* ǵneh₃-tis	knowledge	Lat nōtiō 'a becoming acquainted, investigation conception' Rus znatĭ '[circle of] acquaintances' Grk gnôsis 'knowledge' Skt pra-jñāti- 'knowledge'				Knowledge & Thought	JPM
* ǵnéh₃mn̥	?sign	Lat cognōmen 'surname' Rus znamja 'sign, mark' Grk gnôma 'distinctive mark'	West Central			Sight	JPM
* ǵnh₁-mi-	birth, related by birth		{1} Connected with jā́mātar-, which is probably wrong.				IIAL
* ǵnh₁-to-	born						Beekes
* ǵnh₁-tu-	birth						IIAL

* ǵṇh₃tós	known	OIr gnáth 'used to, known' Lat nōtus 'known' Grk gnōtós 'known' Skt jñātá- 'known'				Knowledge & Thought	JPM
*gol-	branch	Rus golijá 'branch' Arm kołr 'branch'				Trees	JPM
* ǵombʰio-	belonging to the teeth						IIAL
* ǵómbʰos	tooth, set/row of teeth	NE comb Latv zùobs 'tooth' OCS zǫbŭ 'tooth' Alb dhëmb 'tooth, tusk' Grk gómphos 'large wedge-shaped bolt or nail' Skt jámbha- 'tooth' Toch B keme 'tooth'				Head	JPM IIAL
* ǵomh□-ter- * ǵomo-	son-in-law	Skr jāmatar-	{1} [AL] YAv. zāmaoiia- has taken over the suffix of YAv. brātruiia- [m] 'nephew' and tūiriia- [m] 'father's brother' < PIIr. *pHtruia- and may indicate that PIIr. had a form without the suffix -ātar- (which, in its turn, has been taken from the word for 'brother'). {2} [AL] The relevance of Gr. γαμερός, attested in inscriptions, seems doubtful to me. {3} [AL] It is clear that no reconstruction would account for all forms and that we have to reckon with secondary associations with other words and roots. The long vowel in Indo-Iranian is the major crux, although it is seldom treated as such. Both IIr. and Gr. seem to point to a form without any laryngeal, *ǵomo- (+ *-Hter-) and *ǵṃro-, respectively. The connection with Gr. γαμέω (< *ǵmH-eio-) 'to marry' is then indirect, the verbal root being extended with a laryngeal, cf. further s.v. PIr. *zamH- (XXX).			Kinship	JPM IIAL
* ǵónh₁-o-	race						IIAL
* ǵonh□dʰ-o-s	jaw	Lith žándas 'jaw, cheek' Grk gnáthos 'jaw, mouth' Arm cnawt 'jaw'	West Central			Head	JPM
* ǵónu	knee	OIr glūn Lat genū NE knee Alb gju Grk gónu Arm cunr Hit gēnu Av žnu-, Skt jắnu Toch B kenī(ne) [dual]				Body (Lower)	JPM IIAL
*gordebʰós	wild ass	Skt gardabhá- Toch B kercapo	Eastern			Fauna	JPM

*gówr̥	(animal) body hair	MIr gūaire '[animal] hair, bristles' Lith gaũras 'down, tuft of hair' Av gaona- 'body hair, colour' Skt guṇá- 'thread, string'			Hair	JPM
*gras-	eat, graze	ON krās 'delicacy' Grk gráō 'gnaw, eat' Skt grásate 'swallows, consumes' Lat grāmen 'grass'	it is possible that it may have originally referred to herbivores (or Latin transferred the word to herbivores		Food & Drink	JPM
*greut-	± compress	OIr gruth 'cheese' NE crowd	Irish-English Isogloss		Bend and Press	JPM
* ǵr̥ḥnóm	grain	OIr grān Lat grānum NE corn Lith žìrnis 'pea' OCS zrĭno Alb grurë 'wheat' Pashto zaṇnai ⬜ zaṛai 'kernel, seed'			Plants	JPM Beekes
*grōdo-	hail	Lith grúodas 'frost' OCS gradŭ 'hail' Lat grandō 'hail' Arm karkut [< *gagrōdo-] 'hail'			Water	JPM
*gubʰo/ehⱼ-	(store)room, alcove	OE cova 'bedchamber' NE cove Bajui bidɣāj 'lower part of a storeroom'			Dwelling	JPM
*gudóm	intestines	Low German küt Macedonian góda Skt gudá-	May derive from the verbal root *geu- 'bend, twist'		Organs	JPM
*gutr̥	gullet, throat	Lat guttur 'gullet, throat, neck' Hit kuttar 'nape of neck'			Organs	JPM
*gʷ(i)yēhⱼ-	taut thread	Grk biós 'bow' Av jyắ 'bowstring' Skt jyắ 'bowstring' Lith gijà 'warp threads' OCS žica 'thread'	It seems more probable that the underlying PIE meaning simply referred to a 'taut thread' and was specialized to bowstring in Greek and Indo-Iranian.		Weapons	JPM
*gʷabʰ-	dip	ON kafa 'dive' Grk báptō 'dip in' Skt ga(m)bhīrá- 'deep'		?	Swim	JPM
*gʷādʰ-	dive	OIr bāidid 'dives, drowns' Grk bēssa 'valley' Av vi-gāθa- 'ravine'		?	Swim	JPM
*gʷeh₂-	go		{1} Originally, n. of the participle to jígati. [AL] This indicates that some of the forms of the reduplicated present had -á- in the reduplication syllable.	Present III: jígāti [3sg.act.] (RV+) Aorist R: ágāt [3sg.aor.act.] (RV+) Perfect: jagāyāt [3sg.pf.opt.act.] (RV) Inf: gắtave (RV)		IIAL
*gʷeh₃us	cow					Beekes

*gʷeh₁-	come	OIr baid 'dies' Latv gãju 'go' dialectal Grk bibánti 'they stride' Skt jígāti 'goes'	This alteration *gʷem-: *gʷeh₁- is paralleled in the verbal root 'to run', i.e. drem- : *dreh₁-		Come & Go	JPM
*gʷeidʰ-	be foul, purulent	ON kveisa 'boil, whitlow' OCS židukŭ 'sap-filled, juicy [of plants]' Grk deîsa 'slime'			Health&Sickness	JPM
*gʷeih₃- *gʷyeh₃-	live	Lat vīvō 'live' Lith gyjù 'become healthy' OCS živǫ 'live' Av j vaiti 'lives' Skt jĪvati 'lives' Grk zṓō 'live' Toch B śāw- 'live' NE quick is related to this root			Vital Functions	JPM
*gʷel-	strike, stab pierce	NWels ballu 'die' NE kill and quell OPrus gallan 'death' Lith gélti 'sting', ache' Arm kełem 'torture' Grk belónē 'needle'	West Central		Conflict Reductive Activities	JPM
*gʷel(s)-	well up, flow	OHG quellan Grk blúō Skt gá lati Toch B kä ls- 'trickle, ooze'			Liquid Motions	JPM
*gʷeldʰ-	be greedy		{1} With present meaning 'they are greedy'. {2} Regularly < PIIr. *g(h)r̥dh-sa-. The reflex of *gr̥dzha- may be found in Pa. gijjha- 'greedy, vulture'. {3} For *gərəðra- = Ved. gŕ̥dhra- (?). Connection of other Avestan forms (e.g. OAv. gərəzdi-) with gardh- is uncertain. {4} = Skt. gr̥dhnú- (?), cf. gŕ̥dhra- 'vulture' for the meaning.	Present IV: gŕ̥dhyant- [ptc.act.] (RV 02.038.03, ŚB+) Aorist A: ágr̥dhat [3sg.act.] (RV 10.034.04) Perfect: jāgr̥dhúḥ [3pl.act.] (RV 02.023.16) {1}, jagr̥dhur [3pl.act.] (ŚB 3.9.3.21) Fut: gardhiṣyati [3sg.act.] (Br.)			IIAL

*gʷelh₁-	throw	NWels blif 'catapult' Grk bállō 'throw' Av ni-ɣar- 'be thrown down'	{1} Or mistake for *niɣnāire? (Insler).	Present VI: ud-gurámāṇa-[ptc.med.] (VS) Intensive: apa-járgurāṇa-[ptc.med.] 'raising the arm (for striking)' (RV 05.029.04) Abs: apa-gū́ryā (RV 05.032.06) na-ptc.: ud-gūrṇa-(Cl.)		Throw	JPM IIAL
*gʷelh□-	acorn	Lat glāns Lith gìlė Rus želudĭ Grk bálanos Arm kaɫin Skt gula- 'penis'				Trees	JPM
*gʷelōn	insects stinger	Lith geluõ 'stinger' Grk déllithes 'wasps'				Bug	JPM
*gʷelōn	insects stinger	Lith geluõ 'insect's stinger' dialectal Grk déllithes [pl.] 'wasps'	West Central			Conflict	JPM

| *gʷem- | come
go?? | Lat veniō 'come'
NE come
Grk baínō 'come'
Skt gácchati 'goes'
Toch B käm- 'come'
Lith gimù 'am born' | {1} [AL, LK] Based on the sentence jamad agní[ḥ] 'Agni will come' (pace Mh. 'zu Agni gehend'), where jamat probably represents the root aorist subjunctive, with the regular palatalization (i.e. < *gwemet). | Present SK: gáchati [3sg.act.] (RV+)
Aorist R: ágan [3sg.act.] (RV+)
(< PIE *h₁é-gwem-t with secondary g- from the present)
Aorist A: gámat [3sg.act.] (RV+)
Aorist RED: ajīgamat [3sg.act.] (AV)
Perfect: jagā́ma [3sg.act.] (RV+) jagmé [3sg.med.] (RV+)
Fut: gamiṣy° (AV+)
Caus: gamáyati [3sg.act.] (RV+) gāmaya [2sg.impv.act.] (RV 05.005.10) 'let go, bring!'
Inf: gántave (RV+), gámadhyai (RV)
TA-Ptc.: gatá- (RV+) | may you come to us for…': Skt. sā́ n | Come & Go | JPM
IIAL |
| *gʷénh□ | woman | OIr ben 'woman, wife'
OE cwene 'woman, female serf, prostitute'
OPrus genna 'wife'
OCS žena 'wife'
Grk gunḗ 'woman, wife'
Arm kin 'wife'
Av gənā- 'woman, wife'
Skt gnā́- 'goddess, divine female'
Toch B śana 'woman' | The development of this word in English shows two poles: the e-grade gives ultimately English quean, i.e. 'an impudent or disreputable woman' (but, in OE, also (any) 'woman or wife'), while a lengthened grade root (*gwēni-) gives OE cwēn 'woman, wife, consort', NE queen.

{1} [AL] The forms with disyllabic ganā́- are inexistent: they all in reality reflect disyllabic ā, like in root nouns in -aH-.
{2} Uralic *näxi 'woman' may be a LW from IE | | | Family | JPM
IIAL |

*gʷerh₃-	swallow devour?	Lat vorō 'swallow [up], devour' Av jaraiti 'swallows' Skt giráti 'swallows' Lith geriù 'drink' Grk borá'meat, food of a predator'	{2} Connection of Olr. gelid [verb] 'to eat (of animals), to devour' with gari- [2] is unlikely.	Present VI: giráti [3sg.act.] (AV+), gilati (Br.+) Aorist A: garan [3pl.inj.act.] (RV) Aorist IS: gārīt [3sg.inj.act.] (RV) Perfect: jagāra [3sg.act.] (RV+) Fut: gariṣy° (Br.+) Intensive: jalgulas [2sg.subj.act.] (RV 01.028.01), galgalīti [3sg.act.] (VS) na-ptc.: gīrṇá- (RV 10.088.02 +)	Food & Drink	JPM IIAL
*gʷerh□-	praise	OPrus girtwei 'praise' Alb gërshas 'invite to a marriage' Av gar- 'praise' Skt gṛṇā́ti 'sings, praises' Lat grātēs [pl.] 'thanks' (i.e. 'praisings')			Formal Speech & Song	JPM
*gʷerh□-	welcome		{1} [AL] Thus e.g. Gotō 1987: 153f. Some of the scholars only accept járate 'to become awake'.	Present IX: gṛṇā́ti [3sg.act.] (RV+) gṛṇīté [3sg.med.] (RV+) Present I: járate [3sg.med.] (RV+) {1} Aorist R: gūrta [3sg.inj.med.] (RV 01.173.02) Aorist A: ā́ gurasva [2sg.impv.med.] (RV in the Br. transformed into a present, e.g. TB ā́ gurate) Perfect: juguryā́t [3sg.opt.act.] (RV) Abs: abhigū́ryā 'approving, accepting' (RV) TA-Ptc.: gūrtá- 'welcome' (RV+)		IIAL

*gʷéru	spear, spit	Lat verū OIr biur Av grava- 'staff'				Weapons	JPM
*gʷes-	extinguish	Lith gèsti 'go out' OCS ugasiti 'extinguish' Grk sbénnūmi 'extinguish' Hit kist- 'go out' Skt jásate 'be extinguished' Toch B kes- 'go out'	As to our final reconstruction, Anatolian argues for an initial *g-, Greek and Indic for *gw- the other languages will allow either			Health&Sickness Fire	JPM
*gʷésdos	branch	OHG questa 'tuft of branches' OPol gwozd 'mountain forest' Alb gjeth 'leaf '				Trees	JPM
*gʷet-	say	OE cweðan 'say' NE quoth Arm koč'em 'call' Sogdian žut 'says' Skt gádati 'says'		?		Speech	JPM
*gʷétu	pitch resin	Lat bitūmen 'mineral pitch, bitumen' OE cwidu cudu 'mastic' [> NE cud] Skt játu 'lac, gum' NWels bedw 'birch' Lat betulla 'birch' (< Gaulish)				Trees	JPM IIAL
*gʷétus	stomach, womb	OE cwiþ 'belly, womb' Lat botulus 'intestines, sausage' Toch B kātso 'belly, womb'				Organs	JPM
*gʷʰaidrós	bright, shining	Lith gaidrùs 'fine, clear [of weather], bright, limpid [of water]' Grk phaidrós 'beaming [with joy], cheerful'	West Central			Light & Dark	JPM
*gʷʰedʰ-	ask, pray	OIr guidid 'asks, prays' Lith gedáuju 'desire' OCS žeždǫ 'desire' dialectal Grk théssasthai 'ask, pray' Av jaiyemi 'ask, pray' NE bid				Formal Speech & Song	JPM IIAL
*gʷʰel-	wish, want	OCS želěti 'wish' Grk thélō 'wish'	West Central			Desire	JPM

*gʷʰen-	strike ?slay	OIr gonaid 'wounds, strikes' Lat dēfendō 'protect' ON gunnr 'combat' Lith genù 'drive cattle hunt' Rus gon 'a drive, a hunt' Grk theínō 'strike', phónos 'murder' Arm ganem 'strike' Hit kuēnzi 'strikes' Av jainti 'strikes' Skt hánti 'strikes' Toch B käsk- 'scatter [violently]'	This is the predominant verb used in the 'hero slays a serpent' motif which plays an important role in Indo-European mythology	Present II: hánti [3sg.act.] (RV+), ghnánti [3pl.act.] (RV+), jahí (< *gwhn̥-dhi) [2sg.impv.act.] (RV+) Present I<III: jíghnate [3sg.med.] (RV+) Perfect: jaghā́na [3sg.act.] (RV+) Fut: haniṣyáti [3sg.act.] (RV+) Passive: hanyáte [3sg.] (RV+) Caus: ghātayati (Br.+) Intensive: jáṅghanti [3sg.act.] (RV+) Desid: jíghāṃsati [3sg.act.] (RV+) TA-Ptc.: hatá- 'killed, slain' (RV+) Abs: hatvā́ (RV+), Inf: hántave, hántavái	Vr̥tra-slayer': Skt. vr̥tra-hán- (RV) —	Conflict	JPM IIAL
*gʷʰermós *gʷʰor-mó-	warm	Lat formus 'warm' NE warm OPrus gorme 'heat' Thrac germo- 'warm' Alb zjarm 'fire' Grk thermós 'warm' Arm jerm 'warm' Av garəma- 'hot' Skt gharmá- 'heat, glow'				Qualities	JPM IIAL
*gʷʰih□-(slo)-	± sinew, thread	NWels gïau [pl.] 'nerves, sinews' Lat fīlum 'thread' Lith gijà 'thread (in a warp), skein' OCS žica 'sinew' Lith gy´sla 'vein' Arm ǰil 'cord'				Textiles	JPM
*gʷʰntos	killed						Beekes
*gʷʰon-o-	slayer						IIAL

*gʷʰonós	± thick, sufficient	Lith ganà 'enough' OCS goněti 'suffice' OPers āganiš 'full' Skt ghaná- 'thick' ?Grk euthenéō 'flourish' Arm y-ogn 'much'				Measure & Quantity	JPM
*gʷʰr-no-	heat						IIAL
*gʷʰr-to-	heat		{1} [AL] Considering the fact that 'ghee' is 'melted butter', derivation from the verb 'to heat' is more probable that connection with ghar 'to sprinkle'. For MIr. gert 'a product of cattle excluding calves, esp. milk or manure' see Schriiver 1996.				IIAL
*gʷʰren-	think	ON grunr 'suspicion', grundr 'meditation' Grk phronéō 'think', phrḗn 'midriff spirit'	West Central suggesting that the Greeks or their ancestors once placed the organ of knowledge in the chest and not the head			Knowledge & Thought	JPM
*gʷʰrensós	warm	OIr grīs 'heat, fire' Skt ghraṃsá- 'heat of the sun'	Celtic-Indic isogloss			Qualities	JPM
*gʷieh□-	bow-string			jiyā́-			IIAL Beekes
*gʷih₃wo-	resin, pitch	OIr bī 'pitch' Rus živicá 'soft resin' Arm kiv 'tree pitch, mastic'	the plant's 'living material' from *gwyeh₃- 'to live'			Trees	JPM
*gʷl̥tur	vulture	Lat voltur □ volturis □ volturus Grk blosur-ōpis 'vulture-eyed'				Bird	JPM
*gʷm-ské	go (to)						Beekes
*gʷorh□-	mountain forest	OCS gora 'mountain' Alb gur 'rock' Av gairi- 'mountain' Skt girí- 'mountain',	Always 'forest' in Baltic			Earth	JPM
*gʷou-dʰeh₁-	sucking cows			godhā́(s) [nom.sg.]			IIAL
*gʷou-kʷolos	cowherd cow turner	MIr būachail 'cowherd' Grk boukólos 'cowherd'				Occupations	JPM Beekes
*gʷou-sth₂-ó-	sheltered place for cattle	Skt goṣṭhá- 'sheltered place for cattle' Celtiberian boustom ' cattle stall'	Could be independant formation				JPM
*gʷṓus	cow	OIr bō Lat bōs NE cow Latv guovs Grk boûs Arm kov HierLuv wawa- Av gāuš Skt gáu- Toch B keu	No semantic distinction between these three			Fauna	JPM

*gʷreh₂-u- *gʷrh₂-u-	heavy	Grk barús MIr bair '+heavy' Lat gravis 'heavy' Latv grūts 'heavy' Toch B krāmär 'weight, heaviness' Skt gurú- 'heavy'	{1} [AL] According to de Vaan 1997, YAv. gouru.zaoθra- (Yt 10.113) must be emended to *pouru.zaoθra- [adj] 'of many oblations'. The Middle Iranian adjective for 'heavy, difficult' is *garān: MP gl'n, (Man.) gr'n, Parth. gr'n, Sogd. γr'n (Buddh.Sogd. γr'nh 'pregnant'), which most probably represents an extension of *gar < PIr. *garu- with a suffix ß-ān. {2} [AL] In view of the late attestation of this term and its rather technical meaning, I would hesitate to explain gru- by compositional laryngeal loss. Maybe a simple dissimilation? {3} [AL] For the short vowel in the root cf. Lubotsky 1997b.	gurvī- [f] (AVP, Sū.+) {3} gárīyas- [comp] (KS, TB+) gariṣṭha- [sup] (Pāṇ, Cl.)		Qualities	JPM IIAL
*gʷréh₂-w-on-	quern	OIr brāu 'quern' NE quern Lith gìrna 'millstone', gìrnos [pl.] 'quern' OCS žrŭny 'quern' Arm erkan 'quern' Skt grā́vanif it does indicate a 'stone for pressing soma' Toch B kärweñe 'stone' [if <*'millstone']).	From *gwr(e)h₂(-u) 'heavy' Beeks has *h₂ for the laryngeal			Tools	JPM Beekes
*gʷret-sos	thick	MIr bres 'large, thick' Lat grossus 'thick'	North-West			Shape	JPM
*gʷrh₂-ino-	rocky terrain, crag	OCS gora 'mountain' Lith. girià 'wood', Alb. gur 'rock'.					Celt.
*gʷrh₂-dʰh₁-ó-s	poet?	OIr bard NWels bardd Av garəm dā- 'give praise' Skt giram dhā- 'give praise'	from *gʷrh₂-dʰeh₁ – 'praise-put' very possibly independant creations	??		Formal Speech & Song	JPM
*gʷrih₃w-eh₂-	neck	Latv griva 'river mouth' Rus gríva 'mane' Av grīvā-'neck [of a demonic being]' Skt grīvā́'neck'	Possibly derived from the verb *gwer(h₃)- 'swallow', suggests the neck viewed from the inside, i.e. the throat.			Head	JPM
*gʷuh₂-	defecate	Arm ku 'dung, manure' Av gūθa- 'dirt, excrement' Skt gūtha- 'dung' ?Lat imbūbināre 'defile with menstrual blood' OHG quāt 'dirt, excrement'				Vital Functions	JPM
*gʷyéh₃wyom	animal	Grk zṓon 'animal' Toch B śaiyye 'sheep/goat'	built on the root *gʷyeh₃- > *gʷeih₃- 'to live'			Fauna	JPM
*gʷyeh₂-	physical power overcome	ON kveita 'make an end to, kill' Grk bíā 'physical force, violence' Skt jyā́'force, violence', jināˊti 'overpowers, suppresses'				Conflict	JPM
*gʷyo-	sinew, bowstring						Celt.

* ǵ yeuh□-	chew	NE chew Rus žujú'chew' NPers jāvīdan 'chew' Toch AB śuwā- 'eat'				Food & Drink	JPM IIAL
*h₁(e)n-ter	between		{1} The analysis of the second part is disputed.		'to place inside (-> conceal, destroy)': Skt. antár dhā- (RV+) — Lat. inter-ficiō 'to ban, expel': OAv. aṇtarə … mruiiē — Lat. inter-dīcō		IIAL
*h₁(e)su-	good	Grk eṻ´s 'good, useful' Hit āssu- 'good' Lat erus 'master' Celtic divine name Esus				Values	JPM
*h₁ʲeis-	refresh	Grk ierós 'manifesting divine power, holy, hallowed', iáomai 'heal' Av īš- 'strength' Skt íṣ- 'refreshment, comfort, strength', iṣirá- 'strong, lively' Hit iski(ya)- 'salving' or 'anointing'				Health&Sickness	JPM
*h₁ʲek-	rake, harrow	Lith akéti 'to harrow' NWels oged Late Lat occa OE eg(e)ðe ecgan dial Grk oksína Grk ógmos 'furrow' Oss adoeg [< *agoed] ''furrow' Hit akkala- 'furrow' or 'type of plough'				Agriculture	JPM
*h₁ʲóh₁(e)s-	mouth	MIr ā 'mouth' Lat ōs 'mouth' ON ōss 'mouth of a river' Hit a(y)is-'mouth' Av āh- 'mouth' Skt ā́s- 'mouth'				Head	JPM
*h₁ʲokéteh□-	harrow, rake	NWels oged 'harrow' Lat occa 'harrow' OE eg(e)ðe 'harrow, rake' Lith akė´čios [pl.] 'harrow' Oss adæg [< *agæd] 'furrow'				Tools	JPM
*h₁ʲómsos	shoulder	Lat (h)umerus Goth ams 'shoulder' Grk ỗmos 'shoulder' Arm us 'shoulder' Hit an(as)sa- 'hip, buttocks upper back' Skt áṃsa- 'shoulder' Toch B āntse 'shoulder'	{1} Possibly *h₃emso-. [AL] Hitt. anassa-'(lower) part of the back' is most probably unrelated, as it must stand for /ʔ(a)nassa-/ (Kloekhorst, forthc.)			Body (Upper)	JPM IIAL

Root	Meaning	Cognates	Notes	Paradigm	Category	Source
*h₁/ₐōr-	speak a ritual formula	Lat ōrō 'address the gods', ōrāculum 'oracle' Grk arā 'prayer' Hit ariya- 'consult an omen' Rus orú 'cry out' Skt ā́ryati 'acknowledges, praises'			Formal Speech & Song	JPM
*h₁dónt- *h₃d-ont-	tooth	OIr dēt Lat dēns NE tooth Lith dantìs Grk odṓn Arm atamn Av dantan- Skt dánt- Rus desná 'gums'	Originally a participle from the verb *h₁ed- 'eat' (cf. Hit adant-'eaten') {1} Based on acc.sg. dántam. {2} See kárūḍatin-. {3} [AL] Gr. (Aeol.) ἔδοντες [nom.pl.] 'tooth' does not prove *h₁ being a folk-etymological adaptation. The IE root-present of the verb *h₁ed- 'to eat' clearly shows that the root was not resultative.	dán [nom.sg.], dántam [acc.sg.], datás [gen.sg.], etc. (R	Head	JPM IIAL
*h₁e-	anaphoric pronoun		{1} Forms a suppletive paradigm with ay- [2]. [AL] The PIE nom.sg.m. was *h₁e, to which -i- (+ PIIr. *-am) was secondarily added. For the reconstruction of the PIE paradigm see Beekes 1982-3: 208ff. {2} With i- from the acc. im.	nom.sg.m. ayám, dat.sg.m./n. ásmai abl.sg.m./n. asmā́t gen.sg.m./n. ásya {1}		IIAL
*h₁e/oti	over					Beekes
*h₁éd-	eat	OIr ithid 'eats' Lat edō NE eat Lith é´du 'eat' Grk édō 'eat (up), devour' Arm utem 'eat' Hit ētmi 'eat' Av aāiti 'let eat' Skt ádmi 'eat' Toch A nätsw- 'starve' < *'not-eat').			Food & Drink	JPM Beekes
*h₁edie	today		{1} adyā́ must be due to metrical lengthening. Cf. sa-dyás 'on one day, on the same day, immediately' (RV+), but the formation of adyá is unclear. {2} Hardly the same formation.			IIAL
*h₁edonom	food	Grk edanón Hit adanna- Skt ádanam	from *h₁ed- 'eat'		Food & Drink	JPM
*h₁édwōl	pain evil	Hit idālu- 'evil' Toch B yolo 'evil' OIr idu 'pains, birthpangs' Grk odúnē 'pain, suffering'	From a root *h₁ed- 'eat' or 'bite' the word means 'evil' in both Anatolian and Tocharian		Health&Sickness	JPM

*h₁e ǵ	1S I	Lat ego 'I' OE ic 'I' (> NE I) Lith aš 'I' Arm es 'I' emphatic form *h₁egˆóm OCS *(ǰ)azŭ Alb unë Grk egṓ(n) Skt ahám	Accusative (*h₁me) is found as the base form for Celtic (OIr mē 'I'), Anatolian (e.g. Lyc amu ēmu 'I, me'), and Tocharian (Toch B ñaś [< h₁mé-gˆe]).			Pronouns	JPM
*h₁eg-	be in need, lack	Lat egeō 'need' ON ekla 'lack' Hit aki 'dies' Toch AB yäk- 'neglect, be careless about' [<*'be lacking with regard to']				Exchange & Property	JPM
*h₁e ǵ-	say	Lat aiō 'say' Grk ȇ 'said' Arm asem 'say' Toch AB āks- 'announce, proclaim, instruct'				Speech	JPM
*h₁e ǵʰ-	cow	OIr ag Arm ezn Skt ahī-	No semantic distinction between this and other cow words			Fauna	JPM
*h₁e ǵʰ(s)	out (of)	OIr ess- 'out' Lat ex 'out (of)' Latv iz 'out' OCS iz 'out' Grk eks 'from, out of'	West-Central			Position	JPM Beekes
*h₁e ǵ h₂om	I						IIAL
*h₁e ǵʰis	hedgehog	OE igil Lith ežỹs Rus ež Grk ekhîunos Arm ozni Phrygian ezis Oss wyzyn				Fauna	JPM
*h₁ēgʷʰmi	drink	Hit ekumi 'I drink' Lat ēbrius 'having drunk one's fill, drunk' Grk nȇphō 'am sober' (< *neh₁e ‾ gʷʰō 'not drink' Toch AB yok- 'drink'				Food & Drink	JPM

*hₗehₗt-mén-	breath	OE æðre Skt ātmán- OHG ātum 'breath' Toch A āñcäm 'self, soul'	{1}Also in reflexive usages (RV+).	nom.sg. ātmā́, acc.sg. ātmā́nam, loc.sg. ātmáni weak stem: instr.sg. tmánā, dat.sg. tmáne, loc.sg. tmán(i), sometimes also acc.sg. tmánam (RV 01.063.08), puru-tmā́nam 'rich in life-breath' (RV 08.002.38)		Vital Functions	JPM IIAL
*hₗehₗtr-	± lung, internal organ	Celtic inathar 'entrails' OHG ād(a)ra 'vein' Grk ḗto 'heart', ḗtron 'belly, abdomen' Av hv-āθra- 'comfort'	Poses horrendous problems of semantic reconstruction			Organs	JPM
*hₗehₗug(ʷ)ʰ-	announce		{1} [LK] To be distinguished from the forms of the root vāh 'to respect' see Insler 1996 Kümmel 2000: 488. vā́cam … ūhiṣe probably does not belong here see Insler 1996: 184 ('[like a messenger his] word, I respect [you]'). {3} [AL] This is an original reduplicated present of *hₗuegwh- (attested in e.g. Lat. voveo), cf. Lindeman 1972: 67.	Present II: óhate [3pl.med.] (RV), óhāna- [ptc.med.] (RV), ohase [2sg.subj.med.] (RV) óhate [3sg.subj.med.] (RV) Aorist IS: áuhiṣṭa [3sg.med.] (RV 06.017.08) {1}	to say the word': Skt. vácas … ohase (RV 01.030.04) — YAv. v	IIAL
*hₗehₗ₃-os-	mouth		{1} Not a-nā́s- 'without a nose' > 'with a flat nose'. {2} [AL] Cf. also paraca ā̃' 'before (my) eyes' (Yt 8.1), Gershevitch apud Panaino 1990: 89.	āsā́ [instr.sg.] 'with the mouth, before one's eyes, present, visible' (RV) āsás [abl.sg.] (RV) other case forms are based on āsán- [n] (āsán, āsáni [loc.sg.], āsnā́ [instr.sg.] (RV+)) and āsyà- [n] 'mouth, jaws' (RV+)	with the mouth, with the tongue': Skt. āsā́ jihváyā (RV 01.140.0	IIAL

*h₁éi	this (one)	Lat is īs/eā/id 'he/she/it'	Masc emphatic *h₁eyom			Pronouns	JPM
*h₁ih□-		OHG ir er/iz ez 'he/it'	Neut emphatic *h₁idóm □ *h₁idéh□				
*h₁id		Lith jìs/jì 'he/she'					
		Cypriot Grk ín 'him, her'					
		HierLuv is 'this'					
		Skt ayám/iyám/idám 'he/she/it;this'					
*h₁ei-	go	Lat eō 'go'	{1} [AL] It is unclear whether inóti (RV) 'to send, impel' and ŷate (RV+) 'to speed' belong to this root.	Present II (act.): 1sg. émi, 2sg. éṣi, 3sg. éti, 2du. ithas, 3du. itás, 1pl. imási, 2pl. ithá, 3pl. yánti, 2sg.impv. ihí, 1sg.impf. ắyam, 3pl. ắyan (< PIE *h₁e-h₁i̯-) (RV+) Present (them.) áyate [3sg.med.] (RV+) Perfect: iyắya [3sg.act.] (RV+), īyúṣ [3pl.act.] (RV+) Fut: eṣyáti [3sg.act.] (AV+) TA-Ptc.: úd-ita- (RV) Inf: ityai (RV) {1}		Come & Go	JPM IIAL
		Goth iddja 'went'					
		Lith eimì 'go'					
		OCS iti 'go'					
		Grk eĩmi 'will go'					
		Hit yanzi 'they go'					
		Av aēiti 'goes'					
		Skt éti 'goes'					
		Toch AB i- 'go'					
*h₁ei-ti	pour libation, to						Beekes
*h₁eig-	move	ON eikinn 'furious'				Movement	JPM
		OCS igrati 'play'					
		Grk ep-eígō 'drive on'					
		Skt éjati 'stirs'					
*h₁eih□(s)-	ice	NE ice	'(hoar)frost'			Water	JPM
		Lith ýnis 'glazed frost'					
		Rus ínej 'hoarfrost'					
		Av aēxa- 'frost, ice'					
*h₁eis-	set in motion	Skt iṣṇắti				Movement	JPM
		Av aēš-					
		ON eisa 'go dashing'					
		Grk ináō 'pour'					

*h₁eish₂-	send		{1}[LK] Thus according to Gotō 1993: 130. This and other perfect forms built on the stem iyéṣ-/īṣ- are likely to belong to eṣ [1] 'to wish', see Kümmel 2000: 126ff.	Present IV: íṣyati [3sg.act.] (RV+), -iṣye [1sg.med.] (RV 04.033.01) Present IX: iṣṇā́si [2sg.act.] (RV+), iṣṇánt- [ptc.act.] (RV+), iṣṇāná- [ptc.med.] (RV 01.061.13) Present X: iṣayema [1pl.opt.act.] (RV 01.185.09), iṣáyant- [ptc.act.] (RV+) Present ANYA: iṣaṇyáti [3sg.act.] (RV) (Perfect: īṣiré [3pl.med.] (AV) (?) {1}) Aorist ANA: iṣaṇat [3sg.inj.act.] (RV) Inf: iṣádhyai 'to drive on' (RV 07.043.01), iṣayádhyai (RV) TA-Ptc.: iṣitá- 'urged' (RV+)			IIAL
*h₁éitr	way, road	Lat iter 'a going, walk, way' Hit itar 'a going' Toch B ytārye 'road, way'	r/n heteroclitic, from the verbal root *h₁ei- 'go'			Roads	JPM
*h₁eiwos	yew	Olr ēo 'yew' OPrus iuwis 'yew' Lith ievà 'bird cherry' Rus íva 'willow' Hit eya(n)- '+yew'				Trees	JPM
*h₁ekt-	net	Myc dektu- Grk díktuon Skt ákṣu- Hit ēkt-				Textiles	JPM
*h₁éḱweh□-	mare	Lat equa Lith ešvà □ ašvà Av aspā Skt áśvā-				Fauna	JPM Beekes

*h₁éḱwos	horse	OIr ech Lat equus OE eoh Grk híppos Av aspa- Skt áśva- Toch B yakwe HierLuv azu(wa)- Lith ašvíenis 'stallion'	{1}Hitt. (Kikkuli) assussanni- 'horse-trainer' is most probably a loan word from Indo-Aryan. Also HLuv. asu- (and Hitt. assu-, if existent) 'horse' may be loan words.		'with quick horses': Skt. āśv-àśva- (RV+) — YAv. āsu.aspa- 'unbound horse': Skt. víṣita- áśva- (RV) — YAv. Vīštāspa- [m] PN, OP vištasp- /vištāspa-/ [m] PN (= 'of unbound horses') 'to appease horses': Skt. áśvān prī- (RV+) Mitanni-IA Bi-ri-da-aš-ṷa [m] PN (= Skt. *prītāśva-), Mitanni-IA Bi-ri-ịa-aš-šu-ṷa [m] PN (= Skt. *priyāśva-) — OAv. Frīnāspa- [m] PN Elam.-Iran. Pir-ri-ya-iš-ba [m] PN (= Iran. *Friyāspa-)	Fauna	JPM IIAL
*h₁el-	go	MWels el 'may go' Grk elaúnō 'drive' Arm eł 'climbed, came out'	West Central			Come & Go	JPM
*h₁el-	waterbird, swan	OIr ela Lat olor Grk eléā ?				Bird	JPM
*h₁élem	mountain elm (Ulmus mont	MIr lem 'elm' Lat ulmus 'elm' NE elm Rus ílem 'mountain elm'				Trees	JPM
*h₁elew-	juniper, cedar	Rus jálovec 'juniper' Grk elátē 'pine, fir' Arm ełevin 'cedar'				Trees	JPM
*h₁elh₁ēn	red deer	Lith élnis, Rus olenĭ Grk élaphos, all 'red deer' Arm ełn 'hind' Toch B yal 'gazelle'				Fauna	JPM
*h₁elh₁níh◌-	hind/cow-elk adult female Cervus elaphus	NWels elain Lith élnė OCS lanialni				Fauna	JPM Celt.
*h₁élḱes-	± ulcer	Lat ulcus 'ulcer' [> by borrowing NE ulcer] Grk hélkos 'ulcer' Skt árśas- 'haemorrhoids'				Health&Sickness	JPM IIAL
*h₁elu-(s/no-)	dull red reddish	OHG elo 'yellow' Av auruša- 'white' Skt aruṣá-, 'aruṇá- 'reddish, golden'	{1} Less probable to PIE *h₁reudh-.		'reddish/white steed': Skt. árvant-… aruṣá- (RV) — YAv. auruuaṇt-auruša- 'reddish/white horse': Skt. áśva- … aruṣá- (RV) — YAv. aspa- auruša-aurušāspa- 'with white horses'	Color	JPM IIAL
*h₁em-	take, distribute	Lat emō 'take' Lith imù 'take' OCS imǫ 'take'	North-West			Give & Take	JPM
*h₁em-o-	my		{1} Only attested in the formula (AV 14.2.71 with repetitions in later texts) ámo 'hám asmi sā́ tvám 'This one here am I, she thou'. Probably, unrelated to amú-. {2} Connection with áma- uncertain.				IIAL

*h₁empís	gnat, stinging insect	OE ymbe 'swarm of bees' Grk empís 'gnat'	Uncertain			Bug	JPM
*h₁en	in						Beekes
*h₁én-do	into	Lat endo 'in' Alb ndë 'in' Grk éndon 'within' Hit anda(n) 'in'				Position	JPM
*h₁en-t(e)rom	innards	ON innr 'entrails' OCS jętro 'liver' Grk éntera [pl.] 'entrails' Arm ənderkʿ 'entrails' Skt antrá- 'entrails' NE innards				Organs	JPM
*h₁en(i)	in, into	OIr in 'in(to)' Lat in 'in(to)' NE in Lith iñ 'in' Alb inj 'up to' Grk en 'in' Arm i 'in',Toch AB y(n)- 'in, among'				Position	JPM
*h₁endrós	egg, scrotum	Rus jadró 'kernel, scrotum' Skt āṇḍá- 'egg, scrotum', [dual] 'testicles'	Built on a preposition and indicates 'that which is inside'			Body (Lower)	JPM
*h₁eneḱ-	attain	OIr ro-icc 'reaches' Lat nanciō 'attain' OE geneah 'is adequate' (cf. NE enough) Lith nešù 'carry' OCS nesǫ 'carry' Grk enegkeiun 'to carry' Arm hasanem 'arrive' Skt aśnóti ⃝ náśati 'gains' Toch A ents- 'take, grasp, seize'				Come & Go	JPM
*h₁énh₁u	without	NHG ohne 'without' Grk áneu 'without' Oss ænæ 'without'				Position	JPM
*h₁éni-h₃kʷ-o/ehₐ-	face	OIr enech Grk enōpḗ Av ainika- Skt ánīka- 'face, front' Gr. ṓps 'face' OCS oči 'eyes'				Head	JPM IIAL Celt.
*h₁entér	into, between	OIr eter 'into, between' Lat inter 'between' OHG untar(i) 'between' OCS ǫtrĭ 'inside' Alb ndër 'between, among' Av antarə 'within, between' Skt antár 'between'	derived from *h₁en 'in'			Position	JPM

*h₁entero-	inner			{1} Both interior and intrā are based on Lat. *interus. {2} = Lat. *Intera. {3} From PGm. *inθerōz.			IIAL
*h₁entmh□o-	innermost						IIAL
*h₁entos	within			{1} Cf. Pašaī (Chilāsī) andastṓn from *antaḥ-sthāna-. {2} Not an exact correspondence of antastya-.	antaṣtya- (AVP 7.15.7, 8.8.3 for -ṣt- see Griffiths 2004 ad 7.15.7)		IIAL
*h₁enu	along			{1} ānu° is found in a few old compounds, cf. an-ānukṛtyá- [adj] 'inimitable' (RV), ānujāvará- [adj] 'born after' (TS+), ānuṣūka- [adj] 'shot after' (TS), etc. For ānuṣák see s.v. {2} The weak stem is anūc- (RV acc.pl. anūcás, f. anūcī̂), which also forms the basis of a few derivatives, e.g. anūcīná- [adj] 'successive' (RV+), ánūka- [n] 'backbone' (AV+), anūkyà- [n] 'backbone' (RV+), anūcyà- [n] 'lengthwise piece (of a seat, bed)' (AV+). {3} [AL] The difference between PIIr. Hanu and Hānu° may represent *h₁enu vs. *h₁onu°, cf. *h₁epi vs. *h₁opi°. {4} IE derivation is not very certain. Cf. also YAv. ana 'along'.			IIAL
*h₁enu-h₂p-o-	along the water						IIAL
*h₁ep-	take, seize grab	Lat optō 'wish' OCS za-(j)apŭ 'presumption, suspicion' Grk epi-ópsomai 'choose'	{1} Secondary present, formed in parallel to aś-nó-ti. For PIIr. we can only reconstruct the perfect, which undoubtedly was the original formation.	Present V: āpnóti [3sg.act.] {1} (AV+) Perfect: ā́pa [3sg.act.] (RV+), āpiré [3pl.med.] (RV+), āpāná- [ptc.med.] (RV+) Passive: āpyáte (YVm+) Fut: āpsy° (Br.+) Caus: āpay° (Up.+) Desid: īps- (AV+) TA-Ptc.: āptá- 'reached, complete, known' (RV+)		Give & Take	JPM IIAL
*h₁ep-weh₂-	mortal fear			{1} Etymology given by Pokorny (Lith. opùs 'weak', etc.) is very uncertain. {2} Connection with apvā́- remains uncertain (Hoffmann's etymology).	ap(u)vā́-		IIAL
*h₁eperos	boar	Lat aper OE eofor Rus veprĭ				Fauna	JPM

*h₁epi *h₁opi	near, on on, to	OIr iar 'after' Lat ob 'towards' Lith ap- 'about' OCS ob 'on' Grk epí'on, upon, on top of', ópisthen 'behind' Arm ev 'and, also' Av aipi 'upon' Skt ápi 'also, in addition'	{1} [AL] ŚB pi-dháṋa- is a ghost word (pace EWAia): this form has been wrongly extracted from a compound dvār-apidháṋa-n. 'closing of the door' (due to the fact that the usual form of the word for 'door' in Late Vedic is dváṙa-). A similar origin must be assumed for pi-hita- and pi-hityai, attested in late texts.		'to close doors': Skt. dvār-apidháṋa- — Gr. θύρας ἐπέθηκε 'to close, to cover': Skt. ápī-vṛta- (RV) — Lat. op-erīre	Position	JPM IIAL Beekes
*h₁epop	hoopoe	Lat upupa NE hoopoe Lith pupútis Pol hupek Grk épops NPers pūpū				Bird	JPM
*h₁er-	arrive, get somewhere		{1} [AL] For a discussion on the two roots ar- see Kümmel 2000a. {2} [AL] The attribution of the thematic aorist to ar [2] is due to Kümmel 2000a. {3} [AL] Synchronically, this causative belongs here, cf. Kümmel 2000a: 254. {4} [AL] For this form see Kümmel 2000a: 263f.	Present VI: ṛccháti [3sg.act.] (RV+) Aorist A: ārat [3sg.aor.act.] (TS), (nír) ārata [2pl.aor.act.] (RV 01.004.05), ārāma [1pl.aor.inj.act.] {2} (RV) Caus: arpay° (RV+), TA-Ptc. (caus.): árpita- (RV+), arpitá- (RV 01.164.48) {3} TA-Ptc.: ṛtá- (TS)			IIAL
*h₁er-	earth	NE earth Grk érā 'earth'	West-Central			Earth	JPM
*h₁er-	set in motion (horizontally)	Grk érkhomai 'set out come got' Skt ṛccháti 'goes towards, reaches' Hit arta 'stands, is present, occurs'				Movement	JPM
*h₁eregʷo-	pea	Lat ervum 'pea' OHG araweiz 'pea' Grk órobos 'pea'	Seen by many as a Near Eastern loanword.			Plants	JPM
*h₁erh₁-	quiet, at rest	NWels araf 'quiet, calm' Gothic rimis 'rest' Lith rìmti 'to be calm' Grk erḗmos 'lonely' Skt rámate 'stays still, calms down'				Speech	JPM

*h₁erh₁-	row	OIr rāïd 'rows' NE row *h₁erh₁tér 'rower' Grk erétēs Skt aritár-				Swim	JPM Beekes
*h₁erh₁-ter-	rower		{1} RV 02.042.01 09.095.02 aritéva nā́vam 'like a ferry-man the ship'. The verbal root *ari- has probably disappeared because of the three homonymical roots ar-.				IIAL
*h₁erh₁trom	oar, paddle	Lith ìrklas Skt arítra- Lat rēmus 'oar' OE rōðor 'steering-oar' NE rudder	from *h₁erh₁- 'row'			Transport	JPM
*h₁erh□s-	be well disposed to someone	Grk éramai 'love' Toch AB yärs- 'be deferential, respectful'				Values	JPM
*h₁erh□-	wash	Hit ārr(a)- Toch A yär-				Clean	JPM
*h₁eri-	sheep/goat	Grk ériphos 'young of a goat' OPrus eristian 'lamb' Lith éras 'lamb' Arm oroj 'lamb' Lat ariēs Skt āreya- Toch B ariwe				Fauna	JPM
*h₁erkʷ-	praise ?sing	Hit arkuwai- 'explain, answer' Skt árcati 'praises'	{1} [AL] The meaning 'to shine, be brilliant' is rare in Vedic (Gotō 1987: 97ff. and further Roesler 1997).	Present I: árcati [3sg.act.] (RV+), abhí arce [1sg.med.] (RV 05.041.08, 06.022.01), abhy àrcase [1sg.med.] (RV 10.064.03) Perfect: ānr̥cúḥ [3pl.act.] (RV+), ānr̥ce [3sg.med.] (RV 01.160.04) Passive: r̥cyáte [3sg.] (RV+) Caus: arcayas [2sg.inj.act.] (RV 03.044.02) Inf: r̥cáse (RV)		Formal Speech & Song	JPM IIAL
*h₁erkʷós	song of praise	OIr erc 'heaven' Arm erg 'song' Oss arɣaaw 'tale' Skt arká- 'song' Toch B yarke 'honour'	XXX Tucker	r̥c-am [acc.sg.], r̥c-ā́ [instr.sg.], r̥g-bhíṣ [instr.pl.]		Formal Speech & Song	JPM IIAL

*h₁ermen-	sickness	OE earm 'weak, wretched' Alb jerm 'stupor' Arm oɫorm 'pity' Hit arman- □ ērman- 'sickness'				Health&Sickness	JPM
*h₁ers-	flow	Hit arszi 'flows' Skt árṣati 'flows' Grk aperáō 'pour out' Lat errō 'go astray' OHG irran 'confused' Arm eṙam 'seethe, be disquieted'				Liquid Motions	JPM
*h₁ers-	stream			Present I: árṣati [3sg.act.] (RV-YVm)			IIAL
*h₁es-	be	Lat est NE is Grk estí Skt ásti	{1} 2sg.pres.act. *h₁ési < *h₁és-si, 3sg.pres.act. *h₁és-ti, 3pl.pres.act. *h₁s-énti, 3sg.opt.act. < *h₁s-iéh₁-t. {2} Cf. further Schlerath II 150b, 153b, 158a, 160a. {3} abhiṣṭí- [m] 'helper' (RV+), abhíṣṭi- [f] 'help, assistance' (RV+) may derive both from abhí-as- 'to be superior' and from abhí-sthā- 'to overpower, defeat to rise over'.	Present II (act. all RV+): ásmi [1sg.], ási [2sg.], ásti [3sg.], stháḥ [2du.], staḥ [3du.], smáḥ, smási [1pl.], sthá(na) [2pl.], sánti [3pl.], ā́ḥ, ā́sīt [3sg.impf.], ā́san [3pl.impf.] (< *Ha-Hs-), ásat(i) [3sg.subj.], syā́t [3sg.opt.], edhi [2sg.impv.], ástu [3sg.impv.], sántu [3pl.impv.], sánt- [ptc.] (cf. also s.v.) Perfect: ā́sa [1/3sg.act.] (RV+) ā́sitha [2sg.act.] (RV+)	'may we be those …': Skt. té syāma (RV) — Av. tōi … x̌iiāmā 'who are you? to whom do you belong?': Skt. ko 'si kasyāsi (Ep.) — OAv. ciš ahī kahiiā ahī {2}	Being & Doing	JPM IIAL
*h₁es-	throw, hurl	Hit siyēzi 'throws, hurls' Av as- 'throw' Skt ásyati 'throws, hurls'				Throw	JPM

*hₗēs- *hₗehₗs-	sit	Grk ésthai 'sit' Hit ēsa 'sits', āszi 'stays, remains, is left' Av āste 'sits' Skt āste 'sits'	This appears to be an intensive of *hₗes- 'be' (one might note that Spanish employs both the original verbs 'be' and 'sit' in its paradigm for 'be'. {1} [AL] This form is not well explained. {2} [AL] Most probably, based on reduplicated present.	Present II: āste [3sg.med.] (RV+) ā́sate [3pl.med.] (RV+) āsāná- [ptc.med.] (RV), ā́sīna- [ptc.med.] (RV+) {1} Aorist: āsiṣṭa [3sg.med.] (Br.+) Perfect: āsā́ṃ cakre [3sg.med.] (Br.+) TA-Ptc.: āsitá- 'seated' (TS+)		Placement Verbs	JPM IIAL
*hₗes-en-	autumn	Goth asans 'summer, harvest time' OPrus assanis 'harvest' OCS jesenĭ 'autumn' Grk op-ṓrē 'end of summer harvest time' (< *op-osar-ā) Hit zena(nt)- 'autumn'	It is the only season for which we do not find a reflex in Indo-Iranian			Time	JPM
*hₗesh₂éhₓ-	mistress	Lat era				Marriage	JPM
*hₗesh₂ós	master	Lat erus Hit ishā- 'master, lord, owner'				Marriage	JPM
*hₗésh₂ṛ *hₗesh₂r(-gʷ−) *hₗēsh₂r-no-	(flowing) blood	Lat asser Grk éar Arm ariwn Hit ēshar Skt ásṛk Toch B yasar		nom.sg. ásṛk (RV 01.164.04), gen.sg. asn-ás (AV+), ins	Organs	JPM Celt. IIAL
*hₗeskʷe(hₗ)	towards		{1} [AL] It is unclear whether Lat. ūsque belongs here. For a discussion of the etymology see Lubotsky 2001a: 41f.				IIAL
*hₗét(e)no-	kernel	MIr eitne 'kernel' [< *hₗeteniyom NIr eitne and dialectally eithne] Grk étnos 'thin soup made from peas or beans'	The semantic equation is excellent, but the usual Irisht- is phonologically irregular (expected isth-);			Plants	JPM
*hₗeti	and / further, yet beyond	Gaulish eti 'also, further' Lat et 'and also' Goth iþ 'but' Grk éti 'yet, further' Skt áti 'over, towards'				Conjunctions	JPM IIAL
*hₗeu-	put on clothes, cover	Lat induō 'put on [clothes]', exuō 'take off [clothes]' Lith aũti 'put on shoes' OCS obujǫ 'put on shoes', izujǫ 'take off shoes' Arm aganim 'dress' OIr fūan 'tunic' Toch B ewe 'inner skin'	Beekes gives *hₓou-			Textiles	JPM Beekes

*h₁eu(h□)-	empty, wanting	Grk euĥis 'deprived' Arm unayn 'empty' Lat vānus 'empty' NE wan, wane Av ūna- 'wanting' Skt ūná- 'lacking'			Measure & Quantity	JPM
*h₁eugʷʰ-	speak solemnly	Grk eúkhomai 'pray [for], vaunt' Lyd ow- '+proclaim' Av aojaite 'says, pronounces' Skt ójate 'they praise'	present *h₁éugʷʰetor		Formal Speech & Song	JPM
*h₁euh□-	help, protect			Present I: ávati [3sg.act.] (RV+) Aorist S: ā́vīt [3sg.act.] (RV+) aviṣas [2sg.aor.subj.act.] (RV+) aviṣṭu [3sg.impv.act.] (RV+) aviḍḍhí [2sg.impv.act.] (RV+) Perfect: āva [3sg.act.] (RV+) ā́vitha [2sg.act.] (RV+) TA-Ptc.: -ūta- (RV+) (yuṣmóta- [adj] 'supported by you' (RV) indrotá- [m] PN (='supported by Indra') (RV, Br.) possibly identical with the Hurrian name In-tar-ú-da, En-dar-ú-ta)			IIAL
*h₁euh□-men-	help						IIAL
*h₁euh□-os-	help						IIAL

*h₁euk-	become accustomed	OIr do-ucci 'understands' Goth bi-ūhts 'used to' Lith jùnkstu 'become accustomed to', OCS učiti 'teach', vyknǫti 'become accustomed' Arm usanim 'learn, be used to' Skt úcyati 'is accustomed to'	{1} [AL] The Ir. roots *iauč- 'to learn, teach' and *mauč- 'id.', which are only attested from Middle Iranian onwards, are most probably due to a wrong analysis of prefixed formations in *abi-, *ni- and *ham-, respectively (Cheung 2007 s.vv. with ref.).	Present IV: ucyasi [2sg.act.] (RV+) Perfect: uvóca [3sg.act.] (RV), ūciṣé [2sg.med.] (RV 08.082.02), okivā́ṃs- (RV 06.059.03) for *okvā́ṃs- < IE *He-Huk-uōs-, ūc-úṣ- [ptc.act.] (RV)		Social Organization	JPM IIAL
*h₁eus-	burn, singe	Lat ūrō 'burn' ON ysja 'fire' Alb ethe 'fever' Grk heúō 'singe' Skt óṣati 'burns, singes'	{1} [AL] uṣṇā́ti is not attested in the AVP. At AVP 9.16.5 read aśnā́ti with the Orissa mss.	Present I: oṣati [3sg.act.] (RV+), óṣas [2sg.inj.act.] (RV) Present IX: uṣṇánt- [ptc.act.] (RV) {1} Aorist IS: oṣiṣṭam [2du.inj.act.] (ŚB+) Perfect: uvoṣa [3sg.act.] (Br.) Passive: praty-uṣyamāṇa- [ptc.] 'being scorched' (PB) Caus: oṣaya [2sg.impv.act.] (AVP(O) 2.48.4) TA-Ptc.: ȕṣṭa- 'scorched' (Br.+)		Fire	JPM IIAL

*hₗger-	awake	Alb ngre 'awake, raise up, lift' Grk egrḗgora 'was awake' Av jagāra 'was awake' Skt jāgárti 'is awake, awakes' ?Lat expergō 'I waken' (if from *ex-per-gr-)		Present I: járase [2sg.med.] (RV) Present III (<Perfect): jā́grat- [ptc.act.] (RV X), jā́grati [3pl.act.] (AV), jāgárti [3sg.act.] (MS) Perfect: jāgā́ra [3sg.act.] 'he is awake' (RV+) jāgr̥vā́ṁs- [ptc.act.] (RV+) jāgr̥hí [2sg.impv.act.] (RV+) ájāgar [3sg.ppf.act.] (RV+) Caus: jāráy° (RV) (<< *gāráy°, cf. Av.) Aorist RED: ájīgar [3sg.act.] (RV)	waking Mitra': Skt. jāgr̥vā́ṁsā … mitr	Knowledge & Thought	JPM IIAL
*hₗi-	this		{1} < nom.sg.f. *hₗih₂, nom.acc.sg.n. *hₗid, acc.sg.m. *hₗim + the added IIr. particle *-am. The acc.sg.m. form was the basis of the IIr. pronominal stem *ima-.	iy-ám [nom.sg.f.], i-d-ám [nom.acc.sg.n.], i-m-ám [acc.sg.m.] {1}		IIAL
*hₗi-deh□	now						IIAL
*hₗidh□	here	OIr -id- [infixed particle] Lat ibī 'there' Grk ithā-genḗs 'here born' Skt ihá 'here'				Pronouns	JPM IIAL
*hₗieh₂	drive		{1} [LK] īyate may represent either a -ya-present (class IV thus most scholars, in particular Insler) or a reduplicated present (*hₗi-hₗi̯-toi or *hₗi-hₗih₂-toi, with the subsequent thematicization thus Eichner, Joachim) and belong to either yā [1] or ay [1] see Kulikov 2001: 261f. {2} Perhaps a laryngeal enlargement of *hₗei̯- (Skt. ay [1]), i.e. *hₗi̯-eh₂-.	Present II: yā́ti [3sg.act.] (RV+) Present IV (?) {1}: īyate [3sg.med.] (RV+) Aorist S: ayāsam [1sg.act.] (RV+) Perfect: yayáu [3sg.act.] (RV+) TA-Ptc.: yātá- (RV+) Inf: yā́tave (RV+)			IIAL

*hₗieh₂-went-	as much as				'as far as I/we can': Skt. yǎvad íśe (RV) — OAv. yauuat_ isāi (Y 28.4), yā.tə̄ isāmaidē (Y 35.7) 'how much soever': Skt. yǎvant- kíyant- ca (AV+) — YAv. yauuat_ cuuat_ca (V 6.29), cuuat_ yauuat_		IIAL
*hₗio-tro	where			also yátrā			IIAL
*hₗísus	arrow	Grk iós Av išu- Skt íṣu-				Weapons	JPM Beekes
*hₗiteros	(an)other	Lat iterum 'again' Skt ítara- 'the other, another'	Latin-Sanskrit isogloss			Pronouns	JPM
*hₗith□	thus	MWels yt- (verbal particle) Lat item 'also, likewise', ita 'so, thus, in this manner' Lith [dial.] it 'as' Skt íti 'thus, in this manner'	{1} [AL] Possibly, Iranian has adopted the onset of *uta.			Pronouns	JPM Beekes
*hₗle(n)gʷʰ-	light (of weight)	OIr laigiu 'lighter, poorer' Lat levis 'light' NE light Lith leñgvas 'light, easy, slight' OCS lĭgŭkŭ 'light' Alb lehtë 'light, soft, slight, nimble' Grk elakhós 'small, little' Oss roewoeg 'light' Toch B lankutse 'light' OHG lungar 'rapid' Grk elaphrós 'light, fast' Skt laghú- 'fleet, fast'				Qualities	JPM
*hₗlei ǵ	(make) shake		{1} Only attested in the Yajurvedic mantra réḍ asi 'you are trembling', probably resulting from the reintrepretaton of rejasi 'you tremble' (see Gotō 1987: 272). {2} The root is not directly related to *(H)leig- 'to spring'. {3} [AL] In Middle and Modern Iranian we further find the root *larz- 'to shake, tremble', which seems to reflect a reduplicated *ra-r(i)z-: Sogd. (Chr.) wlrz-, wdrz [verb] 'to tremble, shake' (+ *uj-) MP llc- /larz-/ [verb] 'to shake, tremble' Parth. lrz- [verb] 'to tremble' NP larzīdan [verb] 'to shake' Khwar. βržyk 'shaking fever, ague' (+ *abi-) Pash. rā̌ždedal [verb] 'to shake, tremble'	Present I: réjate [3sg.med.] (RV+), réjati [3sg.act.] 'make tremble' (RV) Caus: rejáyati [3sg.act.] (RV)	earth quakes': Skt. rejata kṣā́ḥ 'earth quaked' (RV 04.022.04) –	IIAL
*hₗleig-	jump	OE lācan 'leap, fly' NPers ālēxtan 'jump' Skt réjate 'tremble' Grk elelízō 'whirl around' Lith láigyti 'run around wildly'				Run & Jump	JPM
*hₗlengʰ-	blame, reproach	Grk elégkhō 'blame' Hit li(n)k- 'swear'	Where it is taken to indicate the practice of calling down a curse on oneself if one violated an oath			Law & Order	JPM

*h₁leudʰ-	go (out)	Aorist *h₁leudʰét OIr lod 'went' Grk ἔ luthon 'went' and Toch AB lac- 'went out'				Come & Go	JPM
*h₁leudʰ-	grow	OIr lus 'plant' Lat Līber 'god of growth' OE lēodan 'spring up, grow' Av raodaiti 'grows' Skt ródhati 'grows' Lat līberī [pl.] 'children' Lat līber 'free' Grk eleútheros 'free' NHG Leute 'people' Lith liáudis 'common people' Rus ljúdi 'people, servants'				Vital Functions	JPM
*h₁leudʰos	people, freeman	OE lēod 'people, nation' NHG Leute 'people' Lith liáudis 'people' OCS ljudĭje [pl.] 'people' Khowar loi 'people man, person'	it derives from the verbal root *h₁leudh- 'grow, increase', which in other forms is found, for example, in Lat līberī 'children'.			Social Organization	JPM
*h₁lngʰ-u-	fast, quick			raghvī́- [adj f] (RV+) rághīyas- [comp] 'faster, very fast' (TS) (replacing *rám̐h°, cf. YAv. rəṇjišta-)			IIAL
*h₁ndʰ-wen-	road		{1} [AL] NB: Pok.'s analysis is wrong. {2} Accent uncertain. Presumably, an original Instr.sg. of ádhvan-.				IIAL
*h₁ndʰ-wer-	road (?)		{1} Probably, an original heteroclitic noun *Hadhuar- / Hadhuan- '(holy) road'.				IIAL
*h₁neun-dḱomth₂ *h₁neun-ti-	90 ninety						JPM IIAL

*h₁newh₁m̥ ?*h₁néwh₁n̥	9 nine	OIr noī Lat novem NE nine Lith devynì OCS devętĭ Alb nëndë Grk ennéa Arm inn Av nava Skt náva Toch AB ñu	The evidence for *h₁(e)n- is limited to Greek and Armenian, but if the actual initial was *h₁n-, those would be the only two Indo-European branches to show any trace of the laryngeal anyway. Lat nōnus would be much simpler to explain if the Proto-Indo-European original ended in *-n̥, whereas OIr nōmad, Skt navamá- are harder, and Toch B ñmuk '90' almost impossible, to explain unless we start from *-m̥. The evidence of Baltic and Germanic would seem to favour *-n̥ except we know that all final m's became n in the histories of those branches, so they really give no evidence one way or another. Etymologically, the reconstructed form has been variously explained as derived from *néwos 'new' (see Section 18.6), hence the 'new number' (after 'eight'), or from *h₁énh₁u 'without'. The Wrst explanation has only the phonological similarity of 'nine' and 'new' going for it. If the latter, it would be another example of a subtractive formation where the number 'nine' would then be explained as 'ten without (= less) one'. Such an explanation is strengthened by undoubted examples in Indo-European of '	navānā́m [gen.pl.] 'nine' (RV I, X+)	Numbers	JPM IIAL
*h₁newh₁m̥-mos *h₁newh₁n̥-mos *h₁n(e)unh□o-	9th ninth	OIr nōmad Lat nōnus NE ninth Lith deviñtas OCS devętŭ Alb nëndë Grk énatos Av naoma- Skt navamá- Toch B ñunte	{1} Changed from *HnauanHa- under the influence of other ordinals in -má-.		Numbers	JPM
*h₁nómn̥ *h₃neh₃-men-	name	OIr ainm Lat nōmen NE name OPrus emens OCS imę Alb emër Grk ónoma Arm anun Hit lāman Av Skt nā́ma Toch B ñem	{1} [AL] Middle-Iranian suffix ʰmān (< Plr. acc.sg. *ʰmān-am) in Sogd. and Parth. ʰmān, NP ʰmān, cf. also Sogd. t'nm'n, Parth.'w'nm'n, NP bahmān 'so-and-so' can hardly be old. XXX Sims-Williams JRAS 1990. {2} [AL] Gr. (Dor.) ἐνυμα- in a personal name Ἐνυμακρατίδας, attested on one inscription, must be secondary.	instr.sg. nā́mnā /nā 'having many names': Skt. purú-ṇāman- [adj.] (RV) — Gr. πολυώνυμος [adj] 'dear name': Skt. priyá- nā́man- (RV) — OE frēo nama 'surname, cognomen' 'famous name': Skt. śrútya- nā́man- (RV) — Gr. ὄνομα κλυτόν — ToA ñom-klyu, ToB ñem-kälywe 'fame' 'to call the name': Skt. ahve … nā́ma (RV 03.056.04) — YAv. nąma zbaiiaēša (Yt 15.49) 'Asurian names': Skt. asuryā̀ṇi nā́ma (RV 10.054.04) — OAv. āhūiriiā nāmᵊnī (Y 37.3) 'using a good name': Skt. su-nā́man- [adj] (AV) — Elam.-Iran. *hu-nāman- [m] PN XXX (Hinz)	Formal Speech & Song	JPM IIAL

*hₗnómn̥ dʰehₗ-	name (to put a name)	OCzech dieti jmě Hit lāman dā- Skt nā́ma dhā- Grk onomatothétēs 'name-giver'				Formal Speech & Song	JPM
*hₗógʷʰis	snake	NWels euod 'sheepworm' OHG egala 'leech' Grk ékhis 'viper', óphis 'snake' Arm iž 'snake, viper' Av aži- 'snake' Skt áhi- 'snake' Toch B auk				Fauna	JPM IIAL
*hₗoi-no-s	1 one	OIr oīn 'only one, single' Lat ūnus 'one' NE one Lith víenas 'one' OCS ino- 'one-' [as a prefix], jed-in- 'one' Alb një 'one' Grk oínē 'ace on a die' Grk oîos 'single, alone' < *hₗoi-wo- Av aēva- 'one' < *hₗoi-wo- Skt éka- 'one' < *hₗoi-ko-	The root etymology is generally presumed to be the anaphoric pronoun, i.e. *hₗei-, cf. NE one in the sense 'One does what one's told'. Although there are a number of other theories, this etymology is one of the few thought up for any of the numbers that is at all likely to be correct. Because *hₗoinos (etc.) is etymologically transparent it is probably a relatively recent addition to the number system. The variation in suffixes (*-no-, -*wo-, *-ko-) in the various stocks also suggests the form of this number was still somewhat plastic at the time that Proto-Indo-European unity was dissolving.			Numbers	JPM Beekes
*hₗóistro/eh□-	anger, any strong feeling	Lith aistrà 'passion' Grk oîstros 'gadfly, sting, anger'	West Central from *hₗeis- 'set in motion'			Values	JPM
*hₗóitos	a going; oath	OIr oeth 'oath' NE oath Grk oîtos 'course, fate' Toch B aittaṅka 'directed towards'	It is commonly derived from the verb *hₗei- 'go' which has been explained by a practice of walking between slaughtered animals as part of taking an oath			Law & Order	JPM
*hₗónh□es-	burden	Lat onus 'burden' Skt ánas- 'wagon-load'				Exchange & Property	JPM
*hₗónteros	other	NE other Lith añtras 'other, second' OCS vŭtorŭ 'second'	North-West			Measure & Quantity	JPM IIAL
*hₗop-	desire	Lat optō 'wish' OCS za-(j)apŭ 'presumption, suspicion' Grk epiópsomai 'choose'	West Central perhaps from *hₗep- 'grasp'			Desire	JPM
*hₗopi-bʰeh₂	omen, inauspicious event						Celt.
*hₗopús	(animal) fat	Lat ad-eps 'lard, suet' Hit apuzzi 'animal fat, tallow' Roshani aðawoj (< *ad-op-eko-) 'piece of lard' Toch B op '+ fatness' Arm atoc' 'abundant, fertile'				Meals	JPM
*hₗordʰo-	separate		{1} [AL] For the meaning see Lubotsky 1988: 71, fn. 21. {2}[AL] This Baltic root cannot be related with Skt. ard- because of its circumflex intonation. Connection of árdha- with Lat. orbis 'circle' < PIE *h₂or-dhhₗ-í- seems improbable to me.				IIAL

*h₁orh□deh□-	heron	Lat ardea 'heron' ON arta 'teal' SC róda 'stork' Grk (e)rōdiós 'heron stork'	Some kind of waterbird			Bird	JPM
*h₁órs(o)-	rear-end	NE arse/ass Grk órros 'rump' Arm oṙ 'rump' Hit ārra- □ ārri- □ arru- 'rump'				Body (Lower)	JPM
*h₁óuh□dʰr̥	breast, udder	Lat ūber 'udder, teat, [lactating] breast' NE udder Lith pa-ū́dre 'abdomen' Grk oûthar 'udder' Skt ū́dhar- 'udder'	{1} [AL] For Fi. udar (gen. utaren) 'udder', Mordvin odar 'id.', Mari wađar, wođar 'id.', being probably borrowed from PIIr., see Katz 2003: 198f.	nom.acc.sg. ū́dhar, gen.sg. ū́dhnas, loc.sg. ū́dhan(i), instr.pl. ū́dhabhiḥ (RV+) also early secondary forms of stem ū́dhas-: nom.acc.sg. ū́dhaḥ, loc.pl. ū́dhassu (RV+)		Body (Upper)	JPM IIAL
*h₁owes-	(inner) skin	Lat ōmentum 'fatty membrane or caul covering the intestines' Toch B ewe 'inner skin, hide'	Derived from verbs meaning 'to cover'			Body (Upper)	JPM
*h₁rebʰ-	cover with a roof	Grk eréphō 'cover with a roof' and oróphē 'roof' Khufi rawū̆ j 'plank'	An o-grade derivative in Germanic *h₁robh-tro- gives us NE rafter (and by way of borrowing from ON we have NE reef			Construction	JPM
*h₁regʷ-es-	(place of) darkness	Goth riqis 'darkness' Toch B orkamo 'dark' Arm erek 'evening' Skt rájas- 'night' Grk érebos, the name of the underworld				Light & Dark	JPM IIAL
*h₁rei-	move	NE run OCS vy-rinoti 'thrust out' Skt ríṇvati 'lets flow' Grk orī́nō 'stir', erīnúō 'be angry with', i.e. 'be stirred up' Toch AB rin- 'renounce'				Movement	JPM
*h₁reih□-	move	Skt rin *h₁rih□tís OIr rīathor Skt rītí- 'stream, run' Lat rīvus 'brook'				Liquid Motions	JPM
*h₁reik-	tear (off)	NWels rhygo Grk ereíkō OHG rīhan 'pull a thread' Lith riekiù 'cut bread' Skt rikháti 'scratch'				Reductive Activities	JPM
*h₁reip-	tear	Lat rīpa 'river bank' ON rīfa 'tear out' Grk erípnai [pl.] 'broken cliff'	West-Central an extended form of the unextended, and unattested, *h₁rei- also seen in the more widely attested *h₁reik-			Reductive Activities	JPM

*hₐrem	stop, come rest			Present I: rámate [3sg.med.] 'to become appeased' (RV+), rama [3sg.impv.act.] 'appease, make quiet' (VS+) Present IX: áramṇāt [3sg.impf.act.] 'to quiet, to appease' (RV) Aorist S: áraṃsta [3sg.med.] (RV-AV) Aorist RED: árīramat [3sg.act.] (RV, AVP) Perfect: reme [3sg.med.] (Br.+) Fut: raṃsya° (Br.+) Caus: rāmáya° 'to make stop' (RV+), ramáya° id. (RV+) Abs: ratvā́ (Br.) TA-Ptc.: ratá- 'pleased, delighted, devoted' (Br.+)			IIAL
*hₐrep-	snatch, pluck	Lat rapō 'snatch away, carry off, plunder' Lith ap-re˙́pti 'seize, embrace' Alb rjep □ rrjep 'flay, rob' Grk eréptomai 'browse on, feed on' [< *'pluck']	West Central			Give & Take	JPM
*hₐres- *hₐers-	liquid, moisture	Lat rōs 'dew' Lith rasà 'dew' OCS rosa 'dew' Av Raŋha, the name for the R. Volga Skt rása- 'liquid, moisture' Alb resh 'rains'				Qualities	JPM

Root	Meaning	Cognates	Notes	Sanskrit	Formula/Quote	Category	Source
*h₁reudʰ-	(bright) red	OIr rūad 'red' Lat rūfus 'red' NE red Lith raũdas Rus rúdyj 'blood-red, red-haired' Av raoidita- 'red' Skt róhita- 'red', lohá- 'reddish' Lat ruber 'red' Grk eruthrós 'red' Skt rudhirá- 'red' Toch B ratre 'red'				Color	JPM
*h₁reudʰ-it-o-	red		{1} [AL] For the development -dh- > -h- in Skt. see Lubotsky 1995a.	róhiṇī- [f] (RV+)			IIAL
*h₁reug-	belch ?vomit	Lat ērūgō OE rocettan Lith riáugmi Rus rygá tĭ Grk ereúgomai Arm orcam NPers ā-rōɣ [noun]				Vital Functions	JPM IIAL
*h₁roudʰós	the red metal, i.e. copper	ON rauði 'red iron ore' OCS ruda 'ore metal' NPers rōd 'copper' Skt lohá- 'copper'	A banal derivative of *h₁reudʰ- 'red', i.e. the 'red metal' or 'copper', which probably represents independent developments in diVerent Indo-European groups {1} [AL] For the development -dh- > -h- in Skt. see Lubotsky 1995a.	?		Metals	JPM
*h₁rsn(-bʰo)-	bull						IIAL
*h₁rudʰ-ro-	red		{1} The -i- in rudhirá- is probably due to contamination of *rudhrá- with the compound form rudhi° (possibly attested in rudhikrā́-).				IIAL
*h₁s-ent-	existing, being		{1} prt.pres.act. of the root *h₁s- 'to be'.	satī́- [f] (RV+ in later Skt. also 'virtuous, faithful wife') sát- [n] also 'being, reality' (RV+)			IIAL
*h₁snt-io-	existing, true, real		{1} A derivative of sánt-, prt.pres.act. of the root *h₁s- 'to be'. For the semantics cf. Hitt. /asant-/ [adj] 'true, real', Gr. τὸν ἐόντα λέγειν λόγον, τὰ ὄντα λέγειν 'to tell the truth'.		true formula': Skt. satyó mántraḥ (RV 01.152.02) — OAv. haiθī	IIAL
*h₁sónt-	real, true	Lat sōns 'guilty' OE sōðian 'bear witness, prove true' NE soothe and also NE soothsayer Hit asānt- 'being, existing' but also asān-at iyanun-at "it (is) true, I did it" Skt satyá- 'true'				Values	JPM
*h₁su	well				notice well!': Skt. viddhí ṣú (RV 02.020.01) — Gr. (Aisch.) εὐ ..	IIAL

*hₗsu-dʰhₗ-énos	rich, well-off lit. well-placed	Grk euthenéō 'thrive, flourish' Skt sudha ́na- 'rich'	West Central			Exchange & Property	JPM
*hₗsu-menes(-ye/o-)	be well disposed to	Grk eumenéō 'am gracious' Skt sumanasyáte 'is favourable'	i.e. 'good' + 'thought' + verbal suffix			Values	JPM Beekes
*hₗubʰ-sk-	bind		{1} [AL] For the phonological details of this reconstruction see Lubotsky 2001a.	Present VI: ubjáḥ [2sg.inj.act.] (RV), ubjánt- [ptc.act.] (RV) Abs: ny-ubjya (JB 1.353) TA-Ptc.: sám-ubjita- (AV+)			IIAL
*hₗui-	in two, apart, asunder		{1} [AL] The initial laryngeal follows from the constant long scansion of the augment in ávidhat (10 times in the RV) < *Ha-Hui-dhH-a-, the root vidh- being due to the univerbation of the preverb ví and dhā- (cf. Lubotsky 1994a and s.v. vidh)				IIAL
*hₗuidʰ-uh₂-	robbed, unmarried widow						Beekes
*hₗuogʷʰ-et-	vow			vāghát [nom.sg.], vāgháte [dat.sg.], etc.			IIAL
*hₗureǵ-o-	fenced area		{1} [AL] The meaning of vrájana- (RV 07.003.02), usually translated as 'road, way', is not quite clear. {2} From root *hₗuerǵ- 'to encompass' with unexplained Schwebeablaut.				IIAL
*hₗurhΔ-os-	breadth						IIAL
*hₗurhΔ-u-	broad, wide			urvī́- [f] várīyas- [comp] (RV+) váriṣṭha- [sup] (RV+)	'broad earth': Skt. kṣā́m … urvī́m (RV) — Gr. εὐρεῖα χθών 'far-reaching fame': Skt. urugāyám … śrávas (RV) — Gr. κλέος εὐρύ 'broad seat': Skt. urú … sádas (RV) urvī́ sádmanī (RV) — Gr. εὐρυεδής		IIAL
*hₗweh₂	be extinguished		{1} [AL] Middle forms are late, cf. esp. apa-vāyate [3sg.med.] 'to become feverish' (GB). {2} For the Greek forms see Nussbaum, Two Studies in Greek and Homeric Linguistics, Göttingen 1998, 9-84, besonders 14-45 73-84.	Present IV: vā́yati [3sg.act.] (RV+) {1} Aorist S: avāsīt [3sg.act.] (Br.) Caus: (nir)vāpay° 'to extinguish' (RV+) TA-Ptc.: ud-vāta- 'extinguished' (Br.)			IIAL

*h₁weldʰ	grow, increase		{1} [AL] This distribution is clear in the present, but pf. act. has both meanings, cf. Kümmel 2000: 469ff. {2} [AL] For the so-called vardh- [2] 'to cut' see Kulikov XXX, who shows that this root comes from vy-ṛdh-. {3} [AL] Schindler's idea (expressed in his teachings) that the Ilr. root Huardh- is related to PIE root *h₁ludh- seems attractive, although the metathesis of -lu- to -ul- is unparallelled. The usual direction is the opposite, but it concerns -ur- to -ru-, cf. *kʷetur(C)- > *kʷetru- in Av. caθru°, Gall. petru° (e.g. Petru-corii), Lat. quadru(r), MW pedry°, Gr. τρυ-φάλεια '(helmet) with four φάλοι' *sueḱurh₂- ' mother-in-law' (cf. Skt. śváśura- 'father-in-law') > *sueḱruh₂- (Skt. śvaśrū́-, OCS svekry, OHG swigar) (Lubotsky 1994b).	Present I: várdhanti [3pl.act.] (RV+), várdhate [3sg.med.] (RV+) Aorist R: várdhat [3sg.subj.act.] (RV), vṛdhánt- [ptc.act.] (RV), vṛdhāná- [ptc.med.] (RV) Aorist A: avṛdhat [3sg.act.] (RV[+]) Aorist IS: vardhiṣīmáhi [1pl.opt.act.] (VS+) Perfect: vavárdha [3sg.act.] (RV+), vāvṛdhúḥ [3pl.act.] (RV+) vāvṛdhvā́ṃs- [ptc.act.] (RV+), vāvṛdhé [3sg.med.] (RV+) Caus: vardháya° 'to make grown, big' (RV+) Aorist RED: ávīvṛdhat [3sg.act.] (RV+), ávīvṛdhanta [3pl.med.] (RV+) TA-Ptc.: vṛddhá- (RV+) Inf: vṛdháse (RV), vāvṛdhádhyai (RV)	'to increase the dominion': Skt. vardháyanti … kṣatrám (RV 01.054.08) — OAv. xšaθrəm … varədaitī (Y 28.3) 'to strengthen the judgment': Skt. várdhān naḥ śáṃsam 'he will strengthen our judgment' (RV 05.041.09) — OAv. vərəzdāiš sə̄nghāiš 'with strengthened judgments' (Y 46.3) 'to increase in power': Skt. vāvṛdhāná ójasā (RV 03.045.05) — OAv. aojaŋhā varədaiiaētā (Y 50.3)		IIAL
*h₁werǵ-eno-	settlement						IIAL
*h₁werh□-es	width, breadth						IIAL
*h₁wers-	rain	Grk eérsē 'dew' Hit warsa- 'rainfall'				Water	JPM
*h₁wes-	moist, especially of the grou	Umb vestikatu 'offer a libation' OE wōs 'juice, broth' Latv vasa 'forest with wet ground and blue clay'	North-West			Qualities	JPM

Root	Meaning	Cognates	Notes		Case forms	Category	Source
*h₁yenh□-ter-	husbands brothers wife	Lat ianitrīcēs 'brothers' wives' Lith jéntė 'husband's brother's wife' OCS jętry 'husband's brother's wife' Grk ená tēr 'husband's brother's wife' Arm ner 'husband's brother's wife' Skt yātár- 'husband's brother's wife'				Kinship	JPM IIAL
*h₂(e)nh₂t-	door-post		{1} [AL] Beekes (apud de Vaan 2003: 136) suggests a hysterodynamic paradigm nom.sg. *h₂énHt-h₂, acc.sg. *h₂nHt-éh₂-m, gen.sg. *h₂nHt-h₂ós > PIIr. *ánti, *ātấm, *āthás. The Avestan form would be then a derivative *antiǎ. {2} [AL] Here also probably P 49 aθāhuua loc.pl. 'house', cf. JamaspAsa - Humbach 1971: 72 and de Vaan 2003: 136				IIAL
*h₂(e)po	from, as of						Beekes
*h₂(e)rǵ-nt-	silver		probably from *h₂erǵ – white {1} [AL] The Khotanese form and Yazdi ấldī 'money' seem to point to full-grade *arz- (cf. Cheung 2002: 164).				Beekes IIAL
*h₂(e)us-r-	dawn		{1} [AL] The starting point for the r-stem seems to be a locative in *-er	uṣar [voc.sg.], usráḥ [gen.sg., acc.pl.], usrí [loc.sg.], usrẩm [loc.pl.]			IIAL
*h₂/₃(e)lǵ(ʰ)-	grain (or millet?)	Hit halki- 'barley grain' NPers arzan 'millet' Grk áliks 'spelt' [borrowed from some Anatolian language?]) Toch B lyekśye 'barley' ??				Plants	JPM
*h₂/₃eh□-	trust in, believe	Lat ōmen 'sign, omen' Hit hā(i)- 'believe, take as truth'				Knowledge & Thought	JPM
*h₂/₃éihₓos *h₂ihₓs-eh₂- ??	shaft (of a cart or wagon)	Rus vojë 'pole, or shaft' Hit hissa- 'pole, shaft, thill [for harnessing draft animal to a cart]' Av aēša- '[pole-]plough, pair of shafts' Skt īṣā- 'pole, shaft' Grk oiḗïon 'tiller, helm, rudderpost'	{1} Katz 2003: 252 considers PPerm.*ǒįša 'shaft' (Komi vož, Udmurt waž), FP *ǎįšįá 'pole' (Mordvin *ažįa (Erzya ažįja, Moksha ažįę)) as LW from Proto-Indo-Iranian.			Transport	JPM IIAL
*h₂/₃enḱ-	bestow	Hitt henkzi 'bestows' Grk ógkos 'burden' Skt áṃśa- 'portion, share' Alb jap 'give' Arm unim 'possess' Hit epzi 'takes' Av apayeiti 'obtains' Skt āpnóti 'obtains' Toch B yapoy 'land' [< *'+ dominion']				Give & Take	JPM

*h₂/₃eu-	weave	NE cognate weeds as in 'widow's weeds' Skt u- 'weave' Rus usló 'weaving'	{1} The Skt. root variant vā- is secondary, based on reinterpretation of the present váyati (like dáyati from dā- 'to suck'). {2} [AL] The Sogdian verb prw'y- [verb] 'to envelop' ptw'y- [verb] 'to roll', cited by Mayrhofer, is rather derived from the verb *uiaH-, see vyā. {3} [AL] The colour of the laryngeal is not quite clear.	Present AYA: váyati (< IE *h₂u-éie-) [3sg.act.] (RV+) Perfect: ūvur [3pl.act.] (RV 001.061.08) Fut: vayiṣyánt- [ptc.act.] (RV based on the present stem) Passive: ūyate [3sg.] (YVp+) Inf: ótum (RV) ótave (RV 10.130.02) ótavái (RV 01.164.05) vắtave (AV) TA-Ptc.: utá- (RV+)		Textiles	JPM IIAL
*h₂/₃nsis	large (offensive) knife sword	Lat ēnsis 'sword' Av ahū- 'sword' Skt así- 'sword'	The presumption then is that the word may have originally indicated a 'dagger' or 'knife' (as it seems to do in the earlier Vedic literature) and that it developed the meaning 'sword' independently in each of the language groups in which it is found. Some support for this comes from the fact that there is also a Palaic cognate (hasīra-) which gives us our earliest citation of this word and here it means 'dagger'.			Weapons	JPM
*h₂/₃ónḱos	what is bestowed	Grk ógkos 'burden' Arm hunjk' [pl.] 'harvest' Hit henkan- 'fate, death' Skt áṃśa- 'portion, share'	Formed from the verb *h₂/₃enḱ - 'bestow'			Exchange & Property	JPM
*h₂/₃orbʰos	orphan, heir	OIr orb 'heir, inheritance' Lat orbus 'bereft, childless, orphan' OCS rabŭ 'servant' Arm orb 'orphan' Skt árbha- 'child'	Derives from a verbal form which was still preserved in Hit har(ap)p- 'change status'. {1} Hitt. ḫarp- 'to withdraw from' is probably unrelated.			Marriage	JPM IIAL
*h₂/₃osp-	aspen, poplar	NE aspen (Populus tremula, P. alba) Lith apušẽ 'ash (P. nigra)' Rus osína 'ash (P. tremula)' Arm opʻi 'poplar (P. alba)' NPers fih 'oar', Skt sphyá- 'oar, pole, shovel'	Validity dependant on Indo-Iranian			Trees	JPM
*h₂/₃rgi-	wheel	Hit hurki- 'wheel' Toch A wärkänt 'wheel'				Transport	JPM
*h₂/₃uh₁e/olo-	owl	NE owl NHG Eule 'owl' Hit huwalas 'owl'				Bird	JPM

Root	Meaning	Cognates	Notes	Forms		Category	Source
*h₂/₃up- *h₂/₃ukʷ-	cooking vessel	Lat aulla 'pot' OE ofen 'furnace' [> NE oven] OPrus wumpnis 'bake-oven' Grk ipnós 'oven' Hit hūppar(a)- 'bowl, pot' Skt ukhá- 'cooking-pot'	Suggests an association with cooking and so it may be presumed that this particular vessel was so employed (although in Hittite it may also indicate a 'unit of measure').			Containers	JPM
*h₂/₃webʰ-	weave	NE weave Alb vej 'weave' Grk huphaínō 'weave' Hit huppai- 'entangle, ensnare' Skt ubhnā́ti 'ties together' Toch B wāp- 'weave' Skt ūrṇa-vābhi-, literally 'wool-weaver'	{1} [AL] The -f- in Iranian forms is not well explained, but has several parallels, cf. for instance s.v. nábhya-.	Present VII: sám unap [2sg.inj.act.] (RV 02.013.09), Present IX: ny-àubhnāt [3sg.impf.act.] (RV 04.019.04), ubhnā́s [2sg.inj.act.] (RV 01.063.04) Present VI<VII: ápombhata [2pl.impv.act.] (AVŚ 8.8.11+) TA-Ptc.: ubdhá- 'fettered' (RV+)		Textiles	JPM IIAL
*h₂/₃wédr̥	creatures, (wild) animals	Slov vedevec 'werewolf'	heteroclitic r/n possibly from *h₂/3wed- 'to live' ??			Fauna	JPM
*h₂/₃weg(ʰ)-	pierce	Hit hwek- 'slaughter, butcher, slay' OPers vag- 'pierce'				Reductive Activities	JPM
*h₂/₃wergʰ-	commit a crime	ON vargr 'felon, criminal wolf' OPrus wargs 'evil' Rus vórog 'enemy, devil' Hit hurkil 'sin, sexual perversion' Toch B wārṣṣe 'highwayman, bandit'				Law & Order	JPM
*h₂/₃wop-	treat badly	OIr fel 'bad' NE evil Anatolian huwappi ☐ huwapzi 'ill-treats, despoils'				Values	JPM
*h₂ed	to, by						Beekes
*h₂ed-	cereal crop, grass	Lat ador 'emmer wheat' Goth atisk 'grain Weld' Arm hat 'grain' Sog auk 'crop, cereals' Lyc χθθahe 'hay, fodder' Toch B atiyo 'grass'				Plants	JPM
*h₂ed(ʰ)-	hawthorn	Old Irish *ad-, gen. aide Hittite hat(t)-alkisnas				Trees	JPM Celt.
*h₂eǵ-	land?		root related to word *h₂eǵros				Beekes
*h₂eǵ-	lead (to)						Beekes

*h₂eǵ-ino-	(goat-)skin		{1} Original 'goat skin' developed into 'skin' already in PIIr. times. {2} [AL] Long acute vowel in Slavic is due to Winter-Kortlandt's Law. For the semantic development 'goat skin' -> 'skin' cf. Russ. koža 'skin' < *koziā 'of a goat'.				IIAL
*h₂eǵ-men-	driving						IIAL
*h₂eǵ-o-	(billy-)goat		{1} ajá- 'unborn' does not exist. {2} [AL] The relationship with Gr. αἴξ, αἰγ- 'goat', etc. can only be considered under assumption of a substratum loan word, cf. especially the typical vacillation a : ai in Germanic and Celtic substratum words, discussed in Schriiver 1997: 303f.				IIAL
*h₂eǵ-ro-	pasturage		{1} The meaning and, accordingly, the etymological attribution of this compound are very uncertain. {2} Different accentuation in ájra- and Gr. ἀγρός.				IIAL
*h₂eǵʰ-	cow			vr̥kī-inflexion			IIAL
*h₂egʰ-lo-	distress		{1} [AL] The accentuation is uncertain because the accents in the TĀ are often corrupt.				IIAL
*h₂egʰo-	evil						IIAL
*h₂eǵro-	acre						Beekes
*h₂eǵro-	hunt	Gr. ágrē 'hunt' Av. azrō- 'hunt'					Celt.
*h₂egʷnos	lamb						Beekes
*h₂eh₂(e)r-	± kidney	Hittite hah(a)ri- 'some paired organ' Toch B arañce 'heart' OIr āru 'kidney, gland' Lat rēnēs [pl.] 'kidneys'				Organs	JPM
*h₂eh₂er-	thresh, rake	Lat ārea 'threshing floor open field' Hit hahhar(a)- 'rake'				Agriculture	JPM
*h₂eh₃-mo-	raw						IIAL
*h₂eh□-	burn, be hot	Palaic hā- 'be hot'				Fire	JPM
*h₂eh□-mer-	day	Grk ēmérā Arm awr	West Central a derivative of *h₂eh□- 'burn'			Time	JPM
*h₂eh□-mer-	heat (of the day)	Grk hēmérā 'day' Arm awr 'day'	fr. *h₂eh□-			Fire	JPM
*h₂éh□-ōs	ash	'fire', and	fr. *h₂eh□-			Fire	JPM
*h₂eh□-seh□-	hearth	Lat āra Hit hāssa-	A derivative of the verbal root *h₂eh□- 'burn' (it also provides the base for NE ash)			Construction	JPM
*h₂eh□-tr̥	fire		fr. *h₂ehx- 'burn, be hot'			Fire	JPM
*h₂eh□-tr-eh□-	hearth	Lat ātrium 'hall or entrance way' Rus vatra 'hearth'	West Central			Construction	JPM
*h₂ēh□trō-	quick, fast	OHG ātar 'quick' Lith otrùs 'lively'	North-West			Time	JPM
*h₂ei-os-	copper (?)		{1} Possibly, derived from root *h₂ei- 'to shine, to burn'.{2} [AL] Skjærvø 1997: 110 suggests to take OAv. aiiaŋhā as a verb form of ā-iiā- 'to beseech'.				IIAL

*h₂eidʰ-	burn			Present VII: indhé [3sg.med.] (RV+) indháte [3pl.med.] (RV+) probably here Present I édhate [3sg.med.] 'to thrive, fare well' (RV+) Aorist IS: áindhiḍhvam [2pl.med.] (ŚB) indhiṣīya [1sg.opt.med.] (TS 1.5.8.5) Perfect: īdhé [3sg.med.] (RV+) īdhiré [3pl.med.] (RV+) Fut: indhiṣy° (Sū.) TA-Ptc.: iddhá- (RV+)			IIAL
*h₂eiǵ-	goat?		highly problematic reconstruction				Beekes
*h₂eiḱ-	own		{1} [AL] The consistent short vowel in Avestan may indicate that, whereas in Skt. the long vowel of the perfect spread to the nominal derivatives, the opposite development occured in Avestan (cf. also de Vaan 2002).	Present II: íśe [1sg.med.] (RV+) íṣṭe [3sg.med.] (RV+)	'as far as I can': Skt. yā́vad íśe (RV 03.018.03) — OAv. yauuat_ isāi 'to possess ruling power': Skt. íśe … kṣatríyasya (RV 04.055.08) — YAv. isə.xšaθriiō.təma- [adj] 'possessing the greatest ruling power'		IIAL
*h₂éios	bronze, copper, metal						Beekes

*h₂eis-	seek, want		{1} [AL] See Gotō 1993: 125f., Kümmel 2000: 127f. {2} [AL] See Kümmel 2000: 126ff.	Present SK: icháti [3sg.act.] (RV+) ichánt- [ptc.pres.act.] (RV+) ichase [2sg.med.] (RV+) Aorist A: iṣema [1pl.opt.act.] (RV 08.044.27), áiṣanta [3pl.med.] (RV 01.126.05), iṣe [1sg.inj.med.] (RV) {1} Aorist IS: aiṣiṣma [1pl.act.] (KB), aiṣiṣur [3pl.act.] (ŚB) Perfect: īṣur [3pl.act.] (RV 03.001.02 {2}, SV, Ep.+), iyeṣa [3sg.act.] (Br.+) īṣé [3sg.med.] (RV 10.098.03, Br.+), īṣiré [3pl.med.] (AV, Br.+) Fut: eṣiṣyati, -te [3sg.act., med.] (Br.) Passive: iṣyate [3sg.] (RV 09.069.01, AVP, Sū.) Inf: iṣáṇi (RV			IIAL
*h₂eisd-	fear, honour			Present II: íḍe [1sg.med.] (RV+) íṭṭe [3sg.med.] (RV+) íḍāna- [ptc.med.] 'invoking, praising' (RV) TA-Ptc.: īḍitá- (RV+)			IIAL
*h₂eḱ-eni-	be sharp		{1} A derivative of the PIE root *h₂eḱ- 'sharp, pointed'.				IIAL
*h₂eḱ-mon-	stone (meaning heaven controversial)			áśnas [gen.sg.] (RV+), áśnā [instr.sg.] (RV+) with cluster reduction			IIAL
*h₂ēkr̥	maple	Lat acer 'maple' OHG ahorn 'maple' Grk ákastos 'maple' Hit hiqqar '+maple'				Trees	JPM

*h₂el-eno-	other, alien		{1} Opposite: nítya-. {2} Parallel to kṣétrāṇy áraṇāni 'other countries' (RV 06.061.14). {3} Opposed to Nitio-broges, cf. Skt. nítya-.			IIAL
*h₂élbʰit	barley	Grk álphi 'barleymeal' Alb elb 'barley'	c.f. Hit seppit 'wheat' with the same suffix		Plants	JPM
*h₂eldʰ-	succeed		{1} [AL] With the secondary suffix accentuation (see Kulikov 1998). {2} The connection is not quite certain.	Present VII: r̥ṇádhat [3sg.subj.act.] (RV 01.084.16), r̥ndhánt- [ptc.act.] (RV) Present V: r̥dhnoti [3sg.act.] (RV+) Present IV: sám-r̥dhyatām [3sg.impv.med.] (RV 10.085.27 , AV+), ŕ̥dhyātai [3sg.subj.med.] (TS+), r̥dhyáte {1} [3sg.med.] (TS, MS, ŚB) Aorist R: r̥dhyā́ma [1pl.opt.act.] (RV), r̥dhánt- [ptc.act.] (RV) Aorist IS: vyàrdhiṣṭa [3sg.med.] (MSp) Aorist mediopass: ví … ārdhi [3sg.] (YVp), sám … ārdhi [3sg.] (ŚB) Perfect: sám-ānr̥dhe [3sg.med.] (RV 10.079.07), ānardha [3sg.act.] (AV+) Caus: ardháyati (AV+)			IIAL

*h₂elgʷʰ-	be of value			Present I: árhati [3sg.act.] (RV) árhant- [ptc.act.] (RV) Perfect: arhire [3pl.act.] (RV 10.092.11) Inf: arháse 'to be equalled, to correspond' (RV 10.077.01)			IIAL
*h₂elgʷʰ-o-	worth, price						IIAL
*h₂elgʷʰo/eh□-	payment, prize	Lith algà 'payment, salary' Grk alphḗ'earnings' Hit halkuessar 'produce, supplies [for cultic use]' Av arəjah- 'value, price' Skt arghá- 'value, price'				Exchange & Property	JPM
*h₂elh₁-eni-	rub, grind		{1} Agent noun of type cakṣáṇi- 'looking' < IE *h₂elh₁ –eni-.				IIAL
*h₂elwos	elongated cavity, hollow	Lat alvus Grk aulós Lith aũlas 'leg of a boot' Rus úlica 'street' Lat alv(e)ārium 'beehive'				Dwelling	JPM
*h₂em-	hold on to, contain	Grk ámē 'water bucket, pail' Arm aman 'container' Khot handra- 'jar, pot' Skt ámatram 'large vessel'	These may be independently formed as well			Containers	JPM
*h₂em-h□eḱs-ih□	wagon-chassis	Grk ámaksa '[framework or chassis of] a fourwheeled wagon' Toch A amākṣ-pänte 'wagon-master'	which has been explained as a compound of *h₂em- 'hold on to' and *h□eḱs- 'axle', i.e. the chassis of a wagon that holds the axle.	?		Transport	JPM
*h₂em-ro-s	bitter, sour	Lat amārus 'bitter' OE ampre 'sorrel, dock' Skt amlá- 'bitter' Arm amok 'sweet' Alb ëmbël 'sweet'	from a root *h₂em- 'raw, bitter'			Sensation	JPM
*h₂emǵʰ-	tie, constrain	Lat angō'tie' 'throttle' OCS ǫžǫ 'constrain' Av ąz-'constrain' Hitt cognate hammenk- 'tie' or 'betroth'				Binding	JPM
*h₂en	along in an upwards direction						Beekes
*h₂en	interrogative particle						Beekes
*h₂en	there						Beekes
*h₂en-	draw (liquids)	Grk ántlon 'bilge-water' Arm hanem 'draw out, remove' Hit han- □ haniya- 'draw [liquids]'				Food Prep	JPM

*h₂en-	fathers mother	Grk annís OHG ana 'grandmother' OPrus ane 'female ancestor' OCS vŭnǫkŭ 'grandfather' Grk annís 'grandmother' Arm han 'grandmother' Hit hannas 'grandmother' OPers nyākā 'grandmother'			Kinship	JPM
*h₂endʰ-os-	sprout		{1} Borrowed into PFU *antɜ > Komi od 'spring greens, germ, sprout'.			IIAL
*h₂éndʰes-	± flower	Fris åndul 'marsh-grass' Alb ёndё 'flower' Grk ánthos 'flower' Arm and 'field' Skt ándhas- 'a herb the soma plant grassy ground'			Plants (Wild)	JPM
*h₂eng-ul-	joint?					IIAL
*h₂enǵʰ-os-	narrowness		{1} Also in RV 06.003.01, where a root-noun áṃh- has sometimes been assumed.	'overcome trouble': Skt. áṃhas- tari- (RV) — YAv. vītar-ązah- 'save from trouble': Skt. áṃhas- trā- (RV) — YAv. ązahucit_ … θrāiieṇte		IIAL
*h₂enio-	other		{1} Based on an adverb similar to anyátra.			IIAL
*h₂enk-	bend (v.) hook, barb (n.)	MPers ančītan 'bend' Hit hinkzi 'bows (reverentially), curtsies' Skt áñcati OIr ēcath OHG ango 'fishhook' OCS ǫkotĭ Grk ógkos 'barb' Av aka- Lat uncus			Bend and Press	JPM
*h₂enk-os-	curve					IIAL
*h₂enk-u-	turn, hook					IIAL
*h₂enr	manly strength	Lith. nóras 'will' Hitt. innarā 'forcefully'				Celt.
*h₂ensiyo/eh□-	reins	OIr ēis(s)e Grk (h)ēníā Myc. a-ni-ja Skt nāsyam 'nose cord [of a draft-ox, etc.]			Transport	JPM Celt.
*h₂ent-	forehead	OIr ētan Lat ante 'in front of, before' Grk antí 'in front of, opposite' Hit, hant- 'face, forehead, front part' Skt ánti 'in front of, opposite', ánta- 'end, limit' Toch B ānte 'surface, forehead'			Head	JPM

*h₂entbʰi-	around, on both sides	OIr imm-imb- 'about, mutually' Lat ambi- 'on each side of, around, about' OHG umbi 'about' Alb mbi 'over' Grk amphí 'about, near' Arm amb-olj 'complete' Av aiwitō 'on both sides' Skt abhíta- 'on both sides'				Position	JPM
*h₂entbʰi-kʷolos *h₂mbʰi-kʷol(h□)-o-???	servant	Lat anculus 'servant' Grk amphípolos 'servant, priest' Skt abhicara- 'servant'	literally one who 'moves about on both sides' {1} Cf. for the meaning RV pári-car- 'to serve'. {2} With secondary č-. {3} Presumably, a vṛddhi-derivative in -i- from OP *abicara- 'servant'.			Social Organization	JPM IIAL
*h₂entero-	second						Beekes
*h₂enti	in front against	Lat ante 'in front of' Lith añt 'on, upon at' Grk antí 'instead of, for' Arm ənd 'for' Hit anti 'facing, frontally opposite, against', hanza 'in front of' Skt ánti 'opposite'	A frozen case form of *h₂ent 'face, forehead' (cf. Lith añtis 'breast(s)', Hit hant- 'forehead, front', Toch B ānte 'brow'). {1} Acc.sg. of IE *h₂ent- 'face'.			Position	JPM IIAL Beekes
*h₂enti	over, against						Beekes
*h₂ep-	fasten, join	Lat aptus 'fitted to appropriate, fitting' [> by borrowing NE apt] Hit happ- 'join, attach' Toch A āpsā [pl.] 'limbs' ?Skt āpí- 'ally'				Binding	JPM
*h₂ep-	water (Animate)	OIr. ab 'river'	*p is sometimes voiced {1} Also RV apsu-jít-, with loc.pl. apsu° introduced from compounds like RV apsu-kṣít-, apsu-ṣád- 'living in the waters'. In the later language cf. further AV apsu-yogá- m. 'water-connection' and MS+ apsavyà- adj. 'located in the waters (of Varuṇa)'.	instr.sg. apā́, gen.abl.sg. apás, nom.pl. ā́pas, acc.pl. apa		Water	JPM IIAL
*h₂epero-	later		{1} Comparative to *h₂epo.		'born later, younger': Skt. apara-já- (VS cf. also Singhalese varada 'younger brother') — YAv. apara-zāta- 'first … second': Skt. pū́rva- … ápara- (RV) — YAv. pauruua- … apara-		IIAL

*h₂épes-	limb, part of the body	Hit hapessar 'limb, joint, part of the body' Oss æfcæg 'projecting part of the body, neck' Skt ápsas- 'protruding part of the body, breast, forehead, tusk' Toch A āpsā [pl.] 'limbs'	An admittedly banal derivative of *h₂ep- 'to fit, fasten'			Body (Upper)	JPM
*h₂eph₃on-	river	Hitt. hāpa- Lat. amnis , OHG -affa (in river-names)					Celt.
*h₂epmh□o-	most distant		{1} Superlative to ápa. {2} Connection with apamá- uncertain.				IIAL
*h₂epo	away						IIAL
*h₂epo-h₃kʷ-	turned backwards		{1} Adj. in -añc-/-ak- from ápa. {2} Russ. ópak(o) 'wrong, turned around' is most probably unrelated to ápāk-.	ápācī- [f]			IIAL
*h₂epōmnepōts	grandson of waters	Skt Apā́m Nápāt				Dieties	JPM
*h₂epotio-	coming behind						IIAL
*h₂eps-os-	breast						IIAL
*h₂er-	nut	Lith ruošutỹs 'nut' Rus orékh 'nut' Alb arrë 'walnut, nut tree' Grk árua 'nut' Hit harau- 'poplar'				Trees	JPM
*h₂er-o-	join, assemble						IIAL
*h₂erdi-	point, tip, spearpoint	Gr. árdis 'point (of spear)'					Celt.
*h₂erdus	high, lofty	OIr ard 'high' Lat arduus 'steep, lofty diffcult' ON ǫrðugr 'steep' Hit harduppi- 'high				Position	JPM
*h₂erǵ-ṇt-om	white (metal), silver	OIr argat Lat argentum Arm arcat' Av ərəzatəm Toch B ñkante				Color Metals	JPM Beekes
*h₂erǵu-(no-)	light, white		{1} Messap. argonan does not exist.				IIAL
*h₂erh₃-	plow, to						Beekes
*h₂érh₃trom	plough	MIr arathar Lat arātrum ON arðr Lith árklas Grk árotron Arm arawr				Tools	JPM Beekes

*h₂érh₃ye/o-	plough	MIr airid 'ploughs' Lat arō 'plough' Goth arjan 'plough' Lith ariù 'plough' OCS orjǫ 'plough' Grk aróō 'plough' ?Toch A āre if it means 'a plough' ?Hit hars- □ harsiya- 'till the earth'				Tools	JPM
*h₂erh□-	destroy	Lith ìrti 'dissolve, go asunder' OCS oriti 'destroy' Hit harra- 'destroy'				Conflict	JPM
*h₂erk-	hold back	Lat arceō 'shut in keep at a distance, prevent' Grk arkéō 'ward off, defend assist' Arm argelum 'hinder, restrain, hold back' Hit hark- 'hold, have' Toch B ārk- 'be obliged to'				Give & Take	JPM
*h₂erk-	rend, destroy	OIr oirgid 'slays' Arm harkanem 'split, fell' Hit harkzi 'is destroyed'				Conflict	JPM
*h₂ers-	stab (?)		{1} [LK] See Gotō 1987: 105 contra Joachim 1978: 64f. {2} Connection with Lith. erškĕtis 'thorn, sloe' is less probable.	Present VI: ny-rṣánti [3pl.act.] (RV 01.052.07) {1}, ud-rṣánt- [ptc.act.] 'skewering onto' (RV 10.155.02), rṣáti [3sg.act.] (AV+) TA-Ptc.: ny-r̥ṣṭa- '(poured) full, stuffed' (RV) {1}			IIAL
*h₂eru-	pray, curse	Grk aráomai 'pray, vow call down a curse' Luv hīrūt- 'curse'	Greek-Luvian			Formal Speech & Song	JPM
*h₂eryo-	free man? noble man? goo	Skt. aryá- 'kind, favorable'					Celt.
*h₂éryos	cavity	Hit hariya- 'valley, dale' Arm ayr 'cave' Lith armuō 'abyss'				Dwelling	JPM
*h₂es-	be/become dry	Lat āreō 'be dry', āridus 'dry' Czech ozditi 'dry malt' Grk ázomai 'become dry' Toch AB ās- 'become dry'				Qualities	JPM
*h₂eu	down		{1} The adjective is based on the adv. *avrā́ > *arvā́ (Hoffmann 1956: 9f. = Hoffmann 1076: 390f.).				IIAL
*h₂eu-	enjoy		{1} Connection with Lat. avēna 'oats', ORuss. ovьsь 'oats' is doubtful.				IIAL

*h₂eu-	see		{1} [AL] The analysis of this form remains very uncertain. An interjection is a serious option.				IIAL
*h₂eu(h□)s-	draw water	Lat haurið 'draw water' ON ausa 'draw water' Pal hussiya- 'pour' grk aúõ 'take fire to'				Food Prep	JPM
*h₂eug-	increase, multiply						Beekes
*h₂eug-	shine, become bright	Alb agon 'dawns' Grk augḗ 'beam of light'	Central (Albanian-Greek)			Light & Dark	JPM
*h₂eug-men-	growth		{1} This proto-form must have given **ogmán-. The -j- is taken from ójas-, ójīyas-, etc-. [AL] These forms may also have influenced the meaning of the Skt. word.				IIAL
*h₂eug-os-	growth, power				'giving the most power': Skt. ojodắtama- [adj] (RV) — YAv. aogaz-dastəma- 'the most powerful power': Skt. ójișțham ójas (RV) — YAv. aojaŋha aojišta 'to slay with power': Skt. ghnantv ójasā (AV) — YAv. niɣne … aojaŋha 'dominion and power': Skt. kṣatrám … ójas (RV) — OAv. aogō … xšaθramcā, cf. also YAv. aogarə … xšaθrəm (Yt 13.12) 'firm power': Skt. ójas … dhruvám (RV) — YAv. druuahe … aojaŋhō 'power of the arm': Skt. bāhv-òjas-[n] 'power of the arm', [adj] 'powerful in the arm, arm-strong' (RV) — YAv. bāzuš.aojah- [adj] 'powerful in the arm'		IIAL
*h₂éuh₂-	grandfather	Lat avunculus 'mother's brother'	North-West			Kinship	JPM
*h₂euh₂ih□-	grandmother	Lat avia Alb joshë Grk aîa	West Central			Kinship	JPM
*h₂euh₂os	grandfather	Lat avus Hit hūhhas ON afi Arm haw Toch B āwe 'uncle'				Kinship	JPM Beekes
*h₂ewer	down						IIAL

*h₂idʰ-mo-	firewood		{1} [AL] Iranian shows a suffix -sma-, which is also conceivable for Skt., although I know of no parallels. Since s disappears between two stops in this language, and m often behaves as a stop (cf. vocalization in initial *mnV-, for instance), we may assume that s also disappears in the cluster Csm. It is remarkable that the Hittite word for 'firewood', (GIS)u̯aršma-, also contains this suffix (or are these words compounds, cf. Hitt. šaminu-zi 'to burn (something)', šamešii̯e/a-zi, šimišii̯e/a-zi '(act.) to burn (something) for fumigation (midd.) to burn for fumigation (intr.)'?).		to carry firewood': Skt. idhmám bhar- (RV), idhmá-bhr̥ti- [adj] 'b		IIAL
*h₂ieus	(allotted) lifetime		{1} Originally, a genitive of sphere from *Hāiu-, see ā́yu-. {2} [AL] Note 5x šáṃ yóḥ + dhā- in the RV. The analysis of OAv. yaoš (Y 46.18) is disputed. Most probably, a form of the root dā- must be supplied there (thus Insler 1975: 87).	only in the formula šáṃ yóḥ (RV+), šáṃ ca yós ca (RV) '+_ happiness and longevit			IIAL
*h₂iu-h₁n-ti-	young woman, youth						IIAL
*h₂iu-h₁on-	young		{1} A derivative with the so-called Hoffmann's suffix from *h₂oiu-, cf. s.v. ā́yu-. [AL] The reconstruction of the PIE paradigm nom.sg. *h₂ieu-Hō(n), obl. *h₂iu-Hn-, advocated by Hoffmann 1955: 40 (= Hoffmann 1976: 382) and Mayrhofer, seems unwarraned to me. Neither the -a- in NP and Armenian, nor the Celtic forms guarantee a full grade of the root.	yúvā [nom.sg.], yúvānam [acc.sg.], yū́ne [dat.sg.], yū́nas [gen.sg.] (RV+)			IIAL
*h₂lei-	set in motion	Hit halā(i)-) Lith lé´ju 'pour' OCS lějǫ 'pour' OHG līth 'fruit wine' OIr lie 'sea' Lat lītus 'beach' Grk áleison 'cup'				Movement	JPM
*h₂mbʰi	around		{1} Maybe, from *h₂nt-bhi, instr. of *h₂ent- 'front'. {2} [AL] On the basis of these compounds, it is often assumed that Ilr. *Habhi partly continues PIE *Hebhi, related to OCS o(b)- (Pok. 287), which is rather doubtful. {3} Cf. the discussion in Narten 1986a: 272.	'as far as we are concerned': Skt. asmád abhí (RV) — OAv. ahmat_ … aibī {3} 'to harness': Skt. abhí-dhā- (RV+), Skt. abhi-dhā́nī- 'halter' (AV+) — YAv. aiβiđāiti- 'bridle', YAv. zaraniiō.aiβiđāna- 'with a golden halter', Sogd. βyđ'n, βđ''nh 'bridle' 'to study': Skt. abhi-as- (Mn.+) — YAv. aiβi-ah- Skt. abhyāsa- 'reading, study' (RPr., Mn+) — YAv. aiβišti- 'study, reading (aloud)'			IIAL
*h₂mbʰi-h₂p-o-	having water on both sides		{1} Formed from *abhīpá- (cf. anūpá-, dvīpá-, pratīpá-) with the ablative suffix -tás.				IIAL
*h₂mbʰi-h₃kʷ-o-	nearness						IIAL

*h₂meh₁-	mow	NE mow Grk amáō Hit hamesha- 'spring, +early summer' < *h₂meh₁-sh₂o- 'mowing [time]'			Agriculture	JPM
*h₂melǵ-	milk, to					Beekes
*h₂merd-	bite, crush		{1} The roots mard(i) and mrad have early become confused in Vedic, cf. Gotō 1987: 250.	Present IX: mr̥dnāti [3sg.act.] (ŚrSū.+) Passive: -mr̥dyéta [3sg.opt.] (MS 2.2.5:19.2), mr̥dyámāna-[ptc.] (ŚB+) Inf: sám-marditoḥ (TS) TA-Ptc.: mr̥ditá- 'smashed, crushed' (AV+) {1}		IIAL
*h₂merg-	gather, harvest	Lat mergae 'reaping boards' Grk amérgō 'gather, harvest'			Agriculture	JPM
*h₂met-	mow	OIr meithel 'reaping party' Lat metō 'mow, harvest' NE meadow	North-West an enlargement of an unattested *h₂em-		Agriculture	JPM

*h₂neḱ-	reach		{1} [LK] With the secondary root variants aś (based on the zero grade of naś) and naṃś (extracted from the perfect stem) see Kümmel 2000: 284ff. {2} With the secondary full grade in the root. {3} [AL] The forms ā́kṣiṣur [3pl.aor.act.] (RV 01.163.10) and ā́kṣat [3sg.aor.subj.] (RV 10.011.07) are likely to be nonce (Narten 1964: 160), cf. the RV conc. s.v. akṣ- [2]. {4} Derived from three stem variants: ānáṃś- (< IE *h₂e-h₂no(n)ḱ-/ānaś-, ānā́ś-/ānáś-, ā́ś- see Kümmel 2000: 284ff. {5} [AL] Unclear is the status of the Vedic root nakṣ- 'to arrive at, reach' (Present I: nákṣati [3sg.act.] (RV+), nákṣate [3sg.med.] (RV+), nákṣamāṇa- [part.med.] (RV+) Perfect: nanakṣúr [3pl.act.] (RV+), nanakṣé [3sg.med.] (RV+)), cf. Narten 1964: 160 for a discussion. Most probably, this root is based on the sigmatic aorist and is not an old present with the suffix *-se/o-. The YAv. forms nāšəmna- [part.pr.med.] and nāšāite [3sg.subj.med.] (Yt 19.12) do not prove an old thematic inflection (cf. also YAv. athematic nāšīma [1pl.aor.opt.act.] Y 70.4). {6} Some forms of the root *h₁neḱ- 'to carry' (	Present V: aśnóti [3sg.act.] (RV+) Present ĀYA: aśāyata [3sg.inj.med.] (RV), -aśāyaḥ [2sg.inj.act.] (RV) naśāyathaḥ {2} [2du.act.] (RV 10.040.06) Aorist R: ā́naṭ (< IE *h₁e-h₂neḱ-t) [3sg.act.] (RV+), naṭ [3sg.inj.act.] (RV 07.104.23), prá ṇak [3sg.inj.act.] (RV), náśat [3sg.subj.act.] (RV), aśyā́m [1sg.opt.act.] (RV+), ā́ṣṭa [3sg.med.] (RV), ā́śata [3pl.med.] (RV), náśate [3sg.subj.med.] (RV), aśīmáhi, naśīmahi [1pl.opt.med.] (RV) Aorist S: ākṣata [3pl.med.] (TB 1.3.10.3), ākṣi [1sg.med.] (TĀ 2.3.1) {3} Perfect {4}:			IIAL
*h₂neptih□o-	belonging to the offspring		{1} Originally, *naptíya-, adapted to náptar-.	only in compounds			IIAL
*h₂nobʰ-	navel nave	NE nave OPrus nabis 'nave, navel' Skt nábhya- 'nave' OE nafo-gar 'auger' < *naba-gaizaz PGmc 'nave-piercer'	With the indefinite article, i.e. *a nauger, this was falsely analysed as *an auger and hence NE auger.			Transport	JPM
*h₂ó/ép(e)n-	goods, wealth	Lat opulentus 'rich, wealthy opulent' Ops 'deity of abundance' Grk áphenos 'wealth' Hit happina(nt)- 'rich' Av afnah-vant- 'wealthy' Skt ápnas- 'wealth'				Exchange & Property	JPM
*h₂oǵ-i-	competition						IIAL
*h₂oǵmo-	driving, path, furrow						IIAL
*h₂oiu-	(allotted) lifetime				life(time) disappears, expires': Skt. kṣitā́yu- (RV) [adj] 'whose life		IIAL

*h₂oḱ-ri-	sharp edge					IIAL
*h₂ol-o-	other, alien					IIAL
*h₂omós	raw, uncooked	OIr om Grk ōmós Arm hum NPers xām Skt āmá-			Food Prep	JPM
*h₂ongo-	member		{1} [AL] It is hardly plausible to dissociate áṅga- from aṅgúri-, aṅguṣṭhá- and from the Germanic forms.			IIAL
*h₂onḱ-o-	part		{1} PIIr. *onćo- (possibly, before the change PIE *o > IIr. *a) is borrowed into Finno-Ugric, cf. Fi. osa 'part, share, luck'. {2} Not necessarily an IE formation. Possibly a derivative of *h₁neḱ- 'to carry' or *h₂neḱ- 'to reach'. The Schwebeablaut would, however. be remarkable.			IIAL
*h₂ónkos	something bent, hook	OIr ēcath 'fishhook' Lat uncus 'hook, barb' OHG ango 'Fishhook' Lith ánka 'knot' OCS ǫkotĭ 'hook' Grk ógkos 'barb [of an arrow]' Av aka- 'hook' Skt anká- 'curve hook'	from *h₂enk- 'bend'		Tools	JPM IIAL
*h₂or-o-	fitting		{1} Used predicatively with as- [1], bhavi-, kar-. Presumably, an old acc.sg. of adj. *ára- 'fitting'. The analysis of evā́re (RV 08.045.38) is unclear.			IIAL
*h₂ósdos	branch	OHG ast 'branch' Grk ózos 'shoot' Arm ost 'branch' Hit hasduēr 'twigs, branches'	*h₂o-sd-os 'what one sits upon', the branch from the bir'ds perspective, so to speak.		Trees	JPM
*h₂óst *h₃esth□-	bone	Lat os Alb asht Grk ostéon Arm oskr Hit hastāi- Av asti- Skt ásthi Toch B āsta [pl.] OIr esna □ asna 'ribs'		nom.acc.sg. ásthi (RV+ later -i- also in nom.acc.pl. ásthīni AV, dat.pl. asthíbhyas AV), elsewhere asthán-/asthn-: instr.pl. asthábhiṣ (RV+), gen.sg. asthnás (AV+), gen.pl. asnā́m < *asthnā́m (MS)	Organs	JPM IIAL
*h₂owikéh□-	ewe	NWels ewig 'hind' OCS ovĭci 'ewe' Skt avikā- 'ewe'			Fauna	JPM

*h₂ówis *h₃eui-	sheep	OIr oī 'sheep' Lat ovis 'sheep' NE ewe Lith avìs 'sheep' OCS ovĭnŭ 'sheep' Grk óis 'sheep' Arm hoviw 'shepherd' Luv hāwa/i- 'sheep' Skt ávi- 'sheep' TochB āu 'ewe'	{1} [AL] See for these forms Schmitt 1997. {2} [AL] Not by haplology from ávyaya- (Schmitt 1997: 285, pace EWAia). {3} [AL] The reconstruction with *h₂ seems necessary in order to account for the Anatolian and Arm. h- and for pervasive o-vocalism, in spite of the Tocharian form, which then remains unexplained. The only alternative would be to reconstruct a static paradigm *h₂oui- / *h₂eui- and assume that the attested forms have the o-vocalism of the former variant, and the h- of the latter, which is hardly credible.	ávyas [gen.sg.]		Fauna	JPM IIAL
*h₂r-tó-	fitted				'residence of Truth': Skt. r̥tásya dhāman- (RV) r̥tá-dhāman- [adj] 'who has Truth as residence' (KS+) Ar-ta-ta-a-ma PN (Mitanni-IA) — OAv. aṣā … dāmąm (Y 48.7) 'reverence - Truth': Skt. r̥tám … námasā (RV) — OAv. nəmaŋhā aṣāi-cā (Y 34.3), aṣa-nəmah- PN 'master (?) of Truth': Skt. vedhā́ r̥tásya (RV 10.086.10) — YAv. aṣauuazdah- PN, Ἀρτάβασϭος PN (Iranian), Arm. Artavazd PN (< Iran.) 'to serve Truth': Skt. r̥tám sapāmi (RV 05.012.02) r̥tasáp- [adj] 'serving Truth' (RV) — OAv. aṣəm … haptī (Y 31.22) 'yoked with Truth': Skt. r̥tá-yukti- [f] 'connection with Truth' (RV 10.061.10) — OAv. aṣā yuxtā (Y 49.9) 'source of Truth': Skt. khā́m r̥tásya (RV 02.028.05) — YAv. aṣahe xā̊		IIAL

*h₂reh₁dʰ	be successful, succeed		{1} [AL] ORuss. raditi [verb] 'to care for', OCS ne-raditi [verb] 'to neglect, to be carefree' are most probably of Iranian origin, based on Slav. *radi [postposition] borrowed from Ir. *rādī.	Present IV: rā́dhyatām [3sg.impv.med.] (AV+) Present V: rādhnóti [3sg.act.] (YV+) Aorist R: rādhat(i) [3sg.subj.act.] (RV) Aorist S: arātsīs [2sg.act.] (AV+) Aorist IS: rādhiṣi [1sg.inj.med.] (AV+), rādhiṣīya [1sg.opt.med.] (AVP) Perfect: rarā́dha [3sg.act.] (RV 10.107.06 +) Fut: rātsy° (AV+) Caus: rādhay° 'to make succeed' (AV+) TA-Ptc.: rāddhá- 'brought about, accomplished' (AV, Br.+)			IIAL
*h₂res-	be unfaithful, decline						IIAL
*h₂reu-i-	sun						IIAL
*h₂r̥ǵ-i-ḱuon-	with fast dogs						IIAL
*h₂r̥ǵ-i-pt-ió-	eagle						IIAL
*h₂r̥ǵ-ró-	shining (white), quick				(with) fast horses': Skt. r̥jrá- áśva-, r̥jrā́śva- [m] PN (RV) — YAv.		IIAL
*h₂r̥ǵ(u)	white	Hit harkis 'white' Grk árguros 'silver' Skt árjuna- 'light, white' Toch B ārkwi 'white' *h₂r̥ǵ-es- Grk argḗs 'white'				Color	JPM Beekes
*h₂rh₃-wer-	arable land		{1} [AL] For the reflexes of this sequence in Indo-Iranian see Lubotsky 1997b.		'waters and arable lands/plants': Skt. apás … urvárās (AV 10.10.8a) — OAv. apō uruuarā̊scā (Y 44.4) YAv. apascā uruuarā̊scā (Y 51.7)		IIAL
*h₂rhₓ-mo-	shoulder, arm						IIAL

*h₂ŕ̥tḱos	bear	OIr art Lat ursus Alb ari Grk árktos Arm ar Av arəša- Skt ŕ̥kṣa- Hit hart(ag)ga- 'a cultic official, bear-man'	Explained as a nominalized 'destroyer'			Fauna	JPM IIAL
*h₂stḗr	star	MIr ser 'star' Lat stēlla 'star' NE star Grk astḗr 'star' Arm astł 'star' Hit hasterza 'star' Skt tāras 'stars'	possibly from *h₂ehx-s- 'burn' (i.e. PIE *h₂(h□)-s-tér- 'ember') {1} = *h₂s-tér- 'glower, shiner'	tā́raḥ [nom.pl.], str̥̄	to adorn with stars': Skt. str̥bhiḥ … p	Air	JPM IIAL
*h₂sus	be dry		{1} Assimilation from *soṣ. {2} [AL] For the reconstruction see Lubotsky 1985.	Present IV: śúṣyati [3sg.act.] (AV+) Caus: śoṣáya° (AV+)			IIAL
*h₂teug-	terrify		{1} [LK] See Kümmel 2000: 221f. {2} [LK] See Kulikov 2001: 81f. Here may also belong tujete [3du.pres.med.] (RV 01.061.14), if from *tujyete. {3} [AL] The connection with MP han-dōxtan [verb] 'to heap on, obtain' han-dōztan [verb] 'id.', NP andōxtan [verb] 'to gather, obtain' seems doubtful because of deviant semantics (see Cheung 2007). {4} [AL] The IIr. root is often connected to Germ. forms with s-mobile (MLG, MDu. stoken [verb] 'to poke, stoke', MoHG stochen [verb] 'id.' < PGm. *stukōjan-, Nw. stauke [verb] 'to mash' < PGm. *staukōjan-?), assuming an original meaning 'to thrust' vel sim., but this seems less attractive. In Skt., the meaning developed from 'frighten' to 'drive away' > 'push forward, set in motion' (cf. the pass. tujyáte 'be put to panic').	Present VII>VI: tuñjánti [3pl.act.] (RV) Present VI: tujánt- [ptc.act.] (RV) Perfect: tutujyā́t [3sg.opt.act.] 'to stimulate' (RV 01.143.06) tū́tujāna-, tūtujāná- [ptc.med.] 'hurried, eager' (RV) {1} Passive: tujyáte [3sg.] 'to be put to panic (flight)' (RV) {2} Present AYA: tujáyant- [ptc.act.] 'to press forward' (RV 07.104.07) Inf: tujáse (RV)			IIAL
*h₂ug-ro-	mighty			ójīyas- [comp] 'stronger' (RV+) ójiṣṭha- [sup] 'strongest' (RV+)	'the mightiest of the mighty ones': Skt. ugrā́ṇām … ójiṣṭha- (RV) — YAv. uᵛranąm aojišta- 'with mighty arms': Skt. ugrá-bāhu- [adj] (RV, AV) — YAv. uᵛra.bāzu- [adj], Scyth. Ουγρ-βαζος [m] PN		IIAL

*h₂uh₁-dʰr-	cold		{1} omán-, óman- [n] 'cold' (RV) is very uncertain, see s.v. omán-.	ū́dhani [loc.sg.] (RV 05.034.03), possibly also ū́dhar [loc.sg.] (RV 08.002.12, 10.0			IIAL
*h₂uh₁-el-	wind, breeze	Gr. áella 'stormwind'					Celt.
*h₂we-h₂ur-i-	covering		{1} [AL] The loss of the internal laryngeal is regular in this position in Indo-Iranian, cf. Lubotsky 1995. {2} [AL] The meaning 'lurking place', given by Mayrhofer (after the earlier dictionaries), is dispensable, see Geldner's translations. {3} [AL] It is unclear whether vavrá- [m] 'hole, pit' (RV) or the hapax of uncertain meaning vavráyāmahe (RV 08.040.02) belong here. Cf. also ūrvá- [m] 'container, prison' bíla- [n] 'hole, pit bowl' (RV+) of similar semantics.				IIAL
*h₂wed(h₂)-	lead in marriage, marry	NE wed Skt vadhū́- NWels dyweddïo 'marry' NE wed OPrus weddē 'marry' Lith vedù 'lead, marry [of a man]' Av vaū- 'bride' Skt vadhū́ 'bride'	It is a special use of the verb 'lead', indicating that the male led away the woman in the early Indo-European system of marriage, a system whose vocabulary might be later recreated, e.g. Lat uxōrem dūcere 'to lead away a wife', i.e. 'marry'			Marriage	JPM
*h₂wedʰ	talk, speak		{1} [AL] The connection of the Hittite words is uncertain.	Present I: vádati [3sg.act.] (RV+), vade [1sg.med.] (RV+) Aorist S: avādiṣur [3pl.act.] (RV+) Perfect: ūdima [1pl.act.] (RV 01.161.01), ūde [1sg.med.] (Br.+) Passive: udyáte [3sg.] (RV 05055.08+), vādyáte (to the caus. stem) (KS, ŚB+) Fut: vadiṣyá° (AV+) Caus: vāday° (Br.+) Intensive: vāvadīti [3sg.act.] (RV+) TA-Ptc.: uditá- 'spoken', [n] 'speech' (RV+)			IIAL

*h₂wedʰh₁-	strike, push		{1} With secondary thematic optative forms since the AV (AVŚ 10.5.15-20 vadheyam, AVP 2.70.1 vadhet, 10.4.2 vadheyuḥ). {2} [AL] This root forms one suppletive paradigm with han. {3} [AL] For the etymology see Kloekhorst 2008: 349f. An additional argument for the initial laryngeal is the long scansion of the augment of ávadhīḥ in RV 1.80.11d vṛtrám marútvāṁ́ ávadhīr and 8.12.26b śávasā vajrinn ávadhīḥ.	Aorist R (>IS): ávadhīt [3sg.act.] (RV+), vadhyāt [3sg.opt.act.] (TS+) {1}, vadhiṣṭhās [2sg.inj.med.] (RV-Kh) {2}			IIAL
*h₂weh₁-	blow	OE wāwan blow' OCS věžjati 'blow' Grk áēsi 'blows' Av vāiti 'blows' Skt vā́ti 'blows' *h₂weh₁-ntos 'wind' NWels gwynt Lat ventus NE wind Hit huwant- Skt vā́ta- Toch B yente	{1} [AL] In late Vedic (Br.+), we find vāyati 'blows, smells'. probably due to contamination with vā [2] (Kulikov 2001: 459f.).	Present II: vā́ti [3sg.act.] (RV+) {1} Aorist S: avāsīt [3sg.act.] (Br.) Perfect: vavau [3sg.act.] (Br.+) TA-Ptc.: vāta- (Sū.), úpa-vāta- (Br.)		Blow Up	JPM IIAL
*h₂weh₁-iu-	wind, air, god of wind		{1} [AL] With Iranian shortening from *u̯ai̯u-.				IIAL
*h₂weh₁-nt(-o-)	wind	NWels gwynt Lat ventus NE wind Av vā́ta- Skt vāta- Toch B yente Hit huwant-	from the verb 'to blow'.	Several times trisyllabic /vaʔata-/ in the RV		Air	JPM IIAL
*h₂weh₁-yús	wind	Lith véjas 'wind' Skt vāyú- wind'				Air	JPM
*h₂wenisth□u-	stomach of a ruminant (?)		{1} [AL] The discrepancy in the vocalism can be resolved if we assume *h₂uen- > Gr. *αϝεν- > *āν- > ἤν-. The second part of the Greek word may be influenced by ὑστέρα, Ion. -ρη [f.] 'womb'.	vaniṣṭu-			IIAL

| *h₂wep(h₁)- | scatter
become scattered | | {1} Most probably, the two roots vap- are etymologically identical.
{2} [AL] Less certain is the appurtenance of Ved. vapā́- [f] 'omentum' (RV-Kh+ already in the RV vapā́vant- 'containing vapā́-' and vapódara-, an epithet of Indra) vaprā- [f] 'fireplace' (Sū.), vapra- [m] 'rampart' (Ep.) and the Iranian words for 'snow': YAv. vafra- [m], Khot. borā-, MP wafr, NP barf . | Present I: vápati [3sg.act.] (RV+), vapate [3sg.med.] (RV+)
Aorist S: vāpsur [3pl.inj.act.] (ĀpDhS)
Aorist SIS: avāpsīt [3sg.act.] (Br.)
Aorist mediopass: vāpi [3sg.inj.] (Br.)
Perfect: ūpáthuḥ [2du.act.] (RV+) ūpe [3sg.med.] (RV)
Passive: upyáte (RV+) [3sg.]
Caus: vāpayati [3sg.act.] (YVp)
Fut: vapsy° (Br.+)
TA-Ptc.: uptá- 'strewn out, thrown' (RV ny-ùpta- +)
Abs: abhy-úpyā (RV 02.015.09) | | | IIAL |

| *h₂wer | cover | | | {1} [AL] For the initial laryngeal, the distribution of the present forms and the etymology of the root see Lubotsky 2000.
{2} [AL] For forms with the stem varū- see s.v. varūtár-.
{3} [AL] It seems very improbable to me that the family of varatrā́- [f] '(yoke-)strap' (RV), vārdhrī́- [f] 'leather band' (Br.+), várdhra- [m] 'belt, girdle, leather band' (AV+) belongs to this root.
{4} [AL] Unfortunately, the meaning and interpretation of the OAv. forms vāurāite [3sg.subj.med.] (Y 47.6), vāuraiiā [1sg.opt.med.] (Y 31.3), vāurōimaidī [1pl.opt.med.] (Y 28.5) are uncertain (cf. for a discussion Kellens 1984: 195f.), but their long reduplication seems to point to an initial laryngeal in the root. | Present V: vṛṇóti [3sg.act.] (RV), vṛṇvé [1sg.med.] (RV)
ūrṇuté [3sg.med.] (RV+) {1}
Aorist R: ā́var [2,3sg.act.] with long augment (RV+)
varat [3sg.subj.act.] (RV)
avṛta [3sg.med] (RV)
Aorist S: varṣathaḥ [2du.subj.act.] (RV nonce)
Aorist IS: avārīt [3sg.act.] (Br.)
Aorist mediopass: ávāri [3sg.] (RV)
Perfect: vavāra [3sg.act.] (RV+), vavre [3sg.med.] (RV+), ávāvarīt [3sg.ppf.act.] (RV)
Caus: vāráyante [3pl.med.] (RV+)
Abs: vṛtvā́, vṛtvī́ (RV)
TA-Ptc.: vṛtá- (RV+, also ápā°, ápī°, abhí°, párī°, prā́°, etc.) | | | IIAL |
| *h₂wer-tro- | stopper | | | | | | | IIAL |

*h₂werg	turn			Present VII: vṛṇákti [3sg.act.] (RV+), ávṛṇak [2,3sg.impf.act.] with long augment (RV), vṛñjé [1sg.med.] (RV+)			IIAL
				Present I<VII: vṛñj-a- (Br.)			
				Aorist R: avrjan [3pl.act.] (RV), várk [2,3sg.inj.act.] (RV), ávṛkta [3sg.med.] (RV)			
				Aorist S: vŕkṣi [1sg.inj.med.] (RV)			
				Perfect: vavṛjuḥ [3pl.act.] (RV) vāvṛje [3sg.med.] (RV)			
				Passive: vṛjyáte [3sg.] (RV+)			
				Intensive: várīvrjat < *Huar-Hurj- [ptc.act.] (RV)			
				Desid: saṃvívṛkṣeta [3sg.opt.med.] (ŚB)			
				Caus: pári varjay° (AV+)			
				Abs.: vṛktvī́ (RV+)			
				Inf: pra-vṛ́je (RV), vṛñjáse (RV), vrjádhyai (RV)			

*h₂wes	live, stay, spend the night		{1} [AL] This form is erroneously listed under vas- 'to shine' in Lubotsky 1997a.	Present I: vásati [3sg.act.] (RV+) Aorist S: avātsīḥ [2sg.act.] (AV+) Perfect: uvasa [1sg.act.] (KSp) ūṣatuḥ [3du.act.] (RV+) {1} áproṣivaṃs- [ptc.act.] (RV 08.060.19) Passive: (to the caus. stem) udvāsyámāna- [ptc.] 'being taken off the fire' (MSp+) Fut: vatsyá° (KS+) Caus: vāsay° (RV+) 'to make dwell, to let wait' TA-Ptc.: uṣita- 'having dwelt' (Br.+) Abs: uṣitvā́ (TS+)			IIAL
*h₂wes-	dwell, pass the night, stay	OIr foaid 'pass the night live, dwell' Grk (núkta) á(w)esa "pass the night live, dwell' Arm goy "pass the night' Skt vásati "pass the night' Goth wisan 'live, dwell' Hit hues- 'live, dwell' Av vaŋhaiti 'live, dwell' Toch B wäs- 'live, dwell'	The word probably meant originally 'to spend time' (a Hittite derivative huski means 'wait for, linger') and subsequently developed into meaning 'dwell'.			Dwelling	JPM

*h₂wes-	light up		{1} [AL] avasran [3pl.med.] (RV 04.002.19) seems rather to belong to vas [1] 'to clothe', since vas- 'to shine' is never middle and never transitive (cf. Kümmel 1996: 97-99).	Present SK: uchási [2sg.act.] (RV+) Aorist R: ávas [3sg.act.] (RV secondary forms are 3sg.act. avāt (AV) and avāt (MS)), ví vasas [2sg.subj.act.] (RV .008.03) {1} Perfect: uvāsa [3sg.act.], ūṣá [2pl.act.], ūṣúr [3pl.act.] (RV+) Fut: vatsya° (MS, Br.) Caus: vāsáy° 'to let dawn' (RV+) Inf: vástave (RV) TA-Ptc.: uṣṭá- 'brightened, lit up' (RV+)	the lighting dawn': Skt. (vy)uchántīm uṣásam (RV) — YAv. usa	IIAL
*h₂wóstu	dwelling dwelling place	Grk ástu 'city' Skt vā́stu 'place, seat' NWels gwas 'abode' Toch B ost 'house'			Dwelling	JPM Celt.
*h₃(e)ngʷʰ-	nail		{1} Loss of voice in the Ilr. word is possibly due to the influence of other body parts with voiceless aspirates, like aṅguṣṭhá-, kulphá-.			Beekes IIAL
*h₃ebʰi	towards					Beekes
*h₃ed-	give off a smell	Lat oleō 'smell, stink' Lith úodžiu 'smell' OCzech jadati 'sniff out, investigate' Grk ózō 'smell' Arm hotim 'smell'	West Central		Sensation	JPM
*h₃ed-	hate	Lat ōdī 'hate' [verb], odium 'hate' [noun] OE atol 'atrocious' Grk odúsasthai 'be angry at, hate' Arm ateam 'hate' Hit hatukzi 'is terrible' underlies the name of the Greek hero Odysseus			Love & Hate	JPM

*h₃eh□ḱu- *h₁ōḱu-	quick	Gr. ōkýs Lat. ōcior 'swifter'	{1} [AL] The interpretation of Lat. acu-pedius [adj] 'with fast feet' Lat. accipiter [m] 'hawk, falcon' (< *acu-) is troublesome.	ā́śīyas- [comp] 'quicker' (Br.) ā́śiṣṭha- [sup] 'quickest, very quick' (RV+)	'quick horse': Skt. āśúm áśvam (RV) — YAv. āsušca aspō — Gr. ὠκέες ἵπποι 'having quick horses': Skt. āśvàśva- [adj] (RV) — YAv. āsu.aspa- [adj] 'possession of quick horses': Skt. āśvàśvya- [n] (RV) — YAv. āsu.aspiia- [n] 'to harness the quick ones': Skt. yunajmi … āśū́ (RV) — OAv. yaogət_ āsū (Y 44.4), asištā yaojaṇtē (Y 30.10) 'quick sun': Skt. āśúm … sū́ryam (AV) — Gr. ὠκέος 'Ηελίοιο 'having a fast chariot': Skt. āśú-ratha- [adj] (VS RV already āśú- rátha-) — Med. *āsu-raθa- [m] PN		IIAL Celtic Lex
*h₃eḱth₃-ti-	80 eighty		{1} Precise development in Indo-Aryan is unclear.				IIAL
*h₃ekʷ-	eye	Grk ópōpa 'have seen', opīpeúō 'stare at' Skt ī́kṣate 'sees'	West Central {1} [AL] According to Kortlandt 1991: 5, -i is the original dual neuter ending. {2} Instead of *axši, analogical to uši 'ears'.	gen.sg. akṣṇás (RV) nom.acc.du. akṣ-í̄ (RV+) {1}		Sight	JPM Beekes IIAL
*h₃elek-	elbow, forearm	Lith úolektis 'ell', alkū́ne 'elbow' Rus lokótĭ 'elbow, ell' dialectal Grk álaks 'forearm' Arm olok' 'shin, leg'	a regional variant of the more widespread *h₃elVn-			Body (Upper)	JPM
*h₃elh₁-	destroy	Lat ab-oleō 'destroys' Grk óllūmi 'destroy' Hit hullā(i)- 'combat, fight'				Conflict	JPM
*h₃elVn-	elbow, forearm	OIr uilen 'corner' Lat ulna 'forearm, ell' NE ell, elbow Grk ōlénē 'forearm' dialectal Grk ō llón 'elbow' Arm oɫn 'spine' Toch B aliye 'palm'	Note that in both Latin and Germanic it also indicates the 'ell', a unit of measurement			Body (Upper)	JPM

*h₃emh₃-	grab, take swear		{1} [AL] It seems unwarranted to reconstruct PIE *h₂emh₃– only on the basis of Hes. ἅμοιος . κακός. Σικελοί, next to ὁμοΐϊος (Hom.) 'κακός (?)'.	Present II: abhí amīṣi [2sg.act.] (RV), abhí amánti [3pl.act.] (RV), abhí amīti [3sg.act.] (VS), amīṣva [2sg.impv.med.] (TS) 'to swear', sám amāte [3du.med.] 'to make a treaty' (TS), āmīt [3sg.impf.act.] 'to swear' (TS) Perfect: nir-emiṣe [2sg.pf.med.] 'to acquire by perjury' (AVP 5.36.7, 9.23.4 a secondary formation) Caus: āmay˚ (RV+) 'to hurt, ache' Aorist RED: amamat (Pp. āmamat) (RV) 'to hurt, ache'			IIAL
*h₃engʷ-	anoint (with salve), (be)sme	Lat ung(u)ō '(be)smear, anoint' Arm awcanem 'anoint' Skt anákti 'anoints' OIr imb 'butter' OHG ancho 'butter' OPrus anctan 'butter' Skt áñjas- 'salve'				Binding	JPM
*h₃engʷʰ-l-	foot		{1} "Vṛddhi"-formation to PIE *h₃ngwh-l- ?				IIAL
*h₃éngwṇ	butter	OIr imb 'butter' Lat unguen 'fat, grease' OHG ancho 'butter' OPrus anctan 'butter'	from *h₃engʷ- 'anoint'			Meals	JPM Beekes
*h₃enh₂-	contend, quarrel	Hit hann(a)- 'contend against, contest, take legal action [against], sue' Grk ónomai 'impugn, quarrel with' OIr on 'shame, disgrace, dishonour'				Conflict	JPM

*h₃enos-	(cart-)load		{1} ánar° is an analogical locative form. {2} [AL] For the explanation of the forms see Lubotsky 2007. {3} The connection is uncertain. If the Hittite verb does belong here, then reconstruct rather *hₗenH-, cf. Melchert 1994: 85.				IIAL
*h₃énr̥	dream	Alb ëndërr Grk ónar Arm anur	Albanian-Greek-Armenian isogloss			Knowledge & Thought	JPM
*h₃ens-	be gracious to, show favour	OHG anst 'favour' Grk prose ⁻nḗs 'gentle, kind, soft' Hit ass-☐assiya- 'be favoured, be dear, be good'		?		Values	JPM
*h₃ep-nos-	property		{1} [AL] The compound apna-rā́j- is presumably based on the wrong interpretation of apna-sthá-. {2} The analysis is uncertain. Pok. combines Skt. ápnas- with ápas-, which would mean that ápnas- continues *h₃ep-nos- and is then 'property acquired through work'. Gr. ἄφενος [n] 'wealth, fortune' is then unrelated.				IIAL
*h₃ep-os-	work		{1} [AL] For ápas- (RV 01.178.01 = 04.038.04) and the reconstruction of the Ilr. form see Lubotsky 1990: 131ff. {2} Possibly, derived from apnú- to ápas- (i.e. 'working', like tapnú- 'glowing' to tápas- 'glow'), which may be present in an Elam.-Iran. name (from Plr. *afnu-?). {3} [AL] Also YAv. huuapah-. For the distribution see Lubotsky 1990: 131				IIAL

*h₃er-	rise		{1} [AL] For the relationship between the two roots ar see Kümmel 2000a. {2} [AL] As argued by Kümmel 2000a: 254, r̥nóti in compounds with preverbs may belong to ar [2]. {3} [AL] Formed to the quasi-root īr the root ar [1] disappears during the mantra period. {4} [AL] See Gotō 1987: 263 for the analysis of this form which is read by the Padapāṭha as ranta. In Lubotsky 1997a, the form is given under the root rā- [3] 'to rest'.	Present III: íyarti [3sg.act.] (RV+), ī́rte [3sg.med.] (< PIIr. *Hi-Har-, *Hi-Hr-) (RV+) Present V: r̥nóti [3sg.act.] {2} (RV+) r̥nváti [3sg.act. (them.)] (RV+) Aorist R: (úd) ā́rta [3sg.med.] (RV+), (sám) ā́rata [3pl.med.] (RV), aranta [3pl.inj.med.] (RV) Perfect: (vy) ā́ra [3sg.act.] (RV 03.030.10), (ud) ā́ritha [2sg.act.] (RV 02.009.03), ārúḥ [3pl.act.] (RV+) Intensive: álarti [3sg.act.] (RV) Fut: ariṣy° (Br.+) Caus: īray° (RV+) (to the medial stem īr-) na-ptc.: īrṇá- (TS) {3}			IIAL
*h₃er-	set in motion (vertically)	Lat orior 'rise' a *neu-present form: Skt r̥nóti 'sets in motion' Av ərənaoiti 'sets in motion' Grk ornūmi 'stir up' Arm y-arnem 'stand up'				Movement	JPM
*h₃er-wen(t)-	racing			árvā [nom.sg.] (RV	'mighty race-horse': Skt. ugráḥ … árvā (RV) — OAv. auruuatō … ugrā̊ṇg 'coursing horse': Skt. áśvānām árvatām (AVŚ 4.9.2c) — YAv. auruuat_.aspa- '(riding on a) coursing horse'		IIAL
*h₃érbʰis	circle, orb	Lat orbis 'ring, circle, cycle disc, world, orb' Toch B yerpe 'disc, orb'				Shape	JPM
*h₃erno-	rising (wave)						IIAL

*h₃es(k)-	ash	OIr uinnis 'ash' Lat ornus 'mountain ash' (Sorbus aucuparia) NE ash Lith úosis 'ash' Rus jáseni 'ash' Alb ah 'beech' Grk oksúē 'beech spearshaft' Hit hassikk- 'some form of tree with edible fruit' ??	Validity dependant on Hittite {1} [AL] The connection of Khot. astaucă 'dry land', Armenian astouč, aštouč 'dry' (LW from Iranian) seems doubtful to me, because its fomration is unclear. {2} [AL] Hitt. a-aš-zi [3sg.pres.act.] 'to be left over' can hardly be related, but if Hitt. hāss- 'ashes soap dust' is connected, which seems quite probable, then the reconstruction must be adiusted to *h.eh.s-o-			Trees	JPM
*h₃est-(s)kih□u-	bone ± shin		{1} [AL] For the etymology of this IIr. word see Lubotsky 2002a. ˚aṣṭhīlā- [f] 'honey-comb (of wild bees)' (ŚB 10.3.4.3,5 arkāṣṭhīlā́-, KS 37.14:94.6, JB 3.260 madhvaṣṭhīlā-) is probably a non-IE word and has nothing to do with our word.				IIAL
*h₃eu-	perceive	Hit ūhhi 'see' Skt uvé'I see				Sight	JPM
*h₃eu-tlo-	adorn > put on		{1} [AL] The derivation is uncertain. The root, which means 'to adorn' in Anatolian and 'to put on' elsewhere, is unattested in Indo-Iranian. The meaning development 'to put on -> to put on shoes' is only documented in Balto-Slavic. It is therefore conceivable that the Iranian word is derived from the root *Hau- 'to weave, bind' or even from *HauH- 'to help, protect' (cf. Rastorgueva - Èdel'man: 1.255).				IIAL
*h₃eug-	cold	OIr ūacht 'cold' Lith áušti 'become cold' Arm oyc 'cold'	West Central			Qualities	JPM
*h₃eust(y)o-	estuary, river mouth	Lat ōstium Lith úostas 'river mouth, harbour' Rus ustĭje 'river mouth'	North-Western			Water	JPM
*h₃ewi-keh₂	little sheep	Skt. avikā́-		with diminutive -heh₂			Celt.
*h₃ēwis-	hear	Lat audiō 'hear' Grk aisthánomai 'perceive' OCS aviti 'reveal' *h₃ēwis gives us a Slavic-Iranian isogloss OCS (j)avě Av āviš				Sight	JPM

*h₃iebʰ	copulate		{1} [LK] In the mss. yábhyamāna- see Kulikov 2001: 366ff. {2} [LK] See Kulikov 2001: 368f.	Present I: yábhati [3sg.act.] (RV-Kh., AV+) Fut: yapsyánt- [ptc.act.] (TB+) Passive (?): +yabhyámāna- {1} [ptc.] (RV-Kh. 5.22.3) Des.passive: yīyipsyate [3sg.] '(the wife) is sought for copulation' (ŚrSū.)			IIAL
*h₃lem-	break	OIr ro-laimethar 'dares, ventures' NE lame [<*'broken'] Latv lemesis 'ploughshare' OCS lomljǫ 'break' Alb lemë 'threshing floor' Grk nōlemés 'without a break, unceasingly'	West Central			Reductive Activities	JPM
*h₃ligos	ill	Lith ligà 'illness' Alb lig 'bad' Grk olígos 'few' Toch B lykaśke 'small, fine' Grk loigós 'ruin, harm'				Health&Sickness	JPM
*h₃meigʰ-	drizzle, mist	NE mist Lith miglà 'mist' Rus mgla 'mist, darkness' Grk omíkhlē 'cloud' Skt meghá- 'cloud				Air	JPM
*h₃méiǵʰ-e/o-	urinate	Lat meiō □ mingō OE mīgan Lith minžù Serbo-Croatian mìžati Grk omeíkhō Arm mizem Av maēzaiti Skt méhati		Present I: áva mehanti [3pl.act.] (RV) Aorist R: amiham [1sg.act.] (Br.) Aorist SA: amikṣat [3sg.act.] (Br.) Fut: mekṣyā́mi [1sg.act.] (AV+) Caus: mehay°'to make urinate' (RV) TA-Ptc.: pari-mīḍha- (Sū.) Inf: mihé (RV)		Vital Functions	JPM IIAL
*h₃merǵ-	wipe off	Grk omórgnūmai 'wipe off' Av marəzaiti 'strokes' Skt mrṇákti 'wipes off'	Greek-Indo-Iranian isogloss			Reductive Activities	JPM

*h₃moigʰ-o-	cloud						IIAL
*h₃n(e)id-	taunt (to)						Beekes
*h₃neid-	abuse, curse		{1} With the secondary root variant nind- extracted from the thematic nasal present. {2} Derived from the secondary root variant nind-. {3} [AL] Probably reflecting an old athematic root-present, cf. also Tremblay 1999. The lengthened grade and -s- of nā́ismi come from the monosyllabic 3sg. nā́ist. {4} [LK] See also Fenart & Manessy-Guitton 1974.	Present I<VII: níndati [3sg.act.] (RV+) Aorist IS: ánindiṣur [3pl.act.] (RV 01.161.05, ŚrSū.) {2} Aorist R: nidāná- [ptc.med.] 'blamed' (RV 04.005.12) Perfect: ninidúr [3pl.act.] (RV 10.027.06), nindima [1pl.act.] (RV 01.161.01) Passive: nidyámāna- [ptc.] (RV 06.052.03) nindyate [3sg.] (DhSū.+) {2} Desid: nínitsāt [3sg.subj.act.] (RV+) TA-Ptc.: ninditá- {2} 'mocked, defective' (RV+)			IIAL
*h₃nobʰ-	navel, nave	OE nafu 'nave' OE nafela 'navel' OIr imbliu 'navel' Lat umbilīcus 'navel', umbō 'boss on a shield' OPrus nabis 'nave, navel' Grk omphalós 'navel' Skt nā́bhi- 'navel', nábhya- 'nave'	{1} The Iranian -f- is not well-explained.		next-of-kin': nā́bhā-nédiṣṭha- [m] PN	Body (Upper)	JPM IIAL
*h₃nogʰ(w)-	(finger- or toe-)nail	OIr ingen Lat unguis NE nail Lith nãgas OCS nogŭtĭ Grk ónuks Skt nakhá-, Toch B mekwa [pl.] Lith nagà 'hoof' Rus nogá 'foot, leg' Skt ánghri- 'foot'				Body (Upper)	JPM

*h₃okʷ	eye	OIr enech 'face' Lat oculus NE eye Lith akìs OCS oko Grk ómma Arm akn Av aši-(dual) 'eyes' Skt ákṣi- Toch B ek			Head	JPM
*h₃or-	eagle	OIr irar NE erne Lith erĕlis Rus orĕl Hitt hāras Grk órnis 'bird' Arm urur 'kite', oror 'gull', and ori 'raven'			Bird	JPM
*h₃rdʰuo-	high, upright		{1} [AL] The anlaut development in Sanskrit is unclear, but the reconstruction can hardly be doubted. Connection with vardh seems improbable to me (NB: there is no evidence for the initial digamma in the Greek word).	to stand erect': Skt. ūrdhvá- sthā- (RV+) — YAv. ərəðβā̊ hištəṇ		IIAL
*h₃reǵ-	extend, stretch	OIr rigid 'stretches' OE reccan 'stretch out be concerned about' [> NE reck] Lith réˌžti 'stretch' Grk orégō 'stretch' Skt r̥ñjáti 'stretches' Lat regō 'direct in a straight line' Av rāzayeiti 'adjusts, arranges'	{1} < r̥ji-yant- 'geradeaus gehend' ? (K. Hoffmann apud Joachim 1978: 61f.).	Present VII, VII>VI: r̥ñjánti [3pl.act.] (RV 03.043.06), r̥ñjate [3pl.med.] (RV), r̥ñjate [3sg.med.] (RV), r̥ñjáta [3pl.inj.med.]/[2pl.impv.act.] (RV 05.087.05) Present IV: -rjyate [3sg.med.] (RV 01.140.02), r̥jiyant- [ptc.act.] (RV 06.037.02, 06.037.03) {1} Present YÁ: irajyá- 'to direct, to direct straightforwardly, to lead' (RV) Present VII+AS: r̥ñjase [1sg.med.] (RV), r̥ñjasāná- [ptc.med.] (RV)	Extend	JPM IIAL

*h₃rēǵ-	stretch			Present II: rā́ṣṭi [3sg.act.] (RV 01.104.04), rāṭ [3sg.inj.act.] (RV 06.012.05), Present I: rā́jati [3sg.act.] (RV+), vi-rā́jāni [1sg.subj.act.] (RV) Aorist S: arājiṣuḥ [3pl.act.] (RV) Intensive: rā́rajat [ptc.act.n.] (RV) Inf: rājáse (RV)			IIAL
*h₃reǵ-es-	space, region				at the far (end) of the space': Skt. dūré pāré rájasaḥ (RV 10.04		IIAL
*h₃rēǵ-n-ih₂-	queen						IIAL
*h₃rēǵ-tr-	sovereign ?						IIAL
*h₃rḗǵs	ruler, king	OIr rí 'king' Lat rēx 'king' Av bərəzi-rāz- 'ruling in the heights' Skt rāj- 'king'	It appears not to have been exclusively political in its meaning but rather to have referred to a person who also had religious functions. Indeed in those situations where the monarchy itself disappeared, as in Rome or Athens, the title of 'king' remained in its priestly function (e.g. the Roman rēx sacrõrum). This word too has beside it a widespread feminine derivative (e.g. OIr rígain, Lat rēgīna, Khot rrīṇa, Skt rā́jñī-, all 'queen'), though the details of the formation diVer a bit in the various branches. The deeper etymology of this word has been frequently discussed it is usually explained as an agent noun of *h₃reǵ- 'stretch out the arm, direct' with some arguing that the word derives from the concept of a king who stretches out his arms in rituals, especially those laying out a precinct, or perhaps a more direct semantic development from 'direct' to 'rule'.	rā́ṭ [nom.sg.]		Social Organization	JPM Beekes IIAL
*h₃reǵtos	right	OIr recht 'law, authority' Lat rēctus 'right' NE right Grk orektós 'stretched out' Av rašta- 'right, straight'	from *h₃reǵ- 'stretch out'			Direction	JPM

*h₃rei(h□)	flow		{1} [LK] For the meaning, see now Praust 2001?. XXX {2} Perhaps an enlargement of the root *h₂er 'move'.	Present IV: rī́yate [3sg.med.] (intr.) (RV, YVm) Present IX: riṇā́ti [3sg.act.] (trans.) (RV+) Present V: ariṇvan [3pl.impf.act.] (MS) Intensive: lelā́ya [3sg.pf.] (KS, MS), alelet [3sg.ppf.] (KS), alelīyata [3sg.ppf.med.] (KS), -> pres. lelāyá- (TS, ŚB+ here also ŚB lelayā́ [adv] 'in a tremble') (cf. Praust 1999: 51ff.)			IIAL
*h₃reu(h□)	roar			Present VI: ruváti [3sg.act.] (RV) Present II: rauti [3sg.act.] (ŚrSū.+), ruyā́t [3sg.opt.act.] (ŚB) Present I: áravanta [3pl.impf.med.] (MS+ secondary after návate) Aorist IS: árāvīt [3sg.act.] (RV) árāviṣuḥ [3pl.act.] (RV) Caus: rāvay° (Sū.+) Intensive: róravīti [3sg.act.] (RV+)			IIAL
*h₃reuk-	dig up	Latv rūkīt 'dig' Grk orússō 'dig' OIr rucht 'pig' [i.e. *'one who digs up']) Lat runcō means 'weeds' (<'*pluck') Skt lúñcati 'tears, plucks'.				Reductive Activities	JPM

*h₃r ǵ -u-	straight			ŕjīyaṃs- [comp] (RV+) rájiṣṭha- [sup] (RV+)	straight path': Skt. rjúnā pathā́ (RV 01.041.05) — OAv. ərəzūš	IIAL
*h₃sleidʰ	slip			Present I: sredhati [3sg.act.] (RV) Aorist A: sridhat [3sg.inj.act.] (RV), á-sridhāna- [ptc.med.]		IIAL
*h₃weig-	startle, start back			Present VI: avije [1sg.impf.med.] (RV), vijánte [3pl.med.] (AV+) Aorist R: vikta [3sg.inj.med.] (RV) vikthās [2sg.inj.med.] (AVP+) Perfect: vivijre [3pl.med.] (RV) Intensive: vévijāna- [ptc.med.] (RV) vevijyáte [3sg.med.] (RV) Caus: vejay° (Br.+) Aorist RED: vīvijas [2sg.inj.act.] (RV) TA-Ptc.: prá-vikta- (RV+)		IIAL
*h₁(e)lbʰ–	elf	NE elf Skt rḅhú- 'an artisan deity'		?		Dieties	JPM
*h₁edʰés-	axe, adze	OE adesa > NE adze Hit ates- and atessa				Tools	JPM
*h₁ékmōn	stone	Grk ákmōn 'anvil' Skt áśman- 'stone' OPrus asman- 'heaven' Lith akmuō 'stone' OCS kamy 'stone'	This semantic convergence has been variously explained by assuming that the Proto-Indo-Europeans believed that they lived under a stone vault, that the stone hills and mountains rose to the sky, or that stone axes fell out of the sky, i.e. as thunder-stones (e.g., Lith Perkū́ no akmuō 'thunder-stone' [lit. 'Perkūnas' stone', where Perkūnas is the god of thunder])			Earth	JPM
*h₁el-	grind down	Grk aléō 'grind' Arm ałam 'grind' Skt aṇu- 'fine (< ground down) Panicum miliaceum'				Agriculture	JPM

*h₁elbʰós	white	OHG albiz OCS lebedĭ Hit alpā- 'cloud' Lat albus 'white' Grk alphós 'white leprosy'				Color	JPM
*h₁elh₁-n-	sweat	OIr allas 'sweat' [noun] Hit allaniye- 'sweat' [verb]	Celtic-Anatolian			Vital Functions	JPM
*h₁eli-	he-goat	Toch B āl 'ram, he-goat' Hit aliyan(a)- 'roebuck'	Note that roebuck have very undeerlike horns, horns that are closer to those of goats than to those of other deer			Fauna	JPM
*h₁em-	mother	Lat amma Grk ammás Skt ambā-				Kinship	JPM
*h₁en-	(old) woman, mother	OIr Ana 'mother of the gods' Lat anus 'old woman' Hit annas 'mother'				Kinship	JPM
*h₁ep-	fourth-generation marker	Lat av-avus 'great-great-grandfather' Lat abnepōs 'great-great-grandson'	We find *h₁ep- also in NE offspring.			Kinship	JPM
*h₁ep-ér-	back, behind	Goth afar 'after' Av apara- 'behind, following, other' Skt ápara- 'later' NE after (with a different extension)				Position	JPM
*h₁épo	back, behind	Lat ab 'from' Goth af 'from, since' Grk apó 'from' Hit āppa 'behind' Av apa 'away from' Skt ápa 'away, forth'	Also has a shortened version *(h₁)po which is used as a verbal prefix in Baltic (e.g. Lith pa-) and Slavic (e.g. OCS pa-), Av (pa-), and can also be seen in Lat po-situs 'situated', and perhaps Alb pa 'without'			Position	JPM
*h₁ergʷ-	argue, assert	Lat arguō 'assert, prove, accuse' Hit arkuwai- 'plead, argue, make excuses'				Conflict	JPM
*h₁erh₂os *h₂ent-o-	border, line, limit	Hit arha- 'line, boundary' Lat ōra 'brim, edge, boundary, region' OE ōra 'border, bank, shore' Latv âra 'border, boundary country limit'	{1} In RV also 'nearness' the original meaning is 'place to the opposite'. {2} Hardly etymologically identical to Got. andeis, etc.			Space	JPM IIAL

*h₁erós	member of ones own group	Hit arā- 'member of one's own group, peer, friend' Lyc arus- 'citizens' *h₁eryós yields OIr aire 'freeman' Av airya- 'Aryan' Skt aryá- 'kind', ā́rya- 'Aryan' (cf. arí- 'faithful')	The evidence suggests that the word was, at least initially, one that denoted one who belongs to the community in contrast to an outsider a derivative of the word is found in Hit āra '(what is) Wtting' and natta āra 'not right', cf. the use of kosher which originally meant (in Hebrew) 'what is fitting'. Although in Indo-Iranian the word takes on an ethnic meaning, there are no grounds for ascribing this semantic use to Proto-Indo-European, i.e. there is no evidence that the speakers of the proto-language referred to themselves explicitly as 'Aryans'.			Social Organization	JPM
*h₁eu-	eat	Alb ha 'eat' Skt āvayati 'eats, consumes'				Food & Drink	JPM
*h₂eu(o)	away (from)	OIr ō 'from' Lat au-ferō 'carry away' Lith au- 'away' OCS u- 'away' Hit awan 'away', u- 'hither' Av ava 'down, off' Skt áva 'from'	{1} Possibly, PIIr. *Hau changed to *Haua under the influence of *Hapa.			Position	JPM Beekes IIAL
*h₁loǵ-	branch vine, tendril	Rus lozá 'vine, tendril, shoot' Grk ológinos 'branchy' Av razura- 'forest, thicket' Hit alkista(n)-'branch'				Trees	JPM
*h₃órǵʰei	mounts	ON ergi 'lascivious behaviour' Lith aržùs 'lascivious' Rus jĕrzajet 'Wdgets, moves in coitus' Grk orkhéomai 'makes lascivious motion' Ht ārki arga 'mounts (used with respect to a male animal)' Skt rghāyáte 'is impetuous'				Vital Functions	JPM
*h₃órǵʰis	testicle	MIr uirge Alb herdhe Grk órkhis Arm orjik' Hit arki- and Av ərəzī	A deverbative from *h₃órǵhei 'mounts (sexually)' (e.g. Hit ārki 'mounts', Rus jĕrzajet 'Wdgets, wiggles, moves in coitus', Grk orkhéomai 'make lascivious motions, dance'			Body (Lower)	JPM
*h₁upó	up (from underneath)	OWels gwo- [preverb] OE ufe- 'on', and with doubled consonant: OE upp(e) 'up' [> NE up] Grk hupó'(to) under, by, towards' Av upa 'towards' Skt úpa 'upwards, towards'	From the underlying verbal root *h₁up that means 'go up, rise' (e.g. Hit ūpzi '[the sun] rises', Alb hypem 'go up').			Position	JPM
*h₁upo-sth₂-i/o-	servant	MIr foss 'servant' Skt úpasti- 'subordinate, servant'	A Celtic loan into Latin gives us the Late Lat vassus or vassalus, whence NE vassal.			Social Organization	JPM

*h₁welk-	pull	Lith velkù 'pull' OCS vlĕkǫ 'pull' Alb heq 'pull [out], remove' Grk ő lka 'furrow' Av frāvarčātiti 'carries off'				Convey	JPM
*h□(e)us-sḱe-ti	it lights up, dawns	Lith aũšta 'it dawns' Av usaiti 'it dawns' Skt uccháti 'it dawns'	From the verbal root *h□ewes- 'shine'			Time	JPM
*h□ebi-	fir	Lat abiēs 'silver fir' dialectal Grk ábis 'fir'				Trees	JPM
*h□ebVl- *h₂ebōl	apple	OIr uball NE apple Lith obuolỹs Rus jábloko Pashto maṇá 'apple', if from *amarna- <*abarna-)				Trees	JPM Beekes
*h□ed	at, to	OIr ad- [preverb] Lat ad 'to, at' NE at Phryg ad- 'to' Irish ad- 'to'	West-Central found in the North-West and Phrygian			Position	JPM
*h□ed-bʰer-	sacrifice	OIr ad-opair 'sacrifice' Umb arsfetur 'priest' Skt prá- bhartar- 'one who brings'				Sacred	JPM
*h□e ǵ -	drive	Lat agō Grk ágō Skt ájati OIr ad-aig 'drive' ON aka 'travel' Arm acem 'lead' Toch AB āk- lead' OIr tāin (< *to-a ǵ -no-) bō 'cattle raid' Lat bovēs agere 'to drive or raid for cattle' Av gąm varǝtąm az- 'drive off cattle as booty'				Convey	JPM
*h□e ǵ -	fight	Grk agṓn 'athletic contest' Skt ájman- 'career, passage, battle', ā jí- 'race, fight' OIr tāin [< *to-ag-no-] 'raid'				Conflict	JPM
*h□egʰ-	be afraid, be downcast	OIr ad-āgathar 'fears' ON agi 'terror' Grk ákhos 'mental pain or distress'	West Central			Values	JPM
*h□egʰ-los	unpleasant	Skt aghalá 'wound' OE egle 'disagreeable, loathsome' Av aɣō- 'bad' Skt aghá- 'bad', aghalá- 'terrible'	from a root *h□egʰ- the *-lo- suffix may have been added independently in the two regions.			Values	JPM

*h₂égʰleh₂-	affliction	NE ail Av aɣrā 'type of disease' Skt ághrā 'affliction'			Health&Sickness	JPM
*h₂egʰlu	rain	OPrus aglo 'rain' Grk akhlū́s 'fog, cloud'			Water	JPM
*h₂é ǵʰr̥	day	NE day Av azan- 'day' Skt áhar- 'day'	All the Germanic forms show the result of an initial *d- which has been variously explained (away) as having crossed with the Proto-Germanic *dāȝwaz 'warm time of the year' ([< *dʰōgʷʰo- 'burning'] or from the false division of an expression such as *tod h₂é ǵʰr̥ 'that day' into *to(d) dh₂é ǵʰr̥. Neither explanation has inspired much confidence.	nom.acc.sg. áhar (RV+) loc.sg. áhan, áhani (RV, áhni AV+), instr.sg. áhnā (RV+), dat.sg. áhne (RV+), gen.abl.sg. áhnas (RV+), dat.pl. áhabhyas (RV+), nom.acc.du. áhanī (RV+), nom.acc.pl. áhā (RV), áhāni (RV+), gen.pl. áhnām (RV+), loc.pl. áhasu on the basis of the latter form (analysed as < *ahas-su), other s-stem forms have arisen: áhobhyas [dat.pl.] (RV I,X+), áhaḥsu [loc.pl.] (Br.+) secondary a-stem form gen.pl. áhānām (RV 08.022.13)	Time	JPM IIAL
*h₂e ǵilos	fast	Lat agilis 'quick' Skt ajirá- 'quick, agile'	may be independent formations built on the verbal root *h₂e ǵ - 'drive'		Time	JPM
*h₂e ǵínom	hide, skin	OCS (j)azno 'hide, leather' Skt ajínam 'hide'	Derives from *hae ǵ ós 'goat' thus originally 'goat-hide'		Body (Upper)	JPM
*h₂e ǵmen-	troop	Lat agmen 'troop, train' Skt ájman- 'train'			Social Organization	JPM
*h₂e ǵós	he-goat	Lith ožŷs 'he-goat' Av aza- 'he-goat' Skt ajá- 'he goat'			Fauna	JPM
*h₂e ǵós	leader; driver	Grk agós 'leader' Skt ajá- 'driver'			Social Organization	JPM IIAL
*h₂ēgos	shame	Grk ágos 'guilt, pollution' Skt āgas 'guilt, sin'	Greek-Indo-Iranian isogloss		Law & Order	JPM

*h₁eǵreh₂-	hunt	OIr ár 'carnage' Grk ágrā 'hunt' Av azrō- 'hunt'	From verbal root *h₁eǵ - 'drive'			Travel	JPM
*h₂eǵros	field, pasture	Lat ager OE æcer [> NE acre] Grk agrós Arm art Skt ájra- 'plain'	Note that the Skt does not refer to agriculture			Plants	JPM
*h₂egʷʰnos	lamb	Lat agnus NE yean OCS (j)agnfie Grk amnós				Fauna	JPM
*h₂egwisy(e)h₂-	axe	Lat ascia 'adze of carpenters and masons' NE axe Grk aksī́nē 'axe'	West Central			Tools	JPM
*h₂eh₂-peros	river bank, shore of sea	OE ōfer 'bank' Grk ḗpeiros 'shore' Arm ap'n 'shore'				Water	JPM
*h₂ei-	assail, afflict	Hit inan- 'illness' Av aēnah- 'violence, damage' Skt énas- 'sin, guilt' Grk zētrós 'executioner' Skt yātár- 'avenger' < *hay-eha-				Conflict	JPM
*h₂ei-	give	Hit pai- 'give' [< *pe-ai-] Toch B ai- 'give' Lat aemulus 'emulator, rival' Grk aínumai 'take, seize'	a situation that we see does have quite a few parallels in that the action requires a 'giver' and a 'taker' and either side may become the focal point of the word (cf. NE take to but also take from).			Give & Take	JPM
*h₂eid-	swell	OHG eiz 'abscess' Lat aemidus 'swollen' Grk oidéō 'swell' Oidípous 'Oedipus' [literally 'swollen-foot'] Arm aytnum 'swell'				Blow Up	JPM
*h₂eidʰ	burn, fire	OIr āed 'fire' Lat aedēs 'temple' OE ād 'heat, Wre' Grk aíthō 'burn' Skt indhé 'kindle'				Fire	JPM
*h₂eig-	oak	NE oak Grk aigílōps 'Turkey oak (Quercus cerris)' Lat aesculus 'mountain oak [Quercus farnetto]'				Trees	JPM
*h₂eiǵs	goat	Alb edh 'kid' Grk aíks [she-]goat' Arm ayc '[she-]goat' Av izaēnā- 'goathide'				Fauna	JPM
*h₂eigʷʰes-	shame	Goth aiwiski 'shame' Grk aîskhos 'shame'	West Central			Law & Order	JPM

*h□eiḱ-	possess	OE āgan 'possess' [whence NE own] Av ise 'is lord of ' Skt ī́śe 'owns, possesses' Toch B aik- 'know'				Give & Take	JPM
*h□eiḱsmo/eh□-	spear, pointed stick	Lith iẽšmis 'spit, spear' Grk aikhmḗ 'point of spear, arrow, spear'	West Central			Weapons	JPM
*h□eis-	wish for, seek out	Lith íeškau 'seek' Av isaiti 'seeks, wishes' Skt éṣati 'seeks', iccháti 'wishes, seeks' Lat aeruscō 'ask' NE ask				Desire	JPM
*h□eḱ-	sharp						JPM
*h□eḱ-	sharp, pointed	NWels hogi 'to sharpen'				Shape	JPM
*h□eḱe(tro)-	sturgeon	Lat acipēnser Lith eškė́tras Rus osёtr				Fish	JPM
*h□eḱes-	ear of grain	Lat acus NE ear Grk ákhnē Toch B āka [pl.] 'barley'				Plants	JPM
*h□ekkeh□-	mother	Lat Acca Grk Akkō Skt akkā-				Kinship	JPM
*h□eḱs-	axle	Lat axis OE eax Lith ašìs OCS osĭ Grk áksōn Skt ákṣa-	{1} It is unclear whether words for 'armpit' belong here. {2} Meaning 'armpit' is not attested in IA, so that it remains uncertain whether this word belongs to the 'axle'-family.			Transport	JPM
*h□eḱs-(leh□-)	shoulder (joint) axle	Lat axis 'axis, axle', āla 'shoulder, wing', axilla 'armpit' OE eax 'axle, axis', eaxl 'shoulder' Lith ašìs 'axle, axis' OCS osĭ 'axle, axis' Grk áksōn 'axle, axis' Av aši- 'shoulder' Skt ákṣa- 'axle, axis'				Body (Upper)	JPM
*h□eḱstí-	± awn, bristle	NWels eithin 'furze' Lith akstìs 'spit (for roasting)' Rus ostĭ 'awn, bristle' Toch B āśce 'head' ??				Plants	JPM
*h□eḱú-	perch	ON ǫgr 'sea-bass' Lith ešerỹs □ ašerỹs	Because the word derives from *haeḱ- 'sharp' (the perch has spiny fins), it may have been independently created in the two groups.			Fish	JPM
*h□ekʷeh□-	water	Lat aqua NE island	North-Western			Water	JPM

*h□el-	burn	Lat altar 'altar' Lat adoleō 'burn a sacrifice' Swed ala 'blaze, flare up' Skt alātam 'firebrand, coal'				Fire	JPM
*h□el-	grow	OIr ailid 'nourishes' Lat alō 'grow' NE old Lat altus 'high'	West Central			Vital Functions	JPM
*h□el-	wander	Lat ambulō 'take a walk' Latv aluô t(iês) 'go astray' Grk aléomai 'go astray' Grk aleúomai 'avoid' Toch AB ā l- 'keep off'	Either we have a single verb with divergent semantic histories or two homophonous verbs: 'wander' and 'avoid'.			Travel	JPM
*h□el-	well up, flow	Lith aĺmės 'serum, pus' Skt árma- 'spring' Toch B ālme 'spring' Latv aluôgs 'spring' a number of European river names, e.g. Almus, Alma				Liquid Motions	JPM
*h□éliso-	alder	Lat alnus Lith alìksnis Rus ólîkhna Hit alanza(n) 'type of tree' ??	Status as a valid reconstruction depends on Hittite. A Proto- Germanic *aluzo- gives us NE alder. Some argue that *ha éliso-, if not reflected in Hittite, is actually a substrate term picked up by the Indo-Europeans in central and western Europe.			Trees	JPM
*h□élmos	spring	Skt árma- Toch B ālme				Water	JPM
*h□elnos	beyond, yonder	OIr oll 'ample' Lat uls 'beyond' NE all OCS lani 'last year'	North-West Based on the same root that gives Proto-Indo-European 'other'			Position	JPM
*h□elut-	beer	NE ale OPrus alu 'mead' Lith alùs 'beer' OCS olŭ 'beer' Oss ælūton 'beer'				Meals	JPM
*h□élyos	other	OIr aile Lat alius NE else Grk állos Arm ayl Toch B alyek	{1} Ilr. *Hania- is most probably due to contamination of *h₂elio- with the comparative *h₂entero-. {2} anyá- means 'other of more than two', ántara- means 'the other of two', cf. also Lat. alius resp. alter with the same semantic difference.			Measure & Quantity	JPM IIAL
*h□em(h□)-ī-weh□-	suffering	Grk aníá 'grief, sorrow, trouble' Skt ámīvā 'suffering, sickness' ON ama 'bother, pester, molest'				Health&Sickness	JPM
*h□emes-l-	blackbird	NWels mwylach Lat merula OE ōsle [>NE ousel]				Bird	JPM
*h□emh₃-	lays hold, grasps swears	Grk ómnūmi 'swear' Skt ámīti 'lays hold of, grasps swears'	Greek-Indo-Iranian isogloss the meaning 'swears' may be a late development in the groups involved and reflects the custom of grasping some sacred object while one makes an oath (cf. the practice of swearing with one's hand on the Bible in a contemporary court).			Law & Order	JPM

*h□en-	that	OIr an-d 'here' Lat an 'or whether' Lith añs 'yon' OCS onŭ 'he yon' Alb a 'whether' Grk án 'possibly'	West Central			Pronouns	JPM
*h□en-	year	Grk énos 'year' Lith pér-n-ai 'in the last year' dialectal Rus lo-ni 'of last year'	West Central			Time	JPM
*h□en-h□e	up (onto), upwards, along	NE on Grk aná'up on, up along, over, through, among' Av ana 'onto'				Position	JPM
*h□en-u	up (onto), upwards, along	Av anu 'after, corresponding to, towards' Skt ánu 'after, along, over, near' Toch B oṃṣmeṃ 'from above'	Indo-Iranian-Tocharian isogloss			Position	JPM
*h□endʰós	blind	Gaul anda-bata gladiator who fights blind with a helmet without eye-openings Av anda- 'blind' Skt andhá- 'blind'	Problematic because it rests in the Gaulish term {1} Presumably, containing Gall. *anda-'blind' (*'blind-fighter').			Health&Sickness	JPM
*h□en ǵ ʰ(w)ēn-	neck	Rus vjazĭ 'nape' Grk ámphēn □ aukhḗn 'nape' Arm awjik [pl.] 'neck'	West Central from *haen ǵh-'narrow'			Head	JPM
*h□én ǵ ʰes-	± suffering, grief, fear	ON angr 'grief' → NE anger Lat angor 'fear' Av afi zah- 'oppression' Skt áṃhas- 'fear'				Health&Sickness	JPM
*h□en ǵ ʰu-	narrow	OIr cum-ung 'narrow, restricted' Lat angi-portus 'narrow street, cul de sac' OE enge 'narrow' Lith añkštas 'narrow' MPers hnzwg- 'narrow' Skt aṃhú- 'narrow'		abl.sg.n. aṃhós 'from distress, peril' (the only attested form) aṃhīyas- [comp] 'narrower' (AitB+)		Shape	JPM IIAL
*h□éng ʷʰis	snake	OIr esc-ung 'watersnake' Lat anguis OHG unc 'snake' Lith angìs 'snake' Rus už 'snake' Illyr ábeis 'snakes' Arm awj 'snake'				Fauna	JPM
*h□énh₁-mi	breathe	Goth uzanan 'breathe one's last' Skt ániti 'breathes' Toch B anāsk- 'breathe [in]'				Vital Functions	JPM
*h□énh₁-mos	breath	Lat animus 'spirit, wind' Grk ánemos 'wind' Arm hołm 'wind'				Vital Functions	JPM

*h□énh□t(e)h□	doorjamb	Lat antae 'pillars framing a door' ON ǫnd 'foreroom' Arm dr-and 'door-posts' Skt ā́tā 'door-posts'				Construction	JPM
*h□enk-	bend					Shape	JPM
*h□enkulos	shoot	ON ǭll 'bud, shoot' Skt aṅkurá- 'young shoot'	may derive from the verbal root *haenk- 'bend'			Plants (Wild)	JPM
*h□énr̥	(manly) strength, vitality	Alb njerí 'person' Grk anḗr 'man' Phryg anar 'man' Arm ayr 'man, person' Luv annar- 'man' Av nār 'man' Skt nár- 'man, person' Lith nóras 'will' Hit innara 'violently' Hit innarawant- 'sexually potent'				Health&Sickness	JPM
*h□enseh□-	handle	Lat ānsa MHG ōse 'ring, loop' Lith ąsà 'pot handle'	North-West			Containers	JPM
*h□énsus	god, spirit	ON ǭss 'god' (nominative plural Æsir of Norse mythology) Iranian ahura- 'god, lord' and Ahura-mazdāh Skt ásu- 'powerful spirit' and the Asura-, a special class of Indic deities.				Dieties	JPM
*h□epus	weak	Grk ēpedanós 'fragile, weak maimed, halting' Skt apuvāyáte 'becomes ill, spoils'	Associated with *haépo 'backwards'.			Health&Sickness	JPM
*h□er-	prepare, put together	Arm aṙnem 'make' Av arānte 'they set themselves, remain' Skt ará- means 'spoke [of a wheel]' Lat ars 'art' Arm ard 'structure, ornament' Skt r̥tú- 'fixed time, time appointed for some purpose'				Being & Doing	JPM
*h□er-	reed	Lat harundō 'reed' Grk áron 'arum' Khot arā- 'reed, rush'				Plants (Wild)	JPM
*h□érdʰis	point	OIr aird 'point direction' ON erta 'to goad' Grk árdis 'arrowhead' Skt ali- 'bee'				Shape	JPM
*h□éreh□-	± ryegrass	Latv aîres 'ryegrass' Grk aírai 'ryegrass' Skt erakā- 'sedge'				Plants	JPM

*hₐérh₃wr̥	field	OIr arbor 'seed' Lat arvum 'ploughed field' Grk ároura 'field' Arm haravunk' 'field' Skt urvárā- 'fertile soil'				Plants	JPM Celt.
*hₐérhₐmos	arm, forequarter	Lat armus 'forequarter, shoulder [of an animal]' NE arm OPrus irmo 'arm' OCS ramo 'shoulder' Av arəma- 'arm, forearm' Skt īrmá- 'arm'	May derive from *haérhx- 'attach'			Body (Upper)	JPM
*hₐérkʷos	bow and/or arrow	Lat arcus NE arrow	North-West			Weapons	JPM
*hₐértus	fitting, order	Lat artus 'joint' MHG art 'innate feature, nature, fashion' dialectal Grk artús 'arranging, arrangement' Arm ard 'ornament, shape' Av arəta- 'order' Skt r̥tú- 'right time, order, rule' Toch B ārtt- 'love, praise'	From the root *hₐer- 'fit'			Law & Order	JPM
*hₐéru(s)-	wound	ON ørr 'scar' Skt áruṣ- 'wound')	{1} [AL] This analysis is based on Hajnal 1999. In spite of Hajnal's scepticism concerning the Germanic cognates, they may still be related.			Health&Sickness	JPM IIAL
*hₐet	away, beyond	OIr aith- 'back, out of' Lat at 'but' Goth aþ-þan 'however' Lith ato- 'back, away' OCS ot- 'away, out' Grk atár 'however' Skt átas 'from there' Toch B ate 'away'				Position	JPM
*hₐet-	go	Lat annus 'year' Goth aþn 'year' Skt átati 'goes' NWels wyf 'am'				Come & Go	JPM
*hₐetnos	year	Lat annus 'year' Goth aþna- 'year'	North-West From the verbal root *hₐet- 'go' (i.e. 'what's gone')			Time	JPM
*hₐeu-	favour	OIr con-ō i 'guards' Lat aveō 'desire strongly' Runic auja 'good fortune' Doric Grk aï´tas 'friend' Av avaiti 'cares for, helps' Skt ávati 'is pleased, promotes'	If Alb ha 'eat' belongs here (< * 'enjoy [food]'), then the PIE root is *hₐeu-			Values	JPM

*h□eug-	grow	Lat augeō 'augment, increase' NE eke Lith áugu 'grow' Grk aéksō 'increase' Av uxšyeiti 'grows' Skt úkṣati 'strengthens' Toch B auk- 'grow, increase'				Vital Functions	JPM
*h□euges-	strength	Lat augustus 'sacred' Av aojah- 'strength' Skt ójas- 'strength'	Generally been linked to the type of strength required of a warrior			Conflict	JPM
*h□euges-	strength	Lat augustus 'sacred' and the related augur 'priest, seer' Skt ójas- 'spiritual or physical might'				Sacred	JPM
*h□eusom *h□weseh□-	gold	Lat aurum OPrus ausis Toch B yasa	A noun ultimately derived from the root *h□ewes- 'shine' which also underlies the word for 'dawn', *h□éusōs It has been plausibly suggested that an Indo-European form similar to the one ancestral to Tocharian has been widely borrowed into the Uralic languages, e.g. Proto-Balto-Finnic-Lapp-Mordvin *waśke 'copper, brass', Proto-Ugric *waś'metal, iron', Proto-Samoyed *wesä 'metal, iron'			Metals	JPM
*h□éusōs	dawn	OIr fā ir 'sunrise' Lat aurōra 'dawn' OE ēastre 'goddess of springtime' [> NE Easter] Lith aušrà 'dawn' OCS ustra 'morning' Grk héōs 'dawn' Av ušā- 'dawn' Skt uṣā́- 'dawn'		uṣā́s [nom.sg.] (RV) uṣā́sam, uṣásam [acc.sg.] (RV, later uṣā́m [acc.sg.] in RV 01.181.09, 10.068.09), uṣásas [gen.sg., acc.pl.], older uṣás (also úṣas in RV 10.095.04), uṣási [loc.sg.] (RV+), uṣā́sau, uṣásau [nom.acc.du.] (RV+), uṣā́saḥ [nom.pl.] (RV uṣā́s (AV+)), uṣádbhiṣ [instr.pl.] (RV+), uṣásām [gen.pl.] (RV+)		Time	JPM IIAL
*h□éusōs	dawn goddess	Lat Aurōra Lith Aušrine Latv Auseklis Grk Ē¯ōs Skt Uṣás-				Dieties	JPM

*hₐeust(e)ro-	east	Lat auster 'south wind south country' NE eastern Latv àustrums 'east' OCS ustrŭ 'summer' Av ušatara- 'east'	A transparent derivative from *hₐeus- 'dawn', i.e. the direction of the rising sun			Direction	JPM
*hₐewei-	bird	NWels hwyad 'duck' Lat avis 'bird' Alb vida 'dove' Grk aietós 'eagle' Arm haw 'bird chicken' Av vīš Skt vi-		RV forms: véḥ/víḥ [nom.sg.], vím [acc.sg.], véḥ [gen.sg.], váyaḥ [nom.pl.] víbhiḥ [instr.pl.], víbhyaḥ [dat.pl.], vīnā́m [gen.pl.]	'the birds fly': Skt. prá … váyaḥ … paptan (RV) — YAv. frā vaiiō pataṇ 'carried by birds (?)': Skt. ví-bhṛta- [adj] (RV) — YAv. vaiiō.bərəta- [adj]	Bird	JPM IIAL
*hₐewis	(wild) oats	Lat avēna Lith āvižos OCS ovĭsŭ Khot hau 'some form of cereal'				Plants	JPM
*hₐey-es-	metal > copper > bronze	Lat aes 'copper, bronze' NE ore Av ayah- 'metal (probably bronze)' Skt áyas- [earlier] 'copper', [later] 'iron'	It is generally presumed to mean 'copper' or the copper-tin (or copper-arsenic? [SGM]) alloy of 'bronze' although it has come to mean 'iron' in some of the Indo-European languages, e.g. Indo-Iranian however, there is clear evidence that it earlier meant 'copper' or 'bronze'. In the Germanic languages it tends to mean 'ore' and it is possible it simply meant 'metal' rather than a speciWc type of metal.			Metals	JPM
*hₐeyer-	early	OHG ēr Grk ā́riston 'morning mean' Grk ēérios 'of the morning, in the morning' Av ayarə 'day'				Time	JPM
*haha	a laugh	Lat hahae Grk hà há Skt ha ha	A single *ha tended to indicate surprise (Lat hā, Grk hā, Skt ha)			Human Sounds	JPM
*hₐidʰrós	pure	Grk itharós 'glad pure' Skt vīdhrá- [<*wi-hₐidʰro- 'burned away'] 'clean, pure'	Greek-Indic derives from *hₐeidʰ- 'burn' and may either be inherited or independent developments.			Clean	JPM
*hₐlei-	smear	OIr as-lena 'stain' Lat linō 'smear' Lith laistaũ 'smear' Grk alínō 'spread, smear' Skt linā́ti 'pastes' Toch B linā- 'stick, place'				Binding	JPM
*hₐleit-	± do something hateful or a	OIr lius 'abhorrence' NE loath Grk alitaínō 'trespass, sin'	West Central			Love & Hate	JPM

*h□lek-	defend, protect	OE ealgian 'protect' Grk aléksō 'defend' Arm aracel 'tend' Skt rákṣati 'protect' OE ealh 'temple' Lith al̃kas 'sacred grove'		Present I: rákṣati [3sg.act.] (RV) Aorist IS: rakṣiṣat [3sg.subj.act.] (RV), rakṣīs [2sg.inj.act.] (AV 5.7.1), arakṣīt [3sg.act.] (MSm 1.5.14:84.10) Perfect: rarákṣa [3sg.act.] (RV, ŚB) TA-Ptc.: rakṣitá- (RV+)		Conflict	JPM IIAL
*h□mel ǵ -	milk	OIr bligid □ bluigid NE milk Lith mélžu ORus mŭlzu Grk amélgō Lat mulgeō Toch A mālk- OIr mlicht Rus molokó Alb mjel Toch B malkwer				Meals	JPM
*h□nḗr	man, person	NWels nêr 'hero' Umb ner- 'chief' Alb njerí 'person' Grk anḗr 'man' Arm ayr 'man, person' Phryg anar 'man' Luv annara/i- 'forceful, virile' Av nar- 'man' Skt nár- 'man, person'	Indicates 'power, strength' (e.g. OIr nert 'strength, power', Lat neriōsus 'firm'), and even 'anger' (OPrus nertien)	náram [acc.sg.] (RV+) náre [dat.sg.] (RV+) náras [nom.pl.] (RV+) nṝ̃n [acc.pl.] (RV+), narā́m [gen.pl.] (RV+)	'protector of men': Skt. nr̥-pātár- [m] (RV), nr̥-pa- [m] 'king' (Sū.+) — Gr. Ποίμανδρος [m] PN 'with the courage of a hero': Skt. nr̥-máṇas- [adj] (RV) — YAv. naire.manah- [adj] — Gr. μένος ἀνδρῶν, Ἀνδρομένης [m] PN 'glory of men': Skt. śrávo … nr̥ṇā́m (RV) — Gr. κλέα ἀνδρῶν 'killing men': Skt. nr̥-hán- [adj] (RV) — OAv. jə̄nar- [adj] — Gr. ἀνδροφόνος [adj] 'wisdom of men': Skt. nr̥-médha- [m] PN (RV, TS+) — YAv. narəm mazdrəm 'following the hero': Skt. nr̥-ṣác- [adj] (RV) — YAv. haxšāne narəm (V 19.26) (?)	Family	JPM IIAL
*h□ṇh□ti-	duck	Lat anas OE ened Lith ántis Rus útka Grk nễssa Oss acc 'wild duck' Skt ātí-				Bird	JPM IIAL

*hₐō(w)i-om	egg	NWels wy Lat ōvum German Ei OCS ajĭce Grk ōión Av āvaya 'having eggs'	suspiciously close to the primary word for 'bird' (*haewei-) and, indeed, a fairly transparent derivative of it			Bird	JPM IIAL
*hₐógehₐ-	± berry, fruit	NE acorn (probably) Lith úoga 'berry' Rus jágoda 'berry' Toch AB oko 'fruit'				Trees	JPM
*hₐóus-	ear	OIr ō Lat auris NE ear Lith ausìs Rus úkho Alb vesh Grk oûs Arm unkn Av uši [dual]	Beekes has *h₂eus			Head	JPM Beekes
*hₐóyus	vital force, life, age of vigour	OIr āes 'life, age' Lat aevus 'lifespan, age' Goth aiws 'time, eternity', aiṓn 'vitality, lifespan' Av āyū 'lifespan' Skt ā́yu(ṣ)- 'life, lifespan'				Health&Sickness Vital Functions	JPM
*hₐŕ̥ǵ-rós	flashing	Grk agrós Skt rjrá-	West Central used to describe dogs and horses			Time	JPM

*h₂woks-éye/o-	grow	NE wax Av vaxšaiti 'grows' Skt vakṣayati 'grows'	{1} [AL] Since the root accentuation of this zero-grade is anomalous, Insler (apud Jamison 1983: 139) suggested to read *úkṣyant- with correct accentuation, which would then be cognate to Av. uxšiieiti. {2} [AL] There is further a synchronically distinct root ukṣ- 'to (be)sprinkle': Present VI: ukṣáti [3sg.act.] (RV+), ukṣánte [3pl.med.] (RV+) Aorist IS: áukṣīs [2sg.act.] (YVp, ŚB) Caus.: ukṣayati (Sū+) Passive: -áukṣyata [3sg.impf.] (ŚB+) Fut: prokṣiṣyāmi (Sū+) Abs: -ukṣya (YVp, ŚB) Gerundive: prókṣya- (MS) TA-Ptc.: ukṣitá- 'besprinkled' (AV+). According to Kiehnle 1979, the root ukṣ- 'to (be)sprinkle' has secondarily developed from vakṣ- differently Gotō 1993: 124. {3} s-enlargement of IE root *h₂eug- 'to increase' (cf. Skt. ójas-).	Present VI: úkṣant- [ptc.act.] (RV 01.114.07) {1}, áukṣat [3sg.impf.] (RV 10.055.07), ukṣámāṇa- [ptc.med.] (RV+) Aorist IS: áukṣīs [2sg.act.] (RV 10.027.07) Perfect: vavákṣa [3sg.act.] (RV), vavakṣé [3sg.med.] (RV) Caus: vakṣayam [1sg.inj.act.] 'to make strong' (RV 10.049.08) ukṣayanta ? [3pl.subj.med.] (RV 06.017.04 for this form see Jamison 1983: 139) TA-Ptc.: ukṣitá- 'grown, grown up' (RV) {2}	'to increase the rule': Skt. kṣatrám ukṣatam (RV 01.157.02) — OAv. xšaθrəm … vaxšat_ (Y 31.6) 'to increase oneself': Skt. tanvàm ukṣámāṇāḥ (RV 06.066.04) — OAv. uxšiiā … tanūm (Y 33.10) 'the growth (rise) of the sun': Skt. sū́ryasya … vakṣátha- (RV 07.033.08) — YAv. hū vaxšāt_ (Yt 5.91)	Vital Functions	JPM IIAL
*h₂yeu-	young	OIr ōa 'young' Lat iuvenis 'young' NE young Lith jáunas 'young' OCS junŭ 'young' Av yvan- 'youth' Skt yúvan- 'young'				Family	JPM
*h₂yuh₁-ṇ-ḱós	youth	OIr ōac 'youth' Lat iuvencus 'young (cow)' Skt yuvaśá- 'young'				Family	JPM IIAL
*h₂egro-	top		{1} agrimá- is a contamination of agriyá- and prathamá-. {2} [AL] Latv. agrs 'early', etc. cannot be related because of Winter's Law (pace EWAia).		'at the head of the chariots': Skt. ágre ráthānām (RV) — Av. Aɣraēraθa- 'honey(-drink) of the best quality': Skt. mádhvo agriyám (RV) — Av. aɣriia- maδu-		IIAL
*h₃eh₃l-en-	elbow		{1} [AL] The reconstruction with two laryngeals seems necessary in order to account for the acute intonation of Lith. úolektis, Latv. uo^lekts 'ell' < *Heh₃l-, cf. Lubotsky 1990.				IIAL
*h₁eiǵʰ-	desire			Present III>I: sam īhase [2sg.med.] (VS+)			IIAL

*h□ēpis	confederate	Grk ḗpios 'gentle, kind, soothing, friendly' Skt āpí- 'ally, friend, acquaintance', āpyam 'confederation, alliance, friendship'	Possibly from *h₂ep- 'join';			Social Organization	JPM
*h□ieudʰ	move (intrans), stir > fight		{1} It is conceivable that Ved. úd yodhati 'to rebel' is somehow connected with Ilr. *(H)iauǰ-a- (> YAv. yaoz-a-, OP yaud-a- 'to rebel'). {2} With analogical *-smo- for *-mo- in IE *Hiudh-mó-. {3} [AL] According to an ingenious suggestion by Renou 1952: 254, this name represents 1pl. present.	Present IV: yúdhyata [2pl.impv.act.] (RV+), yúdhyate [3sg.med.] (RV+) Present I: úd yodhanti [3pl.act.] 'to rebel' (AV 12.3.28), ud … ayodhan [3pl.impf.act.] (PB 7.5.2) {1} Aorist IS: áyodhīt [3sg.act.] (RV+), yodhiṣat [3sg.subj.act.] (RV 08.045.05) Aorist R: yodhat [3sg.subj.act.] (RV 06.039.02) SI-impv: yótsi (RV) Caus: yodháy° (RV+) Inf: yodhanāyai (AVP 5.10.8) TA-Ptc.: yuddhá- 'conquered', also [n] 'fight' (RV+)			IIAL
*h□ih□i ǵʰ-(e/o)-	desire (strongly)	Grk îkhar 'violent desire' Av īžā- 'desire' Skt ī́hate 'strives for, wants' Toch B ykāsse 'concupiscence'				Desire	JPM
*h□ih□lu-	mud swamp	Rus il 'mud' Grk īlū́s 'mud, swamp'				Water	JPM
*h□io-ti	how much						IIAL
*h□ishᵢ-ro-	active				'active mind': Skt. iṣiréṇa … mánasā (RV 08.048.07) — Gr. ἱερὸν μένος (Hom.) 'powerful speech': Skt. vácam iṣirā́m (RV) — OAv. vāxš aēšō		IIAL

*h□leh□d-	dear	Rus ládyj 'dear' Toch B lāre 'dear' Arm ałalem 'love, caress' Skt lāḍayate (-d- < *-dr-) 'desires' Lycian it yields lada- 'wife' Rus láda 'wife'				Love & Hate	JPM
*h□nás *h□n(e)h₂s-	nose	Lat nāris 'nostril', nārēs [pl.] 'nose' NE nose Lith nó sis 'nose' OCS nosŭ 'nose' Av nāh- 'nose' Skt nā́sā [dual] 'nostrils'		nā́sā [nom.du.] (RV 02.039.06), nas-óṣ [gen.du.] (RV+),	Head	JPM IIAL
*h□ngʷnis	fire	Skt. Agni Lat. ignis Lith ugnìs Latv uguns OCS ognĭ Rus ogónĭ	Masc. {1} [AL] The initial laryngeal depends on the connection with the family of áṅgāra- 'coal'.			Fire	JPM IIAL
*h□oi(-ko)-	1 one						IIAL
*h□óiwo/eh□-	± berry, fruit	Lat ūva 'bunch of grapes, fruit' Grk óā 'service-berry' Arm aygi 'grapevine'				Trees	JPM
*h□ōḱ-us	fast	OIr di-auc 'not-fast' Lat ōcior 'faster' Grk ōkús 'fast' Av āsu- 'fast' Skt āśú- 'fast'	Apparently derived from *h□eḱ- 'sharp'			Time	JPM
*h□okto-wós	8th eighth	OIr ochtmad Lat octāvus NE eighth Lith ãšmas □ aštuñtas OCS osmŭ Alb tetë Grk ógdo(w)os Av aštəma- Skt aṣtamá- Toch B oktante				Numbers	JPM
*h□oktṓ(u) *h₃eḱt-eh₃	8 eight	OIr ocht Lat octō NE eight Lith aštuonì OCS osmĭ Alb tetë Grk oktō Arm ut' Lycian ait- Av ašta Skt aṣtā(u) Toch B okt	{1} Reconstruction is uncertain, also *Hoḱt-oH being conceivable. The e-grade is usually reconstructed on the basis of the e-grade in other numerals. Further analysis of the numeral 'eight' is highly speculative.	aṣṭā́, aṣṭáu [nom.acc.] (RV+), aṣṭābhíḥ [instr.] (RV+), aṣ	Numbers	JPM IIAL

*hᵤol-eh₂-	pointed instrument, tool with a thorn-like point		{1} Pllr. *ŏraH- has been borrowed into FU, cf. Fin. ora 'awl, bodkin, bore, etc.', Lap. oari 'awl, bodkin', Mordvin (Moksha) orǎ 'big bodkin'.			IIAL
*hᵤoldʰu-	(dugout) canoe, trough	OE ealdoþ 'trough' Lith aldijà 'boat' Rus lódka 'boat' Toch B olyi 'boat'	It suggests that the original referent may have been a dugout boat of some sort.		Transport	JPM
*hᵤóleh₁-	awl	NE awl Skt ā́rā- Khot aiysna-			Tools	JPM
*hᵤólḱis	elk/American moose	NE elk Rus los˜i 'elk' Khot rūs- 'Ovis poli' Skt ŕ̥śya- 'male of antelope'	Presumably related to *hₗelu- 'dull red'		Fauna	JPM
*hᵤolu-	spell	Hit alwanzatar means 'witchcraft, spell' Runic alu, may mean 'spell'			Sacred	JPM
*hᵤóng-l̥ *h₁ongʷ-l-	charcoal	Nir aingeal 'light, fire' Lith anglis 'charcoal' OCS ǫgli 'charcoal' Skt. ángāra	{1} [AL] The forms seem to point to a HD l-stem: nom.sg. *h₁ong-ōl, obl. h₁ong-l-. {2} NP angišt 'charcoal' has a different formation and is probably unrelated.		Fire	JPM IIAL
*hᵤópes-	work n.	Lat opus 'work' OE oefnan 'to work, make' Av -apah- 'work' Skt ápas- 'work' Lat opēs [pl.] 'possessions, abundance, wealth' Grk áphenos 'wealth' Hit happina(nt)- 'rich' Av afnahvant- 'wealthy' Skt ápnas- 'wealth'			Being & Doing	JPM
*hᵤorgʰi-	nit	Alb ergjëz Arm orǰil			Bug	JPM
*hᵤorki-	tick	Lith érkė Arm ork'iwn			Bug	JPM
*hᵤósgʰos	knot (in wood)	OIr odb 'knot' Grk óskhos 'sucker, sprout, vine, branch' NPers azy 'branch' Skt ádga- 'knot, joint'	{1} [AL] The Celtic forms reflect *osbos < *Ho(d)sgwo-. The -e- in Lith. uodegà 'tail' is problematic (uo- may be due to lengthening in accordance with Winter-Kortlandt's Law). Gr. ὄσχη f. 'vine with grapes' cannot reflect *Hodsg(w)eh₂- and is likely to be a Mediterranian LW. It is tempting to connect another IE family for 'branch, twig', viz. Arm. ost, Gr. ὄζος, Go. asts, etc. (Pok. 785 - 786) < *Hosdo-		Trees	JPM
*hᵤoust-eh₂-	mouth, lip	Lat ōstium 'mouth of a river' OPrus austo 'mouth' Lith uostà 'mouth of a river' OCS usta [pl.] 'mouth' Av aušt(r)a- 'lip' Skt óṣtha- 'lip'			Head	JPM
*hᵤreh₁-tr-ih₂	bringing to rest			rā́tri- (AV+)		IIAL

*h□reh₃d-	gnaw, furrow		{1} The connecting vowel -i- must be secondary. {2} [AL] For the short vowel in Skt. see Lubotsky 1981. {3} [AL] Lat. rādere 'to scratch, to plane' and MW rhathu point to *razd-. The Iranian verb rand- 'to make smooth' (e.g. MP and NP randīdan 'to scratch, scrape (off)', Oss. rændun 'to iron') does not seem to belong here either (to randh ?).	Present I: rádati [3sg.act.] (RV) SI-impv: rátsi (RV 05.010.01) Perfect: rarắda [3sg.act.] (RV 07.049.01) TA-Ptc.: raditá- {1} 'gnawed, bitten' (AV+)	to prepare the way': Skt. pathó rádantī (RV+) — YAv. paθō rāδ;	IIAL
*h□resg-u-	rope					IIAL
*h□ret-	walk					Beekes
*h□reu-men-	hair					IIAL
*h□reu(h□)	tear up			Aorist IS: rāviṣam [1sg.subj.act.] (RV) Aorist R / Present II: rávat [3sg.subj.act.] (MSm-KSm) TA-Ptc.: rutá- 'wounded, hurt' (RV, AV)		IIAL
*h□reud-	weep, cry		{1} [AL] The seṭ character of the root seems to be secondary, introduced in order to preserve the endings. In late Vedic texts we also encounter sporadic thematic forms like rodanti (JUB), cf. Gotō 1987: 275).	Present II: rudanti [3pl.act.] (RV+), arodīt [3sg.impf.act.] (YVp+) {1} Aorist A: árudat [3sg.act.] (AV+) Caus: roday° 'to make weep' (RV+) Abs: ruditvā (Sū.+)		IIAL

*h□reup	break, tear		{1} [LK] The suffix accentuation is likely to be secondary (see Kulikov 1998). {2} The root was originally identical with rop, q.v.	Present VII>VI: lumpāmi [1sg.act.] (AVP), ālumpét [3sg.opt.act.] (AVŚ) Present IV/Passive: lupyáte [3sg.med.] (AV+), lúpyeta [3sg.opt.med.] (TS) {1} Aorist A: apālupat [3sg.act.] (AVP 8.15.12+) Aorist mediopass: lopi [3sg.inj.] (Sū.) Perfect: lulopa [3sg.act.] (Br.+) Caus.: lopay° (Br.+) Abs: saṃ-lúpya (AVŚ 10.1.30), ˚lúmpam (MS) TA-Ptc.: úl-lupta- (AV+)		IIAL
*h□reup	break, tear			Present IV: arupyan [3pl.impf.act.] (AVP 8.15.7+) Caus: ropáy° 'to cause racking pain' (AVP+) Aorist RED: arūrupas [2sg.act.] (AV) rūrupas [2sg.subj.act.] 'to cause racking pain' (AV)		IIAL
*h□rh₁-ei-e-	be quiet			Present AYA: iláyatā [2pl.impv.] (RV 01.191.06, AV+)		IIAL
*h□rh₁-mo-	quiet					IIAL
*h□rh₁es-	envy		{1} [AL] The Indo-Iranian forms are clearly of denominal origin (cf. Klingenschmitt 1982: 149, fn. 9), being formed from an s-stem irás-, īrṣ- < *HrHas, *HrHs- (type bhiyás- 'fear', instr. bhīṣā̆) [Pronk]	Present IV: írṣyant- [ptc.act.] (TSp 2.3.5.1, DhSū.)		IIAL

*hₓrot-h₂-o-	car			{1} Derivative of PIE *Hrot-eh₂- 'wheel', cf. PIE *Hret 'to roll, to walk' (OIr. rethim, roithim).		standing on the chariot': Skt. rathe-ṣṭhā́- (RV+) — Av. raθaē-štā	IIAL
*hₓruhₓḱso-	rough			{1} Khwar. m-žxš- [verb] 'to become wrinkled, to become rough' (< Plr. *uz-ruxša-) and Lith. rùkti [verb] 'to become wrinkled' cannot be directly connected because of the "wrong" velar.			IIAL
*hₓVngʰel-	eel	Lat anguilla Lith ungurỹs OCS ǫgulja Grk égkhelus				Fish	JPM
*hₓwers-	rain			{1} [AL] The colour of the initial laryngeal is uncertain: *h₁- seems more probable (Gr. ἐέρση), since ἀέρση is only attested in the glosses (ἄερσαν την δρόσον. Κρῆτες H.). Anatolian cognates (Hitt. u̯arša- 'rain-shower' Luv. u̯arša- 'drop') are not assured. Gr. οὐρέω may have lost its laryngeal because of the so-called Saussure's effect (o-grade in the root) or be due to contraction.	Present I: várṣanti [3pl.act.] (RV+) Present ĀYA: vṛṣāya [2sg.impv.act.] 'to let rain' (RV 10.098.01, probably, nonce) Aorist IS: avarṣīt [3sg.act.] (RV+) Aorist A: avṛṣat [3sg.act.] (KS+, nonce) Perfect: vavarṣváṃs- [ptc.act.] (MS, KS) Caus: varṣáy° (RV+) TA-Ptc.: vṛṣṭá- (abhívṛṣṭa- RV+) Abs: vṛṣṭvī́ (RV)		IIAL
*ieh₃s-neh₂-				{1} Presumably, rā́snā- is due to contamination of *yā́snā- 'girdle' with raśanā́- 'rope, cord, bridle'.			IIAL

*ieug	yoke, harness, join			{1} Perhaps, a root enlargement of *ieu- (yav [1]).	Present VII: yunájmi [1sg.act.] (RV+) yuṅkté [3sg.med.] (RV+) Aorist R: ayuji [1sg.med.] (RV+), yukṣvá [2sg.impv.med.] (RV+) Aorist S: ayukṣata [3pl.med.] (RV+), ayukṣi [1sg.med.] (MSm) Perfect: yuyujma [1pl.act.] (RV 06.061.12), yuyujé [3sg.med.] (RV+) Passive: yujyáte [3sg.] (RV+) Fut: yokṣyate [3sg.med.] (AV+) Aorist mediopass: áyoji [3sg.], áyujran [3pl.] (RV) Abs: yuktvắ 'having yoked' (RV+) Inf: yujé 'to yoke' (RV) TA-Ptc.: yuktá- (RV+)	'to harness the fast(est) ones': Skt. yunajmi … ắśű (RV) — OAv. yaogət_ āsū (Y 44.4) asištā yaojaṇtē (Y 30.10) 'yoking with truth': Skt. ṛtá-yukti- [f] (RV 10.061.10) — OAv. yūjə̄n … aṣā.yuxtā (Y 49.9) 'having yoked horses (as wealth)': Skt. yuktắśva- [adj] (RV 05.041.05), yuktắśva- [m] PN (JB+) — YAv. yuxta.aspa- [adj], yuxtāspa- [m] PN		IIAL
*ieus	justice, welfare			difficult to establish				Beekes Celt.
*imh☐-o-	twin			{1} Identical with yamá- [1]. {2} [AL] For the reconstruction see Lubotsky 1988: 79.		{1} [AL] For the reconstruction see Lubotsky 1988: 79.		IIAL
*iod	that							Beekes
*is ǵʰis-	loins	Grk iskhíon 'hip', iksús 'loins, groin' Hit iskis(a)- 'loins' Lat īlia [pl.] 'abdomen below the ribs, groin, flanks'					Body (Lower)	JPM
*ishˌros	sacred power holy	Grk hierós 'sacred, powerful' Skt iṣirá- 'powerful' Grk hieròn ménos'sacred strength' Skt iṣiréna mánasā 'sacred strength'		Greek-Indo-Iranian isogloss			Sacred	JPM Beekes

*it-	thus	MWels yt- [preverb] Lat ita 'thus' Lith ìt 'very' Skt íti 'thus'				Conjunctions	JPM
*iuh☐s	you (plural)		{1} Skt. yūyám has been refurnished after vayám. The expected form would be *yūrám < *iuHžam < *iuHš + -am.	obl. yuṣmá-, encl. vas			IIAL
*iuh☐s-	soup, broth			gen.sg. yūṣṇás (RV), loc.sg. yūṣán (TS) in later texts, thematic yūṣá- (TS+)			IIAL
*k(e)h☐isVr-	mane	Lat caesariēs 'long flowing hair' Skt késara- Toch A śiśri				Hair	JPM
*ḱ(o)nid-	nit, louse egg	OIr sned 'nit' NE nit Lith glìnda Rus gnída Alb thërije Grk konís Arm anic				Bug	JPM
*k(o)us-	dwelling	NE house Toch B kwaṣai- 'village' Arm xuc' 'room' and xul 'hut'.	These would all appear to be derivatives of *keus- 'hollow out', and the use of this root for 'dwelling' words presumably reXects structures that were at least once semi-subterranean.			Dwelling	JPM
*ḱ(u)wōn	dog	OIr cū Lat canis OE hund [> NE hound] Lith šuõ Rus súka 'bitch' Grk kúōn Arm šun Av spā Skt śvā Toch AB ku Hit kuwan- 'dog-man'		śvā́ [nom.sg.] śvā́nam [acc.sg.] śúnas [gen.sg.]	'swift dog': Skt. rjí-śvan- [m] PN '= with swift dogs' (RV) — Gr. κύνες ἀργοί 'four-eyed dog': Skt. śvā́nau caturakṣáu (RV) — YAv. spānəm … caθru.cašməm 'with the feet of a dog': Skt. śvá-pad- [m] 'wild animal' (AV+) — YAv. spō.pad- [m] PN	Fauna	JPM IIAL

*k(ʷ)erḱ-	be lean		{1} [AL] For the acute tone in Lithuanian see Derksen 1996: 285-294.	Present IX: áva-kṛṣnīyāt [3sg.opt.act.] 'to make lean' (MS 3.6.9:73.8) Present IV: kṛ́śyati [3sg.act.] (Br.+) Perfect: cakárśa [3sg.act.] (AV 12.3.16) Caus: ava-karśáyanti [3pl.act.] 'to make lean' (RV 06.024.07) TA-Ptc.: kṛśita- 'emaciated' (Br.)			IIAL
*k(ʷ)leiḱ-	suffer	Lith klìšės 'crab-claw' Rus klestítĭ 'press' Skt klíśyate 'suffers, is tormented' Toch B klaiks- 'shrivel, wither'				Health&Sickness	JPM
*k(ʷ)rḱ-o-	lean		{1} According to Thieme, *k(w)rḱ-o- < PIE *k(w)rḱ-ro-.				IIAL
*k(ʷ)seud-	disperse		{1} [AL] The circumflex accent in Slavic can be due to Meillet's Law.	Present I: kṣódante [3pl.med.] (RV 05.058.06), kṣodanti [3pl.act.] (RV 07.058.01) Caus: kṣoday° (RV), ákṣodayat [3sg.impf.act.] (RV 04.019.04) 'to pulverize, to make small' or 'to make shake' (Jamison 1983: 153)			IIAL
*k(ʷ)seud-os-	dispersal						IIAL
*k(ʷ)sud-ro-	dispersed, small						IIAL
*k/geu(-k)-	curve	Skt kucá ti 'bends, curves', kuca- 'breast' OIr cūar 'curved' Lith kaũkaras 'hill' NE high Toch B kauc 'high' OPrus cawx 'devil' Lith kaũks 'goblin' OCS kukonosŭ 'curvenosed'	is treated as a verbal root which only survives in a number of nominal forms, e.g. *gudom 'intestines', *gu-ro-s 'lock of hair', *gu-r-nos 'back', all presumably derived from a no longer extant (or at least recoverable) verbal form.			Bend and Press	JPM

*ḱad-	fall	OIr casar 'hail' Lat cadō 'fall', cadāver 'corpse' Arm c'acnum 'fall' Skt śad- 'fall'				Crawl, Slide, Fall	JPM
*kagʰ-	catch, grasp	NWels cau 'close, clasp' Lat cōlō 'tend, take care of' OE haga 'hedge' Alb ke 'has, holds'	West Central			Give & Take	JPM
*kagʰ-	hedge, enclosure	NE haw, hedge ??Lat caul(l)ae 'hole, opening'	North-West from a verbal root *kagh- 'catch, seize'.			Dwelling	JPM
*ḱáikos	one- eyed	Skt kekara- 'cross-eyed' OIr cāech 'one-eyed' Lat caecus 'blind' Goth haihs 'one-eyed'				Health&Sickness	JPM
*kaiwelos	alone	Lat cae-lebs 'living alone, celibate' Skt kévala- 'alone'				Measure & Quantity	JPM
*ḱáiwr̥(t)	cave, fissure (in the earth)	(dialectal) Grk kaíatas 'ditches, fissures in the ground opened by earthquakes' Skt kérạta- 'cave, hollow'				Dwelling	JPM
*kak(k)ehₐye/o-	defecate	MIr caccaid 'defecates' Lat cacō 'defecate' Rus kákatĭ 'defecate' Grk kakkáō 'defecate' Arm k'akor 'excrement'	West Central			Vital Functions	JPM
*kal-	beautiful	Grk kalós 'beautiful' Skt kalya- 'healthy, prepared for, clever', kalyāṇa- 'beautiful'	Graeco-Aryan			Light & Dark	JPM
*kam-p-	bend (of terrain)	Lat campus 'field' Goth hamfs 'maimed' Lith kam~pas 'corner region' Grk kampḗ 'bend of river'	West Central			Bend and Press	JPM
*kamarehₐ	vault	means 'belt' in Avestan Grk kamara	Limited and questionable			Dwelling	JPM
*ḱámos	sheatfish	Lith šãmas Rus som Grk kamasḗnes [pl.] 'a kind of fish'				Fish	JPM
*kan-	sing	OIr canaid 'sings' Lat canō 'sing', carmen 'song, prophecy, form of incantation' OHG hano 'cock' Grk ēikanós 'cock' ?Toch B kene 'song, tune'	West Central			Formal Speech & Song	JPM
*kan-t(ʰ)o-	corner, a bending	NWels cant 'tyre' [Lat canthus or cantus 'wheel rim' comes from Gaul] Rus kut 'angle' Grk kanthós 'corner of the eye'	West Central			Shape	JPM

*ḱank-	branch	OIr cēcht 'plough' NWels cainc 'branch' ON hār 'thole-pin' Lith atšankė~ 'barb crooked projection from a tree' Rus suk 'branch, knot' Skt śankú- 'peg'				Trees	JPM
*kannabis	hemp	Lat cannibis NE hemp				Plants	JPM
*kap-	hawk, falcon	NE hawk Rus kóbec '[type of] falcon'	derived from *kap- 'seize'			Bird	JPM
*kap-	seize	OIr cāin 'law, tribute' Lat capiō 'take' NE have Latv kàmpju 'seize' Alb kap 'catch, grab, seize' Grk káptō 'gulp down' Skt kapaṭī [dual] 'two handfuls'				Give & Take	JPM
*kapōlo-	± head, skull	OE hafola 'head' Skt kapā́la- 'head cup'	Skt means both 'head' and 'cup', an association found elsewhere among the Indo-European languages, e.g. French tête 'head' derives from Lat testa 'pot'			Head	JPM
*ḱāpos	piece of land, garden	Roshani sēpc 'cultivated field' OHG huoba 'piece of land' Grk kêpos 'garden'				Plants	JPM
*kápr̥	penis	OIr gabor 'goat' Skt kápr̥th 'penis' Lat caper OE hæfer Grk kápros 'boar'	i.e. these are archetypically 'male' animals			Body (Lower)	JPM
*kápros	he-goat	OIr gabor 'he-goat' Lat caper 'he-goat' OE hæfer 'he-goat' NPers kahra 'kid'				Fauna	JPM
*kaptos	captive	Lat captus 'captive' NE haft	North-West			Conflict	JPM
*káput	head	Lat caput NE head ?	North-West			Head	JPM
*kar- *kerh₂	praise (loudly)	Av čarəkərə- 'praise' Skt carkarti 'praises' OE hrēþ 'fame' ON herma 'report'	{1} [AL] Possibly, here belong also YAv. kāraiia- '+_ to announce, perform', MP hng'r- 'to (ac)count, reckon', hng'l- /hangār-/ 'to perform, offer (thanks) calculate, determine consider' (Kellens 1984: 147f.). The other possible cognates are Bactr. πιδ-αγγηρ- 'to agree, settle', Khwar. m|nk'ry- 'to settle (a score) with someone to say goodbye'. {2} [AL] The mechanism of the Schwebeablaut in this root is not quite clear.	Intensive: carkarmi [1sg.act.] (RV), carkirāma [1pl.subj.act.] (RV), carkr̥dhi [2sg.impv.] (AVP 5.34.8), cárkr̥ṣe [3sg.med.] (RV) Aorist IS: ákārīt [3sg.act.] (RV+) akāriṣam [1sg.act.] (RV+)		Formal Speech & Song	JPM IIAL
*ḱarh□keh□-	magpie	Lith šárka Rus soróka	Isolated to Baltic and Slavic			Bird	JPM

*kark-	crab	Lat cancer (< *karkro-?) Grk karkínos Skt karkaṭ-a- (< *karkr̥to-) Skt karkī- 'cancer (as a sign of the zodiac)'				Bug	JPM
*kars-	scratch comb (wool)	Lat car(r)ō 'comb wool', carmen 'comb for wool' Lith karšiù 'comb/card wool' elsewhere it means 'scratch'.				Textiles	JPM
*kāru-	poet	Grk kḗruks 'herald' Skt kārú- 'one who sings or praises, poet'	Greek-Indo-Iranian isogloss from *kar- 'praise' although the Indo-European status of the Greek word has been challenged			Formal Speech & Song	JPM
*ḱas-	grey	Lat cānus ON hǫss Osc casnar 'old' 'hare' NWels ceinach NE hare OPrus sasins Khot saha- Skt śaśá-				Color	JPM
*ḱasos	hare	NE hare OPrus sasins Skt śaśá-	derivesfrom the adjective 'grey'			Fauna	JPM
*kat-	cat	Lat cattus	A late loanword perhaps associated with the spread of the domestic cat from Egypt, cf. Nubian kaḍīs 'cat', which was in turn widely borrowed by many other European languages.			Fauna	JPM
*kat-h□e	down	Grk káta 'katá'down through, among according to' Hit katta 'down, by, with, under', katkattiya- 'kneel, go down' Toch B kätk- 'lower'				Position	JPM
*katu-	fight	OIr cath 'battle', OHG hadu- 'fight' OCS kotora 'fight	North-West also widely employed in Celtic [e.g. Gaul Catu-rīx] and Germanic [e.g. OHG Hadubrantl personal names			Conflict	JPM
*kau(k)-	cry out cry out as a bird	Skt káuti 'cries out' Lith kaukiù 'howl' Grk kōkúō 'cry, lament' Arm k'uk' 'sighing, groaning' Skt kokūyate 'cries out' NWels cuan 'nightowl' Lat cavannus 'nightowl' OHG hūwo 'owl' Grk kḗks 'tern' Skt kóka- 'kind of goose'				Animal Noises	JPM

*kaulós	± cabbage	Lat caulis 'stalk of the [cabbage] plant' Grk kaulós 'cole, kail, cauliflower' Hit kaluis(sa)na 'some sort of vegetable'	Confined to the Mediterranean			Plants	JPM
*kaulós	stalk	Lat caulis 'stalk' OPrus caules 'thorn' Lith káulas 'bone' Grk kaulós 'stalk'	West-Central			Plants (Wild)	JPM
*kaunos	humble, lowly	OE hēan 'lowly, despised' Latv kàuns 'shame, disgrace' Grk kaunós 'bad, evil'	West Central			Love & Hate	JPM
*ḱe(n)s-	declare solemnly	Lat cēnseō 'proclaim solemnly, judge, assess, estimate, tax' OE herian 'praise' Av sənghaiti 'proclaims' Skt śáṃsati 'recites, praises, declares, vows'				Formal Speech & Song	JPM
*ked-	± pass through	Lat cēdō 'go from' Toch AB kätk- cross over		?		Come & Go	JPM
*ḱehₗ-	declare solemnly	Alb thotë 'says' OPers θātiy 'says, proclaims'	with a present *ḱéhₗti			Formal Speech & Song	JPM
*ḱehₗkom	edible greens	ON hā 'aftermath, second cutting of hay' Lith šékas 'green fodder' Skt śāka- 'potherbs, vegetables'				Plants	JPM
*ḱehₗs-	instruct	Av sāh- 'say instruct, call' Skt śāsti 'punishes, controls, commands, instructs' Toch A kās- 'chide, reprimand'	Indo-Iranian-Tocharian isogloss from *ḱehₗ- 'declare solemnly'			Formal Speech & Song	JPM
*keh₂-mo-	wish				'to accept a wish': Skt. kā́mam étya (RV 10.066.14) — OAv. kāmahiiā … itē (?) (Y 43.13) 'to grant a wish': Skt. kā́mam ā́ pr̥ṇa (RV) — OAv. pərənā … kāməm (Y 28.10)		IIAL
*ḱeh₂u-	burn	TochB kauṃ 'day' Grk kaíō 'burn'				Fire	JPM
*keh□-	love	Av kā- 'long for' Skt kāyamāna- 'liking' OIr cara 'friend', caraid 'loves' Lat cārus 'dear' NE whore		Present IV: kā́yamāna- [ptc.med.] (RV 03.009.02) Perfect: (ā́) cake [3sg.med.] (RV) cakāná- [ptc.med.] (RV)		Love & Hate	JPM IIAL

*ḱehₐdes-	± concern; hate	MIr cais 'hate' NE hate Grk kḗdos 'care, concern, sorrow' Av sādra- 'grief' Skt ri-śādas- 'caring for a stranger'				Love & Hate	JPM
*ḱehₐk-	jump	Lith šókti 'jump, dance' Grk kēkíō 'jump'	Baltic-Greek			Run & Jump	JPM
*kehₐros	friendly	OIr cara 'friend' Lat cārus 'friend' NE whore Latv kārs 'greedy'	North-West			Family	JPM
*kehₐu-	hollow out	Lat cūpa 'cask' Grk (Hesychius) kū́pē 'cave' Skt kū́pa- 'hole, hollow, cave' Enlarged with *-l- Lat caulis 'stalk' NE hollow Grk kaulós 'stalk' Lith káulas 'bone' Skt kúlyam 'bone' ?Hit gullant- 'hollow?'				Reductive Activities	JPM
*kehₐu-	strike, hew	NE hew Lith káuja 'strikes, forges' OCS kovǫ 'forge' Toch B kau- 'strike down, kill, destroy'				Conflict	JPM
*ḱehₐ(i)-	sharpen, hone	Skt śíśāti □ śyáti 'sharpens, whets' Lat catus 'wise' Grk kỗnos 'pinecone, fircone peak of a helmet' [if < *'sharp(ened) object'] Skt śā́ṇa- 'whetstone' Toch B kāntsā- 'sharpen' Arm srem 'sharpen' NE hone				Reductive Activities	JPM
*kehₐi-	hot	NE hot Lith kaĩsti 'heat, become hot'	North-West			Qualities	JPM
*kei-	set in motion	Lat cieō 'set in motion' Grk seúō 'set in motion' Arm c'vem 'set off' Av š(y)avaite 'sets off' Skt cyávate 'goes forth' Alb qoj means 'wake'				Movement	JPM

*ḱei-	lie	Grk keîmai 'lie' Hit kittari 'lies' Av saēte 'lies, rests' Skt śáye 'lies'	Conjugated in the middle rather than the active voice and in poetic language the word is also used to indicate the position of the deceased (e.g. Homeric Grk keiutai Pátroklos '[here] lies Patroclus'). {1} [LK] śîyate 'falls' may belong to this root as its dynamic present (Lubotsky apud Kulikov 2001: 329ff.) see also śyā.	Present II: śáye [3sg.med.(stat.)] (RV+) śáyāna- [ptc.pres.med.] (RV) *śayīta [3sg.opt.med.] (AVP 8.15.5) śére [3pl.med.(stat.)] (AV+) śéte [3sg.med.] (Br.+) vi śerām [3pl.impv.] (AVP 2.73.3) Present IV: śîyate [3sg.med.] 'falls' (AV+) {1} Aorist IS: aśayiṣṭhās [2sg.med.] (RV 10.124.01) śéṣan [3pl.subj.act.] (RV 01.174.04) Perfect: śaśayāná- [ptc.med.] (RV+) Inf: śayádhyai (RV) TA-Ptc.: á-ni-śita- 'restless' (RV+)		Placement Verbs	JPM
*ḱei(h□)	lie, be somewhere						IIAL
*ḱeigʰ-	fast	OE hīgian 'hasten' [> obsolete or archaic NE hie] Rus sigátĭ 'spring' Skt sīghrá- 'quick, fast'	North-West			Time	JPM
*ḱeir-	dull or brownish black	OIr cīar 'dark brown' NE hoar OCS sěru 'grey' Alb thirr 'soot' Grk kíraphos 'fox', kirrós 'orangy'	West Central			Color	JPM
*ḱéiwos	belonging to the household	Lat cīvis 'citizen' Oscan ceus 'citizen' OE hīwan 'household' Latv sieva 'wife' Skt śivá- 'kind, auspicious, dear' Shiva	Some derive this word from *kˆéi- 'lie', i.e. either 'those who lie together (in sleep)' or 'those who depend on one another'			Family Dwelling	JPM

*keḱ-	polecat	Lith šēškas Skt káśa-	Baltic and Indic only			Fauna	JPM
*kel-	deceive	Lat calvor 'calvō 'deceive' OE hōl 'slander' Grk kēléō 'bewitch, deceive'	West Central			Values	JPM
*kel-	drive	Lat celer 'swift' Grk kéllō 'drive a ship to land' Skt kaláyati 'impels' NE hold Gothic haldan 'pasture cattle' Toch B kälts- means 'press, goad, drive'				Convey	JPM
*kel-	prick	NE holly OCS klasŭ 'ear of grain' Toch B klese 'barley meal' Alb kallí 'straw, chaff' Skt kaṭamba- 'arrow'	It may be related to the homophonous root *kel- 'cut'			Reductive Activities	JPM
*ḱel-	conceal, cover	OIr ceilid 'conceals, dissembles' Lat cēlō 'conceal' OE helan 'conceal' Grk kalúptō 'cover'	West Central {1} [AL] Khot. śaraima 'covering' (KT2 47,5), cited by Bailey (DKS: 395b), does not exist: śaraima is to be interpreted as śarai ma (Cheung, p.c.).			Motion	JPM IIAL
*kel(h□)-	lift, raise up	Lat ante-cellō 'surpass' Grk keléontes 'vertical beams in an upright loom' Lith kélti 'raise up' Toch AB käly- 'stand' NE hill				Convey	JPM
*ḱel(h□)-	± (spear)point	ONhali 'point of shaft, tail' OPrus kelian 'spear' Alb thel 'big nail, spike', Grk kḗla [pl.] 'arrowshafts' Skt śalyá- 'spear, arrowhead'				Weapons	JPM
*ḱelb-	help	NE help Lith šelpiù 'help, support'	North-West			Being & Doing	JPM
*kelh₁-	call out to	OIr cailech 'cock' Skt uṣā-kala- < *'dawn-singer' Lat calendae 'the first days of the month on which the ides and nones were announced' Grk kaléō 'call', kalḗtōr 'herald' ON hjala 'chatter, talk' Latv kaḷuôt 'chatter' Hit kalless- 'call'				Speech	JPM
*kelh₁-	strike	Lat calamitās 'loss, injury, damage, misfortune' [> by borrowing NE calamity] Lith kalù 'strike, forge' OCS koljǫ 'stab, slaughter' Grk keleós 'green woodpecker'	West Central			Conflict	JPM
*kelp-	jug, pot	OIr cilorn 'pitcher' Grk kálpis 'jug, [water] pitcher' ?Skt karpara-'cup, pot'	West Central			Containers	JPM

*ḱēls	(store)room	Lat cella 'storeroom' Grk kalīā́ 'hut' NE hall (a derivative)	It would appear to derive from *ḱel- 'protect, conceal'			Dwelling	JPM
*ḱelto-	cold	Lat calidus 'warm, hot' Welsh clyd 'sheltered, warm, snug' Lith šáltas 'cold' Av sarəta- 'cold' Skt śíśira- 'cold season'				Qualities	JPM
*kem-	± press together	NE hamper Lith kamúoti 'press together' Rus komítĭ 'press into a ball' Grk kô̂mos 'band of revellers (=crowd)' Arm k'amel 'press, squeeze, filter'	West Central			Bend and Press	JPM
*kem-	hum	NE hum Latv kamines 'bee, bumble-bee' Rus cmelĭ 'bumble-bee'	North-West			Animal Noises	JPM
*kem-	love	Lith kamaros [pl.] 'lasciviousness' Skt kāmáyati 'longs for, is in love with, copulates with' Toch B kāñm- 'play'				Love & Hate	JPM
*ḱem-	cover	Late Lat camīsia 'linen shirt, nightgown' (perhaps borrowed from Gaulish) OE hama 'dress, covering' Skt śāmūla- 'thick woollen shirt'				Motion	JPM
*ḱem- *ḱem(h□)-	hornless	Skt śáma- hornless' NE hind Grk kemás 'young deer' OPruss camstian 'sheet' Rus konĭ 'horse'				Fauna	JPM IIAL
*kemeros	± hellebore	OHG hemera 'hellebore' Lith kemė~ras 'marigold' ORus čemerŭ 'hellebore' Grk kámaros 'larkspur'	West Central hellebore and larkspur are poisonous (SGM)			Plants (Wild)	JPM

*ḱemh-	grow tired, tire oneself	MIr cuma 'grief' Grk kámnō 'be tired, work hard at' Skt śāmyati 'becomes quiet, fatigues, ceases'		Present IV: śā́myati [3sg.act.] (AVP+) Present ĀYA: śamāyate [3sg.med.] (RV) Aorist R: śamīṣva [2sg.impv.med.] (TS+) Aorist IS: áśamiṣṭhās [2sg.med.] (RV 03.029.16), áśamiṣta [3sg.med.] (RV 05.002.07) Perfect: śaśamé [3sg.med.] (RV), śaśā́ma [3sg.act.] (Br.+) śaśamāna- [ptc.med.] (RV+) Caus: śamáy° 'to make peaceful, appease to slaughter (a sacrificial animal)' (AV+) Aorist RED: aśīśamat [3sg.act.] (AV+) TA-Ptc.: śāntá- 'soothed, extinguished' (AV+)		Health&Sickness	JPM IIAL
*ken-	fresh	MIr cana □ cano 'young animal [of wolf, dog, etc.]' Lat recēns 'fresh, just arrived' [> by borrowing NE recent] OCS začfęti 'begin' Grk kainós 'young' ?Skt kanîna- 'young'				Health&Sickness	JPM
*ken-	love	MIr cin 'love, tendency' Av čanah- 'demand, request' Skt cánas- 'pleasure'				Love & Hate	JPM
*kenh□is	ash	Lat cinis 'ash' Grk konis 'dust, ash' Toch B kentse 'rust, verdigris'				Fire	JPM
*kenk-	± hock, back of knee	NE hock, Lith kenklě 'hock, back of the knee' Skt kaṅkāla- 'bone, skeleton'				Body (Lower)	JPM

*kenk-	gird, wrap around	Lat cingō 'gird, surround' Lith kinkaũ 'bridle, harness [a horse]' Skt káñcate 'bind' kāñcī- 'girdle'				Textiles	JPM
*kenk-	hunger	NE hunger Lith kankà 'pain, torment' dialectal Grk kégkei 'is hungry'	West Central			Food & Drink	JPM
*ḱent-	sharp	Goth handugs 'wise' Latv sīts 'hunting spear' Grk kentéō 'prick'				Shape	JPM
*ḱéntr/n-	± patch, patched garment	Lat centō 'patchwork clothes' OHG hadara 'patches' Grk kéntrōn 'patched clothes' Arm kʻotʻanak 'clothes'	West Central			Textiles	JPM
*ker-	burn	Goth haúri 'coal' ON hyrr 'fire' OE heorþ, whence NE hearth Lith kùrti 'heat' OCS kuriti sę 'smoke' *kr-em- in Lat cremō 'burn' perhaps *ker-s- if Skt kaṣāku- □ kuṣāku- 'fire, sun'				Fire	JPM
*ker-	caw	Lat corvus 'raven' Grk kóraks 'raven' Skt karaṭa- 'crow' Czech krákorati 'cackle' Grk skorakízō 'dismiss contemptuously'				Animal Noises	JPM
*ḱer-	decay	OIr ara-chrin 'decays' Lat cariēs 'decay' Skt śī́ryate 'decays' Alb ther 'slaughter, stab, goad' Grk keraḯzō 'devastate, kill' Av a-sarəta- 'unbroken'				Conflict	JPM
*ḱer-	grow	Lat creō 'create' Grk korénnūmi 'satisfy', koũros 'adolescent' Arm sirem 'bring forth' Tocharian kärk- 'sprout'	Latin goddess Cerēs derives from this root			Vital Functions	JPM
*ḱer- *ḱr̥-wos	greyish blue,	Lith šir̃vas □ šir̃mas 'blue-grey' Alb thjermë '(blue-)grey', surmë 'dark grey, black' Skt śārá- 'coloured'				Color	JPM
*ḱer(es)-	± (rough) hair, bristle	NE hair Lith šr̃ys 'bristle, animal hair' Rus šerstî 'wool, animal hair'				Hair	JPM
*ḱer(h□)-o-bʰo-	horned animal						IIAL
*ḱer(s)no-	hoarfrost, frozen snow	Lith šarmà 'frost' Rus séren 'frozen snow' Arm saṙn 'ice'				Water	JPM
*ḱérberos	spotted		Would seem to underlie the names of both the Greek hound of Hades Kérberos and the epithet (śárvara-) of one of the dogs of Yama, the Indic god of the dead.	??		Dieties	JPM

*ḱērd *ḱr̥dyeh□-	heart	OIr cride Lat cor NE heart Lith širdís Rus sérdce Grk kē̂r, kardíāñ Arm sirt Hit kir Av zərəd- Skt hŕ8d, hŕ8daya- Toch B kāryāñ [pl.]	{1} *ĵh- must be due to contamination with another word. The original *ć- is preserved in śraddhā-.	nom.acc.sg. hā́rdi, gen.sg. hr̥dás, loc.pl. hr̥tsú	Organs	JPM IIAL Beekes
*kerd-	± defile, defecate	Lat mūs-cerda 'mouse droppings', bu-cerda 'cattle dung' MPers xard 'clay' Shughni šarθk- 'defecate' Skt kardama- 'mud, slime, mire, dirt, filth' Toch B kärkkälle 'swamp, mire'			Vital Functions	JPM
*kerd-	belt	OIr cris 'belt' Rus čéres 'leather belt'	North-West		Textiles	JPM
*kerd-	cut into, carve	OIr cerd 'art, handicraft' Grk kérdos 'profit'	West Central		Reductive Activities	JPM
*kerd-	profit, wealth, gain	Gr. kérdos 'gain, profit'				Celt.
*kerdheh□-	herd, series	NE herd Lith (s)keřdžius 'herdsman' OCS crĕda 'herd, series'	North-West		Measure & Quantity	JPM
*kérdos	craft	OIr cerd 'craftsman' NWels cerdd 'song, poem craft' Grk kérdos 'profit' but in the plural it means 'cunning arts craft'	West Central		Occupations	JPM
*kéres-	millet, grain	NHG Hirse 'millet' Kalasha karasha 'millet' Lat cerēs 'bread, grain'			Plants	JPM
*kerghh-	bind	Lith keřgti 'tie, bind' Toch AB kärk- 'bind'			Binding	JPM

*ḱerh₂	break		{1} [LK] With the secondary suffix accentuation (see Kulikov 1998). {2} [LK] The 3sg.med. form śaśire (AVP), allegedly an archaism (< *ća-ćr̥H-?), does not exist see Kümmel 2000: 518.	Present IX: śr̥n̥áti [3sg.act.] (RV) Present IV: śī́ryate [3sg.med.] (RV 01.164.13 +), śī́ryate [3sg.med.] (ŚB = BĀU), śīryáte [3sg.med.] (MS, KS) {1} Aorist IS: aśarīt [3sg.act.] (AV+) Aorist mediopass: śāri [inj] (RV) Perfect: śaśré [3sg.med.] (AV, ŚB) {2} na-ptc.: śīrṇá- 'broken' (AV+) TA-Ptc.: a-śīrta° 'unharmed' (KS+) śūrtá- 'smashed, crushed (?)' (RV 01.174.06) Inf: śárītoḥ (RV)			IIAL
*ḱérh₂s	horn	Grk kéras Toch B karse 'stag' [< *'horned one']				Fauna	JPM
*ḱérh₂sr̥	horn	Lat crābrō 'hornet' Lith širšuõ 'hornet' Toch B krorīya 'horn'				Fauna	JPM
*kerh□-	propel	Skt kiráti 'pour out, throw' Toch B kärsk- 'propel'	Indo-Iranian-Tocharian isogloss			Movement	JPM
*ḱerh□-	mix	OE hrēran 'move, stir' Grk kírnēmi 'mix' Av sar- 'associate with, mix with' Skt śrīṇā́ti 'mixes, mingles'				Food Prep	JPM Beekes IIAL
*kerk-	hen	MIr cerc 'brood hen' Grk kérkos 'rooster' (dialectal) Av kahrka- 'hen' Skt kr̥kara- 'a kind of partridge' Skt kr̥kavā́ku- 'rooster' Toch B kraṅko 'chicken'	Obvious is the suggestion that the name of the bird may be onomatopoeic (compare NE cluck) and so its reconstruction is not entirely certain			Bird	JPM
*kérmen-	skin	OPrus kērmens 'body' Av čarəman- '[animal] skin, leather' Skt cárman- 'skin'	derives from the verb *(s)ker- 'cut (off)'.			Body (Upper)	JPM

*kerp-	pluck, harvest	MIr corrān 'sickle' Latv cirpe 'sickle' Skt krpānī 'sword' Lat carpō 'pluck' Grk karpós 'fruit' NE harvest OE hoerfest 'autumn'	from *(s)ker- 'cut'			Agriculture	JPM
*kers-	plow		{1} Skt. kaṣ- is a popular form of karṣ.	Present I: apắkaṣan [3pl.impf.act.] (AV 10.7.20)			IIAL
*ḱers-	run	Lat currō 'run' MHG hurren 'hasten' Grk epíkouros 'running for help' OIr carr 'vehicle'				Run & Jump	JPM
*kert-	knife	Skt kṛtí- Av kərəti both 'knife' Toch B kertte 'sword'				Weapons	JPM
*kert-	plait, twine	Lat crātis 'wickerwork, hurdle, honeycomb' NE hurdle OPrus corto 'hedge' Grk kártallos 'basket', kurtía 'wattle'		Present VII: út-kṛṇatti [3sg.act.] (RV 10.130.02) kṛṇátti [3sg.act.] (AV, TS+)		Textiles	JPM IIAL
*kert-tro-	spindle			also cāt(t)ra-			IIAL
*kes-	comb	MIr cīr 'comb' Lith kasà 'braid' OCS kosa 'hair' Hit kiss- □ kisā(i)- 'comb' Grk ksaínō 'scrape, comb [hair or wool], full [cloth]' OE heordan [pl.] 'hards [of flax], tow'				Textiles	JPM Beekes
*kēs(ḱ)eh□-	time	OCS c̆asŭ 'time' Alb kohë 'time, period, epoch weather'	West Central			Time	JPM
*ket-	room	OE heaðor 'enclosure, prison' OCS kotĭcĭ 'chamber' Av kata- 'chamber' Av čāiti 'in a hole' Skt cắtvāla- 'hole for the sacrificialfiWre' Toch B kotai- 'hole'	Refers to a single chamber and was borrowed into the Uralic languages, e.g. Finnish kota 'dwelling, tent, hut'. It may be that the 'chamber' was originally something like a 'storage pit'			Dwelling	JPM
*ḱet-	be angry	Grk kótos 'spite, anger' Skt śátru- 'enemy'	Greek-Indic isogloss			Values	JPM
*keudes-	magic force	OCS čudo 'wonder' Greek kûdos 'renown'	Slavic-Greek Isogloss			Sacred	JPM
*ḱeudʰ-	hide	NE hide Grk keúthō 'hide' Arm suzanem 'hide' after metathesis into *dʰeuḱ- OE dēagol 'secret, hidden' Toch B tuk- 'be hidden'				Conflict	JPM

*ḱeuh₁-	swell, grow great with child	Lat inciēns 'pregnant' Grk kuéō 'am pregnant' Skt śváyati 'swells, becomes powerful' NWels cawr 'giant' Grk kū́rios 'lord' Av sū́ra- 'powerful' Skt śū́ra- 'powerful'				Blow Up	JPM
*Ḱeuh□-	hollow out	MIr cūa 'hollow' Lat cavus (Early Lat covus) 'cave' Alb thellë 'deep' Grk kúar 'eye of a needle' koîlos 'hollow, deep' Arm soyl 'hole' Skt śūnya- 'empty, hollow' Toch B kor 'throat'				Reductive Activities	JPM
*kéuh□ḷ	hernia	OE hēala Lith kū́las Rus kilá Grk kā́lē Oss k'ullaw	The word itself apparently derives from *keuhx- 'be bent (convexly)'			Health&Sickness	JPM
*keuk-	be crooked, bend			Present VI: ut-kucant- [ptc.act.] (KauśS)			IIAL
*ḱeuk-	cry out (to)	Lith šaukiù 'call, cry, shout summon' Toch B kuk- 'call out to'				Speech	JPM
*ḱeuk-	shine, burn	Av suč- 'burn, flame' Skt śócate 'shines, glows, burns' Toch B śukye 'shining' grk kúknos 'swan'				Light & Dark	JPM
*keul-	pig	Lith kiaũle 'pig'	[MWels Culhwych, a mythological Wgure associated with swineherds and boarhunting]			Fauna	JPM
*keus-	hollow out	Lith kaũšti 'hollow out' ON hauss 'skull' Lith káušas 'skull, ladle' Skt koṣa- 'vessel' NE house Arm xuc' 'room' Khot kūṣda- 'mansion' Toch B kuṣā- 'village' [<*'collection of dwellings']	Suggests that one type of Proto-Indo-European dwelling was at least partially dug below ground level			Reductive Activities	JPM
*kew-	gull ?	Gr. kaúaks 'gull'					Celt.
*Ḱewh₂-ro-	strong	Skt. śávīra- 'strong' Gr. kýrios 'lord'.					Celt.
*ḱh₁s-	hare						Beekes
*kʰa-	laugh	Lat cachinnō 'laugh' OE ceahhettan OCS chochotati Grk ka(g)kházō Arm xaxank Skt kákhati □ khákkhati				Human Sounds	JPM

*kh□ónks	honey-coloured, golden	Lat canicae [pl.] 'bran' Grk knĕkós 'pale yellow' Skt kánaka- 'gold' NE honey Toch B kronkśe 'bee'				Meals	JPM
*kh□m(-s)-	be fatigued, sleepy	Skt klām(y)ati 'becomes weary, fatigues' Toch B klänts- 'sleep'	Indic-Tocharian isogloss			Health&Sickness	JPM
*kieu-	move, go		{1} [AL] OAv. šauuaitē (Y 29.3) can hardly be 3pl.pres., as is often assumed, rather an infinitive (Insler 1975: 149).	Present I: cyávam [1sg.subj./inj.act.] (RV 01.165.10) cyavante [3pl.med.] (RV+), cyávāna- [ptc.med.] (athematic!) (RV 10.115.06, usually PN) Aorist S: cyoṣṭhās [2sg.inj.med.] (RV 10.173.02), acyoṣta [3sg.med.] (AB+) Perfect: cicyuṣé [2sg.med.] (RV 04.030.22), cucyuvé [3sg.med.] 'has undertaken' (RV 08.045.25) Caus: cyāváyati [3sg.act.] 'to make stir' (RV+) Aorist RED: ácucyavuḥ [3pl.act.] (RV, AVP), ā-cucyuvīmáhi [1pl.opt.med.] (RV) TA-Ptc.: cyutá- 'movable, shaken' (RV+), á-cyuta- 'unshakable' (RV+)			IIAL
*kieu-	set into motion, be in motion		Long grade. Wierd, huh?				Beekes
*ḱih□won-	pillar, post	Grk kī̃ōn Arm siwn				Construction	JPM
*kiḱ-(y)eh□-	jay	Italian cissa OE hig(e)ra Grk kíssa Skt cisa- 'roller'				Bird	JPM

*ḱiḱer-	chickpea	Lat cicer 'chickpea' Maced kíkerroi 'birds' pease' Arm sisen 'chickpea'				Plants	JPM
*ḱís	this (one)	OIr cē 'here, on this side' Lat cis 'on this side of' OE hē 'he' [> NE he] Lith šìs 'this [one]' OCS sĭ 'this (one)' Alb sot (< *kˆyeha-dihxtei) 'today' Grk sḗtes (< *kˆyeha-wetes) 'in this year' Hit ki 'this'				Pronouns	JPM
*kla(n)g-	scream (of birds)	Lat clangō 'cry [of birds]' ON hlakka 'cry [of an eagle]' Lith klagé̗ti 'cackle' Grk klázō 'resound' Grk klaggṓdēs 'shouting, screaming [of people and birds], barking or baying [of dogs]'	West Central			Animal Noises	JPM
*kleh₂ro-	board, slat, lot?	Gr. klêros 'lot, piece of wood for casting lots'					Celt.
*kleh□-	spread out flat	Lith klóju 'spread out' NE lade OCS kladǫ 'load, lay'	North-West			Extend	JPM
*kleh□dʰreh□-	alder	NHG Lutter 'mountain alder' Grk klḗthrā 'stickyalder'				Trees	JPM
*kleh□wis	bolt, bar (wooden) hook	Lat clāvis 'bolt, key' Grk kleís 'bar, bolt'	West Central			Tools	JPM

*ḱlei-	lean	Lat clīvus 'slope' NE lean Lith šliẽti 'lean against' Rus sloj 'layer, level' Grk klī́nō 'cause to lean' Av sray- 'lean' Skt śráyate 'clings to, leans on' Toch B kläsk- 'set [of sun]' OIr clē 'left' Lat clīvis 'inauspicious'	{1} [LK] According to Narten 1964: 259f., a rebuilding of the root aorist áśret, rather than an authentic sigmatic aorist. {2} The original present formations were an intransitive thematic (middle) *ḱléi-e- and a transitive nasal present.	Present I: śráyate [3sg.med.] (RV+) Perfect: śiśrā́ya [3sg.act.] (RV+), śiśriyé [3sg.med.] (RV+) Aorist R: áśret [3sg.act.] (RV) Aorist S: śreṣāma [1pl.subj.act.] (RV 04.043.01), áśrait [3sg.act.] (AV 13.2.9) {2} Fut: śrayiṣy° (Br.+) Caus: úc-chrāpaȳ 'to raise up' (VS+) TA-Ptc.: śritá- 'attached (to something), leaning (on something), fixed' (RV+)		Placement Verbs	JPM
*kléinus	maple	OE hlīn Lith klẽvas Rus klĕn Maced klinó(s)trokhos Grk glîno- 'a type of maple' ?				Trees	JPM
*kleng-	bend, turn	Lat clingō 'gird' NE link 'chain' Toch B kleṅke 'vehicle/way of arriving at knowledge' Toch B kläṅk- 'doubt'				Bend and Press	JPM
*klep-	± lay hand to	NE helm, halter OPrus anklipts 'concealed' Toch AB kälp- 'find, get, achieve, obtain' Toch B klep- 'touch with the hands, investigate, test' v. 'steal' Goth hlifan Grk kléptō Toch B kälyp-				Sensation	JPM
*ḱleu-	clean	OLat cloāca 'gutter' OE hlūttor 'clean' Lith šlúoju 'sweep' Grk klúzō 'wash'	West Central			Clean	JPM

*ḱleu-	hear	OIr ro-cluinethar 'hears' Lat clueō 'am called' Goth hliuma 'hearing' OCS sluti 'be called' Alb quaj 'call, name consider' Grk kléō 'tell of, make famous' Arm lsem 'hear' Av surunaoiti 'hears' Skt śr̥ṅóti 'hears' Toch B klautso 'ear'				Sensation	JPM
*ḱléuos-ndʰgʷʰitom	fame (immortal)						Beekes
*ḱleus-	hear	OIr clūas 'ear' NE listen Lith klausaū 'I hear' OCS slyšati 'hear' Messapic klaohi 'hear!' Skt śróṣati 'hears' Toch B klyaus- 'hear' *ḱlūtós > NE loud.				Sensation	JPM
*ḱléutrom	a sound	OE hlēodor 'sound' Av sraoθram 'song' Skt śrótra- 'tone'				Human Sounds	JPM
*ḱléwes-	fame	OIr clū 'fame' Lat cluor 'glory' OCS slovo 'word' Grk kléos 'fame' Av sravah- 'word' Skt śrávas- 'fame' Toch B -kälywe 'fame'				Formal Speech & Song	JPM
*ḱléwesh₂-h₂nróm	famous deeds of men						Beekes
*klh̥-ro-s	plank	OIr clār 'plank' Grk klě̃ros 'piece of wood used for casting lots'	from *(s)kel- 'strike, hew'			Construction	JPM
*klh̥wos	bald	Lat calvus Av kaurva- Skt áti-kūrva- NE callow Rus gólyj 'bare'	{1} [AL] There are also a couple of Vedic words of a similar meaning with initial kh-: khalatí- [adj] 'bald-headed' (AVP+), khǎlatya- [n] 'baldness' (AV) cf. also kharvá- [adj] 'mutilated, deformed' (AV+ á-kharva- RV 07.032.13+), but they can hardly be related. Also NP kal [adj] 'bald' must be of a different origin. The relationship of *klHuo- and *golHuo- 'bald', attested in Germanic (OHG kalo) and Balto-Slavic (OCS golъ 'naked', Lith. galvà, Ru. golová 'head') is unclear.			Health&Sickness	JPM
*ḱlíts	post, trimmed log	OIr clī 'housepost' OE gehlid 'fence' [< *'string of posts']) Grk klíta 'cloister' [< *'arcade' < *'series of posts'] Skt śrit- 'ladder'				Construction	JPM

Sheet1

*kl̥nos	callosity	Lat callus 'callosity' [> borrowed in NE callus] Skt kíṇa- 'callosity'	From *kal- 'hard'			Health&Sickness	JPM
*ḱlóunis	± haunch, hip	NWels clun 'haunch' Lat clūnis 'buttocks, haunch [of animals]' ON hlaun 'buttocks, loin' OPrus slaunis 'hip' ?Alb qênjë 'belt' Grk klónis 'os sacrum' Av sraoni- 'buttock' Skt śróṇi- 'buttock, hip, loin'			broad-hipped': Skt. pṛthú-śroṇi- [adj]	Body (Lower)	JPM IIAL
*kl̥tḗr	knife	Lat culter '(butcher's) knife' Skt kuthāra- 'axe'		?		Weapons	JPM
*klun-	resound	OE hlynn 'sound, noise, roaring stream' Toch AB käln- 'resound'	Germanic-Tocharian isogloss			Human Sounds	JPM
*ḱmeh□-	made, prepared	Grk -kmḗtós 'made, worked' Skt śamitá- 'prepared'	From *ḱemh□- whose transitive meaning is 'work' and intransitive is 'become tired'.			Being & Doing	JPM
*ḱmh₂-e/o-	tired						Beekes
*ḱmh₂-to-	which has cost labour						Beekes
*km̥h□ros	crayfish	Grk kámaros 'lobster' ON humarr 'lobster'				Bug	JPM
*km̥h□p-h□-	drone	OHG humbal Grk kḗphḗn				Bug	JPM
*knab(ʰ)-	pick at, tease out	NWels cnaif 'fleece' Lith knabénti 'to pick/peck at' MDutch noppe 'nap, pile' [borrowed into NE as nap] Grk knáphō 'full (cloth)'	Our only possible linguistic attestation of the concept of 'fulling' wool, i.e. felting an already woven fabric.			Textiles	JPM
*knei-gʷʰ	lean	Lat cōnīveō 'blink' Goth hneiwan 'bow'	North-West			Placement Verbs	JPM
*kneu-	nut	OIr cnū 'nut' Lat nux 'nut' NE nut				Trees	JPM
*ḱnt-	by, along						Beekes
*ko(m)	with, side by side	OIr com- 'with' Lat cum 'with' OCS kŭ 'toward' Skt kám 'toward'				Position	JPM Beekes
*ko(n)gos	hook	MIr alchaing 'weapon rack' NE hook Rus kógotĭ 'claw' Hit kagas 'tooth'				Tools	JPM
*kob-	fit, suit, accomplish	OIr cob 'victory' ON happ 'chance, luck' > NE happy OCS kobĭ 'divination'	North-West			Being & Doing	JPM

*kobom	success	OIr cob 'victory' ON happ 'luck [NE hap, whence the adjective happy, is related but is a loanword from ON] OCS kobĭ 'divination'	North-West from *kob- 'suit, fit'			Exchange & Property	JPM
*ko ǵ ʰéh□-	goat	OCS koza 'she-goat' Alb kedh 'kid'	Slavic and Albanian			Fauna	JPM
*Ḱóh₁kōh₂	(forked) branch	Goth hōha 'plough' Lith šakà 'branch' Rus sokhá '(primitive) plough' Arm c'ax 'branch' NPers šāx 'branch' Skt śā́khā 'branch'	Has secondary meanings as 'plough' in a number of languages as primitive ploughs were originally made from forked branches			Trees	JPM
*ḱóh□-r̥	wax	Lith korỹs 'honeycomb' Grk kēríon 'honeycomb', kērós 'wax'				Meals	JPM
*ḱóh□ilus	healthy, whole	NE whole Scots dialect hale OPrus kailū-sitkan 'health' OCS cělŭ 'healthy' dialectal Grk koîlu 'good'				Health&Sickness	JPM
*Ḱoh□nos	whetstone, hone	Lat cōs [genitive cōtis] 'whetstone' NE [a] hone NPers san 'whetstone' Skt śāṇa- 'whetstone'				Tools	JPM
*koiḰ-	cut hair	Lith káišiu 'scrape, shave' Alb qeth 'cut hair, shear' Skt kéśa- 'head hair'				Hair	JPM
*ḱóimos	household, village	NE home	West Central related to Lat cīvis 'citizen' and words that mean 'dear' in Sanskrit.			Dwelling	JPM
*ḱoino-	grass	Lith šiẽnas 'hay' OCS sěno 'hay, fodder, grass' Grk koiná 'hay'				Plants	JPM
*ḱoiw-is	± tube	Lith šeiva 'spool'				Dwelling	JPM
*Ḱókolos	splinter	Lith šakalỹs 'splinter' Skt śákala- 'splinter'				Construction	JPM
*ḱóḰs-o/eh□-	hollow of (major) joint	OIr cos 'foot' Lat coxa 'hip' OHG hāhsa 'back of knee' Av kaša- 'armpit' Skt kákṣa- 'armpit, loins' Toch B kakse 'loins'	Difficult			Body (Upper)	JPM
*ḱokʷ-r-	manure, dung		{1} Probably, a derivative of the root *ḱekw-, found in Lith. šìkti 'to shit'. Similar in form and meaning is *sokr-/-n- 'manure, dung', cf. Hitt. šakkar, šaknaš, Gr. σκῶρ, σκατός. {2} An original adjective ?	śákr̥t [nom.acc.sg.] (RV+), śaknáḥ [gen.sg.] (AV+), śaknā́ [instr.sg.] (VS+), śákabh	IIAL
*Ḱókʷr̥	excrement, dung, manure	Lith šikù 'defecate' Grk kópros 'dung, manure' Skt śákr̥t 'excrement, dung'				Vital Functions	JPM

*kol-	glue	MLG/MDutch hêlen 'stick' Grk kó lla 'glue'				Binding	JPM
*kolh₁-ōn	hill	NE hill Lat collis 'hill' Lith kálnas 'mountain' Grk kolōnós 'hill'	all derivatives of *kelh₁- 'rise, stand'			Earth	JPM
*ḱólh□ōm	stalk, stem, straw	Lat culmus 'stalk, stem, straw' OE healm 'stalk, stem, straw' Latv salms 'stalk, stem, straw' Rus solóma 'stalk, stem, straw' Grk kálamos 'reed' Toch A kulmänts- 'reed, rush'				Plants (Wild)	JPM
*kolnós	one- eyed	OIr coll 'having lost the right eye' dialectal Grk kellás 'one-eyed' Skt kāṇá- 'one-eyed'				Health&Sickness	JPM
*ḱólsos	neck	MIr coll 'head, chief' Lat collus OHG hals 'neck'	West Central			Head	JPM
*kon-	do, make	OWels di-goni 'makes, does' Lat cōnor 'put myself in motion, attempt' Czech konat 'do, achieve' Oss kæn- 'make' Grk diā́konos				Being & Doing	JPM
*konh₂m	leg	Gr. knḗmē 'leg' OE hamm 'ham'					Celt.
*ḱónh□m̥	lower leg, shin	OIr cnáim 'leg' NE ham Grk knḗ mē 'tibia, spoke of a wheel'	West Central			Body (Lower)	JPM
*ḱonḱ-	hang	NE hang Hit kank- 'hang' Skt śáṅkate 'doubts, fears' (as in 'left hanging') Lat cunctor 'delay' < ?'hang about'				Extend	JPM
*ḱonkh□os	mussel (-shell) etc	Grk kógkhos 'mussel (shell)' Skt śaṅká- '(conch)shell' Latv sence 'mussel'				Bug	JPM
*ḱónkus	a kind of fish	ON hār 'shark' Skt śankú- ?	problematic	?		Fish	JPM
*ḱoph₂ós *skeph□o-	hoof	NE hoof Rus kopýto 'hoof' Av safa- 'hoof' Skt śápha- 'hoof, claw'	{1} [AL] For the reconstruction see Lubotsky 2001a: 53, fn. 53.			Fauna	JPM
*ḱóph□elos	carp	Lith šãpalas 'chub' Latv sapalis 'chub, Dvina-carp' Skt śaphara- 'carp'				Fish	JPM
*kopso-	blackbird	OCS kosŭ Grk kópsikhos				Bird	JPM
*kóris	biting insect	OCS korĭ 'moth' Grk kóris 'bed-bug'	from *(s)ker- 'cut'			Bug	JPM

*korm-	broth, mash?	Lat cremor 'broth, pap' Skt karam-bhá- 'barley porridge, soup' OIr cuirm 'beer'		?		Meals	JPM
*ḱormon-	weasel, ermine/stoat	OHG harmo 'stoat' Lith šarmuõ 'wild cat ermine, weasel'	North-Western			Fauna	JPM
*ḱóru	horn	Lat cervus 'stag' Lith kárvė 'cow' Rus koróva 'cow' Grk kórudos 'crested lark' Grk koruphḗ 'crest [of mountain or horse]' Av srva- 'horn claw, talon'				Fauna	JPM
*koryonos	leader		West Central from *koryos 'army'			Social Organization	JPM
*koryos	people (under arms)	OPers kāra- 'people, army' Lith kãras 'war' MIr cuire 'troop, host' OE here 'army' Lith kãrias 'army' Grk koíranos 'army leader'				Conflict	JPM Celt.
*Kos-t-	hunger	Hit kāst- 'hunger' Toch B kest 'hunger'				Food & Drink	JPM
*ḱos-trom *ḱos-dʰrom	knife	Lat castrō 'I prune' Alb thadĕr 'adze' Skt śástra- 'knife, dagger'	From *ḱes- 'cut' and the instrumental suffix	?		Weapons	JPM
*ḱós(V)los	hazel	OIr coll 'hazel' Lat corulus 'hazel' NE hazel Lith kasùlas 'hunter's stick, spear bush'				Trees	JPM
*ḱóss	(Scotch) pine	OE haraþ 'wood' Khot sara-cara 'Barleria cristata' OE cēn 'torch (of resinous pinewood)' Rus sosná 'pine' Grk kônos 'pinecone', kóna 'pitch', kôneion 'hemlock' Khot sānā- 'Celosia cristata'				Trees	JPM
*kouh₁ēi(s)	priest	Grk kóēs 'priest' Lyd kaweś 'priest' Skt kaví- 'seer'	From *(s)keuh₁- 'perceive'			Sacred	JPM
*ḱouh₁ros	powerful	Grk kûrios OIr cora(i)d Skt śū́ra- Thracian name Soura-				Sacred	JPM

*ḱóuh□r̥	hole, opening	Lat caverna 'cave' Grk kúar 'eye of the needle, opening of the ear' Skt śū́na- 'lack' Toch B kor 'throat'	Heteroclitic (with an original genitive *ḱuh□nós)		Dwelling	JPM
*ḱóunos	red	Rus suníca 'wild strawberry' Skt śóṇa- 'red' MIr cúanna 'lovely' NWels cun 'lovely'			Color	JPM
*kr(e)u-bʰ-	gather, amass	Grk krúptō 'hide' Toch B kraup- 'gather, amass herd'	Probably does not indicate human assemblage		Social Organization	JPM
*kr(e)uh₂-	flesh, blood					Beekes
*kreb-	basket	ON hrip 'packbasket' Lith krẽpšas 'large satchel, backpack' Lat corbis Lith kar̃bas Rus kórob	North-West		Textiles	JPM
*ḱred-	framework, beams	NE roost OCS krada 'funeral pile' Shughni χā̌ð 'summer pen for cattle'			Construction	JPM
*ḱred-dʰeh₁-	believe	OIr creitid 'believes' Lat crēdō 'believe' Av zrazdā- 'believing' Skt śrád-dhāti 'believes, has trust in', śrad-dhā́- 'faith'	{1} Ir. *j́hrad- has introduced *j́h- of the word for 'heart' (cf. Skt. hr̥d-), whereas Skt. has preserved the original form *ḱred.		Knowledge & Thought	JPM Beekes IIAL
*kreh₁-i-	sift, winnow, divide	Lat. cerno Gr. krī́nō				Celt.
*ḱr̥ēh₂ *ḱrh₂-os	head	ON hjarsi 'crown of the head' Lat cerebrum 'brain' [< *'(marrow) of the head'] Alb krye 'head' Grk kárē 'head', karára 'head', krāníon 'crown of the head' Av sāra- 'head', sarah- 'head' Skt śíras-'head' Toch B krañiye 'neck' [< *'occiput'] Hit kitkar 'headlong'		śíras [nom.acc.], obl. cases śīrṣán- (śīrṣṇā́ [instr.sg.], śīrṣṇás [gen.abl.sg.], śīrṣán [loc.sg.], śīrṣásu [loc.pl.]) later also śīrṣé [nom.du.] (RV 04.058.03), śīrṣám [nom.sg.] (AV+), etc. and śírasā [instr.sg.], śírasi [loc.sg.] (RV-Kh., AVP+), etc.	Head	JPM IIAL Beekes
*kreidʰrom	sieve	OIr crīathar 'sieve' Lat crībrum 'sieve', OE hrīder hridder 'coarse sieve' [> NE ridder]	From *(s)ker- 'cut'.		Tools	JPM

*ḱreih□	be splendid			Present IX: śrīṇánti [3pl.act.] (RV+) Perfect: śiśriye [3sg.med.] (RV 05.044.13) TA-Ptc.: śrītá- (RV)			IIAL
*krek-	beat the weft with a stick	NE reel Lith krẽklės 'ragged clothing' Grk krékō 'strike (the web), weave, pluck a stringed instrument' Grk króks 'warp'				Textiles	JPM
*krek-	fish eggs, frogspawn	ON hrogn 'roe' Lith kurkulaĩ 'frogspawn' Rus krjak 'frogspawn'				Fish	JPM
*kremh□us	(wild) garlic	MIr crem 'wild garlic' Grk krém(m)uon □ króm(m)uon 'onion' NE ramsom '(bulb of the) broad-leaved garlic' Lith kremùšė 'wild garlic' Rus čeremšá 'wild garlic'				Plants	JPM
*kréps	body	OIr crī 'body, flesh' Lat corpus 'body' OE hrif 'belly, womb' [> NE midriff] Av kərəfš 'body' Skt krp- 'form, beauty'				Body (Upper)	JPM
*kret-	shake	MIr crothaid 'shakes' OE hraðe 'quick' Lith krečiù 'shake, jolt strew by shaking'	North-West			Motion	JPM
*kreu(-s)-	strike	NE rue Grk kroaínō 'stamp, strike with the hoof [of a horse]' Toch AB kärn- 'strike, afflict' ON hrosti 'mashed malt' Lith krušù 'smash, crash grind' OCS sukrušiti 'shatter' Grk kroúō 'strike [together], strike a stringed instrument with a plectrum, knock [at the door]'				Conflict	JPM
*kréuh□	blood, gore	MIr crū 'blood' Lat cruor 'thick blood, gore' Lith kraũjas 'blood' Rus króvĭ 'blood' Grk kréa 'raw flesh', kréas 'piece of meat' Skt kráviṣ- 'raw flesh'				Organs	JPM

*kreuḱ-	cry out, raise the hue and c	OE hrēam '[judicial] outcry' Av xraos- 'call' Skt [ánu] króśati 'cries out, raises the hue and cry'				Formal Speech & Song	JPM
*kreup-	± rough, scabby	OE hrēof 'rough, scabby' NE rough Lith kraupùs 'dreadful, rough; timid' Toch B kärpiye 'common, raw, rough' [< *'rough']				Health&Sickness	JPM
*kreut-	± shake	ON hraustr 'quick' Lith krutù 'move, stir'	North-West			Motion	JPM
*ḱrewh₂-	gore, raw meat	Skt. kravi- 'raw meat' Lat. cruor G kréas 'raw meat'					Celt.
*krh̥ˌpís	shoe ?	OIr cairem 'shoemaker Lith kùrpė 'shoe' SC krplje 'snowshoe' Grk krēpís 'shoe' ON hriflingr 'shoe' Late Lat carpisculum 'little shoe'	Usually derived from *(s)ker- 'cut', i.e. a shoe cut out from leather.			Textiles	JPM Celt.
*ḱrh□sro-(h□)on-	hornet	Lat crābrō NDutch horzel Lith šìrše OCS sĭrsenĭ	From *ḱrh₂s- 'horn'			Bug	JPM
*ḱripo-	± head and facial hair	Lat crīnis 'head hair' Alb krip '[short] head hair, facial hair', krife 'mane' Av srifā- 'plume' Skt śíprā [dual] 'moustache and beard'				Hair	JPM
*kŕḱós	thin	Czech krs 'shrivelled tree' Av kərəsa-gu- 'lean cows' Skt kŕśa-gu- 'having lean cows' ON horr 'thinness' Czech krsati 'lose weight, wane' Lith káršti 'be aged or decrepit' Skt karś- 'grow/be thin or lean'	Possibly derived from a verb 'be thin, emaciated' putative root not given (SGM)			Shape	JPM
*kr̥nom	cherry	Lat cornus 'cornel cherry' Lith Kìrnis 'divine protector of the cherry' Grk krános 'cherry'				Trees	JPM
*kr̥nom	horn	Lat cornum NE horn				Fauna	JPM
*krob-	hurry	OIr crip 'quick' ON hrapa 'fall, hurry' Toch AB kārpā- 'descend, come down, step down'	Celtic-Germanic-Tocharian	?		Run & Jump	JPM
*kroku- *kró-kyeh□-	post	Rus krókva 'stake' Grk króssai 'crenellation'				Construction	JPM

*ḱrópos	roof	NE roof OCS stropŭ 'roof' MIr crō 'hovel, stall'	North-Western			Construction	JPM
*kr̥sneh□-	spring, wave	OE hræn 'spring' Grk krḗnē 'spring'				Water	JPM
*ḱr̥sos	wagon	Lat currus 'chariot, wagon' MWels carr 'wagon'	from *ḱers- 'run'			Transport	JPM
*krt-u-	iteration, X times		{1} Most probably, acc.pl. of *kr̥tu-. {2} Derivation from *kwer- 'to do' is less attractive. Osc. petiro-pert 'four times' could also be related to Lat. sem-per, etc.	RV bhū́ri kŕ̥tvaḥ 'many times', AV dáśa kŕ̥tvaḥ 'ten times'			IIAL
*ks-en-	card wool			Present I: viy-akṣaṇan [3pl.impf.act.] (AVP 15.5.5), vi-kṣaṇant- [ptc.act.] (AVP 2.31			IIAL
*ks-n-eu-	sharpen		{1} [AL] Usually, xšnəuuīšā is taken as pres.opt., but since in OAv. only aorist is attested, it seems reasonable to assume that this form is aor.opt. (as is well known, the sigmatic aorist does not form optative, which is being supplied by the root aorist). The same is probably valid for YAv. xšnuiiā [2sg.opt.act.] (Y 68.9). The YAv. present to the root seems to be kuxšnuuīša [2sg.opt.med.], kuxšnuuaṇa- [ptc.med.] (if not perfect). {2} For the meaning of Iran. *xšnau- 'to hear' cf. Skt. kṣṇav- + vā́c- 'to sharpen the speech'. {3} [AL] In view of the meaning, ks-n-u- is likely to be an original nasal present to *kseu- 'to be sharp' (see s.v. kṣurá-), rather than *ks-en- 'to comb, to card' (kṣan- [2] to OCS česati [verb] 'to comb') + -eu-.	Present II: áva kṣṇaumi [1sg.act.] (RV) kṣṇuvāná- [ptc.med.] (AV+) TA-Ptc.: kṣṇuta- (ŚB)			IIAL
*kseros	dry	Lat serescunt 'they dry' Lat serēnus 'clear, bright, fair [of weather]' < *'dry [of weather]' OHG serawēn 'become dry' Grk kserón 'dry land' Grk ksērós 'dry, solid'				Fire	JPM
*ḱseros	dry	Lat serēnus 'dry, clean' OHG serawēn 'become weak' Arm čʿor 'dry'	West Central			Qualities	JPM
*ḱsēros	dry (of weather or land)	Grk ksērós 'dry, dried up' Skt kṣārá- 'caustic, burning'	Greek-Indic			Qualities	JPM
*kseu-	rub, whet	Lat novācula (< *ksnewā-tlā-) 'razor' Grk ksúō 'sharpen', ksurón 'razor' Av hu-xšnuta- 'well-sharpened' Skt kṣṇáuti 'sharpens, whets', kṣurá- 'razor'				Reductive Activities	JPM
*kseubʰ-	shake	Polish chybnạcˊ 'shake' Av xšaob- 'agitate' Skt kṣúbhyati 'shakes'	Polish-Indo-Iranian isogloss			Motion	JPM

*ksih☐róm	(skim) milk, whey	Alb hirrë 'whey' NPers šīr 'milk' Skt kṣīrám '[thickened] milk'				Meals	JPM
*ḱsúlom	worked, shaped wood post, stake	Grk ksúlom 'wood' OHG sūl 'pillar' Lith šùlas 'wooden post, stake'				Construction	JPM
*ksun	with	Lith sù 'with' Rus s(o) 'with' Grk ksún ☐ sun 'with'	West-Central			Position	JPM
*ksuróm	razor	Grk ksurón Skt kṣurá-	From *kseu- 'rub, whet'			Tools	JPM IIAL
*ksweḱs-os	60 sixth	OIr seissed Lat sextus NE sixth OPrus usts ☐ uschts Lith šễštas Bulg šéstĭ Alb gjashtë Grk héktos Av xštva- (< *Proto-Iranian *xšušta-?) Skt śaṣṭhá- Toch B ṣkaste				Numbers	JPM
*ḱuh☐dós	dung	Lith šū́das 'dung, muck' dialectal Grk hus-kuthá 'pig-dung'	West Central			Vital Functions	JPM
*ḱúh☐los	back	OIr cūl 'back' Lat cūlus 'rear-end' Skt kū́la- 'slope, back rear of army'	Derived from the root *keuhx- 'be bent (convexly)' (apparently distinct from *keuhx- 'hollow'			Body (Upper)	JPM
*ḱúh☐los	spear, spit	Arm slak' 'pike, spear, dagger, arrow' MPers swl'ck 'grill' [< *'complex of spits'] Skt śū́la- 'pike, spit, javelin'				Weapons	JPM
*kuh☐p-	water vessel	Lat cūpa NE hive Grk kúpellon 'cup'	West Central from *keu(h☐)- 'curve'			Containers	JPM
*kuh☐s-	hire (goods or services)	NE hire Hit kuss- 'hire'				Exchange & Property	JPM
*kuḱis	± (female) pubic hair, vulva	Lith kūšу̃s 'female pubic hair, vulva' NPers kus 'female genitals'				Body (Lower)	JPM
*kukū	cuckoo	OIr cūach Lat cucūlus NE cuckoo Lith kukúoti 'to cuckoo' Rus kukúša Grk kókkuks Arm k(u)ku NPers kuku Skt kokilá-	Similar words are found in other language families, e.g. Akkadian kugu and Turkish guguk			Bird	JPM

*kumbʰo/eh□-	bowl, small vessel	OIr coim 'pot' Grk kúmbē 'bowl' Av xumba-'pot' Skt kumbhá-'pot'	Found from Ireland to India although its derivation, either from *keu- 'bend' or possibly a loanword into Proto-Indo-European, is disputed.			Containers	JPM
*kus-	kiss	Grk kunéō 'kiss' Hit kuwaszi 'kisses' ON kyssa OHG kussen NEkiss	Proto-Indo-European *k should give Germanic *h and not *k unless the k was employed for some sound-symbolic reason, i.e. somehow a hard k-sound was thought to be appropriate for a kissing noise among the speakers of Proto-Germanic.			Love & Hate	JPM
*kutsós	anus, vulva	Lat cunnus 'vulva' dialectal Grk kūsós 'vulva anus' NPers kūn 'ass, backside'				Body (Lower)	JPM
*kVIVḰ-	cup, drinking vessel	Lat calix 'cup, goblet' [> NE chalice] Grk kúliks 'cup' Skt kalása- 'pot, pitcher'	Uncertain vowels suggest a Near Eastern loan			Containers	JPM
*kVr-C-	crow raven	Lat corvus NE rook Bulg krókon Grk kóraks Skt karaṭa- □ karāva-				Bird	JPM
*kʷas-	(wicker-) basket	Lat quālus 'wicker-basket', quasillus 'small basket' OCS košĭ 'basket'	North-West			Textiles	JPM
*kʷat-	ferment	Lat cāseus OCS kvasŭ 'leaven, sour drink' Skt kváthati 'boil' Goth ƕaþjan 'foam up'				Food Prep	JPM
*kʷat-	shake	Lat quatiō 'shake' Grk pássō 'strew'	West Central			Motion	JPM
*kʷed-	whet, sharpen	Lat tri-quetrus 'having three corners' NE whet	North-West			Reductive Activities	JPM
*kʷehɪ(i)-	fear, revere	OCS čajǫ '(a)wait, hope' Grk tíō 'honour, revere' Luv kuwaya- 'fear' Skt cắyati 'reveres, pays attention to'				Values	JPM
*kʷeh□k-	of what sort	OIr cāch 'everyone' Lith kók(i)s 'of what sort any, some whatever [relative] OCS kakŭ 'of what sort'	North-West			Interrogative Pronouns	JPM
*kʷeh□li	of what sort, of what size	Lat quālis 'of what sort, of what kind' Lith kōlei 'how long' Grk pēlíkos 'how old, how large'	West Central			Interrogative Pronouns	JPM
*kʷeh□m	how; as	Latin quam 'how, in what way as' Arm k'an 'as', k'cani 'how many?'	West Central			Interrogative Pronouns	JPM

*kʷeh□s-	cough	MIr casachtach 'act of coughing' OE hwōsan 'cough' [related in some way is NE wheeze] Lith kósiu 'cough' OCS kašĭlĭ'cough' [noun] Alb kollë 'cough' [noun] Skt kắsate 'coughs' Toch B kosi 'cough' [noun]				Vital Functions Health&Sickness	JPM
*kʷei-	pay, compensate	OPrus er-kīnint 'freed from the devil' Grk tínō 'make someone pay (a debt, ransom, fine)' Lyc tti- 'pay, requite' Av kāy- 'pay, compensate' Skt cáyati 'pay, compensate' MIr cin 'guilt, crime, payment due'				Law & Order	JPM
*kʷei-	perceive	OIr ad-ci 'sees' Lith skaitaũ 'count, read' OCS čĭtǫ 'count, reckon, read' Grk a-tízō 'pay no attention' Skt cinóti □ cikéti 'perceives'				Sight	JPM
*kʷei-	pile up, build	OCS činĭ 'order' Grk poiéō 'pile up, make' Skt cinŏti 'pile up'				Dwelling	JPM
*kʷeih₁-	rest, quiet	Lat quiēs 'quiet' OE hwīl 'while, time' (> NE while) OCS pokojĭ 'peace, quiet, rest' Arm han-gist 'rest, quiet' OPers šiyāti 'comfort' Lat quiētus 'quiet' Av šyāta- 'happy'				Speech	JPM
*kʷeis-	determine, reckon						Celt.
*ḱweit	be white			Aorist R: aśvitan [3pl.act.] (RV), śvitāná- [ptc.med.] (RV) Aorist S: aśvait [3sg.act.] (RV) Aorist RED (caus.): áśiśvitat [3sg.act.] (RV)			IIAL

*kʷeḱ-	look		{1} [AL] The long vowel in the Skt. root is only based on the late and poorly attested present kā́śate, which is likely to be secondary. Its long vowel may have been taken from the causative and from the forms like avakāśá-, prakāśá-. [[Also the present in Iranian does not look old. At any rate, the non-palatalized initial k- shows that this is not an old thematic present. LIV2 s.v. *ku̯eḱ- proposes dissimilation of inital *č- to *k-, which is hardly plausible.]] Due to various phonetic developments, the original forms of the Ilr. root *kać- are now divided between three roots: kāś (original intensive), cakṣ (original reduplicated present), kśā / khyā (original thematic aorist).	Present I: áva-kāśate [3sg.med.] (ŚB+) Caus: saṃkāśáy° (AV+) 'to look at, show' avakāśáy° (Br.+) 'to make to look at' Intensive: (abhí) cākaśīti [3sg.act.] (RV+) 'to consider' avacākaśat [ptc.] (RV+)			IIAL
*kʷeḱ/ ǵ -	appear	OCS kažǫ 'show' Grk tékmar 'sign' Av čašte 'teaches' Skt cáṣṭe 'sees, appears', kāśate 'appears, is brilliant, shines'	{1} [AL] There is no consensus on the origin of this root. Synchronically, cakṣ- and khyā / kśā belong to the same paradigm, the former supplying the present and the latter supplying the aorist. It is therefore very attractive to assume that cáṣṭe is the reduplicated present of the root *kweḱ- (see s.v. kāś). On the other hand, this origin has often disputed in the literature because -š- in Iranian *čaš- is considered incompatible with *kwe-kwḱ- > PIIr. *ča-ḱć- (thus in recent times explicitly Kümmel 2000: 168, fn. 177, Rastorgueva - Èdel'man: 2.235, who expect Ir. *caxš- or *caxs-). However, I do not see why Skt. kṣ, Ir. š cannot reflect *kwḱ. We know that Skt. kṣ, Ir. š can go back to PIE *tḱ (cf. Skt. takṣ, Ir. *taš- 'to fashion by cutting' < PIE *tetḱ-, Gr. τέκτων), in spite of the fact that the exact details of the phonetic development are not entirely clear. It therefore seems probable that *kwḱ developed in a similar fashion (possibly, *kwekwḱ- > *čaktś- > *čattś- > PIIr. *čatš-, yielding Ir. *čaš-, Skt. *caṭṣ- > cakṣ-, cf. Lubotsky 1997c: 562 as to the development of *ḱć- to Skt. kś- / khy	Present II: cáṣṭe [3sg.med.], cákṣate [3pl.med.] (RV+), cákṣase [2sg.subj.med.] (RV) Present I: cakṣata [3sg.inj.med.] (RV 01.121.02, 09.071.09 a nonce formation) SI-impv: cakṣi (RV) Perfect: cacákṣa [3sg.act.] (RV 05.002.08), abhí cakṣur (< *ča-kćš-) [3pl.act.] (RV 10.092.15), acacakṣam [1sg.ppf.act.] (RV 05.030.02), cacakṣé [3sg.med.] (Br.+) Caus: cakṣay° 'to reveal' (RV) Abs: °cákṣyā́ (RV) Inf: cákṣase, °cákṣe, saṃ-cákṣi 'for seeing' (RV)		Sight	JPM

*kʷekʷḱus-	looking		{1} [AL] An original ptc.pf. of the root kãś, as already indicated by Leumann 1952: 105. The Iranian word for 'eye' is derived from the present stem and is therefore a recent formation.	Secondary cákṣu- (	shining eye, clear sight': Skt. tveṣáṃ cákṣuḥ (RV .008.06) — C		IIAL
*kʷekʷlóm	wheel	NE wheel Grk kúklos Skt cakrá- Av čaxra- 'wheel' Phrygian kíklēn 'Ursa Major', i.e. 'the chariot' Grk kúklos Toch B kokale, where it means 'wagon'	The word is derived from *kʷel- 'turn' after reduplication in some languages we find it without the reduplication, e.g. *kwólos underlies OIr cul 'wagon' while *kwóles yields OCS kolo 'wagon'	Possible inflexion: *	'with golden chariot-wheels': Skt. híraṇya-cakra- (RV) — Av. zaraniiō.caxra- '"the wheel" of the sun': Skt. sū́ryasya cakrá- — ON sunnu … hvél — Gr. ἡλίου κύκλος	Transport	JPM IIAL
*kʷel-	turn	OIr cul 'wagon' Grk pólos 'axle' Alb sjell 'turn around', qell 'carry' Grk pélō 'be in motion be' Lat colō 'till dwell care for'				Motion	JPM

*kʷel(h□)-	move		{1} With the I-variant cali , slightly differing in meaning ('to move, to quiver').	Present I: cárati [3sg.act.] (RV+) vy-àcalat [3sg.impf.act.] 'to wander around' (AV+) Aorist IS: acāriṣam [1sg.act.] (RV+) Perfect: cacā́ra [3sg.act.] (AV+) Fut: cariṣy° (Br.+) Caus: cāray° (KS+), vi-cālayati [3sg.act.] 'to shake' (KS+) Aorist RED: ácīcarat [3sg.act.] 'to make wander' (AV+) Intensive: carcarīti [3sg.act.] (AV+), ní calalīti [3sg.act.] 'to stir, to quiver' (MS) carcūryámāṇa- [ptc.med.] (RV+) Desid: cicar(i)ṣ° (Br.) na-ptc.: cīrṇa- (Up.+) Inf: cáritave, carádhyai (RV)	to wander between (heaven and earth / god and man)': Skt. anf	IIAL	
*kʷelp-	arch	OE hwealf 'vault' Grk kólpos 'fold, hollow'	Germanic-Greek isogloss			Bend and Press	JPM

*kʷels-	plow		{1}[AL] For the meaning see Griffiths 2004: ad 6.9.7. {2} [AL] krṣāyu- [adj] 'plowing (of oxen)' (AVP), given by Mh, does not exist. Instead of Kashmir krṣāyavaḥ, the Orissa mss. read AVP 9.10.11d [']naḍvāhaḥ kriśā iva (for *krṣā iva) 'like lean oxes'. {3} [AL] The easiest way to account for this form is to assume the stem *karšuǐ- (cf. vaṇhuuiā̆ [gen.sg.f.] to vaŋvhī-), pace Klingenschmitt 1968: 103, who assumes haplology from *karšuiiaiiā̆.	Present VI: ví krṣantu [3pl.impv.act.] (RV) krṣasva [2sg.impv.med.] (RV) krṣatu [3sg.impv.act.] (RV) Present I: karṣat [3sg.inj.act.] (RV) karṣathas [2du.act.] (RV) karṣa [2sg.impv.act.] (RV), kárṣet [3sg.opt.act.] (AV+) Aorist SA: (sam) akṛkṣat [3sg.act.] (YV+) Passive: krṣyáte [3sg.] (MSp+) Fut: krakṣye [1sg.med.] (Br.) karṣiṣyánt- [ptc.act.] (Br.) Aorist RED: acīkṛṣam [1sg.act.] (RV) Intensive: cárkṛṣa ° (RV+) TA-Ptc.: kṛṣtá- (AV+)	'to cultivate barley': Skt. yávam … karṣathaḥ, yávam … cárkṛṣat (RV) — YAv. yauuanąm … (a)karštanąm, yaokaršti- [f] 'cultivating barley' 'to make a furrow': Skt. krṣím … krṣasva (RV) — YAv. karšāim kāraiieiti		IIAL
*kʷem-	swallow	Icelandic hvōma 'swallow' Arm kʻimkʻ 'throat' Av a-šam- 'sip' Skt cǎmati 'swallows'				Food & Drink	JPM
*ḱwen(to)-	holy	Lith šveñtas 'holy' OCS svętŭ 'holy' Av spənta 'holy'	Derived from *ḱeu(h₁)- 'swell', hence, 'swollen (with some form of sacred force)'			Sacred	JPM Beekes
*ḱwéndʰr/no-	angelica	SGael contran 'wild angelica' Lat combretum [an unidentified aromatic plant] ON hvonn 'Angelica silvestris' Lith švéndras 'reed reed-mace'	North-West			Plants (Wild)	JPM
*kʷent(ʰ)-	suffer	OIr cēsaid 'suffers' Lith kenčiù 'suffer' Grk páskhō 'suffer'				Health&Sickness	JPM

*kʷer-	cut	Hit kuerzi 'cuts' NWels pryd 'time' Osc -pert ' . . . time[s]' Skt -kr̥ṭ ' . . . time[s]'				Reductive Activities	JPM
*kʷer-	do, make, build	OIr cruth 'form' Lith kuriù 'make, build, create' OCS kručījī 'smith' Av kərənaoiti 'does, makes' Skt kr̥ṇóti 'does, makes, performs executes, builds' Lith kẽras 'magician' Rus čáry 'sorcery'				Being & Doing	JPM
*kʷerp-	turn	NE wharve OE hweorfan 'turn, change' Grk karpós 'wris' MIr carr 'spear' NWels pâr 'spear' Toch AB kurp- 'be concerned with'				Motion	JPM
*kʷerus	large cooking pot, cauldron	OIr coire 'cauldron' Skt carú- 'cauldron' OE hwer 'pot, bowl, kettle, cauldron' ?Toch B keru 'drum' Russ. čara				Containers	JPM Beekes IIAL
*ḱwes	hiss		{1} [AL] Blažek XXX has pointed to important parralels to this name in Elamite.	Present II: śvásiti [3sg.act.] (RV), śvasihí [2sg.impv.act.] (AV), aśvasīt [3sg.impf.act.] Br.+), śvasánt- [ptc.act.] (RV), ā́śuṣe [1sg.med.] (RV 08.093.16) Present I: śvásati [3sg.act.] (AV+) Aorist A (?): śuṣánt- [ptc.act.] (RV 01.061.10) Intensive: śā́śvasat- [ptc.act.] (RV) Caus: śvāsay° (RV+) Inf: abhiśvásas (RV 10.092.80)		IIAL

*ḱwesh□-	breathe; sigh, groan	Lat queror Toch B kwäs- OE hwōsan 'cough' Skt śvásiti 'snort, hiss' NE wheeze is a loanword from Old Norse				Human Sounds	JPM
*ḱwésh□mi	breathe deeply, sigh	Lat queror 'complain, lament' Av suši [dual] 'lungs' Skt śvásiti 'breathes, sighs' Toch B kwäs- 'lament, bewail'				Vital Functions	JPM
*kʷet-	chaff, bran	MIr cāith 'bran, needle' Grk pĕtea 'chaff'				Plants	JPM
*kʷetur-dḱomth₂	40 fourty						Beekes
*kʷetwero-	4x fourfold						Beekes
*kʷetwor-pod-	animal	Lat quadrupēs Lith keturkōjis Alb shtazë Grk tetrápous Skt cátuṣpad- Toch B śtwerpew				Fauna	JPM
*kʷetwóres *kʷetuõr	4 four	OIr cethair [m.] Lat quattuor NE four Lith keturì OCS četyre [m.], četyri [f./nt.] Alb katër Grk téssares [m./f.], téssara [nt.] Arm č'ork' Av čaθwārō [m.] Skt catvā́ras [m./f.], catvā́ri [nt.] Toch B śtwer [m.], śtwāra [f.]	neuter: *kʷetwórh□ Some languages reflect the presence, as with 'three', of a morphologically very unusual feminine form, *kʷetes(o)res: OIr cethēoir, Av čataŋrō, Skt cátasras In Germanic, the influence of the following *pénkʷe explains the aberrant initial *f-, e.g. OE fēower (NE four), OHG Wor, rather than the expected *hw-. There has been a host of attempts to etymologize *kʷetwóres, with two of the most popular (among many) being some relationship to the concept of either little finger or span of four fingers (where *kʷet-wor would be a derivative of *kʷet- 'stretch' found otherwise only certainly in the Baltic languages, e.g. Lith ket-), or the word has been analysed as the enclitic *kʷe 'and' + *tur- (derived from *tur- 'three'), i.e. 'after three' = 'four' (though of course the attested forms of 'three' are unanimous in demanding a reconstruction *ter- or trei-, not *tur-). The Anatolian form has been derived from *mei- 'be small' and hence reference either to the 'little finger' or to a subtractive basis, i.e. 'five minus one' (as one does with			Numbers	JPM
*kʷíd	what, what one	Lat quid 'what, what one' OCS čĭto 'what' Arm in-č 'some' Hit kuit 'what' (interrogative) Av čit [generalizing particle]				Interrogative Pronouns	JPM
*kʷís	who	Lat quis 'who, which one' Grk tís 'who' Hit kuis 'who' Av čiš 'who'				Interrogative Pronouns	JPM

*kʷit-ro-	conspicuous				cétiṣṭha- [sup] 'the	'rich (and) bright': Skt. revátī … citrám '(the) rich (Uṣas has) brightly (climbed both worlds)' (RV 03.061.06) — YAv. raēuuat_ ciθrəm — OP *raiva-ciça-, *raiva-ciθra- 'brillant, wonderful assistances': Skt. citrā́bhir ūtíbhiḥ (RV), citróti- (RV 10.140.03) ˜ OAv. ciθrā.auuah- [adj] '(with) bright shine': Skt. citrá-bhānu- [adj] 'with a bright shine' (RV+) — OP *ciça-bānu- (Onom.) 'having brilliant gifts': Skt. citrá-rāti-[adj] (RV+) — OAv. ciθrā̆rātaiiō 'with brillant goods, ornaments (= shining stars)': Skt. citrā́vasu- [adj] (YVm+) — OP *ciçāva(h)u- [m] PN			IIAL
*kʷḱ(-ehₐ-)	look			{1} This root is just another spelling for kśā. Other spelling variants are: kṣā-, kṣyā-, kśyā-.	Aorist A: ákhyat [3sg.act.] (RV+) Passive: úpa … khyāyate [3sg.med.] (Br.+) 'is/can be seen, is known' Caus: khyāpay° (KS+) 'to make known, to proclaim' TA-Ptc.: sáṃ-khyāta- 'calculated, counted' (AV+) {1}			IIAL
*kʷlep-	desire	Av xrap- 'desire' Toch AB kulyp- 'desire'	Avestan-Tocharian isogloss				Desire	JPM
*kʷleu-	turn						Motion	JPM
*kʷo-tmhₐo-	which (of more than two), a "superlative" of *kwo- which, who		{1} It is not quite certain that this is a IE formation.					IIAL
*kʷod	that							Beekes
*kʷód	what	OWels pa 'what' Lat quod 'in respect to which that, in that' (conj.) OE hwæt 'what' [> NE what] Pal -kuwat [generalizing particle]) Skt kád 'what'					Interrogative Pronouns	JPM
*kʷodéhₐ	when	Lith kadà 'when' Av kaδa 'when' Skt kadā́ 'when'					Interrogative Pronouns	JPM

*kʷoih□os	pertaining to whom/what	Lat cūius 'whose' Grk poîos 'of what kind'				Interrogative Pronouns	JPM
*kʷoineh₂	price		Many languages take this as Pain, Punishment later on				Beekes
*kʷoineh□-	compensation	Lith káina 'price' OCS cěna 'price' Grk poinḗ 'compensation for a crime, bloodprice' Av kaēna- 'vengeance, hatred'	From the root *kʷei- 'pay, compensate'			Law & Order	JPM
*ḱwoitós *ḱwitrós	white	Lith švitrùs 'bright' OCS svĭtĭ 'light' Av spaēta- 'white' Skt śvetá- 'white, bright', śvitrá- 'whitish, white' NE white NE wheat	{1} Skt. sī́sa- [n] 'lead' (AV+) is a LW from a SW-Iranian *siça- 'white' (ˊ śvitrá-).			Color	JPM IIAL
*kʷol-o-	wheel	Gr. pólos 'axis' OCS kolo 'wheel'					Celt.
*kʷoli	?of what sort, of what size	OCS kolikŭ 'how large', kolĭ 'how m	West Central			Interrogative Pronouns	JPM
*kʷóm	when	Goth ƕan 'when' OPrus kan 'when' OCS ko-gda 'when' Alb kë 'when' Av kəm 'how'		Masc.Acc *kʷós		Interrogative Pronouns	JPM
*kʷór	where	OLat quōr 'why, wherefore' OE hwǣ¯ r 'where' [> NE where] Skt kárhi 'when, at what time'				Interrogative Pronouns	JPM
*kʷós	who	OIr nech [< *ne-kʷos 'someone, anyone' OE hwā 'who' [> NE who] Lith kàs 'who, what' OCS česo 'whose' Alb kë 'whom' Grk toû 'whose' Arm ov (< *kʷos/kʷom) 'who' Skt kás [masc.] 'who', [fem.] kā́ 'who', kásya 'whose'				Interrogative Pronouns	JPM
*kʷóteros	who of the two?	Lat uter 'which' OE hwæðer 'which' [> NE whether] Lith kataràs katràs 'which' OCS koteryjĭ 'which' Grk póteros 'which' Skt katará- 'which'	The initial labiovelar exhibits the expected different treatment in Greek where we find *kʷi- > Grk ti- but *kʷo- or *kʷu- > Grk po-/pu-.			Interrogative Pronouns	JPM Beekes
*kʷóti *kʷéti	how much/many	Lat quot 'how many' Grk pósos 'how much, how many' Skt káti 'how much, how many' Bret pet der 'how many days' Av čaiti 'how many'				Interrogative Pronouns	JPM

*kʷrei(h☐)-	pay buy exchange	OIr crenaid 'buys' ORus krĭnuti 'buy' Grk príamai 'buy' Skt krīṇā́ti 'buys' Toch B kāry- 'buy' OIr tinnscra 'bride-price' Lith krieno 'bride-price'	{1} IE nasal present *kwri-ne-h₂–ti with ppp. *kwrih₂–tó-.	{1} IE nasal present *kwri-ne-h₂–ti with ppp. *kwrih₂–tó-.	Exchange & Property	JPM IIAL Celt.
*kʷrésnos	tree brush(wood)	OIr crann 'tree' Grk priunos 'holm-oak [Quercus ilex]'			Trees	JPM
*kʷṛmis	worm, insect wug: worm/bug	OIr cruim 'worm' Lith kirmìs 'worm' OCS črĭvĭ 'worm' Alb krimb 'worm' Skt kṛ́mi- 'worm' OPrus girmis 'mite' Lith kirmìs 'dragon'	{1} Next to a rhyme formation *urmi- (Lat. vermis 'worm', MoHG Wurm 'worm', etc.).	also often written krími-	Bug	JPM IIAL
*kʷṛsnós	black	OPrus kirsnan 'black' OCS črŭnŭ 'black' Skt kṛṣṇá- 'black' Alb sorrë meaning 'crow shiny black?' Lith kéršas 'black and white, piebald'			Color	JPM
*kʷrustēn	(freezing) cold	Grk krustaínomai 'am congealed with cold, freeze', krūmós 'icy cold, frost' Toch B krośce 'cold' Grk krustállos 'ice crystal' Lat crusta 'crust' OHG hroso 'ice, crust' Latv kruvesis 'frozen mud'			Qualities	JPM
*kʷṛwis	± tool	Lith kir̃vis 'axe' Rus cervĭ 'sickle' Skt kṛvi- 'weaving instrument'	Possibly derived from *kwer- 'do, make'.		Tools	JPM
*kʷsep-	night	Grk pséphas 'darkness' Av xšap- 'darkness' Hit ispant- 'night' Skt kṣáp- 'night'		kṣapā́ [instr.sg.], kṣapás [gen.sg.], kṣapā́m [gen.pl.] kṣapā́bhiṣ [instr.pl.] is based on instr.sg.	'night and day': Skt. kṣapā́bhir áhabhiśca (RV 04.053.07) — YAv. asnąmca xšafnąmca (V 4.45) 'night and dawn': Skt. kṣápa usráśca (RV 07.015.08) — OAv. ušā̊ … xšapācā (Y 44.5)	Time	JPM IIAL
*kʷtur-	4 four-		Used in compounds			Beekes

*kʷtur-yós *kʷetwor-to-	4th fourth	Lat quārtus NE fourth Lith ketviřtas Rus četvě̆rtyj Alb katĕrt Grk tétartos Av čaθru- Skt caturthá- Toch B śtarte	Though geographically restricted in its attestation, a zero-grade *kʷturyos (e.g. Hit kutruwa(n)- 'witness' [i.e. 'fourth party to a transaction' (after the two originals and the judge/arbiter/recorder)] from a pre-Hit *kʷtruyos, itself by metathesis from *kʷturyós, Av tūirya- 'fourth', Skt turî̆ya- 'fourth'), is probably older. (One can at least imagine that the Hittite butchers' term, kudur 'leg of beef, sheep, etc.', might have originally meant 'quarter' [as in the English butchers' term] and reflect an even older Proto-Indo-European form, *kʷturóm 'fourth'.			Numbers	JPM
*kʷu *kʷū́	where	OIr co 'how where' Lat ubi 'where' OPrus quei 'where' OCS kŭde 'where' Alb kush 'who' Grk pu- 'where' Hit kuwapi 'where' Skt kū́ 'where' Toch B k□se 'who' extended *kʷúr Lith kuř 'where' Alb kur 'where' Arm ur 'where'				Interrogative Pronouns	JPM
*ḱyeh₁-	deep intense shade,	OE hǣ̄ wen 'blue, purple, green, azure, grey' OE hīw 'colour' NE hue Lith šy´vas 'light grey' OPrus sywan 'grey' OCS sivŭ 'dark grey' Alb thinjë 'grey' Lith šé´mas 'blue-grey' Serbo-Croatian sinji 'sea green' Skt śyāmá- 'dark brown, dark green', śyāvá- 'brown' Sogdian š'w 'dark-coloured' Toch B kwele 'black, dark grey'				Color	JPM
*ḱyeino-	bird of prey, kite?	Grk iktî̂nos Arm c'in Av saēna- 'eagle' Skt śyená- 'eagle'	Greek-Armenian-Indo-Iranian isogloss			Bird	JPM
*l(e)nto-	soft	NWels llathr 'smooth' Lat lentus 'soft, tender' NE lithe Lith leñtas 'quiet, calm'	North-West			Qualities	JPM
*l(e/o)iseh□	furrow	Lat līra 'furrow' (or 'track') OE līste 'fringe, border' (> NE list) OPrus lysa 'field bed' OCS lĕcha 'field bed'	from *leis- 'to leave a trace on the ground'			Agriculture	JPM

*la(m)bʰ-	seize	Lith lōbis 'possessions, riches' Grk lambánō 'seize, take' Skt lá(m)bhate 'seizes, takes'				Give & Take	JPM
*lab-	lick	Lat lambō NE lap Grk láptō 'slurp, drink' Arm lapʻel 'lick'				Food & Drink	JPM
*laiwós	left	Lat laevus OCS lěvŭ Grk laiós, Toch B laiwo 'lassitude'				Direction	JPM
*lak-	lick	Lith lakù 'lap up' OCS loču 'lick' Arm lakem'lick'				Food & Drink	JPM
*lak-	rend, tear	Lat lacer 'worn out' Alb lakur 'naked' Grk lakízō 'tear'	West Central			Reductive Activities	JPM
*lal-	babble	Lat lallō 'sing to sleep' NE lullaby NHG lallen 'stammer, babble, speak indistinctly' Lith lalúoti 'stammer' Rus lál 'babbler' Grk lálos 'babbling, loquacious', laléō 'talk, chat, prattle' Hit lala- 'tongue' Skt lalallā- 'indistinct or lisping utterance'				Human Sounds	JPM
*lap-	shine	NWels llachar 'shining' Grk lámpō 'give light, shine' OIr lasaid 'flames' Lith lópė 'torch' Hit lāpzi 'glows'	Reflexes suggest that it may have been specifically related to the brightness of fire			Light & Dark	JPM
*las-	be greedy, lascivious	OIr lainn 'eager, greedy' Lat lascīvus 'lascivious' NE lust Lith lokšnùs 'loving, amorous, tender' OCS laskati 'flatter' Grk lilaíomai 'desire' dialectal Grk lástē 'courtesan' Skt lasati 'strives, plays, is delighted'				Desire	JPM
*lau-	benefit, prize	OIr lōg 'reward, prize' Lat lucrum 'gain, benefit' [slightly pejorative, whence NE filthy lucre] OE lēan 'reward, recompense'	North-West			Exchange & Property	JPM
*leb-	lip	Lat labium 'lip' NE lip Hitt lipp- 'lick'	North-West			Head	JPM
*lebʰ-	ivory			??		Fauna	JPM

*leg-	drip, trickle	OIr legaid 'perishes, melts' NE leach Arm lič 'bog'				Liquid Motions	JPM
*leǵ-	see	Lat legō 'gather read' NE look Toch AB läk- 'see'				Sight	JPM
*legʰ-	lie	NE lie, law, low MIr laigid 'lies' Lat lectus 'bed' OCS lěžati 'lie' Grk lékhetai 'lies' Hit lāki 'lays aslant' Toch B lyäk- 'lie' Gr. lékhos 'bed' Toch B leke, leki 'bed, resting place'				Placement Verbs	JPM Celt.
*legʰ-	lie; that which is laid out	NE law Lat lex				Law & Order	JPM
*légʰes-	place for lying, bed, couch	Grk lékhos 'bed, bier' Grk lókhos 'place for lying, ambush' Toch B leke 'bed, resting place'	From *legh- 'lie down' possible an independant formation.			Construction	JPM
*leh₁d-	grow slack, become tired	Lat lassus 'tired' OE læt 'sluggish' Lith lénas 'lazy, gentle' OCS lěnŭ 'lazy' Alb lodhet 'becomes tired' Grk lēdeîn 'be tired' Toch B lāl- 'exert oneself, tire oneself'				Health&Sickness	JPM
*leh₁d-	leave	NE let Lith léidžiu 'leave' Alb lë 'leave, let, abandon, allow' Hit lā(i)- 'let go'				Travel	JPM
*leh₁w-	stone	OIr līe (gen. līac) 'stone' Grk laas (gen. laos) [rebuilt from (*lēwas, lawasos?), léusō 'stone' (vb.) Alb lerë 'rubble'	Limited Distribution			Earth	JPM
*leh₂-	pour, wet, make flow	Hittite 'pour, make flow', lahhuzi 'overflows, pours', lahni- 'bottle, pitcher' Lat lāma 'bog' Grk lēnós 'tub' Toch B lāñe 'flood'				Liquid Motions	JPM
*leh₂wós	people (under arms)	Grk lā(w)ós 'people', [pl.] 'army' Doric Grk lāgétās 'leader of the people' Phryg lawagtei 'military leader' Hit lahha- 'campaign'	from a root *leh₂- 'military action'			Conflict	JPM

*lehₓ-	bark	Lat lātrō 'bark [at] rant, roar' Lith lóju 'bark' OCS lajǫ 'bark' Alb leh 'bark' Oss ræjun 'bark' Skt rāyati 'barks'	In six groups {1} [AL] In view of semantics, the connection with a r-root (*Hrehᵢ–: ON rāmr 'hoarse', Russ. (dial.) rájat' 'to sound') is much less probable.	Present IV: rāyasi [2sg.act.] (RV 07.055.03), rāya [2sg.ir	Animal Noises	JPM IIAL
*lehₓ-	complain, cry out	OIr líïd 'complains' Lat lāmenta 'lamentation' dialectal Grk laío '+make a sound' Arm lam 'cry, weep'	West Central might be the same as *lehₓ- 'bark'		Human Sounds	JPM
*lehₓp-ehₓ-	foot, paw	ON lōfi 'palm' Lith lópa 'paw' Rus lápa 'paw' Kurdish lapka 'paw'			Body (Lower)	JPM
*lehₓt-	wet, moist	MIr lathach 'mud' OHG letto 'clay' Grk látaks 'drops' various Baltic river names	North-West		Qualities	JPM
*leib-	pour, make a libation	Lat lībāre Grk leíbō 'pour out [drop by drop]'			Meals	JPM
*lei ǵʰ-	lick	OIr ligid Lat lingō NE lick Lith liežiù OCS lizati Grk leíkhō Arm lizem Av raēza- Skt leh-			Food & Drink	JPM Beekes

*leikʷ-	leave (behind)	Lat linquō 'leave' NE loan Lith liekù 'leave' Grk leípō 'leave' Arm lkʿanem 'leave' Av irinaxti 'releases' Skt riṇákti 'leaves'		Present VII: riṇákti [3sg.act.] (RV+), ắriṇak [3sg.impf.act.] (with a secondary long augment) Present IV: ricyate [3sg.med.] (RV+) Aorist R: ắraik [3sg.act.] (RV) (with a secondary long augment), rikthās [2sg.inj.med.] (RV) Aorist S: rikṣata [3pl.med.] (Br.) Aorist mediopass: reci [3sg.inj.] (RV 04.016.05) Perfect: riréca [3sg.act.] (RV+), riricé [3sg.med.] (RV+), arirecīt [3sg.ppf.act.] (RV) ririkvắṃs- [ptc.act.] (RV) TA-Ptc.: átirikta- 'left over' (RV 08.058.03), riktá- 'emptied, empty' (AV+)		Travel	JPM IIAL
*leip-	adhere, stick; smear	Hit lipp- 'smear' Lith limpù 'adhere' OCS pri-lĭpjǫ 'stick on' OE bilīfan 'remain left over' Toch AB lip- 'remain left over' Grk liparós 'fat, anointed'				Binding	JPM
*leip-	light, cause to shine	ON leiptr 'lightning' Lith liepsnà 'flame, blaze'	North-West			Light & Dark	JPM
*leis-	leave a trace on the ground					Agriculture	JPM
*leit(h□)-	go away, go forth; pass awa	Toch B lit- 'pass on' OE līðan 'go, travel' NE lead OHG beleite 'burial' Grk loiteúō 'bury' Av raēθ- die'				Come & Go	JPM

*lek-	jump, scuttle along	Grk lēkáō 'dance', likertízō 'jump' MHG lecken 'hop' Latv lēkāju 'jump about' Lat lōcusta 'locust' NE lire 'calf of the leg' (< OE līra)				Run & Jump	JPM
*lem-	(nocturnal) spirit	Lat lemurēs 'nocturnal spirits who devour the dead' Grk lámia 'a female flesh-eating monster used to scare children with'				Dieties	JPM
*lemb- *remb-	hang down	Skt rámbate 'hangs down' Lat limbus 'hem, border'.		Present I: rámbate [3sg.med.] (RV) lámbate [3sg.med.] (MSp+)		Extend	JPM IIAL
*lendʰ	sink, fall (?)		{1} Probably isolated nonce formation (Neubildung). {2} [LK] Forms with the nasal in the root (full grade) are used transitively ('to make subject'), forms without nasal (zero grade), except for red.aor. rīradhas, are intransitive ('to be subject') see Narten 1964: 218 Bendahman 1993: 128f. Schaefer 1994: 29f. Kümmel 2000: 415f. {3} [AL] The Indo-Iranian etymology is difficult. The Iranian root rand- means 'to scrape, to make smooth' (see s.v. rad), and NP razda 'tired, exhausted' can easily belong there (with a semantic development typical of colloquial speech). It is even conceivable that this Iranian root is etymologically related to randh, cf. English wipe out for a semantic parallel. The further IE connections are doubtful.	Present IV: rádhyatu [3sg.impv.act.] (AV 17.1.6 +) Aorist A: radham [1sg.inj.act.] (RV 01.050.13), radhāma [1pl.inj.act.] (RV 10.128.05) Aorist IS: randhīṣ [2sg.inj.act.] 'to subjugate, make subject' (RV) Aorist R: randhi [2sg.impv.act.] (RV 04.022.09) {1} Perfect: rāradhúr [3pl.act.] 'to be subject' (RV 07.018.18), rārandhí [2sg.impv.act.] 'to make subject' (RV 06.025.09) Caus: randháy° 'to subjugate, make subject' (RV+) Aorist RED: (mā́) rīradhas [2sg.inj.act.] 'id.' (RV) {2} TA-Ptc.: raddhá- 'succumbed, subject to' (RV)			IIAL

*lendʰ-	open land, waste	NE land OIr lann 'open land' OPrus lindan 'valley Rus ljadá 'overgrown field'	North-Western			Plants	JPM
*leng-	bend	Lith lingúoti 'soar' Slov lągãc 'bend' Alb lëngor 'flexible' Skt ráṅ gati 'moves here and there'				Bend and Press	JPM
*lenk-	bend traverse, divide	Lith leñkti 'tilts, bends' Toch AB läṅk- 'hang' [<*'dangle']) Toch B leṅke 'valley, cleft' OCS raz-lǫciti 'separate, divide'				Bend and Press	JPM
*lenteh□-	linden	NE linden Lith lentà '(linden) board' Rus lut '(linden) bast' Alb lëndë 'wood, material'				Trees	JPM
*lep-	peel	Grk lépō 'peel' OE lōf 'headband' Lith lãpas 'leaf ' Rus lápotĭ 'bast-shoe' Alb lapë 'dewlap of an ox'	West Central			Reductive Activities	JPM
*lep-	stone	Lat lapis 'stone' [with uncleara-] Grk lépas 'stone'	Limited Distribution			Earth	JPM
*lerd-	± crooked	Scots Gaelic lorcach 'lame' Grk lordós 'stooped' Arm lorc'k' 'twisted bodies'	West Central			Bend and Press	JPM
*lerd-	crooked	SGael lorcach 'lame' MHG lërz 'left' Grk lordós 'bent backwards so the front of the body is convex'				Health&Sickness	JPM
*lesi-	liver	Hit lissi- Arm leard	This word could be an early loan between two neighbouring languages			Organs	JPM
*letrom	leather	OIr lethar NE leather	North-Western			Body (Upper)	JPM
*leu-	dirt	Lat polluō 'soil, defile' Grk luma 'dirt'	Limited Distribution			Earth	JPM

*leub^h	be disturbed		{1} The meaning 'to desire greatly or eagerly, long for' is only attested since Mn. {2} [AL] Oss. (D) ilivd 'pitiful, wretched' is not related and goes back to *ui-ripta-.	Present IV: á-lubhyant- [ptc.act.] (AV), ā-lúbhyet [3sg.opt.act.] (ŚB) Perfect: *lulobha [3sg.act.] (AVP 19.51.2) 'is broken' Caus: lobháy° (RV+) Aorist RED: alūlubhan [3pl.act.] (JB 2.384) TA-Ptc.: lubdha- 'confused' (KS+), lubhita- (Sū.+)			IIAL
*leub^h-	love, desire	Lat lubet ⬚ libet 'pleases', lubīdō libīdō 'desire, pleasure' NE love Lith liaupsė~ 'glorification' OCS ljuby 'love' Alb laps 'wish' dialectal Grk luptá 'courtesan' Skt lúbhyati 'desires ardently' OE lēof 'dear' [> (archaic) NE lief] OCS ljubŭ 'dear' Skt lóbha- 'desire'				Love & Hate	JPM
*leud-	act hypocritically, badly	OE lot 'deception' OPrus laustinti 'humble, abase' OCS ludŭ 'foolish'	North-West			Values	JPM
*leug-	bend; bend together, entwir	OIr fo-long- 'sustains, supports' Lat luctō 'struggle' NE lock (of hair) and lock of door (a bending together) Lith lùgnas 'flexible, pliable' Grk lugízō 'fold, bend'	West Central			Bend and Press	JPM
*leug-	grieve, be pained	Lat lūgeō 'mourn, lament' Grk leugaléos 'sad, horrible', lugrós 'baneful, mournful' Toch B lakle 'pain, suffering'				Human Sounds	JPM
*leu ǵ -	break, break off	Lith láužti 'break' Skt rujáti 'break' Lat lūgeō 'mourn' Toch B lakle 'pain, suffering' OIr lucht 'load, cargo'				Reductive Activities	JPM
*leug^h-	lie, tell a lie	NE lie OCS lŭžǫ 'lie' Lith lūgóti 'ask'	North-West			Speech	JPM

*leuh₁-	wash, bathe	Lat lavō 'wash' Grk loúō 'wash' Arm loganam 'bathe, wash myself'	West Central			Clean	JPM
*leuh□-	hunt	Rus lov 'capture, catch' nominal derivative *léuhxōn 'he of the hunt' Grk léōn 'lion' [< *'the hunter' Toch B luwo 'animal' [< *'the hunted']				Travel	JPM
*léuh□ōn	animal	Grk léōn 'lion' Toch B luwo 'animal'				Fauna	JPM
*leuk-	light						Beekes
*leuk-	see	NWels amlwg 'evident' OPrus laukīt 'seek' OCS lučiti 'meet someone' Grk leússō 'see' Skt lókate 'perceives'	Can hardly be separated from *leuk- in the sense of 'shine'			Sight	JPM
*leuk-	shine	Lat lūceō 'shine' Hit lukke- 'shine' Skt rócate 'shines' Toch AB luk- 'shine' Lat lūceō 'kindle' Hit lukke- 'kindle' Av raočayeiti 'makes shine' Skt rocáyati 'makes shine'				Light & Dark	JPM
*leukós	light, bright, clear	OIr lōch 'glowing white' Lith laūkas 'blazed, with a white spot on the forehead [of animals]' Grk leukós 'light, bright, clear' Skt rocá- 'shining, radiant'				Light & Dark	JPM
*leup-	peel	Lith lupù 'peel' Skt lumpá ti 'break, violate, hurt'				Reductive Activities	JPM
*li(w)-	lion	Rus lev Grk lís	Suspected by some to be a borrowing from Hebrew layiw 'lion'			Fauna	JPM
*linom	flax	NWels llin 'linen, flax' Lat līnum 'linen, flax' Lith linaī [pl.] 'linen, flax' Rus len 'linen' Grk línon 'flax, thread, linen'				Plants	JPM
*loh□po-	cow	Latv luõps 'cow' Alb lopë 'cow'				Fauna	JPM
*loid-	play, jest	Lat lūdō 'play' Grk lízei 'plays'				Values	JPM
*loik(ʷ)-u-	left behind						IIAL

*loikʷ-no(s)-	property left by bequest			sometimes scanned in three syllables /ra(y)ïkṇas-/ in the RV (cf. Lubotsky 1995: 218f. for a discussion possibly under influence of rayí-)			IIAL
*lóikʷnes-	(inherited) possessions	OE lœ̄n 'loan, lease, grant, leased land' NE loan Av raēxnah- 'inheritance, goods' Skt rékṇas- 'inherited possessions'	from *leikʷ- 'leave'			Exchange & Property	JPM
*lōḱ-	weasel	Latv luoss Rus láska NPers rāsū		?		Fauna	JPM
*lóḱs	salmonid, salmon trout	OE leax 'salmon' OHG lahs 'salmon' [> NE lox] Lith lãšis 'salmon' Rus losósĭ 'salmon' Arm losdi 'salmon trout' Oss læsæg 'salmon trout' Toch B laks 'fish'				Fish	JPM
*lokús	lake, water, pond	OIr loch 'lake', Lat lacus 'lake, cistern' OE lagu 'water, lake, river' OCS loky 'pool' Grk lákkos 'pond, cistern'				Water	JPM
*londʰ-uo-	*to sink, to fall > *deepening > indentation (a body area) (?)		{1} Possibly, replacing **rándhva- with ṛa- by analogy with udára-, jaṭhára- 'stomach'. {2} See aslo Schrijver 1993 for Celtic cognates (OIr. land 'free land', MW llan 'area', etc.).				IIAL
*lóndʰu	loins	Lat lumbus 'loin' OE lendenu [pl.] 'loins' Rus ljádveja 'loin, hip' Skt rándhram 'loins' Grk iksús				Body (Lower)	JPM
*lónko/eh₂-	valley	Lith lankà 'valley, river-meadow' OCS lǫka 'gulf, valley, meadow, marsh' Toch B leṅke 'valley' Late Latin (< Gaulish?) *lanca 'depression, bed of a river'	Only in Baltic, Slavic, and Latin			Earth	JPM

*lōp-	± strip of cloth, bast, or hide used for clothing	OE lōf 'headband' Lith lõpas 'patch' Rus lápotĭ 'bast shoe' Grk lṓpos 'clothes made from skins'	West Central derived from *lep- 'strip (off)'			Textiles	JPM
*lorgeh₂-	club	OIr lorg 'club' ON lurkr	North-West			Weapons	JPM
*los-	cloth	Khot r(r)aha- 'cloth' Skt las-pūjanī- 'large needle' [< *'cloth piercer'?] MHG lasche 'rags' Rus lóskut 'rags' Lith lāskana 'rags'				Textiles	JPM
*losiwos	weak	Goth lasiws 'weak' Toch B leswi 'attacks of weakness' NE lazy				Health&Sickness	JPM
*lóubʰo/eh₂-	bast, bark	Lith luõbas 'rind, bark' Rus lub 'bast, bark' Alb labë 'rind, bark, crust' Lat liber 'bast book' OHG louft 'bark, bast'	[Latin 'book' because bast, especially beech-bast, provided an early writing medium]			Trees	JPM
*louh₁trom	(wash-) basin	OIr lōthar 'tub, basin' Lat pō-lūbrum 'wash-basin' Grk loetrón 'bath'	West Central from *louh₁- (also reconstructed as *leuh₃-) 'wash'			Containers	JPM
*lóuk(es)-	light	Lat lūx Arm loys Av raočah- Skt rocí- Toch B lyuke				Light & Dark	JPM
*loukos	space, world, place						Beekes
*louksneh₂-	moon	Lat lūna OCS luna OPrus lauxnos 'stars'	North-Western			Air	JPM
*lowh₁-tro-	bath	Lat. lauābrum G loetrón					Celt.
*lu- *luh₃s-	louse	NWels llau NE louse Lith víevesa Rus vošĭ Skt yūka	{1} The IE reconstruction is uncertain because of many tabooistic changes.			Bug	JPM IIAL
*luḱ-	lynx	OIr lug OE lox Lith lū̃šis Rus rysĭ Grk lúgks				Fauna	JPM

*m-h₁em-	mother	NWels mam 'mother' Lat mamma 'breast mu/ommy, grandmother' OHG muoma 'aunt' Lith mamà 'mother' Rus máma 'mother' Alb mëmë 'mother' Grk mámmē 'mother' (later 'grandmother') Arm mam 'grandmother' NPers mām 'mother' Skt mā 'mother'				Kinship	JPM
*m(e)h□d-	become wet, moist, fat	OIr maidid 'breaks, bursts forth, gushes' Lat madeō 'am moist, drip' Alb maj 'feed, fatten [of animals]' Grk madáō 'am damaged by wetness or humidity, drip') Av maða- Skt máda- OE mete 'food' NE meat				Qualities	JPM
*m(e)uh□-	wash (in urine?)	OPrus amūsnan OCS myjǫ Cypriot Grk mulásasthai MIr mūm 'urine' Skt mū́tra- 'urine'	Some have suggested that the meaning here has shifted from 'wash' to 'dirt' although it should be noted that urine was employed by the Romans as a mouthwash and was a component of toothpastes and mouthwashes up the eighteenth century in India, the walls of a room might be washed in cow's urine to honour a guest, so there is some evidence that the notion of urine as a cleanser is of Proto-Indo-European age.			Clean	JPM
*magʰ-	be able	NE may Lith magė́ti 'please, be agreeable' OCS mogǫ 'am able' ?Av moɣu- ?Skt maga- 'magician'	The -g- of Sanskrit rather than the expected *-gh- is difficult			Being & Doing	JPM
*magʰus	young man	Corn maw 'youth servant', mowes 'young woman' OE mago 'son; man; servant' OEmæg(e)þ 'maiden, virgin; girl; wife' NE maiden Av maava- 'unmarried'	from the semantically similar *magh- 'be able'			Family	JPM Celt.
*magʰwih□-	young woman					Family	JPM
*mai-	soil,defile	NE mole Lith miẽles 'yeast'	North-Western			Earth	JPM

*māk-	press	Lat mācerō 'tenderize by marination' Latv màkt 'oppress, depress' Czech mačkati 'press, squeeze'	North-West			Bend and Press	JPM
*makros	thin, long	Lat macer 'lean, meagre, thin' [which via French is borrowed into English as meagre] ON magr 'thin' Grk makrós 'long, big, high deep, long-lasting' Hit maklant- 'thin' Av mas- 'long'				Shape	JPM
*mand-	enclosure, stall		Eastern found in Greek, Indo-Iranian, and Thracian. No examples given (SGM)			Dwelling	JPM
*mant- *mandʰ-	chew	Lat mandō OIr mētal 'belly' OHG mindil 'bite' dialectal Grk máthuiai 'jaws'	West Central			Food & Drink	JPM
*manu-	Man, ancestor of	Germanic Mannus, the mythological ancestor of the Germans Skt Mánu Indo-Iranian ancestor of humanity				Dieties	JPM
*márkos	horse	OIr marc 'horse' NE mare	Attested only in Celtic and Germanic			Fauna	JPM
*masdos	post	Lat mālus 'mast upright in building a tower' NE mast	North-Western			Construction	JPM
*mat-	± worm, maggot,	OE maða 'worm, maggot' OE moþþe (> NE moth) Arm mat'il 'louse' Av maaxa- 'grasshopper'				Bug	JPM
*mat-	hoe, plough	Lat mateola 'hoe' OHG medela 'plough' OCS motyka 'hoe, mattock' Skt matyá- 'harrow'				Tools	JPM
*māwort-	god of war	Lat Mārs Skt Marutás		??		Dieties	JPM
*mē	no, not prohibitive particle	Alb mos Grk mḗ Arm mi Skt mā Toch B mā	does not appear in the North-West {1} impv. of an aor. root *meh₁- 'halt, stop', cf. Hitt. memma- 'to refuse' ?			Conjunctions	JPM IIAL

*mḗ(m)s	meat	Lat membrum 'member, part of a carcass' Grk me Goth mimz Lith mėsà OCS męso Alb mish Arm mis Skt mās- □ māsá- Toch B mīsa [pl.] Grk méṅigks 'skin, meninges' OIr mīr 'bit [< *bit of meat], portion, share' Rus mjazdrá 'meat side of skin'	It is suggested that it also has Celtic cognates including the name of 'Ireland' itself, i.e. both the goddess Eriu and the name of the island is 'fertile' (< *píh□weryōn), i.e. fertile land (one might compare the name of a district in Thessaly, Pīēríā, and the Homeric phrase pĩeiran árouran 'fertile land').			Meals	JPM
*me/o-	interrogative or relative parti	Bret ma □ may 'that' Hit masi 'how much' Toch A mänt 'how'				Relative Pronouns	JPM
*med-	heal, cure	Lat medicus 'doctor' Av vī-mad- 'healer'	Probably a specialized development of PIE *med- 'measure'.			Health&Sickness	JPM
*med-	measure, weigh	OIr midithir 'judges' Lat meditor 'meditate' OE metan 'measure, mete out' [> NE mete] Grk médomai 'provide for, be mindful of ', mḗdomai 'intend plot' Arm mit 'thought, reason' Lat medeor 'cure', medicus 'doctor' Grk Mēdos god of medicine Av vi-madaya 'act as ahealer'				Measure & Quantity	JPM
*medʰ-mh□o-	middlemost		{1} The -y- in Skt. madhyamá- is analogical after mádhya-.				IIAL
*médʰu	mead	OIr mid 'mead' NE mead Latv medus 'honey mead' OCS medŭ 'honey wine' Grk méthu 'wine' Av maθu 'berry wine' Skt mádhu 'honey wine' Toch B mit 'honey', mot [< *mēdhu-] 'alcoholic drink'				Meals	JPM Beekes
*medʰwih□-	intoxicator	OIr Medb, the queen of Connacht Skt Mādhavī, a daughter of Yayāti				Meals	JPM

*medʰyos	middle ?	Lat medius NE mid MIr mide 'middle' OPrus median 'forest' [< 'that which lies between (settlements)'] Rus mežá'border' Alb mjesditë 'noon' Grk mésos 'middle' Arm mēj 'middle' Av maiya- 'middle Skt mádhya- 'middle'				Position	JPM Beekes IIAL
*meghₐ-ḱléuos	fame (great)						Beekes
*me ǵ h□-	large, great	OIr maige 'great, large' Lat magnus 'large' OE micel 'large' Alb madh 'large', Grk mégas 'large' Arm mec 'large' Hit mēkkis 'much, many, numerous' Av maz- 'large' Skt máhi- 'large' Toch B māka 'many'	Pnly much (with unexpected loss, dating to Middle English, of the final -l) and the dialectal mickle (corresponding in form to Grk megálos) survive as direct descendants in English, although the Greek-derived prefix mega- is quite productive in modern English.			Measure & Quantity	JPM Beekes

*meh₁-	measure		{1} Hypercharacterized form. {2} [AL] Iranian maH- [2] 'to be, become' (cf. Cheung 2007) is probably a specific usage of the same root.	Present III: mimīhí [2sg.impv.act.], mímīte [3sg.med.] (RV+) Aorist R: māhi [2sg.impv.act.] (RV), māsva [2sg.impv.med.] Aorist S: ámāsi [1sg.med.] (AV), mā́sātai [3sg.subj.med.] {1} (AV) SI-impv: māsi (RV) Perfect: -mamur [3pl.act.] (RV 01.110.05), mamátur [2du.act.] (RV 03.032.07), mamé [3sg.med.] (RV-YVm) Abs: -mā́ya (RV), mitvā́ (RV) TA-Ptc.: -mita- (RV+) Inf: prati-mái, pra-mé (RV)		IIAL
*méh₁-nōt	moon	OIr mī 'month' Lat mēnsis 'month' NE moon, month Lith ménuo 'moon, month' OCS měsęcĭ 'moon, month' Alb muaj 'month', Grk mḗn 'month' Arm amis 'month' Av må 'moon, month' Skt mās- 'moon, month' Toch B meñe 'moon, month'	from the verb *meh₁- 'to measure'		Air	JPM
*meh₁-ns-	moon, month		{1} From IE *meh₁- 'to measure'.			IIAL
*meh₁(i)-	grow	Hit māi- 'grow' Skt mímīte 'is conceived, grows [of the fetus in the womb]' Toch B maiwe 'youth'			Vital Functions	JPM
*meh₁(i)-	mumble	OCS mŭmati 'stammer' Grk mimikhmós 'neigh' Arm mayem 'bleat' Skt mímāti 'bleat' Hit memma- 'speak'			Human Sounds	JPM

*mehₗl-	small animal	OIr mīl '(small) animal' NDutchmaal 'young cow' NE small Grk mêlon 'sheep, goat'	West-Central NE small has the s-mobile			Fauna	JPM
*mehₗns	month						Beekes
*méhₗtis	measure	Lat mētior 'measure' OE moēþ 'measure' Alb mot 'season rainstorm' Grk mêtis 'plan Skt mắti- 'measure' Hit mēhur 'time'				Measure & Quantity	JPM
*meh₂lom	apple	Hittite mahla- 'grapevine' Lat mālum Grk mêlon Alb mollĕ [borrowed from Latin or Greek?]				Trees	JPM
*meh₂trōus	mothers brother						Beekes
*meh□-	wave/trick (with the hand)	Rus ob-manútĭ 'trick, deceive' Skt māyắ'trick, illusion' Toch A māsk- 'switch, juggle' Lith móju 'wave, signal with the hand'				Values	JPM
*meh□(t)-	good	OIr maith 'good' Lat mānis 'good'	North-West			Values	JPM
*meh□k-	poppy	OHG maho □ mago OPrus moke Rus mak Grk mḗkōn	West-Central			Plants (Wild)	JPM
*méh□r̥	hand	Lat manus 'hand' OE mund '[palm of the] hand, protection' Goth manwus 'at hand, ready' Grk márē 'hand', iómōros 'having arrows at hand' Alb marr 'take, grasp', Hit māniyahh- 'hand over', māri 'manual tool, weapon'	Heteroclitic r/n			Body (Upper)	JPM
*méh□tēr	mother	OIr māthair Lat māter NE mother OPrus mothe OCS mati Grk mḗtēr Phryg matar Arm mayr Av mātar- Skt mātár- Toch B mācer	{1} [AL] Although this compound can be interpreted in three ways (1. haplology < *hama-mātar-, cf. OP hama-pitar-, Gr. ὁμο-μήτηρ 2. = ham-mātar-, cf. RV sam-mắtar- 3. < *sm̥-, cf. Gr. ὄ-πατρος), the first option is by far the most credible one, in view of the parallel OP formation.	mātắ [nom.sg.], mātáram [acc.sg.], mātúr [gen.sg.], mātárā [nom.acc.du.] 'parents', etc.		Kinship	JPM IIAL
*méh□trōus	maternal kinsman maternal uncle	Grk mḗtrōs	Greek Only			Kinship	JPM

*meh□truh□-	mothers sister	OE mōdrige 'mother's sister' Grk mētruiá 'stepmother' Arm mawru 'stepmother, mother-in-law'	perhaps just motherly-one			Kinship	JPM
*mei-	exchange	Latv míju 'exchange' Av fra-mita- 'changed' Skt máyate 'exchanges', minā́ti 'exchanges, deceives' Toch B mäsk- 'exchange' OIr mōin 'treasure' Av maēni- 'punishment' NE mean				Exchange & Property	JPM
*mei-	less	Lat minus 'small' Goth minnists 'smallest' Grk minuőrios 'short-lived' v. *minéuti > Corn minow 'lessen' Lat minuō 'lessen' Grk minúthō 'lessen, decrease' Skt minóti 'lessens'				Measure & Quantity	JPM
*mei-no-	opinion	OIr mīan 'wish, desire' NE mean, bemoan OCS měnjǫ 'mention' Toch B onmiṃ 'remorse'				Knowledge & Thought	JPM
*mei ǵ (ʰ)-	barley (grain?)	OIr mīach 'measure of grain, bushel' Lith miẽžiai Khot māṣṣa- 'field' ???				Plants	JPM
*meigʰ- *meik-	close the eyes	Toch B mik- 'close the eyes' Lith (už-)mìgti 'fall sleep' Rus mžatĭ 'blink' Lat micō 'move quickly, flash'				Sight	JPM

*meih☐	diminish, disappear		{1} [AL] Rather here and not to may [2]. Mh does not mention this form.	Present IX: mináti [3sg.act.] (RV), minīt [3sg.inj.] (AV) Present IV: mī́yate [3sg.med.] (RV+), mīyáte [3sg.med.] (MS, ŚB) Aorist S: meṣi [1sg.inj.med.] (AV), meṣmahi [1pl.inj.med.] (YV+) Perfect: mimāya [3sg.act.] (RV), mīmāya [3sg.act.] (AV) Aorist mediopass: ámāyi [3sg.] (YVp, ŚB) Intensive: ā-mémyāna-[ptc.int.med.] (RV 01.096.05) {1} Desid: mimīṣati [3sg.act.] (AVP 5.32.10) Inf: pra-mī́ye 'to harm' (RV 04.054.04) pra-mī́yam (RV 04.055.07)	to make the fury disappear': Skt. prá … manyúm … mináti (RV	IIAL
*meih☐-	go	MWels mynet 'go' Lat meō 'go, wander' OCS minǫ 'pass away, pass by'	North-West			Come & Go	JPM
*meiḱ-	mix stir up	OIr mescaid 'mixes, agitates, troubles' Lat misceō 'mix' NE mix Lith miẽšti 'mix' OCS měsiti 'mix' Grk mísgō 'mix' Av minašti 'mixes' Skt mekṣayati 'mixes, stirs'				Food Prep	JPM
*meit-	exchange	Lat mūtō 'change' Goth maidjan 'exchange' Latv mietuôt 'exchange' Skt méthatimitháti 'exchanges'	Underlies the name of the Indo-Iranian Mitra/Mithra, the god in charge of contractual relationships.			Exchange & Property	JPM

*mel-	argue, contend	ON māl 'speech, legal dispute' Grk mōléō 'contend, bring an action in a suit' Toch B mäl- 'argue, contest'				Conflict	JPM
*mel-	good	Lat melior 'better' Lith malonùs 'pleasant' Hit malā(i)- 'approve, be favourable'				Values	JPM
*mel-	harm	OIr millid 'harms' Toch B mäl- 'wound, damage'	Perhaps related to the verb *melh₂- 'grind'			Conflict	JPM
*mel-n-	dull or brownish black	Latv melns 'black' Grk mélās 'black' Skt maliná- 'dirty, black' NWels melyn 'yellow' Lat mulleus 'reddish' OPrus melne 'blue spot' Lith mé´las 'dark blue', mélynas 'blue' Latv mélynas 'black'				Color	JPM
*mel(h₁)-	soft	Lat mollis 'soft' OPrus maldai 'young' OCS mladŭ 'young, soft' Grk bladús 'slack' Arm mełk' 'soft, limp' Skt mr̥dú- 'soft, tender, mild'				Qualities	JPM
*meld-	pray		seen in some languages, Hitt. Arm. Balto-Slavic				Beekes
*meldʰ-	lightning		North-Western			Air	JPM
*meldʰ-	pray, speak words to a deity	OE meld(i)an 'announce, declare, proclaim, reveal'; OHG meldōn 'report' Lith meldžiù OCS moljǫ Arm malt'em Hit maldā(i)-				Formal Speech & Song	JPM
*méles-	fault, mistake					Health&Sickness	JPM
*méles-	limb	Breton mell 'knuckle' Grk mélos 'limb'				Body (Upper)	JPM
*melh₂-	± grain, millet to grind	Lat milium	My be independently formed from the verb 'to grind' (*melh₂-)			Plants	JPM
*melh₂-	grind	OIr meilid Lat molō NE meal Lith malù OCS meljǫ Grk múlē 'mill' Arm malem Hit mall(a)- Skt mr̥ṇāti Toch B mely-				Agriculture	JPM
*melh₂-ḱ-s	weak, soft						Beekes
*meli-	badger	Lat mēlēs Slovenian melc				Fauna	JPM

*méli(t)-	honey	OIr mil 'honey' Lat mel 'honey' NE mildew [< *'sweet sap'] Alb bletë 'honey-bee' Grk méli 'honey', mélissa 'honey-bee' Arm mełr 'honey' Hit militt- 'honey'				Meals	JPM Beekes
*melítih₂-	honey-bee	Alb bletë Grk mélissa	Central From *mélit 'honey'			Bug	JPM
*melk-	plait, spin	Hitt malk- 'spin, entwine' Toch mälk- 'joint together, insert' OHG malha 'bag'				Textiles	JPM
*melkʷ-	damage		{1} If connected with Gr. βλάπτω. {2} If connected with Hitt. mārk-hhi.	Present IV: pra-mr̥cyati [3sg.act.] (JB 2.138:2) Caus: marcáyati [3sg.act.] (RV) Aorist SIS (Prec.): mr̥kṣīṣṭa [3sg.med.] (RV 01.147.04) TA-Ptc.: mr̥ktá- 'hurt' (RV)	'(let the one who tries) to hurt us (will hurt oneself) with evil speeches': Skt. mr̥kṣīṣṭa … duruktáiḥ (RV 01.147.04), abhíśastim … yó no marcáyati dvayéna (RV 05.003.07) — OAv. daibitīm duš.sastiš…mərą̄šiiāt_ (Y 45.1) 'an enemy tries to hurt (us)': Skt. marcáyāt … arātīvā́ (RV 02.023.07) — YAv. arātōišca gaē̄θō.mərəṇciiānahe (Yt 13.137)		IIAL
*melo-	bad	MIr mell 'mistake' Lat malus 'bad' Lith mēlas 'lie' Grk méleos 'miserable, fruitless, vain' Arm mełk' 'sin' Av mairya- [an epithet of demonic beings]				Health&Sickness	JPM
*mēms-(o)-	meat						IIAL
*men-	chin	MWels mant 'mouth, jaw' Lat mentum 'chin' Hit mēni- 'chin'	Requires acceptance that the apparently cognate forms are not independent derivatives from *men- 'project'			Head	JPM
*men-	project	NWels mant 'mouth, lip' Lat mentum 'chin', prō-mineō 'project' Hit mēni- 'face, cheek' Av fra-manyente 'gain prominence'				Shape	JPM
*men-	remain, stay	Lat maneō 'remain' Grk ménō 'stand fast, remain' Skt man- 'delay' OIr ainmne 'duty' Arm mnam 'remain, expect' Toch AB mäsk- 'become' possibly Hit mimma- 'refuse'				Dwelling	JPM

*men-	think, consider	perfect *memónh₂e 'think, remember' Lat meminī 'remember' Grk mémona 'yearn' Skt mamné'thinks' present *mnyétor OIr do-moinethar 'believes' Lith miniù 'remember' OCS mĭnjǫ 'think' Grk maínomai 'rage, be mad' Av mainyeite 'thinks' Skt mányate 'thinks') present *mnéh□ti Grk mnê̂ma 'remembrance' Luv m(a)nā- 'see, look upon'				Knowledge & Thought	JPM
*mén-mn̥	thought	OIr menma 'spirit, sense' Skt mánman- 'mind, perception'				Knowledge & Thought	JPM
*men(s)-dʰ(e)h₁-	learn	NWels mynnu 'wish' OHG mendōn 'rejoice',munter 'lively' Lith mañdras 'lively, awake' OCS mǫdrǫ 'wise' ? Alb mund 'be able' Grk manthánō 'learn' Av maẓ-dā- 'stamp in the memory', mazdā 'wisdom' Skt medhā́'wisdom'				Knowledge & Thought	JPM
*mendo/eh□-	± (bodily) defect	OIr mennar 'spot, stain' Lat menda 'bodily defect' Lyc mẽte- 'damage, harm' Skt mindā 'defect of the body'				Health&Sickness	JPM
*menegʰ-	abundant	OIr meinic(c) 'abundant' NE many OCS mŭnogŭ 'abundant' ?Skt maghá- 'gift, reward, wealth'	North-West			Measure & Quantity	JPM
*ménes-	thought	Grk ménos Av manah- Skt mánas-	Graeco-Aryan isogloss			Knowledge & Thought	JPM
*meng-	± charm, deceive	MIr meng 'deceit, guile' Grk mágganon 'charm, philtre' Oss mæng 'deceit'				Values	JPM
*menk-	lack	Lat mancus 'maimed' OHG mengen 'be lacking' Lith meñkas 'feeble, weak scanty insignificant' Skt maṅkú- 'wobbly' Toch AB mäṅk- 'be deprived of lack'				Exchange & Property	JPM

*menk-	press	Grk mássō'knead' Skt mácate 'crushes' OE mengan 'mix' Liith mìnkyti 'knead, touch' OCS mękŭkŭ 'soft, delicate'				Bend and Press	JPM
*menkus	soft	Latv mîksts 'soft' OCS mękŭkŭ 'soft' Alb (Gheg) mekan 'weak'	Baltic-Slavic-Albanian isogloss			Qualities	JPM
*mens	bear in mind, be thoughtful		{1} Pllr. *mans < *mens represents the old acc.sq. of *menos, see s.v. mánas-.				IIAL
*mens-dʰhɪro-	wise		{1} [AL] On the basis of Avestan and Slavic forms, we may conclude that Skt. has introduced zero-grade from *mazdhaH- (see s.v. medhā́-).				IIAL
*menth₂-	stir	ON mǫndull 'handle on a pestle' Lith mę̇sti 'stir, agitate' OCS męsti 'disturb, molest' Skt má(n)th- 'stir, whirl, churn, hurt, destroy' Toch B mänt- 'remove, destroy, pour out'				Food Prep	JPM
*méntis	thought	Lat mēns 'thought' NE mind Lith mintìs 'thought' OCS pamętĭ 'thought' Av -maiti- 'thought' Skt matí- 'thought'				Knowledge & Thought	JPM
*menus *menwos	thin (in density)	OIr menb 'small, tiny' Grk mánu 'small' Arm manr 'small, fine' Skt manāk a little, slightly'				Measure & Quantity	JPM
*mer-	braid, bind	NE moor [a boat] [<MLG mōren] Grk mérmīs 'cord'	West Central			Binding	JPM
*mer-	crush, pulverize	Grk maraínō 'extinguish [a fire]' Hit mariyattari 'is smashed' Skt mr̥ṇā́ti 'crushes, grinds' OIr meirb 'lifeless' OE mearu 'soft'				Reductive Activities	JPM
*mer-	die	Lat morior 'die' Lith mìrštu 'die' OCS mĭrǫ 'die' dialectal Grk émorten 'died' Arm meřanim 'die' Hit mer- 'disappear, die off' Av miryeiti 'dies' Skt mriyáte 'dies'				Health&Sickness	JPM

*mer-	disappear, die		{1} [LK] With the secondary suffix accentuation, see Kulikov 1997. {2} With double characterization.	Present IV: mriyase [2sg.med.] (RV), mriyáte (< *mr-ie-) {1} [3sg.med.] (AV+) Aorist R: mr̥thās [2sg.inj.act.] (RV), marāti [3sg.subj.act.] (RV) {2}, márate [3sg.subj.med.] (RV), murīya [1sg.opt.med.] (RV) Aorist S: mr̥ṣi [1sg.inj.med.] (AVP) Perfect: mamā́ra [3sg.act.] (RV+), mamr̥vā́ṃs- [ptc.act.] (RV+) Fut: mariṣyati [3sg.act.] (AV+) Caus: māráyati [3sg.act.] 'to kill' (AV+) Desid: mumūrṣati [3sg.act.] 'to desire to die' (Sū.+) Inf: martave 'to die' (AVP) TA-Ptc.: mr̥tá- 'died, dead' (RV+) a-mr̥ta- (< *n̥-mr̥to-			IIAL
*mer-	shine, shimmer	Lat merus 'pure, bare' OE āmerian 'test, examine purify' Rus mar 'blaze of the sun' Grk marmaírō 'shimmer' Skt márīci- 'shining beam'				Light & Dark	JPM
*mer-to-	mortal		{1} LW in FU (Komi-Zyryan mort 'man' < *mertä) seem to point to *merto-.		See mártya-		IIAL
*merd-	rub, scrape	Lat mordeō 'bite' Skt mr̥dnā́ti 'rubs' Toch B märtk- 'shave [hair]'				Reductive Activities	JPM

*merh□-	hinder		{1} [LK] The form is taken as perfect by several scholars (Whitney 1885: 124 Lubotsky 1997a: 1085), but it is missing from the corpus of Kümmel 2000 (thus not qualified as perfect by him) and Bendahman 1993 (thus not a redupl. aor.). {2} [LK] The form is connected with mari [3] by Insler 1972b and Lubotsky 1997a: 1085), but with mari [2] 'to crush' by Mh and Schaefer 1994: 166 or, alternatively, with mardi 'to crush' (Schaefer). {3} Connection uncertain.	Perfect (?): mumurat [2sg.subj.act.] 'shall hinder' (RV 08.097.03) {1} Intensive: marmartu [3sg.impv.act.] 'let (Bṛhaspati) hinder (him)' (RV 08.097.03) {2}			IIAL
*merih□-	young woman	Alb shemĕr 'co-wife concubine (female) rival'				Family	JPM
*merk-	± darken	OIr mrecht- 'variegated' NE morn Lith mérkiu 'close one's eyes, wink' OCS mrakŭ 'dark'	North-West			Light & Dark	JPM
*mers-	forget	Lith mirštù 'forget, overlook' Arm mořanam 'forget' Skt mr´ṣyate 'forgets, neglects' Toch AB märs- 'forget' ??OE mierran 'disturb, confuse, hinder' [> NE mar])				Knowledge & Thought	JPM
*méryos	young man	Lat marītus 'husband lover, suitor' Grk meîraks 'young man or woman' Av mairya- 'young man' Skt márya- 'young man, lover, suitor'				Family	JPM
*mesg-	dip under water, dive	Lat mergō 'dip, dive', mergānser 'duck' (literally, *'diving goose' or the like) Lith mazgó ti 'wash up' (i.e. *'dip repeatedly') Skt májjati 'sinks'				Swim	JPM
*mesg-	intertwine	ON mǫskvi 'mesh' Lith mezgù 'knit', māzgas 'knot' Toch B meske 'joint, knot') MDutch maesche NE mesh				Textiles	JPM
*meth₂-	between, with						Beekes

*meu(h□)-	move	Lat moveō 'set in motion' Lith máuju 'put on or off' Grk ameúsasthai 'surpass, outstrip pass over' Hit mauszi 'falls' Av ava-mīva- 'take away' Skt mī́vati 'shoves, moves, sets in motion' Toch B miw- 'shake'			Movement	JPM
*meud-	be merry	Av maoðanō-kara- 'lust-inducing' Skt módate 'is cheerful', mudrá- 'merry, cheerful' Lith mudrùs 'cheerful, lively').			Values	JPM
*meug-	± cheat, deceive	OIr formūchtha 'smothered, concealed' Lat muger 'dice cheat' NE meecher	North-West		Values	JPM
*mēus	moss	Lat muscus 'moss' NE moss Lith mùsos [pl.] 'mould' Rus mokh 'moss'	North-West		Plants (Wild)	JPM
*meus-	move remove	OHG chrēo-mōsido 'graverobbers' Khot muśśa 'robbers' Skt muṣṇā́ti 'steals' Toch AB musnā- 'lift, move [aside]', musk- 'disappear', mäs- 'go'	Would appear to underlie the root noun *mū́s 'mouse', i.e. the 'stealer'		Movement	JPM
*meus-	steal, snatch		{1} [AL] Neither connected with IE *m(i̯)euḫ₁-´ to move' (pace Pokorny), and nor with the word for 'mouse' (pace Mh). The connection with muṣṭí- seems much more probable. Since the Tocharian verb has a deviating meaning, it is less certain that it belongs here.	Present IX: amuṣṇāt [3sg.impf.act.] (RV) Present ĀYA: muṣāya° (RV) Aorist IS: moṣīs [2sg.inj.] (RV+) Aorist R: móṣathā [2sg.subj.med.] (RV) Passive: muṣyate [3sg.] (Br., DhSū.+) TA-Ptc.: muṣṭá- 'taken away, robbed' (RV)		IIAL
*mh₂ḱrós	long					Beekes

*mih₁u-V	set into motion (by shoving and pushing)		{1} [AL] The position of the laryngeal is not quite clear. It does not seem very probable that PIE *miuh₁- would have given *mih₁u̯- > Ved. mīv- before a vowel with metathesis (Rasmussen, Mh). I would rather reconstruct *mih₁-u- and *mih₁uC- > *mi̯uh₁-C. Important are the Tocharian cognates, for which see Adams s.v.	Present I: -mīvantī- [ptc.act.f.] 'pushing down' (AV-Br.) Passive: -mīvyamāna- [ptc.] (KSp) TA-Ptc.: ᵒmūta- (< *muh₁-tó- < *mi̯uh₁-tó-) in kā́ma-mūta- 'impelled by love' (RV 10.010.11) mīvitá- (TB+)		IIAL
*mis-d-	close the eyes		{1} Probably, a nursery form of *mīl- < *miz-d- (Gotō 1987: 74, fn. 48)	Present I: saṃ-mīlate (KS), Fut. saṃ-mīliṣyate (KS) TA-Ptc.: sáṃ-mīlita- 'with eyes closed' (KS) Abs: saṃ-mī́lya 'with eyes closed' (RV 01.161.12)		IIAL
*mis-dʰ(h₁)-ós	reward, prize	OE meord 'reward, pay' OCS mĭžda 'reward, wages' Grk misthós 'reward, wages' Av mīžda- 'reward, gift' Skt mīḍhá- 'competition, contest, prize'	{1} [AL] The first part of the cmp. is likely to be derived from the root *mei- 'to exchange' (see may [2]), if the root does not contain an initial *h₂, rather than *mei(H)-es- (máyas-).		Exchange & Property	JPM IIAL
*míts	stake, post	Skt mít- 'pillar, post'	From underlying verb *mei- 'fix a post in the ground'		Construction	JPM
*mld-u-	soft, weak			mradīyāṃs- [comp] (JB), mradiṣṭha- [sup] (Sū.)		IIAL
*mldʰo/eh₂-	clay	OE molde 'sand, dust, soil' Grk málthē 'modelling mixture of wax and pith' Skt mṛd- 'clay, loam'	Well attested		Earth	JPM
*mled-	be soft		{1} The roots mard(i) and mrad have early become confused in Vedic, cf. Gotō 1987: 250.	Present I: ví mradā [2sg.impv.act.] (RV 06.053.03), ví mradate [3sg.med.] (MS 1.6.3:90.6) Caus: mradayᵒ 'to make soft' (TS) {1}		IIAL

*mleuh☐-	speak	OCS mlŭvati 'create a disturbance' Av mraoiti 'says, recites' Skt bráviti 'says' Toch B pälw- 'mourn'		Present II: brávīti [3sg.act.] (RV+) bruvánti [3pl.act.] (RV+) brūté [3sg.med.] (RV+)	'to speak being the knowing one': Skt. vy àbravīt … vidvắm̐ '[Agni] announced [the right paths, since he is a] knowing one' (RV 01.145.05) — OAv. vīduuā̊ vīdušē mraotū YAv. vīđβā̊ mrūiđi	Speech	JPM IIAL
*mlh₃dʰ-r-	head, crown						IIAL
*ml̥h☐dʰ-o-	crown of the head	OE molda 'crown of the head' Av kamərəða- 'head of a demonic being' Skt mūrdhán- 'head'				Head	JPM
*ml̥ḱ-	touch lightly	Lat mulceō 'stroke, touch lightly, fondle' Skt mr̥śáti 'strokes, touches'				Sensation	JPM
*mn̥h☐-	minnow; small fish	NE minnow Rus menĭ 'burbot' Grk maínē 'Maena vulgaris'				Fish	JPM
*mns-dʰeh₁-	wise						IIAL
*mōd-	meet	NE meet	West Central			Social Organization	JPM
*modʰeros	blue/green	NE madder SC modar 'blue' < *modʰrós Hit āntara- 'blue' [< *m̥dʰrós] Toch B motartse 'green' [< *modr̥-tyo-]	This word would be the best candidate for a Proto-Indo-European word for 'blue' or at least 'blue/green'. The association of the Germanic words for 'red' arises from the use of the madder root as a red dye. The current use of madder and its cognates in Germanic to designate the plant Rubia tinctorum is itself a secondary transfer, on the basis of the root's use in dyeing, from an earlier reference to the bedstraws, some of whose species also have roots used to produce red dye. The bedstraws, however, may have been called *modʰrós because of their characteristic yellow-green flowers.			Color	JPM
*moiso-	sheep, skin of sheep				hundred rams': Skt. śatám meṣắn (RV) — Elam.-Iran. *θata-m		IIAL
*moisós	ram, sheep fleece,	Lith maĩšas 'bag' Rus mekh 'skin' Avmaēša- 'ram' Skt meṣá- 'ram, sheep fleece, skin' Hit maista- 'strand of wool'				Fauna	JPM
*moko-	gnat, stinging insect	Lith mãšalas 'gnat' Skt maśaka- 'gnat, mosquito' MPers makas 'fly' Latv masalas 'horsefly' Lith mãkatas 'gnat' Skt mákṣ- 'fly'	We find dialectal variation in a by-form without a palatal, i.e. *moko-			Bug	JPM
*moḱs *moḱs(u)	soon	OIr mō 'soon' Lat mox 'soon' Av mošu 'as soon as' Skt makṣú 'soon'	{1} [AL] The final length in Sanskrit may be due to the influence of nū (M. de Vaan, p.c.).		come quickly to help': Skt. makṣum̐	Time	JPM IIAL
*mon-éie	warn (to)		Secondary i-stem, causative				Beekes

*moni-	necklace	OWels minci 'collar' Lat monīle 'necklace' OE mene 'necklace' OCS monisto 'necklace' Skt maṇi-grīvá- 'carrying a neck ornament'	The word clearly derives from *mono- 'neck' but the consistently different stem form (i.e. *-i- rather than *-o-) suggests that 'necklace' is not just a metaphorical extension of 'neck'.			Ornament	JPM
*monis	neck	OIr muin 'neck' Lat monīle 'necklace' NE mane OCS monisto 'necklace' Av manaoθrī 'neck', minu- 'necklace' Skt mányā-'nape'	possibly also a derivative of *men- 'project'			Head	JPM
*mor-tio-	mortal, man			/martiya-/	'rich mortal': Skt. mártaḥ … revā́n (RV 07.001.23) — YAv. raēuua mašiia (Yt 14.36) mašiiāṇąm raēuuataą̆m (Vd 20.1) see also gáya- devá- parás		IIAL
*moreh₂	female demon						Celt.
*mor ǵ -	border	OIr mruig 'district' Lat margō 'edge' [> by borrowing NE margin] OE mearc 'border, district' [NE marches is from Old French, in turn from Germanic] Av marəza- 'border country'				Space	JPM
*móri	sea	OIr muir Lat mare NE mere Lith mãrė OCS morje	North-Western word were it not for a possible cognate in Ossetic: mal 'deep standing water.' Hit marmar(r)a- 'swamp' may be a reduplicated version of the word and, if so, would secure this word to Proto-Indo-European Referred originally to an 'inland sea' or 'lake' and was later extended to mean 'salt water sea'			Water	JPM
*morm-	ant	Lat formīca Grk múrmos				Bug	JPM
*mórom	blackberry	NWels merwydd 'mulberry' Lat mōrum 'mulberry, blackberry' Grk móron 'mulberry, blackberry' Arm mor 'blackberry' Hit muri- '[bunch of] grapes'				Trees	JPM
*móros	death	Lith mãras 'death' OCSmorŭ 'plague' Grk móros 'fate, doom, death', Skt māra- 'death'				Health&Sickness	JPM
*mórtos	person, mortal	dialectal Grk mortós 'person dead' Av marəta- 'person, mortal' Skt márta- 'person, mortal'				Health&Sickness	JPM

*morwi-	ant	OIr moirb OCS mravi Av maoirī	{1} [AL] The reconstruction is difficult because of various (taboo) transformations. PIIr. points to *marui-. Since the same order of consonants is also found in Slavic and Celtic, this may be the original form.	vamrī́- [f]		Bug	JPM IIAL
*mosgʰos *mosgʰ-en-	marrow, brain	NE marrow Lith smãgenės 'marrow' smẽgenys brain' OCS mozgŭ 'marrow, brain' Av mazga- 'marrow, brain' Skt majján- 'marrow'	{1} [AL] In view of PIIr. *mastrghan- / mastr̥ǰhan- and *mast(i)- (cf. s.v. mastr̥han-), it seems attractive to assume that *mosgho- reflects earlier *mostgho-.			Organs	JPM IIAL
*móstr̥	brain, marrow	Av mastrəɣan- 'skullwall' [< *'braincase'] Skt mastíṣka- 'brain' Toch A mäśśunt [pl.] 'marrow'	Eastern			Organs	JPM
*moud-	desire strongly	Lith maudžiù 'desire passionately' Czech mdlíti 'desire' Toch B maune 'avarice, avidity'				Desire	JPM
*mouro-	ant	ON maurr				Bug	JPM
*mregʰ-	rain softly, drizzle	Latvian merguôt 'rain softly' Grk brékhei 'rains'				Water	JPM
*mrégʰmen- ??*mest-(m)rgʰ-n-	brain	OE bregen > NE brain Grk brekhmós 'forehead'	West Central {1} [AL] The first attestation is AVP 17.21.1 (cf. Griffiths - Lubotsky 2003: 201f), before KauśS 11.16, for which see Eichner-Kühn 1976: 23-25. {2} [AL] The word has not yet received a plausible explanation. Neither dissimilation *mazgh- to mast-, nor contaminaton of *šst-r̥-gh and *šst-an- is a viable option. There are two variants of the word for 'brain' in IIr.: *mast(i)- and *mastrghan-. The latter should not be analysed as *mast- plus a bunch of suffixes, but rather as a compound. It can hardly be coincidental that -rgh-an- shows the same sequence of phonemes as we encounter at the end of Gr. βρεχμός [m] 'front part of the head' OE brocgen 'brain' (< PGm. *braȝna-) < PIE *mre/oghn- (Greek may have assimilated -n- to -m-). ToB mrestīwe 'marrow' may have an "intrusive" -r- from a similar compound.			Organs	JPM IIAL
*mr̥ǵʰus	short	Lat brevis 'short' NE merry Grk brakhús 'short [of time or space]' Av mərəzu- 'short' Skt múhu- 'short'	{1} [AL] Skt. -u- in the root is due to dissimilation *mr̥hur [mə́rhur] > [múrhur] > múhur , cf. *śr̥thirá- [śərthirá-] > [śirthirá-] > śithirá- *durhŕ̥ṇā- [durhə́ṛnā-] > durháṇā- (Narten 1982: 140).			Measure & Quantity	JPM IIAL
*mr̥k-	± carrot	NE more 'carrot' Rus morkóvĭ Grk brákana 'wild vegetables'				Plants	JPM

*mr̥tís	death	Lat mors Lith mirtìs Av mərəti-				Health&Sickness	JPM
*mr̥tóm	death					Health&Sickness	JPM
*mr̥tós	dead, mortal	Lat mortuus 'dead' Grk brotós 'person' Skt mr̥tá-				Health&Sickness	JPM Beekes
*mū-	dumb	Lat mūtus 'dumb' [> by borrowingNEmute] Norwegian mua 'be silent' dialectal Grk mukós 'dumb' Arm mun 'dumb' Skt mū̆ka- 'dumb'				Health&Sickness	JPM
*mú(k)skos	ass/donkey	Lat mūlus 'mule' ORusmŭskŭ 'mule' Grk mukhlós 'he-ass'				Fauna	JPM
*mug-	make a (low) noise	Hit mugā(i)- 'entreat' Lat mūgiō 'low, bellow' OHG muckazen 'grumble' Grk múzō 'mutter, moan, growl' Skt múñ jati 'makes a noise'	Would appear to be an enlargement of *mu- a low sound of some sort (in Czech it does mean to 'moo' like a cow)			Human Sounds	JPM
*muh☐-tro-	urine (?)						IIAL
*murmur-	murmur	Lat murmurō Lith murménti Grk mormúrō Arm mrmrm Skt marmar- 'roaring'				Human Sounds	JPM
*mūs *muh☐s-	mouse	Lat mūs NE mouse OCS myšĭ Alb mi Grk mûs Arm mukn NPers mūs Skt mū̆ṣ- Toch B maścītsi 'mice, rats'	derives from the verb *meus- 'steal' {1} [AL] The laryngeal further follows from the probable Toch. B cognate maścītse* 'mouse, rat' (lyśī no māka krui tākaṃ /// śalapä maścītsi ṣpä peṣeli śaiṣṣene mäskenträ pākri 'if, however, there are many thieves, grasshopper[s], mice and worms appear in the world' (K-8b1)). The Tocharian word reflects PToch. *măst'ə̇tse < *m(w)asti- <*muHs-ti- with a diminutive suffix of some kind.			Fauna	JPM IIAL
*mus-	steal	OHG [Lex Salica] chrēo-mōsido 'grave-robbery' Skt muṣṇā́ti 'steals' Toch B mus- 'steal' Toch AB mus- 'lift, move aside'	The Tocharian example 'lift' is perhaps not far removed from modern NE lift for 'steal'			Exchange & Property	JPM
*mūs(tlo)-	(little) mouse muscle	Lat mūsculus 'little mouse muscle' [> NE muscle] OHG mūs 'mouse muscle [especially the biceps]' Grk mûs 'mouse muscle' Arm mukn 'mouse muscle' Khotanese mūla- 'mouse muscle'	closely associated with the word for 'mouse' (it means 'little mouse'), and words for 'mouse' may also mean 'muscle' in various Indo-European groups			Organs	JPM

*mus/hₐ-	fly gnat, midge, mosquito	Lat musca Lith muša OCS mǔšĭca Grk muîa Arm mun				Bug	JPM
*muskós	male or female sex organ	dialectal Grk múskhon 'male or female sex organs' Skt muṣká- 'testicle, scrotum [dual] vulva'	Greek-Indic isogloss			Body (Lower)	JPM
*mustí-	fist	Av mušti- Skt muṣṭí- Toch B maśce	Indo-Iranian-Tocharian isogloss {1} [AL] Janda 1998: 14ff. convincingly argues that this word is not related to Lith. mùšti 'to beat, to thrash', but rather with Gr. μύω 'to close (eyes, mouth)', Hitt. muš- 'to eat one's fill' (= 'to close [the mouth]'?) < PIE *mus- 'to close'. Possibly, also the Skt. root moṣ(i) 'to steal' belongs here (orig. 'to snatch' ?).			Body (Upper)	JPM IIAL
*mVnus	man	NE man Skt mánu- 'man, person'	Rests on a not entirely clear Germanic-Indic isogloss many claim to go back to *men- 'think', presumably under the illusion that man is a cognitive creature			Family	JPM
*n̥	negative prefix		{1} Zero grade to *ne 'not'. In IE, *n̥- was restricted to verbal adjectives and bahuvrīhi-compounds. {2} an- has originated in compounds with 2nd member in H̯V- (*n̥HV- > anV-) and then was analogically prefixed to 2nd members with initial vocalic resonant.				IIAL
*n̥-h₁r̥g-etos	from when one may not be awoken	wuh?					Beekes
*n̥-h₂eigʷʰos-	impeccable						IIAL
*n̥-h₃bʰelēs	useless						Beekes
*n-h₁en-	mother	Lat nonnus NWels nain 'grandmother' Late Lat nonnus 'nurse' Alb nёne 'mother' Rus njánja 'nurse' Grk nánnē 'female cousin, aunt' NPers nana 'mother' Skt nanā- 'mother'				Kinship	JPM
*n̥-mr̥-tós	undying	Av aməša- Skt Amŕ̥ta- Grk ambrosíā				Meals	JPM
*n̥-mrtós	immortal						Beekes
*n(é)h₁tr-	snake	OIr nathir [gen. nathrach] Lat natrix 'watersnake penis' Goth nadrs 'snake, viper' OE nǣddre 'adder'				Fauna	JPM
*n(o)hₐt-	± rear-end	Lat natis 'human buttocks' Grk nŏton 'back'	West Central			Body (Lower)	JPM
*nak-	press, squeeze to felt	Lat naccae 'cloth-fullers' Hitt nakki- 'weighty, important'	If it only meant 'press' in Proto-Indo-European (or Proto-Indo-Hittite), the meaning 'felt' may have been a later and secondary development.			Textiles	JPM

*nák(es)-	± pelt, hide	OE næsc 'dressed fawn's skin' OPrus nognan 'leather' Grk nákos ⬜ nákē 'pelt, fleece, hide of deer or goat'	West-Central			Body (Upper)	JPM
*nant-	combat, fight [noun]	OIr nēit 'battle, combat' ON nenna 'strive'	North-West			Conflict	JPM
*nbʰ–ro-	rain cloud	Lat imber 'shower' Skt abhrá- 'rain-cloud' Grk ómbros 'rain' Toch B epprer 'sky'	also, *-ri- {1} [AL] Frisk I: 197 is opposed to this connection. Gr. ŏμβρος 'rain, downpour, thundery shower' cannot be connected for formal reasons (no initial laryngeal, -β-). Also Alb. avull 'smoke' is most probably			Water	JPM IIAL
*ṇdʰés *ṇdʰero-	under, low	ON und 'under' Arm ənd 'under' Lyc ẽti 'down, below' Skt adhás 'under' Toch B ette 'downward, under' Lat īnfernus 'lower' NE under Goth anderas 'lower' Lycian ẽtre/i- 'lower' Av aðara- 'the lower' Skt ádhara- 'lower'				Position	JPM Beekes
*ne	like						Beekes
*ne	no, not	Lat nōn OE ne Lith ne OCS ne Hit natta Skt ná *ṇ- Lat in- Gmc un- Grk- a- Av- a- Skt a-	{1} = ná [1]	'(certainly) not': Skt. néd (RV+) — Av. nõit_ 'cerainly not': Skt. néd evá (RV 10.051.04) — OAv. nõit_ aēuuā 'or not': Skt. ná vā (RV+) — YAv. na-uua (V 5.26) — Lat. nēve, neu 'not at all': Skt. ná vái (RV+) — YAv. na-uua 'no-one': Skt. ná-kiḥ (RV, AV) — Av. naē-ciš — Oss. nī-cy / ne-ci — Lat. ne-quis 'there is no …': Skt. nā́sti (RV+) — OCS něstь	Conjunctions	JPM IIAL
*nē	as, thus	Lith ne OCS neže Grk tóne, 'like' Skt ná Lat nē (interrogative particle) OHG ne (interrogative particle)				Conjunctions	JPM
*nébʰos	mist, cloud; sky ?moisture	OIr nem 'heaven' Lat nebula 'mist, fog' OE nifol 'dark' Lith debesìs 'cloud' OCS nebo 'sky' Grk néphos 'sky' Skt nábhas- 'mist, cloud sky' Hit nēpis- 'sky'				Air	JPM IIAL

*ned-	knot, bind	OIr naiscid 'binds' Lat nectō 'knot, bind' [influenced by pectere 'comb wool'], nōdus 'knot' NE net Av naska- 'bundle' ??Grk adíkē 'nettle' ??NE nettle	North-West			Textiles	JPM
*ned-	nettle	MIr nenaid 'nettle' NE nettle Grk adíkē 'nettle' Lith nõterė 'nettle' Slovenian nât 'nettle'	West-Central			Plants (Wild)	JPM
*ned-	roar, rustle		{1} [LK] Thus according to Jamison 1983: 60f., contra most scholars' causative analysis ('to make resound'). Jamison's analysis is again disputed by Gotō 1987: 192, fn. 356 ("nicht wahrscheinlich").	Present I: nádant- [part.act.] (AV+) Present X / Caus: nadáy° 'to resound' {1} (RV) Intensive: nā́nadati [3pl.act.] 'to resound, roar loudly' (RV), nā́nadat- [part.act.] (RV, AV) nānadya° (JB)			IIAL
*ned-ih₂-	resounding, rustling (?)			vr̥kī́-inflexion: nadyàm [acc.sg.], nadyàḥ [gen.sg., nom.acc.pl.], nadī́ [loc.sg.]			IIAL
*nedós	reed, rush	Lith néndrė 'reed' Luv nātatta- 'reed' NPers nai 'reed' Skt nadá- '+reed'	{1} The original form of the word is nadá- with unexplained -ḍ-.			Plants (Wild)	JPM IIAL
*nedskéh□-	tie, ring	OIr nasc 'fastening tie, ring' OHG nuska 'metal clasp'	North-West			Textiles	JPM
*negʷʰrós	kidney	ME nēre 'kidney' Grk nephrós 'kidney'	West Central			Organs	JPM
*negʷnós *nogʷnós	bare, naked	Grk gumnós Hit nekumant- Av maɣna- Skt nagná- Lat nūdus NE naked	Latin and Engish forms are derived: *nogwedʰo {1} [AL] For a discussion of the various suffixes in this word see Beekes 1994.			Health&Sickness	JPM Beekes IIAL
*neh₂-	be timid	MIr nār 'modest' Hit nāh- 'be afraid'				Values	JPM
*neh₂u-h₂og̑o-	skipper						IIAL
*neh₃	us both						IIAL

*neh₃dʰ-	be in distress		{1} Also nāthitá- (RV+) with -th- taken from the root nāth- 'to seek aid'.	Present I: nā́dhamāna- [ptc.med.] (RV+), nā́dhai [1sg.subj.med.] (ŚBK 4.5.1.16) TA-Ptc.: nādhitá- 'oppressed' (RV) {1}			IIAL
*néh☐us	boat	OIr nāu Lat nāvis [> NE nave (of a church)] Grk naûs Oss naw Skt nau-	from *(s)néh☐- 'swim' {1} Formed on the basis of Acc.sg. nāv-em.			Transport	JPM IIAL Beekes
*néh☐wis	corpse	Goth naus 'corpse' OPrus nowis 'corpse' ORus navĭ 'corpse' Toch A nwām 'sick'				Health&Sickness	JPM
*neid-	flow			Present I: -nédanti [3pl.act.] (YVp+)			IIAL
*neigʷ-	wash	OIr nigid Grk nízō Av naēnižaiti 'washes' Skt nénekti 'washes'	although there are problems with the Irish form (as Proto-Indo-European *gʷ > Celtic b and not g). Tocharian lik- 'wash' may belong here too, if the initial l- can be explained as resulting from the contamination of some other root (e.g. *leuh₁- 'wash').	Present III: ninikta [2pl.impv.act.] (RV 10.132.06) Aorist R: nir-ṇijāná- [ptc.med.] (RV 09.069.05) Aorist A: anijam [1sg.act.] (AV 10.4.19 +), anijan [3pl.act.] (AV+) Aorist S: anikṣmahi [1pl.med.] (AVP 16.149.12), nikṣi [1sg.inj.med.] (AV 10.5.15-21) Aorist SIS: anaikṣīt [3sg.act.] (AV 2.7.1) Caus: nejay° (Br.+) Intensive: nenikté [3sg.med.] (RV 09.071.03 +) TA-Ptc.: niktá- 'washed clean' (RV+)		Clean	JPM IIAL
*neih☐-	churn butter		{1} A technical usage of nayi ?				IIAL

*neih□-	lead						IIAL
*neih□-	lead	Hit nāi- 'leads' Skt náyate 'leads'		Present I: náyati [3sg.act.] (RV+) Present II (nonce): nethá [2pl.act.] (RV 10.126.02), ánītam [3du.impf.med.] (RV 01.121.05) Aorist S: anait [3sg.act.] (AV+), anaiṣam [1sg.act.] (MS), naiṣṭa [3sg.inj.med.] (RV), néṣat [3sg.subj.act.] (RV) SI-impv: neṣi (RV+) Perfect: ninā́ya [3sg.act.] (RV+), ninīyāt [3sg.opt.act.] (RV) Passive: nīyáte [3sg.] (RV+) Fut: neṣyati [3sg.act.] (AV+) Intensive: nenīyá° (RV+) Desid: nínīṣasi [2sg.act.] (RV 08.103.04 +) Inf: neṣáṇi 'to lead' (RV) TA-Ptc.: nītá- (RV+)	'to lead a horse': Skt. áśvam … nay° (RV+), *aśva-nī- PN ('led by the horse' (?)) (Mitanni-IA) — YAv. aspa … naii°— OP. asam frānayam 'to lead away the bound one': Skt. baddhám nay° (RV 10.034.04) — YAv. bastəm naii°— OP. basta anayatā	Travel	JPM IIAL
*neik-	begin	Lith u-ninkù 'begin' OCS vŭz-nĭknoti 'regain consciousness' Hit nini(n)k- 'start up, mobilize'				Movement	JPM
*neik-	winnow	NWels nithiaf Lith niekóti Grk likmáō				Agriculture	JPM

*neḱ-	disappear. perish			Present IV: náśyati [3sg.act.] (RV+) Aorist RED (intr.): néśat [3sg.inj.act.] (RV), ánéśan [3pl.act.] (YV) Perfect: nanā́śa [3sg.act.] (RV 09.067.30 , 10.017.01), - neśur [3pl.act.] (BĀU 1.3.7 = ŚB 14.4.1.8) Fut: naśiṣyati [3sg.iact.] (AV+) Caus: nāśáy° 'to make disappear, to destroy' (RV+) Aorist RED (tr.-caus.): anīnaśat [3sg.act.], nī́naśaḥ [2sg.inj.] 'to damage' (RV+) TA-Ptc.: naṣṭá- (RV+)			IIAL
*neḱ-	perish, die	Lat necō 'kill' Av nasyeiti 'disappears' Skt náśyati 'is lost, disappears, perishes' Toch B nakṣṭär 'disappears, perishes'			Health&Sickness	JPM
*neḱs-	death	Lat nex 'death' Grk néktar 'nectar' [< *'death-conquering']			Health&Sickness	JPM
*néḱus	death; dead	Grk nékus 'corpse' Av nasu- 'corpse' Toch B eṅkwe 'man' [< *'mortal']			Health&Sickness	JPM Celt.
*nekʷt-	night	OIr innocht 'at night' Lat nox 'night' NE night Lith naktìs 'night' OCS noštĭ 'night' Alb natē 'night' Grk núks 'night' Hit nekuz 'at night' Skt nákt- 'night' Toch A nokte 'at night'		nom.sg. nág, acc.sg. náktam, nom.acc.du. náktā acc.pl. náktīḥ (analogical after rā́trīḥ), instr.pl. naktábhiḥ (after áhabhiḥ)	Time	JPM IIAL

*nem-	bend	Av nəmaiti 'bends' Skt námati 'bends, bows, submits oneself to' Toch AB nām- 'bend' NWels nant 'valley' Gaul nanto 'valley' OIr neimed 'sacred grove' Lat nemus 'sacred grove' Fris nimidas 'sacred grove' Grk némos 'sacred grove'	'sacred grove' meaning based on the supposition that we have 'bend' > 'bow in reverence' > 'place where one honours the gods'. {1} [LK] Probably perf.subj. rather than reduplicated aor. see Bendahman 1993: 145, Kümmel 2000: 279.	Present I: namanti [3pl.act.] 'to bend' (tr.) (RV+), námate [3sg.med.] 'to bend (oneself)' (intr.), 'to bend (for oneself)' (tr.) (RV+) Aorist S: anān [3sg.act.] (KS), anaṃsata [3pl.med.] (Br.), naṃsante [3pl.subj.med.] (RV) Perfect: nānāma [3sg.act.] 'has bent (oneself)' (intr.) (RV), neme [3sg.med.] (RV 01.057.05) nanámas [2sg.subj.act.] {1} 'to turn away' (RV 01.174.08 = 02.019.07) Fut: naṃsyati [3sg.act.] (Br.) Caus: namáy° 'make bow' (RV+), namay° (Up.+) Aorist RED: nīnamas [2sg.inj.act.] (RV 08.024.27) Intensive:		Bend and Press	JPM IIAL
*nem-	take/accept legally	OIr nem 'gift' Lith núoma 'rent' Av namah- 'loan' Toch B ñemek 'harvest' Grk némō 'distribute, possess' NHG nehmen 'take'				Give & Take	JPM
*nem-os-	distribution				'homage to you (greeting)': Skt. námas te (RV+) — YAv. nəmasə.tōi, nəmasə.tē 'to bring homage': Skt. námas-bhar- (RV+) — YAv. nəmō bar- 'sacrifice with homage': námasā miyédhaḥ (RV) — OAv. miiazdəm … nəmaŋhā		IIAL

*némos-	(sacred) grove	OIr neimid 'sacred grove' Lat nemus 'sacred grove' Old Saxon nimidas 'sacred grove' Grk némos 'wooded pasture, glade'				Trees	JPM
*neneh₂-	mum						IIAL
*népōt-s	grandson (?) nephew	Lat nepōs Grk népodes Skt nápā t OIr nia 'sister's son, grandson, descendant' OE nefa 'sister's son, grandson' Lith nepuotìs 'grandson' OCS netijĭ 'nephew' Alb nip 'grandson, nephew' Grk népodes 'descendants' OPers napā 'grandson, descendant' Skt nápāt 'grandson, descendant' NWels kefnder 'male cousin' (< *kom-nepōt-)	One of the most controversial words in the reconstructed lexicon. Formally, the word is attested in Celtic, Germanic, Italic, Baltic, Slavic, Albanian, Greek, and Indo-Iranian there is no problem reconstructing the shape of the word to Proto-Indo-European. The problem arises when one Wnds that, in addition to the meaning 'grandson', the word also means 'sister's son (i.e. nephew)' in Celtic in later Imperial Latin also 'nephew', Germanic, Baltic, Slavic, and Albanian. Thus some would argue that both meanings, 'grandson' and 'sister's son', should be ascribed to Proto-Indo-European. Others argue that 'sister's son' is a secondary development among some and not all the North-Western Indo-European languages and, therefore, this second meaning cannot be ascribed to Proto-Indo-European itself, since in the east of the Indo-European world only 'grandson' or the like is attested. Lubotsky gives *h₂nepot-	nápāt [nom.sg.] (RV+) nápātam [acc.sg.] (RV+) náptrā [instr.sg.] (RV+) náptre [dat.sg.] (RV+) náptuḥ [gen.abl.sg.] (RV+) nápātas [nom.pl.] (RV+), náptṛbhiḥ [instr.pl.] (RV+) nádbhyas [dat.pl.] (RV 10.060.06) later náptāram [acc.sg.] (KS+), etc.	grandson of the waters': Skt. apáṃ r	Kinship	JPM Beekes
*neptih□-	granddaughter (?) niece	Lat neptis 'granddaughter, female descendant', Grk anepsiá Lith neptė 'granddaughter niece' ORus nestera 'niece' Alb mbesë 'granddaughter niece' Av naptī- 'granddaughter' Skt naptī́- 'granddaughter' OIr necht 'granddaughter, ?niece'		vṛkī́-inflection		Kinship	JPM IIAL
*neptiyos	descendant	Grk anepsiós Grk anepsiós '(male) cousin' (< *sm̥neptiyo-)				Kinship	JPM
*neptonos	grandson of waters	OIr Nechtain Lat Neptūnus				Dieties	JPM
*ner	under	NE north Grk nérthen 'from below' Tocharian ñor 'below, beneath, under'	The peculiar semantic development of *ner 'under' to Germanic 'north' is explained by the Indo-European system of orientation which involves facing the sun so that straight ahead is east and the left or north is 'low' compared with the right or south where the sun will be high.			Position	JPM

*nes-	return home	Grk néomai 'return home' Av asta- 'house' OE ge-nesan 'be saved' Skt násate 'unite with'		Present I: násate [3sg.med.] (RV) Present III: nímsate [3pl.med.] (RV+), nimsata [3sg.inj.med.(them.)] (RV), *nimsīta [3sg.opt.med.] (AVP 8.15.5) 'to visit' Aorist R: nasīmahi [1pl.opt.act.] (for *asīmahi) (RV 02.016.08)		Travel	JPM IIAL
*nesd-ios-	closer		{1} Positive of *nazdias-, probably reflecting PIE *nsd-no-.				IIAL
*neu-	cry out	OIr nūall 'cry, noise' Lat nūntius 'message messenger' Latv nauju 'cry' NPers navīdan 'cry' Skt návate 'shouts cries' Toch AB nu- 'roar'				Speech	JPM
*neu-	nod make a short movement	Lat ad-nuō 'agree by nodding' Grk neúō 'nod' ?Skt návate 'goes, moves'	West Central	Present II: -nauti [3sg.act.] (Gr̥Sū.) Caus: áti-nāvayet [3sg.opt.act.] (TSp 6.3.4.4, ŚB)		Speech	JPM IIAL

*neu(h□)-	roar {3}		{1} Created on the model of ruvá- 'roar'. {2} [LK] Differently Narten (< *ánonot by dissimilation) see Kümmel 2000: 283. {3} Probably an onomatopoetic root.	Present I: návate [3sg.med.] (RV+) návant- [ptc.act.] (RV 06.017.10) Present VI: nuvánt- [ptc.act.] (RV 01.029.05) {1} pra ṇauti [3sg.act.] (Br.+) Aorist S: ánūṣata [3pl.med.] (RV+) Aorist IS: anaviṣta [3sg.med.] (RV 09.071.07) Aorist RED {2}: ánūnot [3sg.act.] (RV) Intensive: anonavur [3pl.act.] (RV), návīnot [3sg.inj.act.] (RV) Intensive perfect: nonāva [3sg.act.] (RV 01.079.02)			IIAL
*neud-	push (away)	Skt nudáti 'pushes' Toch B nätk- 'thrust, push away'	Eastern			Convey	JPM
*neud-	use, enjoy	OE nēotan 'use, enjoy' NE neat Lith naudà 'use, property'	North-West			Being & Doing	JPM
*néwos	new	Lat novus OCS novŭ Grk néos Hit nēwas Av nava- Skt náva- Toch B ñuwe *néw-yos- NE new Lith naũjas Ionic Grk neîos Skt návya-	{1} [AL] Beekes 1994: 90 convincingly argues that this adjective is derived from the locative *neui.	náv(ī)yas- [comp] (RV), návatara- [comp] (Br.+), náviṣṭha	Time		JPM Beekes IIAL
*ngʷén-	± (swollen) gland	Lat inguen 'groin, swelling of the groin' OHG ankweiz 'pustules' Grk adḗn 'gland'	West Central			Organs	JPM
*ṇh₃dʰ–ro-	in distress, weak				powerful vs. weak': Skt. ugrám … ādhrá- (RV 07.041.02) — OA		IIAL

*ni	downwards	OIr ne 'down' NE nether OCS nizŭ 'down' Arm ni- 'down, back, into' Skt ní 'down'			to sit down': Skt. ni-ṣad- [verb] 'to sit	Position	JPM Beekes IIAL
*ni-h₂p-o-	down to the water						IIAL
*ni-h₃kʷ-	in the direction downwards						IIAL
*ni-tero-	lower						IIAL
*ni-tio-	own, native		{1} [AL] It seems unnecessary to distinguish between *ni 'down' and *ni 'in' (< *h₁ni-). The second *ni is only found in *nitio- (both Ved. nijá- 'innate' and Av. nizəntəm F 730 are secondary formations, cf. Hoffmann 1982: 88f. = Hoffmann 1992: 794f.), which may have originally meant 'settled down, sedentary', then 'native'.				IIAL
*nigʷ-tos	washed	OIr necht Grk ániptos 'unwashed' Skt niktá- NE nix ☐ nixie 'water spirit'				Health&Sickness	JPM
*nisdos	nest	NE nest Lat nīdus 'nest' Skt nīḍá- 'nest'	Literally a 'sit-down place, i.e. *ni- 'down' + sed- 'sit'.			Construction	JPM IIAL
*n̥kʷtus	end of the night	OE ūhte 'early morning' Grk aktís 'ray of sunlight' Skt aktú- 'night'				Time	JPM
*nogʷ-o-	naked						IIAL
*nóh₁	1D we two	OE wit 'we two' Lith mùdu 'we two, us two' OCS vě 'we two' Grk nṓ 'we two, us two' Skt āvā́m 'we two, us two' Toch B wene 'we two, us two'				Pronouns	JPM
*noibʰos	holy	OIr noīb OPers naiba-	from *nei- 'be excited', again some form of sacred animation.			Sacred	JPM
*nos	us						IIAL
*ns-me	us			acc. asmā́n (RV+), instr. asmā́bhiṣ (RV+), dat. asmábhyam (RV+), abl. asmát (RV+), gen. asmā́kam (RV+), loc. asmā́su (RV+) asmé [dat.gen.loc.] (RV, AV)	given by us': Skt. asmád-rāta- [adj] 'given by us' (VS) — OAv. ā		IIAL
*nsi-	sword		difficult, only seen in Latin, Sanskrit				Beekes

*nu-	now	Lat num NE now Lith nù OCS nŭ Grk nŭ(n) Hit nu Av nū Skt nú Toch B no	{1} [AL] At the beginning of a sentence only nū́.			Time	JPM IIAL
*ō	O; vocative particle	OIr ā MHG ā NE O Lith ō OCS o Grk o͂ Skt ā Lat ō a cry Goth ō 'alas'				Human Sounds	JPM
*os(o)nos	ass	Lat asinus Grk ónos Luv tark-asna-	Difficult	??		Fauna	JPM
*p(e)h₂-us-on-	protect						IIAL
*p(e)h₂no/eh□-	cloth	Lat pannus 'piece of cloth, garment' MIr anan 'piece of cloth, garment' NE fane from OE fana 'banner, standard' NE vane Grk pḗnē 'thread on the shuttle' Roshani warbōn [< *vara(h)-pāna- 'sheep(skin)-coat				Textiles	JPM
*p(ʰ)eu-	blow, swell	Grk phûsa 'wind, blast' OPrus pounian 'buttocks' Grk pugḗ 'buttocks' Rus púlja means 'ball' MIr ūan mean 'foam'				Blow Up	JPM
*p(o)lh□-	city, high place						Beekes
*p(ō)lh□-	foal						Beekes
*p(o)rḱ-	question						Beekes
*p(r)oti-h₂p-ó-	against the stream		{1} [AL] Oettinger 1983: 91 reads paiti[pā] duuaēpā 'über die Inseln'.				IIAL
*pad-	duck, teal?					Bird	JPM
*pandos	curved	Lat pandus 'curved, bent' ON fattr 'bent back'	North-West			Shape	JPM
*pano-	millet	Lat pānicum Shughni pīnj	Latin-Iranian isogloss			Plants	JPM
*pant-	stomach, paunch	Lat pantex 'belly, paunch, guts' Hit panduha- 'stomach'				Organs	JPM
*pap-	± mothers breast, teat	Lat papilla 'teat, nipple, breast' MHG buoben 'breast' Lith pāpas 'breast' Skt pippala- 'nipple'	Probably a continually reinvented children's word			Body (Upper)	JPM

*papa	father, papa	Lat pāpa Grk páppa				Kinship	JPM
*parikeh□-	± concubine wanton	MIr airech '(type of) concubine' Av pairikā- 'demonic courtesan'	Presumably the meaning attested in Irish is the older one while in Iranian 'the other woman' has suffered a loss of social standing.	?		Marriage	JPM
*pastos	firm	Skt pastyám 'habitation' NE fast [as in 'stand fast'] Arm hast 'firm'				Qualities	JPM
*pē(n)s-	dust	OCS pěsŭkŭ 'dust' Av pąsnu- 'dust' Skt pāṃsú- 'crumbling soil, sand, dust'				Earth	JPM
*pe/oth□mo-	thread	OWels etem 'thread, yarn' OHG fadm 'thread'	North-West This word is derived from *pet- 'stretch out', i.e. stretch out the arms while preparing yarn from thread, and in the various languages it means either 'thread' or a 'measure of outstretched arms', hence the cognate NE fathom.			Textiles	JPM

*ped-	fall ?step	Lat pessum 'to the ground' OE gefetan 'fall' OCS padǫ 'fall' Av paiyaiti 'moves down, plunges down' Skt pádyate 'falls'		Present IV: pádyate [3sg.med.] (RV+), ní padyate 'to lie down, to copulate' (RV+) Present III>I: (°)píbdamāna- 'to tread on one and (then) another foot, to stamp' [ptc.med.] (RV, Br.) Aorist mediopass.: pā́di [3sg.inj.] (RV-YVm), apādi [3sg.] (AV+), apadran [3pl.] (RV 06.020.04) Aorist R: padīṣṭá [3sg.opt.med.] (RV), padāti [3sg.subj.act.] (with double characterization) (RV 09.073.09), -patthās [2sg.inj.med.] (AV), apadmahi [1pl.med.] (VS), apadi [1sg.med.] (ŚB) padām [3sg.impv.med.] (AVP 5.15.7) Aorist S: apatsi		Crawl, Slide, Fall	JPM IIAL
*ped-eh₁	by foot		{1} [AL] Possibly, derived from the instr.sg. *padaH 'by foot', contaminated with pattí-.			IIAL
*ped-io-	pertaining to feet		{1} It is unclear whether Lat. °pedius [suff] and Lith. °pě̃dis 'having … feet' is an IE formation.			IIAL
*pedo-	step, footprint			'at the place of Iḍā' (= refreshing draught): Skt. íḷāyās padé (RV) — OAv. padāiš … ižaiiā̊ (Y 50.8) 'the tracks of the cattle': Skt. padā́ni paśváḥ (RV 01.067.06) — YAv. pasə̄uš … paδəm (V 2.24)		IIAL

*pedom	footprint, track	MIr inad < *eni-pedo- 'position, place' Lat peda 'sole, footprint' ON fet 'step' Lith pėdà 'footprint' OCS podŭ 'ground' Grk pédon 'ground' Arm het 'footprint, track' Hit pēdan 'place' Skt padám 'track' Toch B pätsa 'bottom'	From the noun *ped- 'foot'			Roads	JPM
*peh₁(i)-	harm	Goth fijan 'hate' Grk pêma 'suffering, misfortune' Skt píyati 'blames, reviles'				Conflict	JPM
*péh₁mn̥	misfortune, suffering	Grk pêma 'misfortune, suffering, misery' Av pāman- 'dryness, scab' Skt pāmán- 'skin disease'	Greek-Indo-Iranian			Health&Sickness	JPM
*peh₂-	nourish					Food & Drink	JPM
*peh₂- *peh₂-i-	guard, cause to graze	Lat pāscō 'feed, lead to pasture nourish' OCS pas- 'protect, guard' Hit pah(ha)s- 'protect' Av pā iti 'guards' Skt pắti 'guards' Toch B pāsk- 'guard, protect' NWels pawr 'fodder' NE fodder OIr aīnches 'bread basket'	{1} [LK] See Scarlata 1999: 299ff. {2} [LK] In some contexts also 'protecting oneself', e.g. in RV 07.066.03, 08.009.11. {3} [AL] The fact that nouns in *-men- do not usually have o-grade in the root does not seem to be a sufficient argument to reconstruct h₂ in the root and to separate it from *peh₂s-.	Present II: pắti [3sg.act.] (RV+), pāhí [2sg.impv.act.] (RV+), pāná- [ptc.med.] (RV 09.070.04) Aorist S: pāsati [3sg.subj.act.] (RV 10.017.04), pāsatas [3du.subj.act.] (RV 07.034.23)		Food & Drink	JPM IIAL
*peh₂-tro-	vessel, protection		{1}The poets clearly considered Skt. pắtra- as a derivative of the verb pā- 'to drink'. Possibly, this word partly reflects PIE *peh₃-tlo- 'drinking vessel' (Lat. pōculum [n] 'cup').				IIAL
*péh₂ur	fire	Umb pir NE fire OPrus panno Czech pýrˇ 'ashes' Grk pu^r Arm hur Hit pahhur (genitive pahhenas) Toch B puwar				Fire	JPM
*péh₂usōn	pastoral god	Grk Pắn Skt Pūşắ		?		Dieties	JPM

*peh₃(i)-	swallow ?drink	OIr ibid, Lat bibō OPrus poieiti OCS pijǫ Alb pi Grk pī́nō Arm əmpem Skt píbati Hit pāsi □ paszi 'swallows'	{1} < PIE *pí-b-e/o- < *pi-ph₃−e/o- or, rather [AL] < *bi-bh₃−e/o- with *b- > p-.	Present III>I: píbati [3sg.act.] (RV+) {1} Aorist R: apāt [3sg.act.] (RV+), pānti [3pl.subj.] (RV), pāthás [2pl.subj.] (AV) Aorist S: ápās [3sg.act.] (RV 05.029.08) Perfect: papáu [3sg.act.] (RV+), pape [3sg.med.] (RV+) Passive: pīyáte [3sg.] (AV+) Fut: pāsyate [3sg.med.] (Br.+) Desid: pipīṣati [3sg.act.] (RV 01.015.09) pipāsati 'to be thirsty' [3sg.act.] (RV+) Caus: pāyáy ° (RV+) Abs: pītvī́ (RV), pītvā́ (RV+) Inf: pā́tave [inf] (RV) TA-Ptc.: pītá- (RV+)		Food & Drink	JPM
*peh□ǵ - *peh□k-	fasten securely	Goth fahan 'capture' Grk pḗgnūmi 'plant, make solid' pangō 'drive in' Skt pāśáyati 'binds'	It may be that Lat pāx 'peace' [> via Old French NE peace] also belongs here as *'a binding together by treaty'			Binding	JPM
*peh□-	move		{1} [AL] The active form pratyutpipāti at AVP 2.65.2a yas tvotpipānaṃ pratyutpipāti 'who shall march against you, when you are marching… (to a chief)' may be nonce, cf. Zehnder 1999: 148.	Present III: vi-pipāná- [ptc.med.] 'separating, moving apart' (RV) ut-pípāna- [ptc.med.] 'rising' (AV) ut-pípīte [3sg.med.] (MS, TS) {1}			IIAL
*pei-	sing	OCS pěti 'sing' Toch B pi- 'sing'				Formal Speech & Song	JPM

*peih□-	scorn			Present IV: pī́yati [3sg.act.] (RV-TBm)		IIAL
*peih□-	swell (with milk)		{1} [AL] The aniṭ forms (pīpivā́ṃs-a-pí-t-) are clearly secondary.	Present V>I: pínvate [3sg.med.] (RV+) Aorist R: píyāna- [ptc.med.] (RV 01.079.03) (nonce) Present I: páyate [3sg.med.] (RV 01.164.28) (nonce form based on the adjacent páyobhiḥ) Perfect: pīpā́ya [3sg.act.] (RV) pipyathur [2du.act.] (RV) ápīpema [1pl.ppf.act.] (RV) pīpivā́ṃs- [ptc.act.] (RV) pipyúṣ-ī- [ptc.act.f.] (RV) TA-Ptc.: prá-pīta- 'overflowing' (RV 07.041.07), ā́-pīta- 'swollen' (RV 08.009.19) na-ptc.: prá-pīna- 'overflowing' (AV+), ā́-pīna- 'swollen' (AV+)		IIAL
*peih□-os-	milk (?)					IIAL

*peiḱ-	paint, mark ?cut out	Lat pingō 'paint, colour' OE fāh 'coloured' Lith piẽšti 'draw, write' OCS pisati 'write' Grk poikílos 'coloured' Av paēsa- 'colour' Skt piṃśáti 'colours, paints' Toch AB pik- 'write, paint'	{1} [LK] See Scarlata 1999: 319.	Present VII>VI: piṃśati [3sg.act.] (RV+), piṃśáte [3sg.med.] (RV+) Aorist A: piśā́ [2sg.impv.act.] (RV 07.018.02) Aorist R: piśāná- [ptc.med.] (RV 07.057.03) Perfect: pipéśa [3sg.act.] (RV+), pipiśé [3sg.med.] 'has adorned has adorned oneself (refl.) is adorned (pass.)' (RV+) Passive: piśyámāna- [ptc.med.] (AV 12.5.36) TA-Ptc.: piṣṭá- 'adorned' (RV+) piśitá- 'cut to size' also [n] 'meat, cut in pieces' (AV+)	'adorned with all ornaments, richly decorated': Skt. viśva-píś- [adj] {1} (RV), viśvá-peśas- [adj] — YAv. vīspō.pis- [adj], vīspō.paēsah- [adj] 'to put on dainty clothes, decorated with stars': Skt. vástrāṇi … péśanāni vásāna (RV 10.001.06) pipéśa … stŕ̥bhiḥ (RV 01.068.10) stŕ̥bhiḥ … pipiśé (RV 06.049.03) — YAv. vaste vaŋhanəm stəhrpaēsaŋhəm (Yt 13.3) 'adorned with gold, wearing golden adornments': Skt. híraṇya-peśas- [adj] (RV) — YAv. zaraniiō.paēsī- [adj, f], zaraniiō.pis- [adj]	Color	JPM IIAL
*peik/ḱ-	be hostile, hate	NE foe Lith peĩkti 'blame, rebuke, censure' Arm hēk' 'unfortunate, suffering', Skt píśuna- 'backbiting, wicked'				Love & Hate	JPM
*peis-	blow to make a noise	OCS piskati 'whistle' Skt picchorā 'flute' OE fisting 'fart' Lat spīrō 'blow' Toch A pis- 'blow an instrument'				Blow Up	JPM
*peis-	grind						IIAL

*peis-	thresh, grind	Lat pīnsō 'thresh' Lith paisýti 'thresh' OCS pĭchati 'hit' Grk ptíssō 'winnow' Skt piná sti 'grinds, threshes'		Present VII: pináṣti [3sg.act.] (RV+), pimṣánti [3pl.act.] (RV+) Aorist S: apikṣan [3pl.act.] (ŚB) Perfect: pipéṣa [3sg.act.] (RV+) sám … pipiṣe [3sg.med.] (pass.) (RV 01.032.06) Fut: pekṣyati [3sg.iact.] (JB, Up.) Passive: piṣyámāṇa-[ptc.med.] (AVP 6.15.5, ŚB+) TA-Ptc.: piṣṭá-(RV+)		Agriculture	JPM
*peitu-	food		{1} [AL] Usually, this word is analysed *pi-tu- and taken as a derivative in -tu- from an aniṭ variant of *piH- 'to swell', but this analysis is arbitrary and not very probable.				IIAL
*peḱ-	pull out [wool]	Lat pectō 'comb' [verb], pecten 'comb' [noun] Lith pešù 'pull, tear out, pluck [fowl]' Grk pékō 'comb, shear', pékos '(raw) wool, fleece' OE feax '(head) hair' Toch B päk- '+comb out [wool], shear'	The original meaning must have been something like 'harvest wool [by plucking]' and came to mean successively 'harvest wool [by combing]' and 'harvest wool [by shearing]' as the technology of wool-gathering evolved.			Textiles	JPM
*peḱ-s-(men)	wool						IIAL
*péḱu	livestock	Lat pecu 'pecus 'cattle, livestock' OE feoh 'livestock, property, money' [> NE fee] Lith pĕkus 'cattle' Av pasu 'cattle' Skt páśu- 'cattle'				Fauna	JPM Beekes

*pekʷ-	cook, bake	NWels pobiaf 'bake' Lat coquō 'cook' [> NE cook] Lith kepù 'bake' OCS pek 'bake, roast' Alb pjek 'bake' Grk péssō 'make ripen, cook' Av pačaiti 'cooks' Skt pácati 'cooks' Toch AB päk- 'become ready for eating [i.e. ripen, be cooked]'	{1} [LK] The difference in meaning only partly correlates with accent placement some Vedic dialects/schools have generalized the suffix accentuation (AV, MS) see Kulikov 2001: 300ff.	Present I: pácanti [3pl.act.] (RV+) Present IV/Passive: pácyate [3sg.med.] 'to ripen' (RV 01.135.08 +), pacyáte [3sg.med.] 'to be cooked, to ripen, to be digested' (RV+) {1} Aorist S: pákṣat [3sg.subj.act.] (RV 08.069.15, 10.027.18) Perfect: papā́ca [3sg.act.] (AV+), pece [3sg.med.] (RV+), ápeciran [3pl.plpf.med.] (AV 5.18.11) Fut: pakṣyate [3sg.med.] (Br.+) Inf: páktave (AV+)		Food Prep	JPM IIAL
*pekʷter-	cook		Attested in 3 groups			Food Prep	JPM
*pekʷtis	cooking		Attested in 5 groups			Food Prep	JPM
*pekʷuo-	ripe, cooked		{1} Employed as a ppp. of pac 'to cook, to ripen'.				IIAL
*pel-	± sell	ON falr 'to be sold' Lith pelnas 'profit' Rus polón 'booty' Grk pōléō 'sell' Skt páṇate 'bargains, haggles'				Exchange & Property	JPM
*pel-	fold	NE fold Alb palë 'fold' Grk péplos 'garment that falls in folds' OIr dīabul 'double' Lat duplus 'double' Grk diplóos 'double', i.e. 'twofold'.				Bend and Press	JPM
*pel(h□)it-o-	pale		{1} [AL] The laryngeal, which is mainly reconstructed on the basis of the Balto-Slavic facts (Latin is ambiguous), is doubtful. I would expect *paRHita- to have given *palīta-.	páliknī- [f]			IIAL

*pel(i)s-	cliff	OIr ail 'cliff' MIr all 'cliff' ON fjall 'cliff'[< *pelsó-] Grk pélla 'stone' Pashto parša 'steep slope' Skt pāṣī- 'stone' [< *pelsiha-]				Earth	JPM
*peleḱus	axe	Grk pélekus Skt paraśú- Oss færæt	the proto-form is often compared with Semitic forms, e.g. Akkadian pilakku which some translate as 'axe' but others translate as 'spindle', which is semantically very distant from 'axe'. Generally, the Proto-Indo-European word is treated as a Wanderwort, a loanword that crossed a number of diVerent languages or language families.			Tools	JPM
*peles-	wound	Grk ápelos '[unhealed] wound' Toch B pīle 'wound'				Health&Sickness	JPM
*pelh₁-	fill	OIr línaid 'fills' Lat pleō 'fill' Arm hełum 'pour' Av par- 'fill' Reduplicated: Grk pímplēmi Skt píparti	{1} [LK] The root variant pū́r has been extracted from ppp. pūrṇá- see Albino 1999. pū́r and the Schwebeablaut root variant prā are synchronically distinct roots in the Vedic prose see Kümmel 2000: 325ff. {2} The original reduplicated stem *píprā- < IE *pi-pleh₁- is based on prā. {3} [LK] With the secondary suffix accentuation (see Kulikov 1998). {4} Secondary replacement of the RVic sigmatic aorist aprās [3sg.act.]. {5}A nonce fromation (Narten 1964: 173). {6} [LK] On the hapaxes paprā́ (the only certain 3sg.pf.act. form in -ā́ [not in -áu] derived from an ā-root (prā) and pupūre, see Kümmel 2000: 325ff.	Present IX: pṛṇā́ti [3sg.act.] (RV+) Present IX>VI: pṛṇáti [3sg.act.] (RV+) Present III>I: ápiprata [3sg.impf.med.] (RV 05.034.02) {2} Present III: píparti [3sg.act.] (AV 13.3.4) {2} Present IV: pū́ryamāṇa- [ptc.med.] 'to become full' (RV 01.051.10 +), pūryáte [3sg.med.] (MS+) {3} Aorist S: aprās [2,3sg.act.] (RV, Br.) SI-impv: prā́si (RV) Aorist R: aprāt [3sg.act.] (AV-YVm) {4} Aorist IS: pū́riṣṭhās [2sg.inj.act.] (TĀm 1.14.2) {5} Perfect: paprā́ [3sg.act.] (RV\ X2 01.069.01), papráu [3sg.act.] 'has filled' (RV+),	to fulfil/grant a wish': Skt. kā́mam …	Measure & Quantity	JPM IIAL

*pēlh₁ewis	container	Lat pēlvis 'basin OE full 'goblet' Grk pélla 'milk-can' Skt pālavi- 'pot'	Has usually been derived from *pelh₁- 'fill'			Containers	JPM
*pélh₁us	much	OIr il OE fela Grk polús Av pouru- Skt purú- Comparative *pleh₁-yos give Lat plūs 'more' OIr līa 'more' Av frāyah- 'more' Skt prāyá- 'mostly, commonly'				Measure & Quantity	JPM
*pelh□-	set in motion	OIr ad-ella 'seeks' Lat pellō 'push'	North-West			Movement	JPM
*pelh□k-	spread out flat	OE flōh 'flagstone' Lith plākanas 'flat' Grk pláks 'flat surface' Lat placeō 'please, be acceptable to', plācō 'soothe, calm' Toch AB plāk- 'be in agreement'				Shape	JPM
*pelh□-	bear young	NE foal Alb pjell 'give birth to, produce', pelë 'mare' Grk pôlos 'foal' Arm ul 'kid, young of deer or gazelle'	West Central			Vital Functions	JPM
*pelh□-	fort, fortified place	Lith pilìs 'fort, castle' Grk pólis 'city' citadel' Skt pū́r 'wall, rampart, palisade'				Dwelling	JPM
*pélh□us	mouse	OIr luch Rus polokhók Shughni pūrg				Fauna	JPM
*péln-	animal skin, hide	Lat pellis '[animal] skin, hide' NE fell and also film Lith plėnė~'film [on milk], scab' Rus plená 'pelt' Grk erusí-pelas 'red inflammation of the skin'	West-Central			Body (Upper)	JPM
*pelo/eh□-	chaff	Lat palea Lith pela [pl.] Rus pelá Skt palāvās [pl.]	Appears to be related to words for 'dust'.			Plants	JPM
*pelpel-	butterfly	Lat pāpiliō OE fīfalde				Bug	JPM
*pen-	feed, fatten	Lat penus 'store of food' Lith penù 'fatten' Pal bānnu 'liver' [<*'the fattened one']				Food & Drink	JPM

*pen-	water	OIr en 'water' NE fen OPrus pannean 'peat-bog'	North-Western			Water	JPM
*penk-	damp, mud	OE fūht 'wet' Skt pánku- 'mud				Water	JPM
*penkʷ-ti-	group of five			also often spelled paṅtí- in texts			IIAL
*pénkʷe	5 five	OIr cōic Lat quīnque NE five Lith penkì Grk pénte Arm hing Av panča Skt páñca Toch B piś *pénkʷ-ti- OCS pętĭ 'five' Alb pesë 'five' Skt pánkti- 'group of five'	Celtic and Italic show the regular assimilation of Proto-Indo-European *p … kw to *kw … kw, hence Lat quīnque rather than the otherwise expected *pīnque, while the Germanic forms show an irregular assimilation of *p … kw to *p … p, giving a Proto-Germanic *fimfi. NWels pimp looks as if it has undergone the assimilation we see in Germanic but actually it is a regular descendant of Proto-Celtic *kwenkwe, since in the branch of Celtic to which Welsh belongs all Proto-Celtic *kw become p. Thus the apparent agreement of NWels pimp and Proto-Germanic *WmW illustrates the possibility of a single result being the product of very diVerent processes and histories. The number *penkʷe has plausibly been connected etymologically with *pn(kʷ)stí- 'fist' (e.g. NE fist, Lith kùmstė [< *punkstė] 'fist', OCS pęstĭ 'fist'). Presumably the latter was originally then 'group of five [fingers]' or the like though it has been suggested that the derivation went the other way and that the basic word for 'hand' or 'fist' came to be the ordinary word for 'five' and was replaced	pañcānā́m [gen.pl.] (YV+)		Numbers	JPM
*penkʷē-ḱomt(h□) ?*penkʷo-dḱomth₂	50 fifty	OIr coīca Lat quīnquāgintā Grk pentḗkonta Arm yisun Av pančāsatəm Skt pañčāśát Toch B piśāka				Numbers	JPM
*penkʷedeḱm̥(t)	15 fifteen	Lat quīndecim NE fufteen Arm hingetasan Av pančadasa Skt páñcadaśa				Numbers	JPM
*pent-	find ones way	NE find nominal derivative *póntōh₂s 'path' Lat pōns 'bridge' Grk pátos 'path' Skt pánthās 'path' 'find' + 'path', i.e. 'find one's way'				Travel	JPM
*pēnt-	heel	OPrus pentis 'heel' Rus pjatá 'heel' Pashto pūnda 'heel'				Body (Lower)	JPM

*pent-*dʰehᵢ- *pent-*kʷer-	priest	Lat pontifex Skt pathi-kṛt-	Both suggest the concept of a 'path-maker' which in Latin is exclusively employed in a religious context, i.e. 'one who makes a path to the gods' while the Indic form can be applied to priests.	?		Sacred	JPM
*per	over, through, about	Lat per				Position	JPM Beekes
*pḗr	house	Hit nominative pēr, genitive parnas	Only certainly attested in Anatolian its ascription to Proto-Indo-European is largely dependent on seeing it as the underlying concept behind PIE *prih□ós 'dear, beloved', i.e. 'of the same household' and its archaic morphology reXecting a PIE *pḗr (< *pérr), genitive *pṛnós against such an ascription is the fact that there are similar words for 'house' in non-IE languages of the Near East, e.g. Egyptian pr 'house', and thus some would see the Anatolian words as a borrowing from another language.	?		Dwelling	JPM
*per-	blow (on a fire)	OCS para 'steam, smoke' Grk prḗthō 'blow, pímprēmi 'burn' Hit p(a)rāi- 'breathe, blow				Blow Up	JPM
*per-	come through, penetrate, cross (water)		{1} Indicative and injunctive are not attested.	Present III: píparti [3sg.act.] (RV+) Aorist S {1}: párṣat [3sg.subj.act.] (RV), parṣa [2sg.impv.act.] (RV 01.097.08) SI-impv: párṣi [2sg.] (RV) Aorist IS: pā́riṣat [3sg.subj.act.] (RV) Caus: pāray°°to make cross over' (RV+) pāláy°'to bring across, to save, to protect' (AV 18.3.1, RV-Kh.+)			IIAL
*per-	exchange, barter	OIr renaid 'sells, barters, exchanges' Lat interpres 'go-between', pretium 'price' Grk pérnēmi 'sell' Av pairyante 'they compared'				Exchange & Property	JPM
*per-	offspring ?	OE fearr 'bullock, steer' Grk póris □ pórtis 'calf, heifer' Skt pṛthuka- 'child, young of an animal'				Fauna	JPM

*per-	pass through	Lat portāre 'lead' NE fare OCS na-perjǫ 'bore through', perǫ 'fly' Alb sh-pie 'send, carry, take to, lead' Grk peráō 'pass through', peírō 'pierce, bore through' Arm hordan 'go away' Av -par- 'convey across' Skt píparti 'conveys across saves' *pértus 'passage way' Lat portus 'harbour' ON fjǫrðr 'estuary' [whence by borrowing NE fjord] NE ford Av pərətu- 'bridge'				Come & Go	JPM
*per-	strike	Lith periù 'beat with brushwood, flog' Rus pru 'press, oppress' Alb pres 'cut down, cut off, split' Arm hari 'struck' Av pərət- 'battle, strife' Skt pṛt- 'battle, strife'				Conflict	JPM
*per-	trial, attempt	Lat experior 'attempt' Grk peiura 'attempt' Arm pʻorj 'test, proof'	West Central			Being & Doing	JPM
*per-o-	further				'higher life': Skt. ásum páram (RV 01.140.08), parāsu- [adj] 'dying, dead' (Ep.+) — OAv. parāhu-'(containing) higher life' (Y 46.19) 'farther-off day': Skt. páratare … áhan 'on a farther-off day' (RV 10.095.01) — YAv. parō.asna-[adj] 'future', Pash. parūn 'yesterday'		IIAL
*per-os	beyond				beyond the mortals (and the gods)': Skt. paró hí mártyair … (de	IIAL

*per-ur	coming through (place where one can get through, place until w		{1} [AL] Already in the earliest Vedic, we encounter semantic differentiation between the two stems, párus- referring to the joint proper, and párvan- referring to a piece between the joints, often = 'bone' (Griffiths - Lubotsky 2003: 197).	Originally, a heteroclitic paradigm (RV): párur [nom.acc.], párvaṇā [instr.sg.], párvaṇas [gen.abl.sg.], párvaṇi [loc.sg.], párva, párvāṇi [nom.acc.pl.] later párva [nom.sg.] (AVP, TS+) and páruṣā [instr.sg.], páruṣas [gen.abl.sg.], páruṣi [loc.sg.] (all RV+) later also paru- (AV+)			IIAL
*per-ut(i)	in a year, on the other side of a year						IIAL
*per(h☐) *prh☐-uo-	first	Lat prīmus which is *pri-is- + the superlative suffx -mo- Alb parë 'first' Av paurva- 'prior' Skt pū́rva- 'first' Toch B parwe 'first' OE frum 'primal, original, first' < *pṛh☐-wo-, Lith pìrmas 'first' NE first < *pṛh☐-isto-				Numbers	JPM IIAL
*perd-	panther, lion	NPers palang Grk párdalis				Fauna	JPM
*pérde/o-	fart	Lat pedō NHG fisten Lith bezdù Rus bzdetĭ Grk bdéo NWels rech NE fart Lith pérdžiu Rus perdétĭ Alb pjerdh Grk pérdomai Av pərə- Skt párdate	West Central			Vital Functions	JPM IIAL

*perg-	pole, post	Lat pergula 'balcony outhouse used for various purposes' ON forkr 'pole' Rus poróg 'threshold'	North-Western			Construction	JPM
*perh₂-	provide		{1} [AL] Less plausible is the analysis of this hapax as belonging to pari[1] (root variant pūr) 'to fill' see Kümmel 2000: 304f. [[XXX the note can be removed]]	Present IX: pṛṇā́ti [3sg.act.] (RV+) Aorist R: pūrdhí [2sg.impv.act.] (RV) Perfect: -pupūryās [2sg.opt.act.] (RV 05.006.09) {1}			IIAL
*perh□t-	fern?	Skt. párpata- 'medicinal herb' Lith. papártis					Celt.
*peri-h₁es-	surpass	Grk períesti 'comes round' Skt pary asti 'surpasses'	Unless an independant creation			Come & Go	JPM
*peri-steh₂-	stand before > belief	OIr iress 'belief' Parthian parast 'ardor'	Just as likely to be independant creations			Knowledge & Thought	JPM
*perikeh₂	female servant?						Celt.
*perk-	fear	NE fright Toch AB pärsk- 'be afraid'				Values	JPM
*perḱ-	ask, ask for (in marriage)	OIr arcu 'ask' Lat poscō 'ask', precor 'ask for' OHG forscōn 'ask, examine' Lith prašaũ 'request' OCS prositi 'ask' Arm harc'anem 'ask' Av pərəsaiti 'asks' Skt pṛcháti 'asks' Toch AB pärk- 'ask'	{1} With the secondary root variant pṛch- extracted from the SK-present. {2} Derived from the secondary root variant pṛch-. {3} On the passive interpretation, see Renou, EVP IV, 49. {4} Probably related to Ved. pṛṣthá- [2] 'riddle'.	Present SK: pṛchā́mi [1sg.act.] (RV+) Aorist S: áprāṭ [3sg.act.] (RV 10.032.07), ā́ … pṛkṣase [2sg.subj.med.] (RV 10.022.07) áprākṣīt [3sg.act.] (AVP+) Perfect: papraccha [3sg.act.] (YVp+) {2} Passive: pṛchyámāna- [ptc.] (RV, Ep.+) {2} Fut: prakṣyáti [3sg.act.] (Br.+) Inf: práṣṭum (RV+) TA-Ptc.: pṛṣṭá- (RV+)		Formal Speech & Song	JPM IIAL
*perḱ-	speckled	MIr erc Grk perknós Skt pṛṣṇí-				Color	JPM Celt.

*pérḱus	± breast, rib	dialectal Lith pìršys 'forepart of a horse's chest' Rus pérsi [pl.] 'breast, chest [especially of a horse]' Alb parz parzĕm 'breast' Av parəsu- 'rib' Skt párśu- 'rib', pārśvá- 'region of the ribs, side'			Body (Upper)	JPM
*perkʷunos	thunder god	Fjǫrgyn, mother of the Norse thunder god Thor Lithuanian thunder god Perkūnas Old Russian thunder god Perúnŭ *pergwenyo- Skt Parjánya a weather god			Dieties	JPM
*pérkʷus	oak	Gaulish érkos 'oak-forest' Lat quercus 'oak [particularly Quercus robur]' ON fjor 'tree'			Trees	JPM
*pero-mh☐o-	farthest					IIAL
*pers-	sprinkle	Hit pappars- Toch AB pärs- Skt pr´8ṣat- 'drop' OCS prachŭ 'dust' ON fors 'waterfall'			Throw	JPM
*pers-o-	grain, wheat spike?		{1} [AL] A translation 'ear of corn' seems a likely alternative to the tradition 'sheaf'.	'to thresh the ears of corn': Skt. parṣắn hanmi 'I thresh the ears of corn' (RV 10.048.07) — YAv. yaθa nā satəmca hazaŋrəmca baēuuarəca paršanąm nijatəm hiiāt_ 'as if a man would thresh a hundred, a thousand, a hundred thousand of ears of corn' (Yt 13.71 Geldner's edition reads pairištanąm nijaθəm, although the best ms. F1 has paršanąm)		IIAL
*pérsn-eh☐-	heel	Lat perna 'haunch' OE Wersn 'heel' Grk ptérna 'heel' Hit parsna- 'upper thigh' Av pāšna- 'heel' Skt pắrṣni- 'heel' Toch B porsnai- 'ankle'			Body (Lower)	JPM
*pértus	passage, way	Gaul ritu- 'ford' Lat portus 'harbour' NE ford Av pərətu- 'ford, bridge'	From *per- 'go across'		Roads	JPM
*péru	rock	Hit perunant- 'rocky' Av paurvatā 'mountain' Skt párvata- 'rock, mountain			Earth	JPM
*perunto-	rocky, furnished with rocks					IIAL

*perut-	last year	ON fjǫrð 'last year' Grk pérusi 'last year' Arm heru 'last year' Skt parút 'in past years'				Time	JPM
*pesd-u-	insect						IIAL
*péses-	penis		it has been variously analysed as deriving from a verb 'rub', a verb 'penetrate', and, most recently, from *pes- 'blow, swell', i.e. a swelling forth of liquid.			Body (Lower)	JPM IIAL
*pet-men-	flight						IIAL
*pet-r	wing		{1} Possibly, pataṅgá- [adj] 'flying' [m] 'bird' (RV+) (see pat [1]) contains a trace of the heteroclytic stem, i.e. patan-ɡa-.				IIAL
*pet(e)r-	wing, feather	OIr ēn 'bird' Lat penna 'feather' NE feather Grk pterón 'wing' Arm tʻřčʻim 'fly', Hit pittar □ pattar 'wing'	Derives from the verbal root *pet- 'fly'			Body (Upper)	JPM

*pet(h□)-	fly	NWels hedeg 'fly' Lat petō 'fly at, attack' Grk pétomai 'fly' Hit peta- 'fly' Skt pátati 'flies'	{1} The root-final laryngeal is improbable.	Present I: pátati [3sg.act.] (RV+) Present AYA: patáy˚ 'to fly' (RV+) Aorist RED: apaptat [3sg.act.] 'flied' (RV+) Perfect: paptúr [3pl.act.] (RV), petátur [3du.act.] (RV), paptiváṃs- [ptc.act.] (RV) Fut: patiṣyáti [3sg.act.] (AV+) Caus: patáy˚ 'to make fly' (RV+) Aorist RED: apīpatat [3sg.act.] 'made fly' (RV+) Intensive: -pā́patīti [3sg.act.] 'to shoot again and again' (RV 06.006.05), -ví … pāpatan [3pl.inj.act.] 'to fall asunder' (RV 08.020.04) Desid: pipatiṣ˚ (AV+) TA-Ptc.: patitá- (AV+) Inf: pátitum' (TS+)	'flying quickly': Skt. āśu-pátvan- [adj] (RV 04.026.04) — Gr. ὠκυπέτης 'flying quickly': Skt. raghu-pátvan- (RV) — Gr. ἐλαφρότατος πετεηνῶν (Hom) 'let the arrows fly': Skt. íṣavaḥ patantu (AV 2.3.6) — YAv. išunąm … patənti 'birds fly': Skt. prá … váyaḥ … paptan (RV) — YAv. frā vaiiō patąn	Run & Jump	JPM
*peth□-	fly	Grk petámai 'fly' Skt patiṣyáti 'will fly'	From *pet-			Run & Jump	JPM
*peth□-	spread out (the arms)	Lat pandō 'spread out' NE fathom Grk pítnēmi 'spread out' OWels etem 'fathom' Lat passus 'step, fathom'	West Central			Extend	JPM
*peug-	prick, poke	Lat pungō 'prick' Grk pugmḗ 'fist'	West Central			Reductive Activities	JPM

*peuh☐-	clean	OHG fowen 'sieve, clean grain' Skt pav*yati 'cleanses' *puhx-to-s 'cleaned' Lat putus 'clean' Av pūtika- 'serving as purification' Skt pūtá- 'clean' *puhx-ro-s 'clean' OIr ūr 'new, fresh' Lat pūrus 'pure'	{1} [AL] Koivulehto's theory that Fin. puhdas/puhtaan 'clean' < PUral. *puštas was borrowed from *puH-tó-s, is improbable (pace EWAia). A more likely source of borrowing is Baltic *puoštas (Liukkonen, K. Baltisches im Finnischen. Helsinki 1999, p. 108, V. Blažek, Indo-European Conference at UCLA, Archiv Orientální 70 (2002), 221-230 p. 226).	Present I: pávate [3sg.med.] 'to become clean' (RV+) Present IX: punā́ti [3sg.act.] 'to clean' (RV+) Aorist IS: apaviṣṭa [3sg.aor.med.] (RV, MS) Perfect: pupuvur [3pl.act.] (Br.+) Passive: pūyáte [3sg.] (RV+) Caus: paváy° (TS+) pāváy° (AVP, KS+) Abs: pūtvī́ 'having cleansed' (RV), pūtvā́ (AV+) TA-Ptc.: pūtá- {1} (RV+)		Clean	JPM IIAL
*péuḱs	(Scotch) pine, conifer	OIr ochtach 'pine, fir' OHG fiuhte 'fir' Lith pušìs 'pine, fir' Grk peúkē 'pine, spruce' Waigali puc 'species of pine'				Trees	JPM
*peyh₂-tu-	prairy, rich grassland'						Celt.
*ph₂ew-	fear						Celt.
*ph₂tr-ih☐o-	paternal			pítriya-			IIAL
*ph₂tr-uio-	paternal uncle						IIAL
*ph☐tḗr	father	OIr athir Lat pater NEfather Grk patḗr Arm hayr Av ptā Skt pitár- Toch B pācer		pitā́ [nom.sg.] (RV+) pitáram [acc.sg.] (RV+) pitré [dat.sg.] (RV+) pitáras [nom.pl.] (RV+) pitŕ̥bhyas [dat.pl.] (RV+) pitárā, pitárau [nom.acc.du.] 'parents, father and mother' (RV+);	'father's fame': Skt. pitr̥-śrávaṇa-[adj] 'who takes care of his father's fame' (RV) — Gr. (Hom.) πατρός … κλέος Gr. Πατροκλέης [m] PN	Kinship	JPM IIAL

*ph□trōus	paternal kinsman	Grk pátrōs OLith strūjus OCS stryjĭ Arm yawray Av tūirya-				Kinship	JPM
*ph□tr̥wyos	fathers brother	Lat patruus Grk patruiós Skt pitr̥vyá-				Kinship	JPM
*pih□-we/on- *pih□-uos- *pih□-wer-ih₂	fat			pī́varī- [f] (RV+)			IIAL Beekes
*pih□(y)-	revile	OE fēon 'hate' NE fiend Skt pī́yati 'insults' Grk pêma 'suffering, misfortune'	Appears to derive from *peh□- 'misfortune'			Love & Hate	JPM
*píh□wr̥	fat(ness)	Grk pîar 'fat, tallow' Skt pī́vas- 'fat'				Meals	JPM
*pik-	pitch	Lat pix picea 'tar, pitch' OCS picŭlŭ 'tar, pitch' Grk píssa 'tar, resin'	this word may be related to one of the designations for conifers (*peuḱ-) in Proto-Indo-European			Trees	JPM
*pikśḱos	trout, fish	OIr īasc Lat piscis NE fish Skt picchā- 'calf of the leg'?	Derived from *piḱ-sḱo- 'spotted' or the like, a derivative of *peiḱ- 'paint, mark', and the original referent is taken to be the 'trout' which, given its ubiquity across Eurasia, developed into the more general meaning of 'fish'.			Fish	JPM
*pilos	a single hair	Lat pilleus 'felt' [adj.] NE felt OCS plŭstĭ Alb plis Grk pîlos	Derived froms *pil-so- or *pil-do- or, as recently suggested *peld- 'felt'			Textiles	JPM
*pin-	± shaped wood	OHG witu-fīna 'heap of wood' OCS pĭnĭ 'tree trunk' Grk pínaks 'plank' Skt pināka- 'staff, bow'				Construction	JPM
*pipih□usih□	rich in milk	Lith papìjusi 'cow which produces milk' Skt pipyúṣī- 'rich in milk'				Meals	JPM
*pipp-	young bird, nestling	Slov pípa 'hen' Alb bibë Grk pîpos 'young bird' Skt píppakā-	Transparently onomatopoeic (e.g. the Latin derivative means 'peep')			Bird	JPM

*pisd-	press crush	Grk piézō 'press' Skt pīḍáyati 'presses'	Greek-Indic isogloss {1} Most probably, a root enlargement of *pis- (Skt. peṣ 'to crush') definitely not from *([hᵢ]e)pi-s(e)d-, because Greek would have had an initial ἑ. {2} With a different analysis (*(e)pi-s(e)d-). {3} [AL] Usually considered a rebuilding of *πίζω (after ἔζω), but an IE ablaut *piesd-/pisd- cannot be excluded (cf. Avestan siiazd-/sižd-).	Perfect: pipīlé [3sg.med.] 'is pressed out' (pass.) (RV 04.022.08) Present AYA/Caus: pīḍay° 'to press to hurt, to pain, to vex' (AV 12.5.70 +) Passive: apīḍyata [3sg.impf.] 'was squeezed out' (TS 2.6.7.1)		Bend and Press	JPM IIAL
*pisdo/ehᵤ-	vulva	Lith pyzdà Rus pizdá Alb pidh Nūristāni pəṛí 'vulva'	Is analysed as an old compound *(hᵢe)pi- þ s(e)d- þo- 'what one sits on'			Body (Lower)	JPM
*pit(u)-	(some form of) conifer	Lat pīnus Alb pishë 'spruce, pine, fir' Grk pítus 'pine, spruce' Skt pītu- 'deodar-tree'				Trees	JPM
*pitu-(o-)	food		{1} Only as a second member of compounds, e.g. apa-pitvá- 'eating time' (RV 03.053.24), pra-pitvá- 'daybreak, time before eating' (RV). {2} Possibly, hypostasis of *áram piθváh (vi)bāgā́ya 'ready for the distribution of food'. {3} See for this analysis s.v. pitú-.				IIAL
*pitus	grain	OIr ith 'grain' Lith piētūs 'meal' OCS pišta 'meal	Probably from an unattested verbal root *peihᵤ- 'be fat/swollen'			Food & Drink	JPM
*pl(e)t-	shoulder (blade)	MIr leithe 'shoulder' Rus plečó 'shoulder' Grk ōmo-plátē 'shoulder blade' Hit paltāna- 'shoulder'				Body (Upper)	JPM
*plehᵢdʷéhᵢs	(the mass of) people	Lat plēbēs 'plebeians [as opposed to the patricians]' Grk plēthū́s 'throng, crowd [common] people'	West Central			Social Organization	JPM
*plehᵤk-	please	Lat plācō 'smooth, calm' NE placate Lat placeō 'please' (through Old French) NE please Toch AB plāk- 'be in agreement'				Values	JPM

*pleh☐k/g-	strike, strike ones breasts	Lat plectō 'strike, punish' Lat plangō 'strike, strike one's breast in lamentations, bewail' OE flōcan 'strike, clap' Lith plàkti 'strike' OCS plakati sę 'weep, be sorrowful' Grk plā́ssō 'strike'	West Central			Conflict	JPM
*pleḱ-	± break, tear off	NE flay Lith plė́šiù 'tear off' Alb plas 'burst, break'	West Central			Reductive Activities	JPM
*pleḱ-	braid, plait	Lat plectō 'plait, interweave' OE fleohtan 'braid, plait' OCS pleto 'braid, plait' Grk plékō 'braid, plait' Skt praśna- 'braiding, basketwork, turban' NE flax < *plok-so-	{1} Gershevitch 1959: 261, however, follows Bartholomae's connection of Av. frašna- with Phl. plš 'spear (or sim.)' and translates 'pike'.			Textiles	JPM IIAL

*pleth₂-	spread out	OIr lethaid 'extends, expands' Lat plantō 'plant' Lith plečiù 'widen, spread out' Skt práthati 'spreads out'		Present I: práthate [3sg.med.] 'to spread, extend' (intr.) (RV+) áprathatam [2du.impf.act.] 'to make spread, to make extend' (RV 06.069.05, 06.072.02), prathantu [3pl.impv.act.] (VS, ŚB) Aorist IS: aprathiṣṭa [3sg.med.] (RV 02.011.07), práthiṣṭa [3sg.inj.med.] (RV) Aorist R: prathāná- [ptc.med.] (RV 01.092.12, 06.064.03 nonce) Perfect: papráthat [3sg.subj.act.] (RV) paprathé [3sg.med.] (intr.) (RV-TBm) Caus: pratháyant- [ptc.act.] 'to make spread, make extend' (RV+), prathayase	to extend power': Skt. paprathac chá	Extend	JPM IIAL
*pleth₂-mon-	breadth, extension		{1} [AL] Gr. πλάθανον 'dough-board' is hardly related.	prathinā́ [instr.sg.] (RV) (< *prathimnā́)			IIAL
*pleth₂-os-	breadth						IIAL
*pleu-	float, swim wash	Grk plé(w)ō Skt plávate OIr luīd 'moves' Lat pluit 'it rains' NE flow OCS plovǫ 'flow' Arm luanam 'wash' Toch B plus- 'float'				Swim	JPM
*pléumōn	lung	Lat pulmō 'lung' Grk pleúmōn 'lung' Skt klóman- 'right lung'	Derives from *pleu- 'float'			Organs	JPM IIAL

*pleus-	(pluck) fleece, feathers	Lat plūma 'the downy part of a feather') NE fleece Lith plùskos [pl.] 'hair'	North-West			Textiles	JPM
*plh₁-	stronghold			pū́r [nom.sg.], púram [acc.sg.], etc. (RV+)			IIAL
*plh₁-u-	much			pūrvī́- [adj.f.] (RV+) purutáma-, purūtáma- [sup] 'very much, in great numbers, very often, occurring very often' (RV)	'of many wonderful deeds': Skt. puru-dáṃsa(s)- [adj] (RV) — Gr. (Hes.) πολυ-δήνης [adj] 'of many names': Skt. purú-ṇāman- [adj] (RV) — Gr. πολυ-ώνυμος [adj] 'of many colours': Skt. puru-péśa(s)- [adj] (RV) — Gr. πολυ-ποίκιλος [adj] (?)		IIAL
*plh₁nós	full	OIr lān NE full Lith pìlnas OCS plъnъ Av pərəna- 'filled' Skt pūrṇá- 'full' Toch B pällew 'full [of the moon]' Lat plēnus is from the full-grade	{1} It is not certain that this is an Indo-Iranian formation. {2} Possibly, for *plānus to avoid homonymy with plānus 'flat'.		'(of) full moon': Skt. pūrṇá-mās-a- [m] 'sacrifice at full moon' (KS+) — YAv. pərənō.måŋha- [m] N of god (divinity of the full moon) — MP purr-māh 'full moon' '(having) full life(time)': Skt. pūrṇāyuṣ- [m] N. of a Gandharva (= 'having full life-time') (Ep.) — YAv. pərənāiiu- [adj] 'of age' {1}	Measure & Quantity	JPM Beekes IIAL
*plh₁u-poik/ḱos	many-coloured, variegated	Grk polupoíkilos Skt puru-péśa- ?Gothic filu-faihs 'very diverse'	West Central			Color	JPM
*plh□-	grey, pale	MIr līath 'grey' Lith pìlkas 'grey' Grk pelitnós, poliós 'grey' Av pouruša- 'grey' Skt palitá- 'grey' Lat pallidus 'pale' NE fallow 'old man' Alb plak 'fallow' Arm alik' 'white'	{1} [AL] There is no evidence for a laryngeal in this word.	páruṣṇī- [f], also name of a river (RV+)		Color	JPM IIAL
*plth₂-o-	flat						IIAL

*plth₂-u-	broad			pṛthvī́- [adj.f.] (RV+) práthīyas- [comp] 'broader, wider' (ŚB+)	'(of) wide fame': Skt. pṛthú śrávas (RV) pṛthu-śrávas- [m] PN (RV+) — ˘ Gr. κλέος εὐρύ, Εὐρυκλῆς [m] PN 'of wide expanse/lakes': Skt. pṛthu-jráyas- [adj] (RV) — YAv. pərəθu.zraiiah- [adj] 'forming wide lakes' (Yt 8.2) 'wide waters': Skt. ā́paḥ … pṛthvī́ḥ (RV) — YAv. āpō … pərəθβīš 'with broad hips': Skt. pṛthú-śroṇi- [adj] (ŚB+) — YAv. pərəθu.sraoni- [adj] 'broad place': Skt. pṛthúṃ yónim … sasāda (RV 10.099.02) — YAv. pərəθu.yaona- [adj] 'with a broad place'		IIAL
*plth₂ús	broad, wide	Lith platùs 'broad' Grk platús 'broad' Av pərəθu- 'broad, wide' Skt pṛthú- 'broad, wide'	derived from *pleth₂- 'spread'			Shape	JPM Beekes
*plth₂w-ih□-	country, land	OE folde 'land' Arm hoł 'earth, country' Skt pṛthivī́- 'earth'	The Celtic languages retain the word to designate Brittany (e.g. Mlr Letha, NWels Llydaw) while the Greeks similarly used it as a place name, i.e. Plátaia both Celtic and Indic also deiWed the concept as an '(earth) goddess' (Skt Pṛthivī́- and Gaul Litaví(s)).			Social Organization	JPM
*plus-	flea	Lith blusà OCS blŭcha	The Latin word, for example, requires metathesis from *plusek- to *puslek- The possible Greek cognate would seem to require a development *plusy(e)ha- > *psuly(e)ha > psúlla Baltic and Slavic require *blusyeha- {1} "Die vielen Varianten beruhen auf euphemistischer, spielerischer od[er] volksetymologischer Verdrehung" (Frisk).			Bug	JPM IIAL
*plut-	plank	Lat pluteus 'movable penthouse, shed' Lith plaũtas 'plank'	North-Western			Construction	JPM
*pn(kʷ)stí-	fist	NE Wst Lith kùmstė [< *punkstė] 'fst' OCS pęstĭ 'fist'	North-Western			Body (Upper)	JPM
*pneu-	snort, sneeze	OE fnēosan 'sneeze' Grk pnéō 'breathe'	West Central			Vital Functions	JPM

*pn̥ḱʷ–tós *pn̥kʷ–th□o-	5th fifth	Av puxa-, Skt pakthá- *pénkʷtos Lat quīntus NE fifth Lith peñktas OCS pętŭ pestë Grk pémptos Toch B piṅkte				Numbers	JPM IIAL
*po-skʷo-	behind	Lith paskuē 'behind after that, later on' Alb pas 'after' Av paskāt pasča 'behind' Skt páścāt □ paścā 'behind, westerly' [because the west is to one's back when oriented to the rising sun]	a compound of *po 'back' and *sekʷ- 'follow'.			Position	JPM
*pṓds	foot	Lat pēs 'foot' NE foot Lith pādas 'sole of foot' Rus pód 'ground' Grk poús 'foot' Arm otn 'foot' Hit pata- 'foot' Av pad- 'foot' Skt pád- 'foot' Toch B paiyye 'foot'	{1}The feminine in °pad-ī- seems to be inherited (< IE *°ped-ih₂), cf. a-pádī- [adj.f.] 'footless', cátuṣ-padī- [adj.f.] 'having four feet' (RV), YAv. a̤xmō.paiđī- [f] 'wearing sandal straps on the feet', Gr. ἀργυρό-πεζα [f] 'with silver feet'.	pā́t [nom.sg.], padā̆ bipeds and quadrupeds': Skt. dvi-pá		Body (Lower)	JPM IIAL Beekes
*poh₂-i-mén-	herdsman	Lith piemuõ 'herdsman' Grk poimḗn 'herdsman'	from *poh₂(i)- 'watch (cows)'			Occupations	JPM
*poh₂-iu-	protector / herd		Related to *peh₂- protect				IIAL Beekes
*poh₃tlom	drinking vessel	Lat pōculum 'cup' Skt pātra- 'drinking vessel'	Derives from *peh₃- 'drink' and may be banal independent formations, i.e. 'an instrument for drinking'.			Containers	JPM
*póh□iweh□-	open meadow	Lith píeva 'meadow' Grk póā 'grass, grassy place'	Possibly from the verb *peh₂- 'nourish'			Plants	JPM
*poksós	side, flank	Latv paksis 'corner of a house' Rus pákh 'flank, loins', pakhá 'armpit' Oss faxs 'side' Skt pakṣá- 'wing, flank, side' OIr ucht ?? 'breast' Lat pectus 'breast'				Body (Upper)	JPM
*pōl-	fall	NE fall Lith púolu 'fall' Arm pʻul 'fall, crush'	West Central	?		Crawl, Slide, Fall	JPM
*pólh□m̥ *plh₂meh₂	palm of the hand	OIr lām 'hand' Lat palma 'palm' OE folma 'palm, hand' Grk palámē 'palm'				Body (Upper)	JPM Celt.
*pólik(o)s	finger, thumb	Lat pollex 'thumb' Rus pálec 'finger, toe'	North-Western			Body (Upper)	JPM

*polḱéh₂-	± fallow land	Gaul olca 'fallow land' NE fallow Rus polosá 'strip of arable land'	North-Western			Plants	JPM
*polt-	pap, porridge	OIr littiu 'porridge, gruel' Lat puls 'pap, porridge, mash' Grk póltos 'pap, porridge'				Meals	JPM
*pont-eh₁-	road		{1} -th- in Sanskrit has been generalized from the oblique cases. {2} Most probably, /panθim/, cf. Beekes 1989. {3} [AL] The reconstruction given in the EWAia, viz. *pént-oh₂−s / *pn̥t-h₂−es, is improbable. The *-o- in the root follows from Greek, Latin, Armenian, OCS. If the laryngeal in the suffix had been *h₂, it would have yielded an ā-stem somewhere. The reason (not explicitly mentioned in the EWAia) for reconstructing *h₂ is the theory that Skt. aspiration can only be caused by the second laryngeal. This theory is refuted by 2pl. ending *-th₁e > Skt. -tha.	pánthās [nom.sg.],	'comfortable road': Skt. syonán patháḥ (RV) — YAv. huuāiiaonā̊ŋhō paṇtānō 'the path of Truth': Skt. r̥tásya pánthāḥ (RV) — YAv. ašahe paṇtam̥ cf. also s.v. rjú-, rad		IIAL
*póntōh₂s	(untraced) path	OIr āitt 'place' Lat pōns 'bridge' OPrus pintis 'way' OCS pǫtĭ 'way' Grk póntos 'sea' (< 'path through the sea'), pátos 'path' Arm hun 'ford' Skt pánthās 'path'	From the root *pent- 'find one's way'			Roads	JPM
*pórḱos	young pig, piglet	MIr orc 'young pig' Lat porcus 'young pig' OE fearh 'pig' [cf. NE farrow] Lith par̃šas 'young pig castrated male hog' Rus porosënok 'young pig' Av parəsa- 'young pig'	From a root *perḱ-'dig, root up the earth' > NE furrow			Fauna	JPM Beekes
*pos-	after, behind ?	Lat posterus 'behind' Lith pàs 'at, with', pāstaras 'last, furthest behind' OCS po 'after' dialectal Grk pós 'near, by' Alb pa 'without'	West-Central May itself derive (as the genitive form) from either *h₁ep- 'near' or *h₄ep- 'back'. {1} [AL] For the reconstruction see Lubotsky 2001a.			Position	JPM Beekes IIAL
*posti	after	Lat post(e) 'after' Arm əst 'after' Toch B postäm̥ 'after'	derived from *pos			Position	JPM
*pot-n-ih₂-	mistress, lady	OPrus waispattin 'wife, mistress' Grk pótnia 'lady, wife' Alb zonjë 'lady, wife' Skt pátnī- 'lady, wife'				Marriage	JPM IIAL
*póthₐr̥	shallow dish	Grk patánē 'bowl, flat dish' Hit pattar 'dish' OIr ān 'drinking vessel'	Presumed derivation from *pethₐ- 'spread out'			Containers	JPM
*poti	over, against						Beekes

*poti-e	be lord over			Present IV: pátyate [3sg.med.] (RV-YVm)		IIAL
*pótis	husband lord, master	Bret ozah [< *potis stegesos] 'husband, master of the house' Latv pats 'master of the house self' Rus gospódï [< *ghost-poti-] 'host' Alb zot [< *wikā-pot-] 'master of the house' Grk pó sis 'husband' Hit pat 'self' Av paiti- 'husband' Skt páti- 'husband, master' Toch A pats 'husband'	The husband and wife constituted the 'master' and 'mistress' of the household, which might consist of children, grandchildren, and perhaps unrelated slaves or servants. Of course within a given household not every husband and wife, of which there might be several (father and mother, sons and wives), would be 'master' and 'mistress' but only the most senior ones. Indeed, there is some evidence that, should the senior man die, his eldest son would become the master, but the dowager would remain the mistress.	pátye [dat.sg.] (RV+), etc.	Marriage	JPM
*pótyetoi	rules, is master	Lat potior 'I am master' Av paiθyeiti 'rules' kt pátyati 'rules'			Social Organization	JPM
*pou-m-s-	(human) body hair	Lat pūbēs also designates 'adult, one able to bear arms' Skt púmān 'man, male' Lith paustìs 'animal hair' Rus pukh 'down' Alb pushem 'begin to grow a beard, body hair' Grk põ gōn 'beard' Shughni pūm 'down, fluff'			Hair	JPM
*pr̥(h₃)tis	what is distributed	Latin pars 'part', portiō 'portion' Skt pūrtá- 'gift, granting, reward'	Possibly independent creations from *per(h₃)- 'sell, distribute'		Exchange & Property	JPM
*pre/oti	over, against					Beekes
*preh₂i	at the front					Beekes

*preih□-	satisfy, please		{1} [LK] With the secondary shortening of the root vowel see Kulikov 2001: 359f., 203ff. {2} Connection of Gr. πρᾱΰς [adj] 'soft, mild' with prayi- is uncertain.	Present IX: prīṇanti [3pl.act.] (RV+) Present IV: aprīyamāṇa- [neg.ptc.med.] (JB 3.232), priyantām {1}, prīyantām [3pl.impv.med.] (Sū.m+) Aorist S: présat [3sg.subj.act.] (RV 01.180.06), apraiṣam [1sg.act.] (Br.) Aorist SIS: apraiṣīt [3sg.act.] (ŚB) Perfect: pipriyé [3sg.med.] (RV), pipráyat [3sg.subj.act.] (RV), piprīhí [2sg.impv.act.] (RV), ápipres [2sg.ppf.act.] (RV-Kh., YVm) TA-Ptc.: prītá- 'pleased, satisfied' (RV+)	'to worship and please (gods)': Skt. yákṣat … pipráyac ca (RV) — OAv. yazamaidē … friiạmahī (Y 38.4) YAv. kō yazāite … kō frīnāt_ (Yt 13.50) 'having satisfied horses': IAr. *prītāśụa- PN (Mitanni-IA) — YAv. frīnāspa- [m] PN		IIAL
*preḱ-no-	question						IIAL
*prem-	press down or back	Lat premere 'press down' Toch B präm- 'restrain'				Bend and Press	JPM
*prep-	appear	OIr richt 'form' Grk prépō 'appear' Arm erewim 'am evident, appear'	West Central			Sight	JPM
*prest-	(period of) time	ON frest 'period of time, interval' OHG frist 'period of time, interval' Toch A praṣt 'season'				Time	JPM
*preu-(g)-	jump	Skt právate 'jumps' Lith sprū́gti 'leave, escape' Rus pry´gnutĭ 'leap' Toch B pruk- 'make a leap' NE frog Skt plava- 'frog'				Run & Jump	JPM
*preus-	burn	Lat prūna 'glowing coals' Alb prush 'glowing' Skt ploṣati 'burns' ?	Questionable			Fire	JPM

*preus-	frost	NE frost Lat pruīna 'hoarfrost' OIr reōd 'strong cold' ? Skt pruṣvā́- 'hoarfrost' or 'dew, drop' ?	North-Western			Water	JPM
*prh₂os	before						Beekes
*prh₃ḱtós	anus	Grk prōktós Arm erastank' [pl.]	Greek-Armenian isogloss			Body (Lower)	JPM
*prḥ□éh₁	in front of before (of time)	NE fore Grk pará'by, near, alongside of, beyond' Arm ar 'near, at' Av parə 'before' Skt purā 'formerly'				Position	JPM
*prḥ□éi	in front of before (of time)	Gaul are- 'before, by east' Lat prae 'before' Lith priẽ'by, at, near in the time of' Grk paraí'before', Skt paré'thereupon')				Position	JPM
*prih□-eh□-	love	Goth frijōn 'love', frijōnds 'friend' OCS prijajǫ 'am favourable' Skt priyāyáte 'befriends' OE frīgan 'love' ON frī 'beloved, spouse' Av frya- 'dear' Skt priyá- 'dear' NE free NWels rhydd 'free'				Love & Hate	JPM
*prih□-o-	dear				'we would like to be (your) dearest friends': Skt. syāma … préṣṭhāḥ (RV 06.026.08) — OAv. fraēštā̊ŋhō ā̊ŋhāmā 'lord of the beloved one': Skt. priyá-pati- (YV+) — Elam.-Iran. *friyapati- 'having desired horses': IAr. *prija-aśṷa- [m] PN (Mitanni-IA) — Elam.-Iran. *friyāspa- [m] PN		IIAL
*prih□eh□-	wife	ON Frigg ON frī 'beloved, wife' OE frēo 'woman' Skt priyā́- 'wife'				Marriage	JPM
*prih□ós	of ones own	NWels rhydd 'free' NE free Av frya- 'dear' Skt priyá- 'dear'	Some have seen this word as derived from a (controversial) root *per- 'house', i.e. 'those who belong to one's own household'			Family	JPM
*prḳ(w)eh□-	pine	Italian forca NE fir				Trees	JPM

*prḱeh□-	furrow	NWels rhych Lat porca'a ridge between two furrows' NE furrow Skt párṣāna- 'chasm'	Only the North-West region evidences a specifically agricultural meaning. The term is related to the word for 'pig' (*porḱos) and there is the widespread notion of the pig as an animal that leaves a furrow-like track as it roots up the ground.			Agriculture	JPM
*pro	forward, ahead, away before, towards the front	Lat prō □ pro 'before, in front of, before' OHG Wr- 'before' OPrus pra 'through' Grk pró'in front of before [of time]' Hit parā 'forward, further' Av frā 'in front of' Skt prá- 'before'				Position	JPM Beekes
*pro-	third-generation marker	Lat pro-avus 'great-grandfather' Lat pro-nepōs 'great-grandson' Skt prá-napát- 'great-grandson'				Kinship	JPM
*prō-	early, morning	OHG fruo 'early' Grk prōí'early, in the morning' Skt prātár 'early'	Appears to have been a lengthened grade of a form ultimately based on *per- 'forward, through'			Time	JPM
*pro-dʰur-	outdoor		{1} [AL] For the etymology, see Forssman 2000 with reff. Originally, the etymology was proposed by Theodor Benfey in 1839. Rastorgueva - Èdel'man 2: 501 (s.v. *2du̯ar-/duār-) mention several Iranian formations, illustrating the connection 'door' ˜ 'outdoor', e.g. Ishk. ᵽъ-var, tar-var 'outdoors', Yaghn. divari 'outside', Oss. dwarmæ 'outside, outdoors', Bactr. αλβαρο 'court(yard)'.				IIAL
*pro-mo-	foremost, leading	Gr. prómos 'leader' Umbrian promom [Adverb] 'firstly'					Celt.
*pro-tero-	more to the front						IIAL
*pro-tmh□o-	first, front		{1} The antiquity of Skt. -th- is confirmed by MP pahlom and (indirectly) by OP fraθara- [adj] 'superior' (see pratarám). Presumably, we must assume contamination of the superlative suffix *-tHa- and *-tamHa- < *-tmHo-.	partly pronominal inflection			IIAL
*próḱsom	grain	Rus próso 'millet' Toch B proksa [pl.] 'grain'	*proksom [sg.] □ *proḱseha [pl.].			Plants	JPM
*proti	against, up to	Latv pretī 'against' OCS protivǔ 'towards' Grk protí'at, in front of, looking towards' Skt práti 'against'				Position	JPM
*próti-h₃(ō)kʷ-o/eh□	face, front	Grk prósōpon Skt prátīka- Toch B pratsāko 'chest'				Head	JPM
*proti-h₃kʷ-o-	turned towards, looking towards			pratyáṅ [nom.sg.m.], pratyáñc-am [acc.sg.m.], pratyák [nom.sg.n.], pratīc-ás [abl.s			IIAL
*psten-	breast of a woman						IIAL

*psténos	womans breast, nipple	dialectal Grk sténion Arm stin Av fštāna- Skt stána- Toch B pāścane [dual]				Body (Upper)	JPM
*pster-	sneeze	Olr srēod 'sneeze' Lat sternuō 'sneeze' Grk ptárnumai 'sneeze' Arm pʻrngam 'sneeze'		?		Health&Sickness	JPM
*pteh₁-	fall	Grk aptēs 'not-falling' Av tāta- 'fallen (of rain)' Hitt piddāi- means 'flees'				Crawl, Slide, Fall	JPM
*pteley/weh□-	elm?	MIr teile 'linden' Lat tilia 'linden' Grk pteléā 'elm' ptélas 'wild rowan' Arm tʻeli 'elm' Oss foerwe 'alder'				Trees	JPM
*pū- (*puh□-)	stink	Lat pūteō 'stink' Lith púdau 'rot' Grk púthō 'become rotten' Av puyeiti 'rots' Skt pǘyati 'stinks'				Sensation	JPM
*puh□-	rot		{1} With the accent on the suffix (pūyá-) in the corresponding form in the Kāṇva recension (ŚBK 2.1.3.2).	Present IV: pǘyati [3sg.act.] (AVP 13.4.4, YVp+) TA-Ptc.: án-ā-pūyita- 'non-putrified' (ŚB 1.1.3.5)			IIAL
*púh□es-	putrefaction, pus	Lat pūs 'pus' [> by borrowing NE pus] Lith puvẽs(i)ai 'rotten things' Grk púos 'pus' Arm hu 'purulent blood'	From a root *peu(hx)- 'stink, rot'.			Health&Sickness	JPM IIAL
*puh□rós	wheat	Lith pūraī 'winter wheat' Slov pîr 'spelt' Grk pūrós 'wheat'				Plants	JPM Beekes
*puḱ-	headband	Grk ámpuks '(metal) headband' Av pusā- 'diadem'				Textiles	JPM
*puḱ-	press together	Grk ámpuks Av pusā- Alb puth 'kiss'				Bend and Press	JPM
*puk(eh□)-	tail	NE fox Torwali pūš 'fox' Skt púccha- 'tail' Toch B pāka- 'tail, chowrie'	Found in Germanic, Indic, and Tocharian and gives us our word 'fox'			Hair	JPM

*pulos *pilos	(a single) hair	MIr ulu 'beard' Grk púligges [pl.] 'hairs of the body' Kurd pūr 'head hair' Skt pulakās [pl.] 'bristling hairs of the body' Lat pilus '[a single] hair [of the human body]' pilleus 'felt' OCS plŭstĭ 'felt' Grk pîlos 'felt'				Hair	JPM
*put-	cut	Lat putō 'prune' Toch AB putk- 'divide, share, separate'				Reductive Activities	JPM
*putlós	son	Skt putrá- Osc puklo- 'son' Arm ustr 'son' Av puθra- 'son'	Traditionally derived from *p(a)u- 'small' + the diminutive suffix *-tlo-, i.e. the 'small one'			Kinship	JPM IIAL
*putós	± vulva, anus	MHG vut 'vulva' Grk púnnos 'anus' Skt putau [dual] 'buttocks'				Body (Lower)	JPM
*pyek-	strike	NE fight Alb për-pjek 'strike' Toch B pyāk- 'strike [downward], batter, beat [of a drum], penetrate [as the result of a downward blow]'				Conflict	JPM
*rabʰ-	± ferocity	Lat rabiēs 'violence' Skt rábhas- 'ferocity'	Italic-Indic isogloss			Values	JPM
*red-	gnaw, scrape	Lat rōdō 'gnaw' MPers randītan 'scrape, smooth' Skt rádati 'bites, gnaws, cuts, makes way, opens'				Reductive Activities	JPM
*reg-	dye	Grk hrézō 'dye' NPers rang 'colour' Skt rájyati □ rájyate 'is coloured reddens'				Textiles	JPM
*reǵ- -*rek-nos	moist, make wet	Lat (ir)rigāre 'water, irrigate' NE rain Lith rōkia 'drizzles' Alb rrjedh 'flow, pour'	West Central			Qualities	JPM
*rehₗ-	put in order	OIr rād- 'say' Goth rōdjan 'talk' OCS raditi 'take care of' Skt rādhnóti 'prepare' ? Latin reor 'count, calculate'	The Latin cognate is not universally accepted			Placement Verbs	JPM

*réh₁is	possessions	Lat rēs 'thing, affair, circumstance possessions, wealth business matter law-suit' Av raēvant- 'rich, splendid, ostentatious' Skt rayí- 'possession, wealth'				Exchange & Property	JPM
*reh₁mós	dirty dirt, soot	OE rōmig 'sooty' Skt rāmá- 'dark, black'				Earth	JPM
*reh₁t-	post, pole	Lat rētae 'trees growing along the bank or in the bed of a stream' NE rood	North-Western			Construction	JPM
*rei-	striped, spotted	OIr rīabach 'streaked, striped' Latv ràibs 'spotted' Rus ríbyj 'variegated' ?NE roe	North-West			Color	JPM
*rei-	tremble, be unsteady	Goth reiran 'tremble, shake' Skt lelā́yati 'swings, is unsteady'	Gothic-Sanskrit correspondence			Motion	JPM
*reidʰ-	ride	MIr rīadaigid 'rides' NE ride	Celtic-Germanic isogloss			Convey	JPM
*rei ǵ -	extend, stretch out (a body	OIr ringid 'twists, tortures' NE reach Lith réižti 'stretch, tighten'	North-West			Extend	JPM
*reik-	scratch line	NWels rhwyg 'break' NE row Lith riekė~'slice [of bread]' Grk ereíkō 'bend, bruise' Skt rekhā́ lekhā́'line'				Placement Verbs	JPM
*rek-	speak	OCS rešti 'say' Toch B reki 'word'	Slavic-Tocharian Isogloss			Speech	JPM
*rendʰ-	rend, tear open	NE rend Skt rándhram 'opening, split, hole'				Reductive Activities	JPM
*rēp-	crawl	Lat rēpō 'crawl, go on all fours' Lith rėplió ti 'crawl, go on all fours'	North-West			Crawl, Slide, Fall	JPM
*rēpéh-	turnip	Lat rāpum OHG ruoba rāba Lith rópè Grk hráp(h)us	West-Central			Plants	JPM
*resg-	plait, wattle	Lat restis 'rope, cord' NE rush Lith rezg(i)ù 'knit, do network' OCS rozga 'root, branch' NPers raaza 'woollen cloth' Skt rájju- 'cord, rope'				Textiles	JPM

*reth₂-	run	OIr reithid 'runs' NWels rhedaf 'run' *roth₂eh□- or *róth₂os 'wheel' OIr roth 'wheel' Lat rota 'wheel' OHG rad 'wheel' Lith rãtas 'wheel' (and plural rãtai 'wagon') Alb rreth 'ring, hoop, tyre' Av raθa- 'chariot, wagon' Skt rátha- 'chariot, wagon'	The Tocharian word for 'army', e.g. Toch B retke, is probably derived from PIE *roth₂ikos 'pertaining to chariot', i.e. the army was originally the 'chariotry'			Run & Jump	JPM
*reu-	roar, howl	ON rymja 'roar' OCS rovǫ 'roar' Grk ōrúomai 'howl' Skt ruváti 'roars, bellows' Lat rūmor				Animal Noises	JPM
*reu(h□)-	pull out [wool]	ON rȳja (also Norw ru 'winter wool' OIr rōn 'horse's mane' Rus runó 'fleece' NPers rōm 'pubic hair' Skt lóman- □ róman- 'body hair of men and animals'				Textiles	JPM
*reu(h□)-	tear out, pluck	MIr rūam 'spade' Lat ruō 'tear off fall violently' ON rȳja 'pluck wool from a sheep' Lith ráuju 'pull out, weed' OCS rŭvǫ 'pull out' Toch AB ruwā- 'pull out [from below the surface with violence]'				Reductive Activities	JPM
*reudʰ-	push back	NE rid Skt rudh- 'check, restrain' Toch AB rutk- 'move, remove'				Convey	JPM
*reudh□-	mourn, lament	Lat rudō 'roar, bellow, bray' ON rauta 'roar' [whence by borrowing NE root (for someone)] OE rēotan 'moan' Lith raumi 'mourn, lament' Slov rydati 'weep, cry, sob' Av raod- 'lament, mourn' Skt róditi 'weeps, roars'	present *réudh□ti			Human Sounds	JPM
*réugʰmen-	cream	NE ream Av raoɣna- 'butter'		?		Meals	JPM
*réuh□es-	open space	OIr rōi 'field, open land' Lat rūs 'countryside, open fields' Av ravah- 'space' NE room (with a different suffix)	From the verb *reuh□-,preserved only in Toch AB ru- 'be open'			Space	JPM

*reuk/g-	shrink, wrinkle up	Lat rūga 'wrinkle' Lith runkù 'shrivel up' Toch B ruk- 'grow lean (with hunger)'			Measure & Quantity	JPM
*reumn-	rumen	Lat rūmen 'gullet, rumen' Baluchi rōmast 'rumination' Skt romantha- 'rumination'			Organs	JPM
*réumn̥-	horsehair fleece	OIr rōn 'horse's mane' Rus runó 'fleece' NPers rōm 'pubic hair' Skt róman- □ lóman- 'body hair of men or animals'			Hair	JPM
*reup-	break	Lat rumpō 'break' NE rift Lith rūpé́ti 'grieve, afflict' ?Skt rúpyati 'suffering racking pain'			Reductive Activities	JPM
*reus-	contend with,	MHG rūn 'make a noise, uproar bluster, rave, rage' Skt roṣ- 'displeases, takes offence at' Toch B räs- 'criticize, accuse, object to'			Conflict	JPM
*rik-	nit,	Lat ricinus Skt likṣ́ā́			Bug	JPM
*róth₂o/ehₐ-	wheel	Lat rota 'wagon' Lith rãtai [pl.] 'wagon' Av raθa- 'wagon, chariot' Skt rátha- 'wagon, chariot' OIr roth 'wheel, circle' Lat rota [again] 'wheel' OHG rad 'wheel' Lith rãtas [sg.] 'wheel'	A derivative, *róthₐikos, gives Alb rreth 'ring, hoop, tyre (for carriages)' and the Tocharian word (Toch B retke) for 'army' (< *'chariotry').		Transport	JPM Beekes
*roudhₐos	cry n.	OHG rōz Lith graudà Skt róda-			Human Sounds	JPM
*r̥sḗn	male	Grk ársēn 'male' Av arəšan- 'male' Skt r̥ṣabhá- 'bull male animal in general'	Generally indicates 'male' in opposition to 'female'		Family	JPM
*rugʰis *rugʰyo-	rye	NE rye Lith rugȳs Rus rožĭ Shughni rɵ̌ɣz 'ear of rye'			Plants	JPM
*ruk-	over-garment	OIr rucht 'tunic' OE rocc 'over-garment, rochet'	North-West		Textiles	JPM
*s-hₐupó	underneath	Lat sub 'underneath', animālia suppa 'animals [on all fours]' Arm hup 'near' Hit suppala- 'animal' Toch B spe 'near'			Position	JPM
*s(e/ō)m	one, as one, united					Beekes
*s(h₂)nehₐur-	sinew					IIAL

*s(w)eb^h-	lineage	NE sib Lat sodālis 'associate' OCS svobodĭ 'free' Skt sabhā́- 'assembly'	built on the reflexive pronoun 'self '.			Family	JPM
*s(w)ed^h-	custom, characteristic	Lat sodālis 'companion' [< *'member of a group'] OE sidu 'custom' Grk éthos 'custom, habit' Skt svadhā́'character, peculiarity, custom' Toch B ṣotri 'sign, characteristic'	Which has been analysed as a compound of *s(w)e 'own' and *dh(e)h₁- 'set, establish'.			Social Organization	JPM
*saiwos	hard, sharp, rude	Lat saevus 'hot-headed, raging, furious' Latv sievs 'hard, curt'	North-West			Values	JPM
*sakros	holy	Lat sacer 'sacred' and sacerdōs 'priest' Toch B sākre- 'happy' Hit saklāi- 'rite, custom'	One might then envisage a rite by which something is made sacred and some would derive this form from the verbal root *sek- 'cut', i.e. cut off from the world.			Sacred	JPM Celt.
*sal(i)k- *sh₂elik-	(tree) willow	OIr sail 'willow' Lat salix 'willow' OE sealh 'willow'				Trees	JPM Celt.
*samh□d^hos	sand	NE sand Lat sabulum 'sand' Grk ámathos 'sand'				Earth	JPM
*sap-	sap	Lat sapa 'must, new wine boiled thick' OHG saf 'sap' NE sap Skt sabur-dhúk- 'yielding nectar or milk'	Possibly with *b			Trees	JPM
*sap- or *sep-	± taste, come to know	OE sefa 'understanding' Osc sipus 'knowing' Arm ham 'taste, juice' [< *sapno-?])	Lat sapiō 'taste' provides a basis for sapiēns 'wisdom'.			Food & Drink	JPM
*sausos *sus	dry	Lat sūdus 'dry, without rain' Alb thaj 'dry up' Av haoš- 'wither away' Skt śuṣ- 'become dry' OE sēar [> NE sere] Lith saũsas OCS suchŭ Grk auôs				Qualities	JPM
*se-sh₁-o-	crop ?						IIAL
*se(n)k-	cease to flow, dry up	NE singe Lith senkù 'ebb, drain away, dry up [of water]' OCS i-sęknǫti 'dry up [of water]' Skt ásakra- 'not drying up'				Qualities	JPM
*sed-	go	Av āsnaoiti 'approaches' Skt ā-sad- 'enter' Grk o-grade noun hodós 'way', OCS chodŭ 'walk'				Come & Go	JPM

*sed-	set ?sit	NE set	{1} [LK] See Kümmel 2000: 676f.	Present III>I: sī́dati [3sg.act.] (RV+) Perfect: sasā́da [3sg.act.] (RV+) Aorist A: ásadat [3sg.act.] (RV+) Aorist S: sátsat [3sg.subj.act.] (RV 10.053.01) SI-impv: sátsi (RV) Aorist mediopass: ásādi 'has sat down' (RV+) Fut: satsy° (Br.+) Caus: sādáy° (RV+) TA-Ptc.: sattá- 'put, settled down' (RV+) na-ptc.: ā́-sanna- 'set down' (AV+)		Placement Verbs	JPM IIAL
*sed-	sit (down)	OIr saidid 'sits' Lat sīdō 'sit down', sedeō 'sit, be sitting' NE sit Lith sė́du 'sit down' OCS sěsti 'sit down' Grk hízdō 'sit' Arm nstim 'sit' Av hiaiti 'sits' Skt sī́dati 'sits'	this also supplies a causative *sodye/o- 'set'.			Placement Verbs	JPM
*sedes-	seat	NWels sedd 'seat' Grk hédos 'seat' Av hadiš- 'home' Skt sádas- 'place' Lat. sēdēs	A fairly transparent nominalization of *sed- 'sit'	Gen. *sed-os 'seat'		Construction	JPM Celt.
*sedlom *sedros	seat, chairlike object	Lat sella 'seat, chair', sedīle 'seat' NE settle				Construction	JPM
*seg-	fasten	OIr sūainem 'cord' Lith sègti 'fasten, buckle' OCS sęgnǫti 'take, grab' Skt sájati 'fastens'				Binding	JPM

*se ǵʰ-	hold fast, conquer overpower	OIr seg 'strong' NHG Sieg 'victory' Grk ekhurós 'firm, strong' Hit sakkuriya- 'overcome' Skt sáhas- 'victory', sáhuri- 'victorious' Greek verb ékhō 'hold'		Present I: sáhant- [ptc.act.] (RV, AVP), sáhante [3pl.med.] (RV+) Perfect: sāsáha [3sg.act.] (RV-YVm), sāhváṃs-, sāsahváṃs- [ptc.act.] (RV), sasāhé [3sg.med.] Aorist R (precative): sahyās [3sg.opt.act.] (RV) Aorist S: sákṣat [3sg.subj.act.] (RV), sákṣvā [2sg.impv.med.] (RV), asākṣi [1sg.med.] (RV) Aorist IS: ásahiṣṭa [3sg.med.] (RV) SI-impv: sakṣi (RV 05.033.02) Desid: síkṣant- [ptc.act.] (RV+) TA-Ptc.: á-sāḍha- 'invincible' (RV+) Inf: sáhadhyai, sakṣáṇi (RV)	'(to beat off enemy's) force and power to establish power (in oneself)': Skt. távíṣīm … sáhaḥ '(Indra beat Vṛtra's) force, (Vṛtra's) power (with his power)' (RV 01.080.10) sáhas- dhā (RV) — Av. hazas ° … təuuiš̌ ° … təuuīš̌īm dasuuā … hazō (Y 33.12)	Conflict	JPM IIAL
*se ǵʰ-es-	power, violence				'(to beat off enemy's) force and power': Skt. távíṣīm … sáhaḥ '(Indra beat Vṛtra's) force, (Vṛtra's) power (with his power)' (RV 01.080.10) — OAv. hazas ° … təuuiš ° (Y 29.1) 'to establish power (in oneself)': sáhas- dhā- (RV) — OAv. təuuīš̌īm dasuuā … hazō (Y 33.12)		IIAL
*sehₗ-	sow	Hit sā(i)-'sow, throw' Lat serō NE sow Lith séju OCS sějo				Agriculture	JPM Beekes

*seh₁(i)-	go forward, advance	Grk īthúō 'press forward' Phryg sideto 'succeeded, achieved' Skt sádhate 'suceeds' Hit zāi- means 'cross over'				Come & Go	JPM
*seh₁(i)-	sift	NWels hidl ON sādl Lith síetas OCS sito Alb shosh	West Central			Tools	JPM
*seh₁i-	sow	Skt sī́ra- '(seed-) plough', sī́tā- 'furrow' Toch B ṣito '+grainfield' Grk sītos 'grain (both wheat and barley)'					JPM
*seh₁men-	seed	Lat sēmen OHG sāmo OPrus semen OCS sěmę	North-Western			Plants	JPM
*seh₁ros	long	OIr sīr 'long lasting' Lat sērus 'late' OE sīd 'long'	North-West			Shape	JPM
*seh₂	bind	{1} Often treated as distinct (perhaps already in Proto-Indo-Iranian) roots (áva/ví) sā (< *seh₂-) 'untie' and si (< *sei-) 'bind' ava-sā́na- and ava-sātár- belong to the former, present sināti, perfect siṣāya and setár- to the latter. See Insler 1971: 580ff., Kümmel 2000: 548ff. {2} See Kulikov 2000b. {3} Or 3pl.pres.opt.act. of ah 'to be' (see Kümmel 2000: 676). {4} ppp *(u̯i-)sh₂-tó- (Av. hita-/vī-šta°, Ved. sitá-/ví-ṣita-) -i̯-present *sh₂-i̯-éti (Ved. syáti, Hitt. iš-ḫi-an-zi). *sh₂-i̯° gave through metathesis *sih₂° > *si-ne-h₂° (Ved. sināti, ToA sinäṣtär).	Present IV/VI {2}: °syáti [3sg.act.] (RV+) Present IX: sinā́ti [3sg.act.] (RV+) ā́ siṣāya [3sg.act.] [2.720.3.1] (RV 10.028.10, JB), siṣet [3sg.inj.act.] (RV 08.067.08) Aorist R: sāt [3sg.inj.act.] (RV+), ava-sat [3sg.subj.act.] (AVP 4.15.6), vi … sitam [2du.impv.act.] (RV 08.005.09), saṃ satām [3pl.impv.med.] (AVP 4.14.5) Caus: sāyáyati (TS+) TA-Ptc.: sitá- 'bound' (RV+), ví-ṣita- 'untied' (RV+)	resting place (unharnessing)': Skt. avasā́na- [n] (RV+) — OAv.	IIAL

*seh₂(i)-	satisfy, fill up	Grk ắmenai 'satisfy oneself' Arm hač 'contented' Hit sāh- 'stuff full, clog up' Skt asinvá- 'unsatisfied' Toch A si- 'be satisfied'				Desire	JPM
*séh₂tis	satistfaction	OIr saith 'satisfaction' Lat satis 'enough' Lith sótis 'satiety'				Desire	JPM
*seh₁i-	± be angry at, afflict	OIr saeth 'pain, sickness' Lat saevus 'fierce' NE sore Latv sĩvs 'sharp, biting' Grk haimōdíā 'kind of tooth-ache' Hit sā(i)- 'be angry at, resent' Toch B saiwe 'itch'				Health&Sickness	JPM
*seh□-(e)l-	salt	OIr salann Lat sāl NE salt Latv sāls OCS solĭ Grk háls Arm ał Toch B salyiye Lith sólymas 'brine' Alb ngjelmët 'salty' Skt salilá- 'sea, flood'		sarirá- [n] 'sea, ocean' (KS+)		Meals	JPM IIAL
*seh□g-	perceive acutely, seek out	OIr saigid 'seeks out' Lat sāgiō 'perceive acutely', sāga 'fortune-teller' NE seek Grk hēgéomai 'direct, lead' Hit sākiya- 'make known'				Sight	JPM
*séh□ul *seh₂u-el-	sun	Lat sōl 'sun' NE 'sun, Lith sáulė 'sun' OCS slŭnĭce 'sun' Grk hēélios 'sun' Av hvar 'sun' Skt svàr □ sứr(y)a- 'sun'	Gen. *shawéns	nom.sg. svàr (< *súHr̥ < *sHur < *sh₂ul), gen.sg. sứras, dat.sg. sūré	'sun-like': Skt. svar-dŕ́ś- (RV) — YAv. huuarə.darəsa- 'sunny, bright, heavenly': Skt. svàrvant- (RV+) — OAv. xvēnuuaṇt-, YAv. xvanuuaṇt- 'sun in the rock (= heaven)': svàr yád áśman (RV 07.088.02c) — YAv. asmanəm xvanuuaṇtəm 'brilliant as the sun': Skt. svàr ṇá citrám (RV 01.148.01d) — YAv. huuarə−ciθra- [m] PN	Air	JPM IIAL
*seik-	pour out overflow	Grk ikmázō 'strain' Av hičaiti 'sprinkles' Skt siñcáti 'sprinkles' Toch A sik- 'overflow' NE sye 'sink' Lat siat 'urinates'				Liquid Motions	JPM

*seik-	reach for	Lith síekti 'reach for something' Toch B sik- 'set foot', i.e. 'reach out the foot' Grk híkō 'arrive, reach'				Extend	JPM
*sek-	cut	MIr eiscid 'cuts off' Lat secō 'cut' Lith i̧-sě´kti 'dig' OCS sěkǫ 'cut' Lat sciō 'know' Hit sakk- 'know'	The semantic change from *'cut' to 'know' is not, admittedly, an obvious one, but it is confirmed by the same change in the history of *ker-s-, another enlargement of *ker- (above) which means 'cut' in Hit karsmi, as we would expect, but 'know' in Tocharian (AB kärs-)			Reductive Activities	JPM
*sekūr-	axe	Lat secūris OCS sěkyra	North-West from *sek- 'cut'			Tools	JPM
*sekʷ-	follow	OIr sechithir 'follows' Lat sequor 'follow' Lith sekù 'follow, keep an eye on' Grk hépomai Skt sácate all 'follow(s)' nominal derivative *sókʷh₂ōi 'follower' ON seggr 'follower' Skt sákhā- 'friend'	This verb is probably the same as *sekw- 'see'			Travel	JPM
*sekʷ-	say, recount publicly	OIr insce 'discourse' Lat īn-seque 'say!' NE say Lith sakaũ □ sekù 'say' OCS sočiti 'indicate' Grk ennépō 'say'	West Central			Formal Speech & Song	JPM
*sekʷ-	see	NE see Lith sekù 'follow, keep an eye on' Alb shoh 'see' Hittite sākuwa 'eye' Lydian saw- 'see'				Sight	JPM
*sekʷo-	following	OIr sech 'past, beyond' Lat secus 'after, beside, otherwise' Latv secen 'by, along' Av hačā 'from, out of in accordance with' Skt sácā 'together with', sakám 'with'	Derives from the verbal root *sekʷ- 'follow'.			Position	JPM
*sel-	jump	Lat saliō Grk hállomai	Italic-Greek isogloss			Run & Jump	JPM

*sel-	move quickly	Skt ucchalati (< *udsal-) 'hurries forward' Toch AB säl- 'fly' and säl- 'throw [down]' Arm yłem 'send' OCS sŭljǫ 'send' OE sellan 'deliver' > NE sell OCS sŭlŭ 'messenger'	{1} Synchronically distinct, but etymologically probably identical with sar [2].	Present III: sisarṣi [2sg.act.] (RV), sisrate [3pl.med.] (RV) Present X: sarayante (RV+) Present ANYA: saraṇyắn [3pl.subj.act.] (RV), saraṇyánt- [ptc.act.] Aorist A: ásarat [3sg.act.] (RV+) Perfect: sasắra [3sg.act.] (RV+), sasre [3sg.med.] (RV) Fut: sariṣyánt- [ptc.act.] (RV) Inf: sártave, sártavái		Run & Jump	JPM IIAL
*sel-	seize, take possession of	OIr selb 'possession' OE sellan 'hand over' [> NE sell] Grk heleîn 'take'	West Central			Give & Take	JPM
*séles-	marsh	Grk hélos 'marsh, meadow' Skt sáras- 'lake, pond' NWels hêl 'river meadow');	Graeco-Aryan			Water	JPM
*sel ǵ -	release, send out	OIr selg 'hunt' MHG silken 'drip' Av hərəzaiti 'releases' Skt sṛjáti 'releases'				Movement	JPM
*selk-	pull	Toch B sälk- 'pull out' Lat sulcāre 'to plough' Grk hélkō 'pull' NE sullow 'plough'				Convey	JPM
*selp	be fat						IIAL
*sélpes-	oil, fat, grease	Grk élpos 'oil, fat, grease', Skt sarpí- 'melted butter' NE salve Alb gjalpë 'butter' Toch B ṣalype 'unguent, fat'				Meals	JPM
*sem-	at one time, once	Lat sem-per 'always', sim-plex 'single' Grk haploûs 'singly, in one way' *sem-lo-m OIr samlith 'like, as' Lat simul 'simultaneously, together, at the same time' OE simbel(s) 'always'				Measure & Quantity	JPM
*sem-	draw water	Lat sen-tīna 'bilgewater' Grk ámē 'bucket' OIr do-essim 'pours' Lith sémti 'draw water'	West Central			Food Prep	JPM

*sem-	put in order/together	ON semja 'put together' Skt samayati 'puts in order' Toch B ṣäṃs- 'count'				Placement Verbs	JPM
*sem-	summer	OIr sam 'summer' NE summer Arm am 'year' Av ham- 'summer' Skt sámā 'season, year' Toch A ṣme 'summer'	{1} [AL] The color of the laryngeal cannot be determined.			Time	JPM IIAL
*sem-go-(lo)s	single one	Lat singulī 'single, individual'				Measure & Quantity	JPM
*sem-s	united as one, one together	Grk heius [m.], mía [f.], hén [nt.] 'one' Arm mi 'one' Toch Bṣe [m.], sana [f.] 'one'				Numbers	JPM
*sēmis	half	Lat sēmi- 'half-' OHG sāmi- 'half-' Grk hēmi- 'half-' Skt sāmí- 'half-'	This has been variously interpreted as a lengthened grade of *sem- 'one' or derived from the verbal root *seh₁- 'separate' certainly the latter makes more sense semantically.			Measure & Quantity	JPM
*sen-i/u-	apart	OIr sain 'especially' Lat sine 'without' Hit sanizzis 'excellent' Av hanarə 'except, without' Skt sanitúr 'apart from' Toch B snai 'without' NE sunder (derived)				Position	JPM
*sen(h□)-	seek, accomplish	OIr do-seinn 'pursues, strives' Grk ánūmi 'accomplish, get [somewhere, something]' Hit sanhzi 'seeks, plans, demands' Av han- 'gain, obtain' Skt sanóti 'wins, gets grants'				Being & Doing	JPM
*seng^wh-	sing, make an incantation	MWels dehongli 'explain' NE sing, song Grk omphḗ 'divine voice, prophecy' ?Prakrit saṃghaï 'say, honour'				Formal Speech & Song	JPM

*senh₂	obtain			Present V: sanóti [3sg.act.] (RV+) Perfect: sasā́na [3sg.act.] (RV+) Aorist A: ásanat [3sg.act.] (RV, Br.m) Aorist IS: saniṣat [3sg.subj.act.] (RV), sániṣanta [3pl.subj.med.] (RV) Fut: saniṣyáti [3sg.act.] (RV, Sū.m) Intensive: saniṣṇata [3pl.med.] (RV 01.131.5) Desid: siṣāsati [3sg.act.] (RV, AV) TA-Ptc.: sātá- (RV+)			IIAL
*senh□dʰr-	congealed moisture, slag	NE cinder RusCS sjadry 'clotted blood'	North-West			Qualities	JPM
*seno-meh□tḗr	grandmother	OIr senmāthair Lith senmotė-	North-West literaly 'old-mother'			Kinship	JPM
*sénos	old	OIr sen 'old' Lat senex 'old' Goth sinista 'eldest' Lith sēnas 'old' Grk hénos 'last year's' Arm hin 'old' Av hana- 'old' Skt sána- 'old'				Time	JPM
*sent-	go	NE send Lith suntù 'send' OHG sinnan 'go' Av hant- 'arrive' OIr sēt 'way' OHG sind 'way, side' Arm ənt'ac' 'way, passage' Toch A ṣont 'street'				Come & Go	JPM
*sent-	perceive, think	Lat sentiō 'feel', sēnsus 'feeling, meaning' NHG Sinn 'meaning' Lith sentė´ti 'think' OCS sęštĭ 'wise'	North-West			Knowledge & Thought	JPM

*sentos	way, passage	OIr sēt 'road' OE sīþ 'way' Arm ənt'ac 'way, passage' Toch A ṣont 'street'	From from *sent- 'go'	?		Roads	JPM
*sep-	handle (skilfully), hold	Grk hépō 'serve, prepare' Av hap- 'hold' Skt sápati 'touches, handles, caresses venerates' Lat sepeliō 'bury', i.e. 'prepare a body' Skt saparyáti 'honours, upholds' Grk methépō ⬚ ephépō 'manage [horses]' Skt sápti- 'team of horses'				Being & Doing	JPM
*sepit	wheat					Plants	JPM
*septḿ	7 seven	OIr secht Lat septem NE seven Lith septynì OCS sedmĭ Alb shtatë Grk heptá Arm ewt'n Av hapta Skt saptá Toch A ṣpät	How it arrived in Proto-Indo-European has been a subject of long discussion. Generally, the fact that many other language families in the surrounding region possess a similar word for 'seven' has argued for borrowing. Generally, the source is taken to be from pre-Akkadian *sabá-tum (the form used to modify masculine deWnite nouns) 'seven'. However, as was the case with 'six', the pre-Akkadian form would be too late to serve as a model for the Proto-Indo-European word and the Proto-Semitic *šab(at) looks considerably less helpful.			Numbers	JPM Beekes
*septm-dḱomth₂	70 seventy						Beekes
*septm̥-mós *septmo-	7th seventh	OIr sechtmad Lat septimus NE seventh Lith sẽkmas ⬚ [analogical] septiñtas OCS sedmŭ Alb shtatë Grk hébdomos Av haptaθa- Skt saptamá- ~[analogical] saptátha- Toch A ṣäptänt				Numbers	JPM Beekes
*ser-	flow	MIr sirid 'wanders through' Lat serum 'whey' Alb gjizë 'whey, (cottage) cheese' Grk orós 'whey' Toch B ṣarwiye 'cheese'	which underlies *sreu-			Liquid Motions Meals	JPM
*ser-	line up	OIr sernaid 'arranges' Lat serō 'line up, join, link' Lith sẽris 'thread' Grk eírō 'line up' Hit sarra- 'break' Skt sarat- 'thread'	Likely derives from the vocabulary of textile manufacture			Placement Verbs	JPM

*ser-	protect	Lat servō 'guard' Lydian sarēta 'protector' Av haraiti 'defends'			Conflict	JPM
*seren(y)uh□s	some female deity??		There are fewer semantic reasons to link the Greek fury Erīnűs with the Indic goddess Saranyū, wife of the Sun, although the phonological correspondence of both their names does seem sound enough.	?	Dieties	JPM
*serk-	construct/repair a wall	Lat sarciō 'mend, repair' Grk hérkos 'fence, enclosure' Hit sark- 'make restitution'			Construction	JPM
*serk-	make a circle,				Shape	JPM
*serk-	make restitution	Lat sarciō 'make restitution make whole [i.e. repair]' Hit sarnikzi 'makes restitution' Toch B serke 'circle'			Law & Order	JPM
*serK-	pass, surpass	Hit sarku- 'projecting, immense, powerful' Toch B ṣärk- 'pass, surpass, go beyond'	Hittite-Tocharian isogloss		Come & Go	JPM
*serp-	crawl	Lat serpō Grk hérpō Skt sárpati 'snake' Lat serpēns Alb gjarpër Skt sarpá-		Present I: sárpati [3sg.act.] (RV+) Perfect: sasarpa [3sg.act.] (ŚB+) Aorist A: asrpat [3sg.act.] (AV+) Fut: sarpsyati, srapsyati [3sg.act.] (Br.) TA-Ptc.: srpta-, also [n] 'crawling track' (KS+) Abs: (niḥ-)srpya (AV)	Crawl, Slide, Fall	JPM IIAL
*ses-	rest, sleep, keep quiet	Hit sess- 'sleep', sessnu- 'put to bed' Av hah- 'sleep' Skt sásti 'sleeps'		Present II: sásti [3sg.act.] (RV+)	Knowledge & Thought	JPM IIAL
*ses(y)ó-	grain, fruit	NWels haidd 'barley' Ligurian asia 'rye' Hit sesa(na)- 'fruit' Av hahya- 'providing grain' Skt sasyám 'grain, fruit'			Plants	JPM
*seu-	boil (something)	NE seethe Av hāvayeiti 'stew' Rus šutítī 'joke around with'			Food Prep	JPM

| *seu- | press out | | {1} [AL] Hitt. šunna-/šunn- [verb] 'to fill' rather belongs to savi[1]. | Present V: sunóti [3sg.act.] (RV+) sunvāná- [ptc.med.] (RV+) stative middle sunvé [3sg.] and sunviré [3pl.] with a passive meaning (RV) Present III: suṣvati [3pl.] (RV) Aorist R: sótā [2pl.impv.act.] (RV) Aorist S: asoṣṭa [3sg.med.] (ChU) Aorist mediopass: ásāvi [3sg.] (RV), suvāná- /svāná-/ [ptc.med.] (RV-TSm) Perfect: suṣā́va [3sg.act.] (RV+), suṣumá [1pl.act.] (RV+), suṣvāná- [ptc.med.] (RV) Fut: saviṣyāmi [1sg.act.] (MS), soṣyati [3sg.act.] (ChU+) Passive: sūyáte [3sg.] (RV+) TA-Ptc.: sutá- (RV+) Abs: abhi-ṣútya (TS+), sutvā (Sū.+) | | | IIAL |

*seu(h□)-	bear a child	Av hu- 'bear a child' Skt sū́te 'bears, begets' NE son Grk huyús 'son' Skt sūnús 'son' Toch B soy 'son'	{1} [AL] On the basis of this adjective, a denominative verb suṣvay° has been formed: suṣváyantī- [ptc.act.f.] (RV 10.110.06) and suṣváyanta [3pl.inj.med.] (RV 07.036.06). The enigmatic forms with a short root-vowel sú-ṣuti- [f] 'easy birth' (RV 10.039.07) and possibly su-ṣu-mánt- [adj] 'with a good birth (?)' (RV 10.039.07) may be attributed to the influence of this denominative verb, since the laryngeal was regularly dropped there (*-uHá- > -va-, cf. Lubotsky 1997b). {2} [AL] For the reconstruction see Kloekhorst 2008: 785f. Possibly borrowed into Finnish suku- 'race, family, birth, brood'.	Present II: sū́te [3sg.med.] (RV), sūté [3sg.med.] (TB) Perfect: sasū́va [3sg.act.] (RV, AV) Aorist R: asūt [3sg.act.] (MSm) Fut: sū́ṣyant- [ptc.fut.act.] (RV 05.078.05) Inf: sū́tave (RV, AV) TA-Ptc.: sú-ṣūta- 'easily born' (RV 02.010.03), sūta-[m] 'child, son' (AVP 5.37.4)		Vital Functions	JPM IIAL
*seug-	be sick	NE sick Arm hiwcanim 'sicken'				Health&Sickness	JPM
*seug/k-	suck	Lat sūgō NEsuck Latv sùzu 'suck' OCS sъsǫ 'suck'	North-Western			Food & Drink	JPM
*seuh₁	child						Beekes
*seuh₃-	set in motion	OIr soïd 'twists, turns' Hit suwāi- 'push, urge' Av hunā iti 'seeks to create drives forward' Toch B ṣewi 'pretext, excuse' Hit sunna- 'fill Palaic sūnat 'poured out'				Movement	JPM
*seup-	pure	Umb supa 'viscera of a sacrificed animal' Hit suppa- 'viscera of a sacrificed animal' Hit supp-i- 'pure'				Sacred	JPM
*seuyós	left	OCS šujĭ Av haoya- Skt savyá-				Direction	JPM
*séwe	Reflexive pronoun	Lat sē 'him-/her-/itself' OHG sih 'him-/her-/itself' Lith savė́ '-self ' OCS? se̢ '-self ' Alb u 'him-/her-/itself ' Grk hé □ heé 'him-/her-/itself ' Skt svá- 'one's own' Toch B ṣañ 'one's own'				Pronouns	JPM

*sh₂ó-men-	song	Grk húmnos 'song, festival song (of praise in honour of gods and heroes)' Hit ishamai- 'song, melody' Skt sā́man- 'song, chant'	{1} Possibly, a derivative of the root *seh₂– 'to bind' and can then be related to Gr. oǐμη [f] 'song, hymn', if from *sh₂–oi°.			Formal Speech & Song Poetics	JPM
*sh₂ul-gʷm	going to the sun (light)			/suvargá-/			IIAL
*sh₂wens-kʷekʷlos	wheel of the sun		n				Beekes
*sh☐tós	satisfied	OHG sat 'satisfied' Grk áatos 'insatiable' OE sæd 'satisfied'				Desire	JPM
*silVbVr-	silver	Ibero-Celtic śilaPur NE silver Lith sidãbras Rus serebró	Its doubtful vowels and various outcomes of the consonants suggest that it has been borrowed from some non-Indo-European source.			Metals	JPM
*sinǵʰós	leopard	Arm inj ☐ inc Skt siṃhá- 'lion'				Fauna	JPM
*siskus	dry	NWels hysb Lat siccus Av hišku- OIr sesc 'sterile' (of livestock).				Qualities	JPM
*skabʰ-	hold up	Lat scamnum 'stool, bench' Av upa-skambəm 'support, prop' Skt skabhnā́ti 'supports, fixes'				Give & Take	JPM
*skaiwós	left	Lat scaevus Grk skaiós				Direction	JPM
*skand-	jump	OIr sceinnid 'leaps' Lat scandō 'climb' Skt skándati 'jumps'				Run & Jump	JPM
*skauros	± lame	Lat scaurus 'clubfooted' Skt khora- 'lame'				Health&Sickness	JPM
*skebʰ-	scratch, shave	Lat scabō 'shave, scratch' NEshave Lith skabùs 'sharp' OCS skoblĭ 'scraping knife'	North-West			Reductive Activities	JPM
*skeh₁i(-d)-	cut	Lat scindō 'cut' Lith skíedžiu 'separate' OCS cědĭti 'filter, strain' Grk skhízō 'split, tear' OE be-scītan > NE shit Skt chyáti 'cuts'				Reductive Activities	JPM
*skeh₂-	make an incision		{1} vichāyáti (AVP+) [3sg.act.] 'to drive (by blows)' is a denom. of vyachá-, not a causative of chā (Hoffmann 1976: 455ff.). {2} [AL] Hardly related to OAv. sāzdūm [2pl.impv.med] 'tear up!' (Y 31.18) siiō(z)dūm [2pl.impv.med.] 'banish [the fury]!' (Y 48.7) See Lubotsky 2004a, contra Humbach, Kellens/Pirart. For the phonetic development of *sk- see Lubotsky 2001a. {3} See Kulikov 2000b.	Present IV/VI: °chyáti [3sg.act.] (AV+) {1} TA-Ptc.: áva-cchita- 'pulled off (skin)' (ŚB)			IIAL

*skeid-	split		{1} [LK] With the secondary suffix accentuation (see Kulikov 1998). {2} Gr. -χ- is unclear.	Present VII: chindhi [2sg.impv.act.] (RV 01.133.02), chinátti [3sg.act.] (AV+) Present IV/Passive: áchidyamāna- [neg.ptc.med.] (RV 02.032.04) 'unbreakable', chidyate [3sg.med.] (AV+), chídyamāna- [ptc.med.] (TS+), chidyáte {1} [3sg.med.] (MS, ŚB) Aorist R: chedma [1pl.inj.act.] (RV 01.109.03) Aorist A: achidan [3pl.inj.act.] (AV+) Aorist S: chitthās [2sg.inj.med.] (AV 8.1.4), chitsi [1sg.inj.med.] (YVp) Aorist IS: acchaitsīt [3sg.act.] (Br.) Aorist mediopass: áchedi [3sg.] (RV 01.116.15), chedi [3sg.inj.] (RV+)			IIAL
*skéits	shield, board	OIr scīath 'shield' OE scīd 'thin piece of wood, shingle' OCS štitŭ 'shield' Lat scūtum 'large leather-covered shield'	North-West			Weapons	JPM
*skek-	± jump	Lith skataũ 'jump' OCS skočiti 'jump' ON skagi 'point of land sticking out' Skt khacati 'projects (of teeth)' Toch AB skāk- 'balcony'				Run & Jump	JPM

*skend-	shine		{1} [AL] For the reconstruction and the relationship between the roots cand, chand and śad [2] see Lubotsky 2001a.	Present X: chadáyati [3sg.act.] (RV, Br.) Aorist S: achān [3sg.act.] (RV) áchāntsur [3pl.act.] (RV) chantsat [3sg.subj.act.] (RV) SI-impv: chantsi (RV) Aorist RED: acachadat [2sg.act.] (AVP 5.27.1) Perfect: cachanda [3sg.pf.act.] (RV 07.063.03), cachadyāt [3sg.pf.opt.act.] (RV 10.073.09) Caus: chandayate [3sg.med.] 'to take pleasure in' (RV 10.027.08, 08.050.05), chandayati [3sg.act.] 'to seem, to please' (ŚĀ+)			IIAL
*sker-	± hop about	Grk skaírō 'jump, hop, dance' OHG scerōn 'be mischievous' OE scere-gescēre 'locust' Lith skėrỹs 'locust'	West Central			Run & Jump	JPM
*sker-	± threaten	Toch B skär- 'speak hostilely, threaten reproach' MLG scheren 'ridicule'				Values	JPM

*skerdʰ-	be divided in equal parts (?)		{1} [AL] For the reconstruction and semantic development see Lubotsky 2001a: 50f.	Present I: śárdha [2sg.impv.act.] (RV), śárdhant- [ptc.pres.act.] 'boasting (enemy)' (RV) Caus: atipraśardháyati [3sg.act.] (RV) 'to make audacious'	the troop of Ṛta': Skt. śárdhāṃ ŕ̥tásya (RV 08.007.21) — YAv. ɑ	IIAL
*sket(ʰ)-	injure, harm	OIr scīth 'tired' OE skaðian 'injure' [NE scathe is related but a Norse loanword] Grk askēthḗs 'uninjured'	West Central			Conflict	JPM
*skeu- *kseu-	sneeze	Lith skiaudžiu Skt kṣáuti	Form have been regarded as onomatopoeic and hence possibly independent creations	?		Health&Sickness	JPM
*skeu(h□)-ih₂-	skin		{1} [AL] For the reconstruction see Lubotsky 2001a: 33.				IIAL
*skeubʰ-	push away, push ahead	NE shove Lith skùbti 'hurry' OCS skubǫ 'pluck, tear off'				Convey	JPM
*skh₂ey-wo	left						Celt.
*skid-ró-	split						IIAL
*skidrós	thin	OHG sceter 'thin' Latv šk̆idrs 'thin' dialectal Grk skidarós 'thin, slender'	West Central			Shape	JPM
*skolmeh□-	sword	ON skǫlm Thrac skálmē	West Central			Weapons	JPM
*skótos	shadow, shade	OIr scāth 'shadow, reflection ghost, spectre' NE shadow Grk skótos 'darkness, gloom shadow'	West Central			Light & Dark	JPM Celt.
*sḱóyh□	shade	Latv seja 'shadow ghost' Rus sen 'shade, shadow' Alb hie 'shade, shadow ghost, spectre' Grk skiā́ 'shade, shadow reflection, image ghost, spectre' Av asaya- 'who throws no shadow' Skt chāyā̆- 'shade, shadow' Toch B skiyo 'shadow'				Light & Dark	JPM
*skʷēis	± needle and/or thorn	OIr scē 'hawthorn' Lith skujà 'fir-needle and cone' Rus khvojá 'needles and branches of a conifer'				Trees	JPM

*slag-	slack	OIr lac 'slack, weak' Lat laxus 'slack, loose' NE slack Latv legans 'slack, soft' Grk lagarós 'slack'				Qualities	JPM
*slak-	strike	MIr slacc 'sword' NE slay	North-West from *kap- 'seize'			Conflict	JPM
*sleimak-	snail, slug	Rus slimák Grk leímaks 'slug'	from *(s)lei- 'slimy'			Bug	JPM
*slenk-	turn, twist (like a snake)	NWels llyngyr 'worms' NE sling Lith slenkù 'crawl [like a snake]'	North-West			Motion	JPM
*sleubʰ-	slide	Lat lūbricus 'slippery NE sleeve	Italic-Germanic			Crawl, Slide, Fall	JPM
*slih☐u-	plum-coloured	OIr lī 'colour' Lat līvor 'bluish colour' NE sloe Rus slíva 'plum'	North-West			Color	JPM
*slóugos	servant	OIr slōg 'army, host crowd, company' Lith slaugà 'service' Rus slug 'servant'	North-West			Social Organization	JPM
*sm̥-logʰos	bed-fellow	SerbCS sulogŭ 'wife' Grk álokhos 'bed-fellow, spouse'				Marriage	JPM
*sme(h₂)	truly						Beekes
*smeg-	taste (good)	OE smæc 'taste' Lith smaguriáuti 'delight in, nibble on, have a sweet tooth'	North-Western			Food & Drink	JPM
*smei-	smile, laugh	ME and NE smile Grk meidiáō Indic smáyate Norw smila 'laugh' Latv smeju 'laugh' OCS smějǫ 'laugh' Toch B smi- 'laugh'				Human Sounds	JPM
*smeid-	smear	Goth ge-smeitan 'smear' ??Arm mic 'dirt'	Germanic-Armenian Isogloss	?		Binding	JPM
*smeit-	throw	Lat mittō 'let go, send' Av maēθ- 'throw'				Throw	JPM
*smeḱ-	chin, jaw					Head	JPM
*sméru-	oil, grease	NE smear Toch B ṣmare 'oily, greasy' OIr miur 'marrow'				Meals	JPM
*smh☐-o-	any			accentless same [nom.pl.]			IIAL

*smóḱwr̥	chin, beard	Alb mjekër 'beard, chin' Arm mawruk' 'beard' Hit z(a)munkur 'beard' Skt śmáśru 'beard, [especially] moustache' Lith smakrà 'chin' Alb mjekër 'beard, chin' OE smoēras [pl.] 'lips'				Hair	JPM
*smós	some, any	NE some Grk hamós 'anyone' Arm amen(ain) 'all, each' Av hama- 'anyone' Skt samá- 'anyone'				Measure & Quantity	JPM
*sneh₁u-	twist fibres into thread	Lat nervus 'sinew, tendon' Grk neûron 'sinew, tendon'				Textiles	JPM
*snéh₁wr̥	sinew, tendon	Lat nervus 'sinew, tendon, nerve, muscle' [> NE nerve] Grk neûron 'sinew, tendon, gut' Arm neard 'tendon' Av nāvarə 'tendon' Skt snāvan- 'tendon' Toch B ṣñor 'tendon, sinew'	From the verbal root *snéh₁(u)- 'turn, twist'			Organs	JPM
*sneh□-	swim	OIr snāīd Lat nō Grk né̄khō Skt snā́ti Toch B nāsk- Av snayeiti 'washes'				Swim	JPM
*sneigʷʰ-(os)	snow	OIr snigid 'snows, rains' Lat nivit □ ninguit 'snows' OE snīwan 'to snow' Grk neíphei 'snows' Av snaēžaiti 'snows'				Water	JPM Beekes
*sner-	± rattle, growl	NE snore, snarl Lith niùrniu 'growl, grumble' dialectal Grk énuren '+cried out'	West Central			Human Sounds	JPM
*sneubʰ-	marry	Lat nūbere OCS snubiti 'to pander' Grk númphē 'bride'	Seen from the wife's point of view			Marriage	JPM
*sneudʰ-	mist, cloud	NWels nudd 'mist' Lat nūbēs 'cloud, mist' Av snaoða- cloud'				Air	JPM
*snh□-u	without, aside						IIAL
*snusós	sons wife, brothers wife	Lat snurus 'son's/grandson's wife' OE snoru 'son's wife' Rus snokhá 'son's wife bride' Grk nuós 'son's wife bride' Arm nu 'son's wife' Skt snuṣā́- 'son's wife'	{1} The stem in *-eh₂- is everywhere secondary.			Kinship	JPM IIAL

*so *seh□ *tód	that (one)	OIr -so/-d 'this one' Lat is-te / is-ta / is-tud 'this (one)' OE sē / sēo / þæt (> NE that) 'the' OHG der / die / daz 'the' Goth sa / sō / þata 'that (one)' Lith tàs / tà 'that [one]' OCS tŭ / ta/to 'that [one]' Alb ai / ajo 'he/she', Grk ho / hē / tó 'the' Arm ay-d 'that' Hit ta 'and, then' Skt sá / sā́ / tát 'that [one]' Toch B se/sā/te 'such (a one)'	This pronoun supplies the definite article in Germanic and Greek			Pronouns	JPM
*so ǵʰ-ur	victorious						IIAL
*sóhɪr	throw ??	Lith sóra 'millet' Toch AB sāry- 'to plant'					JPM
*soito/eha-	sorcery	NWels hud 'magic' ON seið 'magic'	Celtic-Germanic isogloss			Sacred	JPM
*sóḱr̥	(human) excrement	OE scearn 'dung, manure' Latv sārni 'slag' Rus serú 'defecate' Grk skōr '[human] waste, excrement' Av sairya- 'dung' Hit sakkar 'excrement'				Vital Functions	JPM
*sokto-	sickness	OIr socht 'silence, stupor' Hit saktāizzi 'takes care of, performs sick maintenance';	Rare Celtic-Hittite isogloss the word perhaps derives from the root *sek- 'dry', i.e. sickness as a form of dryness			Health&Sickness	JPM
*sóḱʷ-h₂-ōi	follower, companion	Lat socius 'partner, companion' OE secg 'follower' Grk aosséō 'help' Av haxā- 'friend, companion' Skt sákhā- 'friend, companion'				Social Organization	JPM
*sokʷós	sap, resin	Lith sakaĩ[pl.] 'resin' Rus sok 'juice, sap, sapwood' Alb gjak 'blood' Grk opós 'sap, resin' Toch B sekwe 'pus'				Trees	JPM
*sóḱʷt	(upper) leg	Hit sakutt(a)- 'upper leg' Rus stegnó [< *segdno < *sektno] 'hip, groin, thigh' Av haxti- 'hip' Skt sákthi 'thigh'				Body (Lower)	JPM

*sokʷth□-i-	thigh		{1} [AL] The Hittite form, for which see Kloekhorst 2008: 703, offers the closest parallel, although its meaning is not absolutely certain.	heteroclitic with sakthán-: instr.sg. sakthnā́ (VS 23.29), nom.acc.pl. sakthā́ni (RV 05.061.03) nom.acc.du. sakthyā̀, -àu (RV+)			IIAL
*sól(h□)wos *solh₂-u-	whole	Lat salvus 'whole, well' Alb gjallë 'living, agile, deft' Grk hólos 'whole' Av haurva- 'entire' Skt sárva- 'all, whole' Toch A salu 'complete'	{1} [AL] According to Plath 2000, this is an original locative of the u-stem *salu-. {2} [AL] The laryngeal is *h₂ if Hitt. šalli- 'great', CLuv. šalḫitti- 'greatness' belong here (cf. Melchert 1994: 51, 55, 89). XXX		*sol(h□)uo-teh₂t- 'wholeness'	Health&Sickness	JPM IIAL
*solh□-	dirt dirty	OE salu 'dark, dusky' sol 'dark, dirty' Lat salebra 'dirt' Toch B sal 'dirty'				Earth	JPM
*solo/eh□- *selo-	dwelling, settlement	OE sæl 'room, hall, castle' Lith salà 'village' Rus seló 'village'	North-West			Dwelling	JPM
*som-	(together) with	OHG samn 'together' Lith sam- 'with' OCS sǫ- 'with' Av ha(m)- 'together' Skt sam- 'with'	An o-grade derivative of *sem- 'one'			Position	JPM Beekes
*somo- ǵṇh□-yo-s	same (kinship) line	Goth samkunja 'of the same lineage' cf. NE kin Grk homógnios 'of the same lineage'	may be independently formed in the two groups.			Family	JPM
*somo-ph□tōr	of the same father	ON samfeðra Grk homopátōr OPers hamapitar- Toch A ṣomapācār				Kinship	JPM
*somos ?*somh□-o-	same	OIr -som 'self that one' NE same OCS samŭ 'himself ' Grk homós 'similar, same' Arm omn 'some, certain, any' Av hama- 'same' Skt samá- 'equal, like, same' Toch AB sam 'like, even'				Measure & Quantity	JPM IIAL

*soru	booty	Hit sāru 'booty [particularly captured men, cattle, and sheep]' ?Mlr serb 'theft' ?NWels herw 'raid [whose principal goal was usually cattle] outlawry' ??Lat servus 'slave'				Exchange & Property	JPM Celt.
*sou-mo-	pressed juice						IIAL
*spehₗ-	be satisfied, be filled, thrive ?swell	OE spōwan 'thrive, succeed' Lith spé´ju 'have free time' OCS spěti 'be successful, prosper' Toch B spāw- ' spread out' Lat spē 'hope' Skt sphā́yate 'grows fat'	{1} With present *spehₗ–i-. Skt. sph° may have arisen in contact with the laryngeal (*sphₗ–i-), but this is uncertain.	Present IV: sphāyātai [3sg.subj.med.] (AVP 8.11.11), sphīyate [3sg.med.] (SāmavidhB 3.3.1) TA-Ptc.: sáṃ-sphīta- 'complete, not lacking anything' (MS+)		Desire	JPM IIAL
*spehₗ(i)-	be sated, prosper	Lat spēs 'hope' OE spōwan 'thrive, succeed' Lith spé´ju 'have free time' OCS spěti 'be successful, prosper' Hit ispā(i)- 'get full, be filled, be satiated' Skt sphā́yate 'grows fat' Toch B spāw- 'spread out'				Exchange & Property	JPM
*spelo/ehₓ- *sko/eyto-	shield	MPers ispar 'shield' Skt phálakam 'shield, board' ON fjǫl 'board' Luvian palahsa- 'blanket' or 'coat'	It is commonly derived from *(s)p(h)el- 'strip, tear off', suggestive of a wooden or leather shield			Weapons	JPM Celt.
*spend-	make an offering pour a libation	Lat spondeō Grk spéndō Hit sippand- ▢ ispant-				Meals	JPM
*speno-	(womans) breast, nipple	OIr sine 'teat' OE spanu 'breast' Lith spenỹs 'teat'	A metathesized and simplified Western version of Proto-Indo-European *psténos			Body (Upper)	JPM
*sper-	?sparrow	NE sparrow Corn frau Grk sparásion 'starling' Toch A ṣpār				Bird	JPM
*sper-	strew, sow	Grk speírō Hit ispā ri OHG sprā t 'scattering' Alb farë 'seed' Grk spérma 'seed' OIr sreb 'stream'				Throw	JPM

*sper-	wrap around	Lith spartas 'band, ribbon' Grk speîra 'coils' Arm pʻarem 'enclose, surround'	West Central			Motion	JPM
*sperdʰ	pass by, walk away			Present I: spárdhante [3pl.med.] (RV+) Perfect: paspṛdhāte [3du.med.] (RV) ápaspṛdhethām [2du.ppf.med.] (RV), paspṛdhāná- [ptc.med.] (RV) Aorist R: aspṛdhran [3pl.med.] (RV), spṛdhāná- [ptc.med.] (RV) Abs: mithaspṛ́dhya (RV 01.166.09) Inf: spárdhitum (AV+) [[XXX AiGr I: 25,27:: spūrdhán [3pl.aor.inj.] (RV 06.067.09) is a nonce formation (Joachim 173, fn. 598-600) Inf: spūrdháse (RV 05.064.04)]]			IIAL
*sperǵʰ-	move energetically	NE spring Grk spérkhō 'drive, press' Skt spṛháyati 'desires' Av ā-spərəza- 'excited' Toch AB spärk- 'disappear, perish'				Run & Jump	JPM
*sperh₁-	kick, spurn	Lat spernō 'separate spurn' NE spurn Latv sperˆt 'kick' Grk spaírō 'palpitate, give a start' Skt sphuráti 'springs, spurns' Hit ispar- 'tread down, destroy'	{1} [AL] For the etymology see Lubotsky 2006.	Present VI: sphuráti [3sg.act.] (RV) Aorist S: sphárīḥ [2sg.inj.act.] (RV)		Convey	JPM IIAL
*sperh☐g-	strew, sprinkle	Lat spargō 'strew' NE spark and sprinkle	North-West			Throw	JPM

*speud-	hurry	Lith spáusti 'press' Grk speúdō 'hurry' o-grade derivative *spoudeh□- Lith spaudà press' Grk spoudḗ 'haste' Arm p'oyt' 'zeal' NP poy 'haste' OHG spioz 'spear' Alb punë 'work'				Run & Jump	JPM
*sphꞁ-ró-	fat						IIAL
*sphꞁrós	± fat, rich	Lat prosper 'lucky' NE spare OCS sporŭ 'rich' Skt sphirá- 'fat'				Measure & Quantity	JPM
*sph□en-	flat-shaped piece of wood	Lat sponda 'frame of a bed, bedstead' NE spoon NE spade (derived)				Construction	JPM
*splei ǵ ʰ-	step, go	Grk plíssomai 'stride out' Skt pléhate 'goes' Grk plikhás 'space between the thighs' OIr slīasait 'thigh'				Come & Go	JPM
*sploi ǵ h₂−ḗn ?*spl ǵ ʰen-	spleen	OIr selg Lat liēn OCS slĕzena Grk splḗn [> via Latin in NE spleen] Arm p'aycałn Av spərəzan- Skt plīhán-	It has undergone an unusual amount of irregular phonological development. {1} With tabooistic sound-replacements in the daughter-languages (Skt. plīhán- after snīhán- 'snot'?). {2} [AL] Misprinted in EWAia as felc'h.			Organs	JPM IIAL
*spoh□ino/eh□	foam	Lat spūma 'foam' NE foam Lith spáine	may originally derive from the verb 'to spit'			Water	JPM
*spolih□om	something torn or split off	Lat spolium 'hide stripped from an animal booty, spoils' dialectal Grk spó lia [pl.] 'wool plucked from the legs of sheep' Lith spā liai [pl.] 'refuse of hemp and flax'				Reductive Activities	JPM
*spṛh□-ó-	heel	OE spor 'footprint' [> NE spoor], spure 'heel', spur 'spur' Grk sphurón 'ankle[bone]' Toch B sprāne [dual] 'flanks'				Body (Lower)	JPM
*sre/oh□gs	± berry, fruit	Lat frāga 'strawberries' Grk hrṓks □ hrấks 'berry, grape'				Trees	JPM

*sreb^h-	gulp, ingest noisily	Lat sorbeō 'sup, swallow, absorb' Alb gjerb 'sip, tipple' Grk hrophéō 'gulp down' Arm arbi 'drink' Hit s(a)rap- 'gulp' MHG sürpfeln Latv strebju 'slurp, spoon' OCS srŭbati 'drink noisily'	suggests onomatopoeia			Food & Drink	JPM
*srenk-	snore	OIr sreinnid 'snores' Grk hrégkō 'snore'	West Central			Human Sounds	JPM
*srēno/eh☐-	± hip, thigh	Lith stréna 'loin' Av rāna- 'thigh'				Body (Lower)	JPM
*sret-	boil, be agitated, move nois	MIr srithit 'spurt of milk or blood' OHG stredan 'effervesce, whirl, boil' Grk hróthos 'rushing noise, roar of waves, clash of oars' Toch B ṣārtt- 'incite, instigate'				Food Prep	JPM
*sreu-	flow	Lith sraviù 'ooze' Grk rhéō 'flow' Arm aṙoganem 'moisten', srávati 'flows' NE stream				Liquid Motions	JPM
*sreumen	flowing, streaming	NE stream Rus strúmenĭ 'brook' Grk rheûma 'flow, river'	in river names *sreu-men?			Water	JPM
*srih☐ges-	cold, frost	Lat frīgus 'cold, frost' Grk rhîgos 'frost, cold');	West Central			Qualities	JPM
*sromós	lame	Rus khromój 'lame' Skt srāmá-	Possibly a loanword in Slavic from [unattested] Iranian			Health&Sickness	JPM
*srpo/eh☐-	sickle	Hit sarpa- 'agricultural tool [used in ritual along with a plough]' Latv sirpis 'sickle' Rus serp 'sickle' Grk hárpē 'sickle' Oss æxsyrf 'sickle' Lat sarpō 'cut away, prune'				Tools	JPM
*st(h₂)eug-	stiff	Lith stúkti 'stand tall' Rus stúgnuti 'freeze' Toch B staukk- 'swell, bloat'				Qualities	JPM
*stag-	seep, drip	Lat stāgnum 'standing water' Grk stázō 'drip'				Liquid Motions	JPM
*steh₂-wer-	standing firm						IIAL
*stéh₂mōn	what stands, stature	Lat stāmen 'warp' NE stem Lith stomuõ 'stature' Grk stḗmōn 'warp' Skt sthắman- 'position' Toch B stām 'tree'				Space	JPM

*stéh₂tis	place	Lat statiō 'position, station' NE stead Lith stãčias 'standing' Grk stásis 'place, setting, standing, stature' Av stāiti- 'station' Skt sthíti- 'position'	From the verbal root *steh₂- 'stand'			Space	JPM
*stéh₂ur	post	Grk staurós 'cross' Skt sthū́ṇā- 'post'	From the verb *stéh₂- 'stand' a derivative gives NE steer			Construction	JPM
*steig-	prick	Lat īnstīgō 'goad' NE stick, stitch Grk stízō 'prick, tattoo' Av bitaēγa- 'having two edges' Skt téjate 'is sharp, makes sharp'	{1} [AL] The root is given in the literature as stegh-, but neither of the MS and AVP mss. preserves the -gh-: we find -g-, -ñ- and -bh-instead. These readings rather point to the root steg-. Also the meaning of these forms is rather 'to penetrate, assail' than 'to step'. All this makes clear that the traditional etymology, connecting Gr. στείχω [verb] 'to march, mount', στίχες [f.pl.] 'ranks, lines of battle' OHG stīgan [verb] 'to mount, ascend' Latv. staĩga^t [verb] 'to go, walk', is wrong. The accentuation of the desiderative participle atitiṣtíghiṣan must be emended to +atitíṣtighiṣan (Werba1997: 258 nr. 227), since all desideratives are accented on the reduplication syllable.	Present V: pra-stignoti [3sg.act.], pra-stignuyā́t [3sg.opt.act.] (MS 2.1.12:14.4f) Aorist IS: *ā-stegiṣat [3sg.subj.act.] (AVP 13.4.5) Desid: +ati-tíṣtigiṣant-[ptc.act.] (MS 1.6.3:89.9) Inf: ati-ṣtígam (MS 1.6.3:89.9) {1}		Reductive Activities	JPM IIAL
*steigʰ-	step (up), go walk	OIr tīagu 'stride' OHG stīgan 'climb' Skt stighnóti 'climb' Lith steigiù 'hurry' Grk steíkhō 'step, go' OCS stignǫ 'come'				Come & Go	JPM Beekes
*stel-	put in place, (make) stand	NE stall NHG stellen 'put, place' OPrus stallit 'stand' Alb shtjell 'fling, toss, hurl' Grk stéllō 'make ready send' Skt sthálam 'eminence, tableland dry land, earth'				Placement Verbs	JPM

*stembʰ(h□)-	make stand, prop up	Lith stem~bti 'produce a stalk [of plants]' Grk astemphḗs 'imperturbable, firm' Av stəmbana- 'support' Skt stámbhate 'prop, support hinder, restrain' Toch AB stäm- 'stand'		Present IX: stabhnāmi [1sg.act.] (RV) stabhāyá° (RV) Perfect: tastámbha [3sg.act.] (RV+) Aorist IS: ástambhīt [3sg.act.] (RV) TA-Ptc.: stabhitá- 'consolidated, propped' (RV+) Abs: stabdhvá́ (AV+)		Placement Verbs	JPM IIAL
*sten-	moan	OE stenan Lith stenù OCS stenjǫ Grk sténō 'roar', stónos 'moaning' Skt stánati 'thunders'	Probably related to *(s)tenh□- 'thunder' {1} With laryngeal derivative *stenh₂- 'to thunder' (see stani) ?	Present: ni(s)stananti [3pl.act.] (ep.)		Human Sounds	JPM IIAL
*sten-	narrow	ON stinnr 'stiff, hard' Grk stenós 'narrow'	West Central			Shape	JPM
*ster-	steal	OIr serb 'thief ' Grk steréō 'deprive, rob' NE steal < *stel- ?	West Central			Exchange & Property	JPM

*ster-	throw down		{1} Pok. does not distinguish between stari and star.	Present V: strṇóṣi [2sg.act.] (RV 01.129.04), astrṇot [3sg.impf.act.] (GB 2.3.12:199.15), strṇuté [3sg.med.] (YVp+) Perfect: tast(r)iré [3pl.med.] (AVŚ 19.46.3 = AVP 4.23.5) Aorist R: ástar [3sg.act.] (RV), (mā́) star [2sg.inj.act.] (RV) Aorist S: strṣīya [1sg.opt.med.] (AV 10.5.15-21), astrṣi [1sg.med.] (Br.) Fut: stariṣyāmahe [1pl.med.] (KSp) Desid: tústūrṣati [3sg.act.] (ŚBK), tústūrṣate [3sg.med.] (MSp+) Inf: stártave (ŚB), startavai (AB) TA-Ptc.: á-strṭa- (RV+) 'invincible', strṭa- (KSp+) 'overthrown'			IIAL
*ster- *ster-ih₂-	barren, infertile	Lat sterilis 'barren' NIce stirtla 'barren cow' Bulg sterica 'barren cow' Grk steîra 'barren cow', stériphos 'barren' Arm ster 'barren' Skt starī́ 'barren cow' Alb shtjerrë 'lamb' Toch B śari 'kid'				Health&Sickness	JPM IIAL

| *ster(h₃)- | spread out | Lat struō 'build up' and sternō 'spread out'
NE strew
Alb shtrij 'stretch'
Grk stórnūmi 'spread out'
Av stərənaoiti ☐ stərənāiti 'spreads out'
Skt strṇóti ☐ strṇā́ti 'spreads out' | {1} Pok. does not distinguish between stari and star. | Present IX: strṇā́ti [3sg.act.] (AVP+), ástrṇāt [3sg.impf.act.] (RV), strṇīte [3sg.med.] (RV+)
Perfect: tistiré [3sg.med.] (RV)
Aorist IS: -astarīḥ [2sg.act.] (AV 12.3.38)
Aorist mediopass: ástāri (RV 06.063.03)
Passive: stīryate (KB+), stīryámāṇa- (KSm+)
Inf: -strṇīṣáṇi (RV 06.044.06)
Abs: stīrtvā́ (MSp+), -stī́rya (TSp+)
na-ptc.: stīrṇá- (RV+) | | Extend | JPM |
| *ster(h₃)mṇ | strewn place, ?bed | Lat strāmen 'straw'
Grk strôma 'straw, bed'
Skt stáriman- 'act of spreading out bed, couch'
Grk stro 'bed' | | | | Construction | JPM |

*steu-	praise solemnly announce	Grk steûtai 'make a gesture of or show of [doing something], promise, engage oneself, or threaten [to do something]' Av staoiti 'praises' Skt stáuti 'praises'		Present II: astaut [3sg.impf.act.] (RV), stáumi [1sg.act.] (AV+), stáuti [3sg.act.] (AV+) Present I: stávate [3sg.med.] (RV) stáve [3sg.med.] 'is praised' (stative) (RV) Perfect: tuṣṭuvúr [3sg.act.] (RV+) Aorist mediopass: ástāvi (RV) Aorist S: astoṣi [1sg.med.] (RV), astoṣṭa [3sg.med.] (RV+), stoṣat [3sg.subj.act.] (RV) SI-impv: stoṣi (RV 10.022.04) Passive: stūyáte [3sg.] (RV+) Fut: staviṣyá° (RV+), stoṣya° (Br.+) TA-Ptc.: stutá- (RV+)		Formal Speech & Song	JPM IIAL
*steubʰ	praise, sound			{1} Most probably, an enlargemnet of *steu- (see s.v. stav).	Present I: stobhati [3sg.act.] (RV) Aorist R: pra-stubhāná- [ptc.med.] (RV 04.003.12, nonce) stobdhi [2sg.impv.act.] (JB nonce) Caus: ástobhayat [3sg.impf.act.] (RV 01.088.06) TA-Ptc.: stubdha- (Br.+)			IIAL
*sthₐbʰo/eh□-	post, pillar	NE staff Lith stābas 'post'	North-Western from the root *stehₐ- 'stand';				Construction	JPM

*sth₂dʰ-lom	stall, stable					Beekes
*sth₂ei-	become hard, fixed	Lat stīria 'icicle' Frisian stīr 'stiff' Lith stóras 'stiff' Skt styǎyate 'becomes fixed, coagulated, hardens' B stinãsk- 'be silent'			Qualities	JPM
*stíǵʰs	path	ON stig 'step' OCS stĭdza 'step' Grk stíkhos 'row, line'	it derives from the verbal root *steigʰ- 'step, go'.		Roads	JPM
*stíǵʰs	step	ON stig 'step' OCS stĭdza 'footstep street', Grk stíkhos 'row, line'			Travel	JPM
*stl̥neh□-	post, support	OHG stollo 'support' Grk stḗlē 'pillar'	from *stel- 'stand'		Construction	JPM
*stóigʰo/eh□-	way	OHG steiga 'step, way' Alb shteg 'path' Grk stoîkhos 'row, line'				JPM
*stómn̥	mouth	NWels safn 'jawbone' Grk stóma 'mouth' Hit istaman- 'ear' Av staman- 'maw'			Head	JPM
*storos	starling	Lat sturnus NE starling OPrus starnite 'gull'			Bird	JPM
*str(h□)yon-	sturgeon	OE styri(g)a	Means 'salmon' in Gaulish c.f. Lat sariō which is a loan		Fish	JPM
*strenk-	string, to pull (tight)	NE string Grk straggós 'drawn through a small opening', ?MIr sreng 'string, cord' [if not an ON loanword]			Textiles	JPM
*streug-	be fatigued, exhausted	Grk streúgomai 'am exhausted, worn out suffer distress' Toch B sruk- 'die'	Greek-Tocharian isogloss		Health&Sickness	JPM
*strh₃-no- (-to-)	laid down					Beekes
*stuh₂-ró-	big, strong			sthávīyas- [comp] 'thicker, stronger' (Br.+) stháviṣṭha- [sup] 'thickest, strongest' (TS+)		IIAL
*stup-	± offcut, piece of wood	Grk stúpos 'stick, post, pole' NE stump Toch A ṣtop 'club'			Construction	JPM
*suh□-	rain	Grk húei Toch su-			Water	JPM

*suh□-nú-s	son	NE son OPrus soūns 'son' OCS synŭ 'son' Av hūnu- 'son' Skt sūnú- 'son' Toch B soṃśke '(young) son'				Kinship	JPM Beekes IIAL
*suh□-ros	sour, acid	NE sour Lith sū́ras 'salty' OCS syrŭ 'wet'	North-West			Qualities	JPM
*suh□sos	grandfather	Alb gjysh 'grandfather' Skt sūṣā́ 'paternal grandmother'	Albanian-Indic correspondence from *seuh□- 'beget', the same root that gave the words for 'son'			Kinship	JPM
*suh□yús	son	Grk huiús 'son' Toch B soy 'son'				Kinship	JPM Beekes
*suḱs-th□o-	6th sixth		{1} For the Avestan form see Hoffmann 1965: 254 = Hoffmann 1975: 190. For the Sanskrit form see Lubotsky 2000a.				IIAL
*súleh□-	(fermented) juice	Skt súrā- 'intoxicating drink' OPrus sulo 'curdled milk' Av hura 'kumys' Latv sula '(birch) sap'	perhaps the word originally designated fermented [birch] sap {1} [AL] In the AVP, the preparation of the Surā-drink is described in two hymns (5.10 and 8.12). It follows that there were two ways of preparation: by fermentation (a kind of beer) and by distillation			Meals	JPM IIAL
*suod	as, like						Beekes
*sūs	pig; sow	Lat sūs 'pig' NE sow Latv suvēns 'young pig' Alb thi 'pig' Grk sū́s □ hūs 'pig' Av hū- 'pig' Skt sūkará- 'pig, boar' Toch B suwo 'pig'				Fauna	JPM Celt. Beekes
*sw(o)r(ak)s	shrew	Lat sōrex Latv sussuris Bulg səsar Grk húraks	West-Central			Fauna	JPM
*sward-	laugh	NWels chwarddiad 'laugh' Grk sardánios '(bitter) laughter', sardázō 'scoff, jeer'	Welsh-Greek isogloss			Human Sounds	JPM
*swe(n)g-	bend, swing	NE swing Skt svájate 'embraces' Toch B suk- 'hand over'				Bend and Press	JPM
*swedʰ-o-	lineage	Lat sodālis 'associate' Grk éthos 'custom, habit' Skt svadhā́ 'homestead kindred group'	built on the reflexive pronoun 'self '.			Family	JPM
*sweh□de/o-	be tasty, please be sweet	Grk hḗdomai 'rejoice' Skt svādate 'becomes savoury'	Underlies the derived adjective found widely in Proto-Indo-European that indicates 'sweet' (*sweh□dús)			Food & Drink	JPM IIAL

*swehₓdús	sweet	NE sweet Skt svādhú- 'sweet' Toch B swāre 'sweet' Lith sū́dyti 'to salt' Lat suāvis 'pleasing to the senses' Grk hēdús 'what is pleasing to the senses'		svādvī́- [f] svā́diyas- [comp] 'sweeter' (RV+) svā́diṣṭha- [sup] 'sweetest, most pleasant' (RV+);		Sensation	JPM IIAL
*swei-	blow to hiss or buzz	OIr sēitid 'blows' OCS svistati 'whistle' Grk sízō 'crackle' Skt kṣvédati 'buzzes, hums, murmurs' Goth swiglōn 'play the flute'				Blow Up	JPM
*sweid-	shine	OE switol 'distinct, clear' Lith svidù 'shine, am glossy' Av xᵛaēna- 'glowing' Lat sīdus, consīderō 'consider' which literally meant 'consult the stars'				Light & Dark	JPM
*sweid-	sweat	Lat sūdō NE sweat Latv svîstu Alb dirsem Grk idíō Skt svédate Toch B sy-		Present I: svedate [3sg.med.] (Ar., Up.) Present IV: svidyanti [3pl.act.] (ṢB+) Perfect: siṣvidāná- [ptc.med.] (RV) Caus: svedayati (SāmavidhB) na-ptc.: svinná- (AV+)		Vital Functions	JPM IIAL
*swéḱrúhₓs	mother-in-law	NWels chwegr 'mother-in-law' Lat socrus 'mother-in-law' OE sweger 'mother-inlaw' OCS svekry 'husband's mother' Alb vjehërr 'mother-in-law' Grk hekurā́ 'husband's mother' Arm skesur 'husband's mother' Skt śvaśrū́- 'mother-inlaw'				Kinship	JPM IIAL
*swéḱuros	father-in- law	NWels chwegrwn 'father-in-law' Lat socer 'father-in-law' OE swēor 'father-in-law' Lith šẽšuras 'husband's father' OCS svekrŭ 'husband's father' Alb vjehërr 'father-in-law' Grk hekurós 'wife's father' Av xvasur 'father-in-law' Skt śváśura- 'father-in-law'				Kinship	JPM IIAL

*swēḱurós	wifes brother	Skt śvāśura- OHG swāgur		?		Kinship	JPM
*swel-	burn	OE swelan 'burn' Lith svi̧lù 'singe' Grk hélā 'heat of the sun'				Fire	JPM
*swel- *sel-	plank, board	NE sill Grk hélmata 'planing, decking'				Construction	JPM
*sweliyon-	wifes sisters husband	ON svili Grk eilíones [pl.]	Norse-Greek isogloss			Kinship	JPM
*swelno-	slope	OE swelle 'slope, rise in land' Toch B ṣale 'mountain'				Earth	JPM
*swelp-	burn, smoulder	Toch sälp- 'be set alight, burn' OE swefl Lat sulphur 'sulphur', i.e. 'that which burns'	nominal derivative *swélpl̥ (Gen. *sulplós)			Fire	JPM
*swem-	swim	NE swim OIr do-seinn 'moves'	North-West			Swim	JPM
*swenh□-	(re)sound	Lat sonō Latv sanēt OE swinsian 'sing' OIr seinnid 'play a musical instrument' Lat sonus 'sound' NE swan (< *'singer')				Human Sounds	JPM

*swep-	sleep, dream	Prs. *swépti 'sleeps, dreams' OE swefan OCS sŭpati Hit supp- Av xᵂap- Skt svápiti Caus· *swopéyeti ☐ *swōpéyeti 'puts to sleep' Lat sōpiō 'lull to sleep' OE swebban 'lull to sleep, kill' Skt svapáyati ☐ svāpáyati 'lulls to sleep'	{1} With a secondary -i-. {2} [AL] For a discussion of the IE situation see Kümmel 2000: 594f.	Present II: svápiti [3sg.act.] (TSp+) {1}, svapánt- [ptc.act.] (RV) Present I: ní … svapa [2sg.impv.act.] (RV, AV+) Perfect: suṣupuḥ [3pl.act.] (RV+) 'to sleep in (pres.)', suṣupvāṃs- [ptc.act.] (RV), suṣupāṇá- [ptc.med.] (RV+) Aorist SIS: svāpsīt [3sg.inj.act.] (AVP+) Caus: svāpáyati [3sg.act.] (RV+) Aorist RED: síṣvap [2sg.inj.act.] (RV), siṣvapaḥ [2sg.inj.act.] (them.) (RV) TA-Ptc.: suptá- 'fallen asleep' (AV+) Abs: suptvā́ (AV)		Knowledge & Thought	JPM IIAL Beekes
*swep-	throw, sweep	Lat supō 'throw' OCS sŭpǫ 'strew, pour about' ON sváf 'spear' and sófl 'broom' Skt svapū́ 'broom' Toch B sopi 'net, snare, throwing net'				Throw	JPM
*swer	sound, rustle			Present I: sváranti [3pl.act.] (RV+) Aorist S: ásvār [3sg.act.] (RV) Inf.: svaritoḥ (JB)			IIAL
*swer-	darken	Lat sordēs 'dirt, soil, uncleanliness' NE swart Oss xuarun 'to colour'				Light & Dark	JPM
*swer- *swer-u-	post, rod	Lat surus 'twig, short stalk' Grk hérma 'support' Skt sváru- 'sacrificial post, stake'	{1} [AL] Mayrhofer considers the etymology uncertain, but he gives no reason for his doubts.			Construction	JPM

*swerbʰ-	turn, move in a twirling moti	NWels chwerfan 'spindlewhorl' OE sweorfan 'wipe, rub' Latv svārpstīt 'bore' OCS svrabŭ 'scabies'	North-West			Motion	JPM
*swergʰ-	be ill	OIr serg 'illness' Lith sergù 'am ill' Alb dergjem 'lie ill' Toch B särk- 'illness'				Health&Sickness	JPM
*swerh□K-	watch over, be concerned	OE sorgian 'grieve, be sorry for, be anxious about' Lith sérgti 'keeps watch over' Skt sū́rkṣati 'takes care of'				Sight	JPM
*swero-	(suppurating) wound	NWels chwarren 'ulcer' OHG sweren 'fester' Rus khvóryj 'sick' Av x□ara- 'wound'				Health&Sickness	JPM
*swésōr	sister	OIr siur Lat soror NE sister OPrus swestro OCS sestra Arm kʻoyr Av x□aŋhar- Skt svásar- Toch B ṣer Grk éor 'cousin's daughter'	The word for 'sister' has been variously analyzed as a compound *swe- 'own' + *sōr 'woman', i.e. a 'woman of one's own family' or, alternatively, as *su- 'with' + *h₁esōr 'blood', i.e. '(woman of) one's own bloodline'. Neither derivation is widely accepted.			Kinship	JPM IIAL
*swesr(iy)ós	pertaining to a sister, sisterl	OSwed swiri 'mother's sister's son' Sanglechi xīr 'sister's son' Skt svasrīya- 'sister's son' literally something like 'he of the sister'				Kinship	JPM
*swesrih□nos	sisters son	Lat cōnsobrīnus 'mother's sister's son (any) cousin' Lith seserėnas 'sister's son'	North-West probably originally meant 'pertaining to the sister';			Kinship	JPM
*swīg/k-	be silent	OE swīgian 'be silent' Grk sīgáō	West Central			Speech	JPM
*swoiniyeh□-	wifes sister	Lith sváinė 'sister-in-law' Latv svaîne 'wife's sister' Arm kʻeni 'wife's sister'				Kinship	JPM
*swombʰos	spongy	OE swamm 'mushroom' Grk somphós 'spongy'	West Central			Qualities	JPM
*swópniyom	dream	Lat somnium 'dream' Lith sapnỹs 'sleep, dream' Grk enúpnion 'dream' Skt svápnyam 'vision in a dream' *supn(iy)om OCS sŭnije 'dream' Toch B sänmetse 'in a trance' ?Grk enúpnion 'dream'				Knowledge & Thought	JPM

*swópnos	sleep, dream	Lat somnus 'sleep' Lith sãpnas 'dream' OE swefn 'sleep' Grk húpnos 'sleep' Av hᵕafna- 'sleep' Skt svápna- 'sleep' Toch B ṣpane 'sleep, dream' *supnós OCS sŭnŭ 'sleep' Alb gjumë 'sleep' Arm kʿun 'sleep'				Knowledge & Thought	JPM
*swópr̥ *swépōr	sleep, dream	Lat sopor 'overpowering sleep' Grk húpar 'true dream, vision walking reverie' Hit suppariya- 'dream'	(genitive *supnós)			Knowledge & Thought	JPM IIAL
*syō(u)ros	wifes brother	OCS šurĭ 'wife's brother' Arm hor 'son-in-law' Skt syālá- 'wife's brother'				Kinship	JPM
*syuh₁-	sew	Lat suō NE sew Lith siuvù OCS šijǫ Grk kassū́ō Skt sī́vyati	{1} [AL] It seems easier to account for the attested forms by assuming metathesis *siHuC > *siuHC rather than the other way round (pace Mh), cf. also s.v. mīv. Under unclear circumstances, *siu̯H- > *suH- (syū́man- vs. sū́tra-). {2} [AL] Hitt. šum(m)anza(n)- 'string, rope' does not exist (Melchert 2003).	Present IV: sī́vyatu [3sg.impv.act.] (RV+) TA-Ptc.: syūtá- 'sewn up' (RV+)		Textiles	JPM IIAL
*t-at-	father	Lat tata Grk tatã̂ Skt tatá- NWels tad Luv tātis				Kinship	JPM
*t(e)h₂u-s-	be silent	OPrus tusnan 'quiet' Hit tuhussi(i)ye- 'keep quiet, acquiesce' Av tušni- 'sitting quietly' Skt tūṣṇī́m 'quiet, silent'				Speech	JPM
*t(e)rm-	thread-end	OE þrum NE thrum Grk termíoeis 'be-thrummed'	From *termn-			Textiles	JPM
*tag-	touch	Lat tangō 'touch' OE þaccian 'touch lightly, stroke' Grk tetagṓn 'seizing'	West Central			Sensation	JPM
*tãg- ?*tag-	set in place, arrange	Lith sutógti 'get married ally oneself with') Thessalian Grk tāgós 'military leader' Parth tgmdr ' commander' Toch B tāś 'commander'				Placement Verbs	JPM
*tagós	leader	Grk tāgós 'leader' Toch A tāśśi [pl.] 'leaders'	Derives from *t[a/ā]g- 'put in order, arrange'			Social Organization	JPM
*tak-	be silent	OIr tachtaid 'chokes, stifles' Lat taceō 'am silent' ON þegja 'be silent'	North-West			Speech	JPM

*taksos	yew	Lat taxus 'yew' Rus tis 'yew' Grk tókson 'bow' NPers taxš 'bow'				Trees	JPM
*tauros	aurochs bull	OIr tarb 'bull' Lat taurus 'bull' OPrus tauris 'bison' Lith taũras 'bull aurochs' Rus tur 'aurochs mountain goat' Grk taũros 'bull' Alb tarok 'bullock' Khot ttura- 'mountain goat'				Fauna	JPM
*teg-os	cover, roof	Lat. tego 'cover' Gr. tégos 'roof' German Dach					Celt.
*tegus	thick, fat	OIr tiug 'thick' NE thick Hit tagu- 'fat, swollen'				Shape	JPM
*teh₂uros	bull						Beekes
*teh₂ys-t-	dough	OCS tě̌sto OHG theismo					Celt.
*teh□-	melt	NWels toddi 'melt' Lat tābeō 'melt' NE thaw OCS tajǫ 'melt' Grk tḗ̆kō 'melt' Arm t'anam 'moisten' Oss tajyn □ tajun 'melt'				Fire	JPM
*teh□li	of that sort or size	Lat tālis 'of that sort' Lith tõlei 'so long' Grk tēlíkos 'so old'	West Central			Pronouns	JPM
*téh□mot(s)	then, at that place	Latv nuo tām 'from there' OCS tamo 'thither' Grk tēmos 'then'	West Central			Pronouns	JPM
*téh□wot(s)	so many, so long	Grk téōs 'so long, meanwhile' Skt (e-)tā́vat 'so much, so many so great, so far' Toch B tot 'so much, so many so great so far'				Pronouns	JPM
*teigʷ-	± side	OIr tōib 'side' Arm t'ekn 'shoulder'				Body (Upper)	JPM
*tek-	bear or beget a child	Grk tíktomai 'bear, beget' NE thane Skt tákman- 'child, offspring'.	NE and Skt come from *tek-men-			Vital Functions	JPM

*tek-	run, flow swiftly	OIr teichid 'flees' Lith tekù 'run, flow [of water], rise [of sun]' Rus tekú 'flow' Alb ndjek 'follow' Skt tákti 'hurries' o-stem *tekwós 'runner' OE þēow 'servant' OHG deo 'servant' Toch B cake 'river'				Run & Jump	JPM
*teknom	child, offspring	Grk téknon 'child'	From a root *tek- 'beget', hence more properly 'offspring' The range of meanings for this word includes a Germanic series all pertaining to servants of a king or followers (e.g. NE thane).			Family	JPM
*teḱs-	hew, fabricate	Lat texō 'weave, intertwine, put together, construct' Lith tašýti 'hew, trim' OCS tesati 'hew' Skt tákṣati 'fashions, creates carpenters, cuts' Grk téktōn 'architect', tékhnē 'art, technique' Skt tákṣan- 'carpenter' Hit taksan- 'joint' OHG dehsa 'axe'				Dwelling	JPM
*teḱs-(t)or/n-	one who fabricates	Lat textor 'weaver' Grk téktōn 'carpenter' Skt tákṣan- 'carpenter' Av tašan- 'creator'	It derives from the verbal root *teḱs- 'fabricate', and the semantic divergence may be due either to the fact that the verbal root itself is ambiguous or the fact that the craft of the carpenter also included the construction of wattled ('woven') walls.			Occupations	JPM
*teḱso/eh₂-	axe, adze	OHG dehsa 'axe, hatchet' Av taša- 'axe' with a derivative in *-lo/eha- : OIr tāl 'axe' OHG dehsala 'adze, hatchet' Russian Church Slavonic tesla 'axe'	From the verb *teḱs- 'fabricate'	?		Tools	JPM
*teḱsteh₂-	plate, bowl	Lat testa 'plate, pot' Av tašta 'cup'	originally indicated a wooden vessel			Containers	JPM
*tekʷ-	hurry, rush, walk, flow			Present II: takti [3sg.act.] (RV), takantīḥ [ptc.act.nom.pl.f.] 'rushing (waters)' (AVP) TA-Ptc.: taktá- 'rushing along, fleeting, fugitive' (RV)			IIAL

*telh₂-	lift, raise	Lat tollō 'lift' NE thole Grk talássai 'bear, suffer' Arm t'ułow 'let, permit' Skt tulā́ 'scales' NE thole 'endure' Toch AB täl- 'uphold, raise' Mlr tlenaid 'takes away'				Convey	JPM
*telh₂-ti-	suffering, sadness	Gr. talás 'sad' OHG dolen 'suffer'					Celt.
*telh□-	pray	ON þulr 'wiseman, sage, sayer of sacred rituals' Hit talliya- 'appeal to a god for help'				Formal Speech & Song	JPM
*telh□-om	floor (of planks)?	OE þel 'floor', þille 'plank of floor' Lith tìles 'planks at the bottom of a ship' OIr talam 'earth, ground' Lat tellūs 'earth' Rus tlo 'bottom' ?Skt tala- 'surface, bottom'				Construction	JPM
*telk-	push, thrust	OIr tolc 'blow' Lith tìlkti 'be tame' Rus tolkátĭ 'push, shove'				Convey	JPM
*telp-	have room	OIr -tella 'have room for something' Lith telpù 'find or have room enough enter' Skt tálpa- 'bed' Toch B tälp- 'be emptied of, purge'				Space	JPM
*tem-	reach, attain	Grk témei 'arrives, reaches' Toch AB täm- 'be born'				Come & Go	JPM
*temh₁-	cut						Beekes
*temh₁es-i	in the dark						Beekes

*temh☐-	be struck, be exhausted faint, be dark	OCS tomiti 'torture, harass, tire' MIr tām 'sickness, death' Lat tēmētum 'any intoxicating drink' NHG damisch 'foolish, silly' Skt tā́myati 'gasps for breath, is faint, stunned, exhausted'	{1} Subjunctive of a root aorist (Hoffmann 1967: 240), rather than injunctive of thematic aorist (Whitney, Macdonell)	Present IV: tā́myati [3sg.act.] (YVp+) Aorist R/A (?): tamat [3sg.subj.act.] (RV 02.030.07, TB) {1} Perfect: tatāma [3sg.act.] (Br.) Caus: támayati (KS-KpSp+) TA-Ptc.: tāntá- 'breathing with difficulty, fainted, exhausting' (KS+)		Conflict	JPM
*temh☐-s-reh₂-	darkness		{1} All from Plr. *tanθra-. {2} Plural of *temafrā-.				IIAL
*temp- *ten-p-	stretch	Lith tem~pti 'stretch out, pull out' ON þambr 'thick' OCS tǫpŭ 'thick'				Extend	JPM

*ten-	stretch	Lat tendō 'stretch' OE þenian 'stretch' Lith tìnti 'swell' Alb ndej 'extend, stretch, spread' Grk tanúō 'stretch' Skt tanóti 'expands, stretches' Lat tenuis 'thin' NE thin participle *tn̥-tó-s Lat tentus Grk tatós Skt tatá- 'stretched'	{1} [AL] The seṭ-variant of the root is attested in such forms as uttāná- (< *ut-tn̥H-nó-), pass. tāyáte, tanú-, for which see Beekes 1982-3, Beekes 1985a.	Present V/VIII: tanóti [3sg.act.] (RV+), tanuté [3sg.med.] (RV+) Aorist R: átan [3sg.act.] (RV), átnata [3pl.med.] (RV), atathās [2sg.med.] (Br.) Aorist S: atān [3sg.act.] (RV, AV) atāṃsīt [3sg.act.] (TS) Perfect: tatā́na [3sg.act.] (RV+) tātāna [3sg.act.] (RV 01.105.12), tatne [3sg.med.] (RV+), tate [3sg.med.] (RV 01.083.05), tatnire [3pl.med.] (RV-YVm), (vi) teniré [3pl.med.] (AV+) Passive: tāyáte [3sg.] 'to be performed (of a rite)' (RV+) 'to be stretched' (AV+, almost exclusively in compounds) Fut: taṃsy° (Br.) Caus: ā́ tānayā [2sg.impv.act.] 'to		Extend	JPM IIAL
*ten-d-	be exhausted due tension, become tired			Present I: tandate [3sg.med.] (RV 01.138.01)			IIAL

*ten-s-	pull	OHG dinsan 'pull' Lith té ͜ sti 'stretch, pull' Skt taṃsayati 'draws to and fro'	if not independant creations {1} [AL] Or reduplicated aor. (which seems less probable, as the form is used in parallel with an impf.) ? Cf. the discussion in Kümmel 2000: 205. {2} [AL] See Jamison 1983: 93, fn. 35.	Present X: ā́ taṃsayethe [2du.med.] (RV 10.106.01), átaṃsayat [3sg.impf.act.] (VS) Aorist A: átasat [3sg.act.] (AV+) Perfect: tatasré [3pl.med.] (RV), átataṃsatam [2du.ppf.act. (?) {1}] (RV 01.120.07) Intensive: vi-tantasáite [3du.subj.med.] (RV 06.025.06) Inf: pari-taṃsayádhyai (RV)		Extend	JPM IIAL
*ten-tlo-	warp						IIAL
*ten-tu-	thread, cord						IIAL
*ten-uh₂-	body			tanvàm [acc.sg.] (RV+) tanvā̀ [instr.sg.] (RV+) tanvè [dat.sg.] (RV+) tanū́bhyas [dat.pl.] (RV+)	'self (reflexive)': Skt. sváyā tanvā̀ (AV) — OAv. xva- tanuuas-cīt_ , YAv. huua- tanū-, MP, NP xwēštan 'self' 'made by oneself': Skt. tanū-kŕ̥t- (RV+) — YAv. tanu.kərəta- 'to hide oneself': Skt. tanvàm gū́h° (RV) — YAv. tanūm (ā)guz° 'dear body': Skt. priyā́m … tanvàm (RV, AV) — YAv. friiā … tanuui 'protector of the bodies': Skt. trātā́ tanū́nām — YAv. tanuiie … θrāθrəm 'to protect the body (himself)': Skt. tanū-pā́- [adj] (RV+) — YAv. tanūm pāiti 'to shine with the body / to light up the body': Skt. tanū-rúc- [adj] 'shining with the body' (RV) — YAv. tanūm raocaiieiti 'to light up the body' (Yt 10.142)		IIAL
*teng-	moisten, soak	Lat tingō 'moisten' OHG thunkōn 'dunk' Grk téggō 'moisten'	West Central			Qualities	JPM

*teng-	think, feel	NE thank, think Toch B tańkw'love' cänk- 'please' Alb tëňgë 'resentment, grudge' Lat tongeō 'know'				Knowledge & Thought	JPM
*teng(ʰ)-	pull	OCS ras-tęgǫ 'pull apart' Av θang- 'pull' Lat tēmō 'chariot pole' OE þīxl 'wagon-pole, shaft'				Extend	JPM
*tengʰ-	be heavy, difficult	ON þungr 'heavy, difficult, unfriendly' Lith tingùs 'idle, lazy, sluggish' OCS o-tęžati 'become heavy, loaded' Toch B täňk- 'hinder, obstruct'				Qualities	JPM
*tengʰ-s-	pole	Lat temō OE tīsl 'wagon-pole, shaft'	from *ten- pull, stretch'			Transport	JPM
*tenh₂-u-	long, thin			tánīyas- [comp] 'thinner' (Br.)			IIAL
*tenh□g-	shallow water	Latv tīgas 'deep spot in water' Grk ténagos 'shoal, shallow water' Lat stāgnum 'standing water, pool, swamp' ?				Water	JPM
*tenk-	become firm, thicken shrink	OIr tēcht 'coagulated' ON þēl 'buttermilk' Lith tánkus 'thick, copious' Skt tanákti 'pulls together', takrám 'buttermilk' Toch B tańki 'very, fully full'				Measure & Quantity	JPM
*ténkl̥	buttermilk	ON þēl 'buttermilk' Skt takrám 'buttermilk mixed with water'				Meals	JPM
*ténus	thin, long	OIr tanae 'thin' Lat tenuis 'thin, fine' NE thin Lith teˌ´vas ' thin, slim' OCS tĭnŭkŭ 'slender, thin' Grk tanaós 'long, elongated' MPers tanuk 'thin, weak' Skt tanú- 'thin, slender, small'	from verbal root *ten- 'extend, stretch'			Shape	JPM
*tep-	be warm						IIAL

*tep- hot be warm	OIr te 'hot' Umb tefru 'burnt sacrifice' OE þefian 'gasp, pant' Rus topitĭ 'heat' Grk téphrā 'ashes' Hit tapissa- 'fever, heat' Av tāpaiti 'be warm' Skt tápati 'warms, burns' Alb ftoh 'make cold'	{1} [AL] With the secondary suffix accentuation (see Kulikov 1998). {2} [AL] Isolated and irregular form, probably transitive: '[Agni] heated [the bow]'.	Present I: tápati [3sg.act.] (RV+) Present IV: tapyate [3sg.med.] (RV+), tápyate [3sg.med.] (YVm+), tapyáte [3sg.med.] (AV, TSm, ŚB) {1} Aorist mediopass: átāpi [3sg.] (RV+) Aorist S: átapthās [2sg.med.] (AV 9.5.6), atāpsīt [3sg.act.] (KS+) Aorist RED: atītape [3sg.med.] (RV 08.072.04) {2} Perfect: tatā́pa [3sg.act.] (RV+), tepāná- [ptc.med.] (RV), tatápate [3sg.subj.med.] (RV 04.002.06) Fut: tapsyáti [3sg.act.] (KS+) Caus: tāpáyant- [ptc.act.] (AV+) TA-Ptc.: taptá- 'heated, hot, glowing' (RV+)	*tep-os- 'warmth' the sun warms, burns': Skt. sū́rya ā́tapatu (AV 8.2.14) — Av. huuarə ātāpaiieiti	Qualities	JPM IIAL
*ter- speak out	Hit tar- and Lith tariù 'say' MIr to(i)rm 'noise, din, uproar' OPrus tārin 'noise' Rus torotóritĭ 'chatter, prattle' Luvian tātariya- 'curse' Toch B tär- 'implore'				Speech	JPM
*ter(i)- rub, turn	Lat terō 'rub' Lith trinù 'rub' OCS tĭrǫ 'rub' Grk teírō 'rub'	West Central			Reductive Activities	JPM

*terd-	pierce		{1} [AL] Lith. tríesti (dial.) [verb] 'to suffer from diarrhoea' seems to show that acute is original in this root.	Present VII: tṛṇátti [3sg.act.] (RV+), tṛṇdhi [2sg.impv.act.] (RV+) Aorist R: tárdas [2sg.subj.act.] (RV 06.017.01), tṛdyur [3pl.opt.act.] (Sū.), tarddhi [2sg.impv.act.] (AVP 5.20.3) Perfect: tatarda [3sg.act.] (RV, AV), tatṛdāná- [ptc.med.] (RV) Caus: vi-tarday° 'to drill into, to hollow out' (Sū.) Desid: títṛtsān [3pl.subj.act.] 'to wish to open' (RV 10.074.04 +) Abs: pra-tŕ̥dya (ŚB) na-ptc.: ava-tṛṇṇa- (AVP 1.58.3+), ā́-tṛṇṇa- (KS+)			IIAL
*tergʷ-	scare fear, threaten	NWels tarfu 'hunt' Lat torvus 'piercing wild [of the eyes]' OE þracian 'fear, feel dread, shudder' Grk tarbéō 'scare' Skt tárjati 'threatens, scolds'				Values	JPM Celt.
*terhₗ-	pierce by rubbing	OIr tarathar 'instrument for drilling' Lat terō 'rub, wear away' Lith trinù 'rub' OCS tĭrǫ 'rub' Alb tjerr 'spin' [<*'rub yarn back and forth'] Grk teírō 'pierce' Skt tārá- 'piercing'				Reductive Activities	JPM
*térhₗtrom *térhₗdʰrom	auger	OIr tarathar 'auger' Lat terebra 'auger' Grk téretron 'borer, gimlet'	West Central from *terhₗ- 'pierce'			Tools	JPM Celt.

*terh₂-	across, through, above	NE forms both through and thorough OIr tar 'across, above' Lat trāns 'across' Av tarō 'over, to' Skt tirás 'over, across, apart'				Position	JPM
*terh₂-	bring across overcome	Hit tarhzi 'defeats' Skt tárati 'overcomes' Lat intrāre 'enter' Skt trā́yati 'protects, shelters' Grk trānós 'penetrating, clear'	{1} [AL] The secondary root tur/tūr(v) is probably extracted from the -va-present tū́rva-. In Vedic, the two zero grades are largely semantically divided, tir-/tīr- meaning 'to cross', and tur-/tūr- meaning 'to conquer', cf. Lubotsky 1997b: 139, fn. 2. Among rare exceptions are aptúr- 'crossing the waters', aptū́rya- 'crossing of the waters'. {2} Employed as the transitive-causative counterpart of the class I present, meaning 'to make pass, to make cross, to save'. {3} [LK] Instead of the regular *titirúṣ-, on the model of the class I present tárati (see Kümmel 2000: 214). {4} aptúm [acc.sg.] and aptáve [dat.sg.] (TS, ŚB+) are based on the secondary u-stem extracted from nom.sg. aptúr.	Present I: tárati [3sg.act.] (RV+), tarete [3du.med.] (RV 01.140.03) Present VI {2}: -tirá [2sg.impv.act.] (RV+), -tirasi [2sg.act.] (RV+), -tiráte [3sg.med.] (RV+) til-a- (VS) Aorist IS: átārīt [3sg.act.] (RV+), tā́riṣat [3sg.subj.act.] (RV+), tāriṣīmahi [1pl.opt.med.] (RV+) Perfect: tatā́ra [3sg.act.] 'to cross, to pass over' (RV, TBm), titirur [3pl.act.] (RV), titirvā́ṃs-, tatarúṣ- {3} [ptc.act.] (RV) Passive: prá tīryatām [3sg.impv.] (TBm 2.5.1.3) Caus: pra tāráy° 'to extend' (AV) Intensive: tartarīti [3sg.act.] (RV), táritrat- [ptc.act.]	'to cross the waters, the river': Skt. apás tari- (RV+), Skt. aptúr- [adj] 'crossing the waters' (RV+) — OP tigrām viyatarayāmā (DB I 88) — Khot. bi-tar- (+ river) — MP vi-dardan (+ river) — MoP guđar- / guđaštan (+ river) 'to overcome all hostilities, enemies': Skt. víśvā dvéṣāṃsi tari- (RV+) — YAv. vīspa t_baēšā̊ titarəṇtəm, tarō.t_baēša(h)-, t_baēšō.tara-, t_baēšō.tauruuan- [adj] 'overcoming hostilities'	Come & Go	JPM
*TerK-	release, allow	Hitt tarna- 'let, release' Toch AB tärk- 'let go, allow'	Both languages reflect a PIE present stem *TṛK-neh□-			Movement	JPM
*terk(ʷ)-	twist turn	Lat torqueō 'twist, wind torment' Alb tjerr 'spin' Grk átraktos 'spindle' Skt tarkú- 'spindle'	{1} [AL] Gr. ἄτρακτος [m] 'spindle' Gr. ἀτρεκής [adj] 'precise' cannot be related because of its -κ- and the initial ἀ-	Caus: tarkay° 'to consider' (Ep.+)		Textiles	JPM IIAL

*térmn̥	border	Lat termen 'border' Grk térma 'border, goal, end point' Arm tʻarm 'end' Hit tarma- 'stake' Skt tárman- 'point of sacrificial post'	From root *ter- 'cross over' both Hittite and Indic provide a concrete meaning here, i.e. 'post, stake', a device employed to mark the limit of something.		Space	JPM
*terp-	satisfy			Present VI<VII: tr̥mpáti [3sg.act.] (RV+) Present V: trpn̥óti [3sg.act.] (RV+), trpn̥utám [2du.impv.act.] (RV 08.035.10) Present IV: tŕ̥pyati [3sg.act.] (RV-Kh., AV+) Aorist A: átrpat [3sg.act.] (AV+) Aorist R: trpyāsma [1pl.opt.act./prec.act.] (TS) Perfect: tātrpur [3pl.act.] (AV, TBm), tātrpāná- [ptc.med.] (RV 10.095.16) Fut: atrapsyat [3sg.cond.act.] (Br.) Caus: tarpáyati (RV+) Aorist RED: atītrpat [3sg.act.] (AV+) TA-Ptc.: trptá- (RV+)			IIAL
*terp-	take (to oneself),	OE þurfan 'need, lack' Av tarəp- 'steal' Skt paśutrp- 'cattle stealing' Grk térpomai 'satisfy myself' Skt tŕ̥pyati 'be sated' Lith tarpstù 'flourish' OCS trŭpěti 'suffer, endure' Toch A tsārwā- 'be confident, rejoice' térptis (gen. *trptéis) 'satisfaction' ON purft 'need' Grk térpsis 'satisfaction' Skt tŕ̥pti- satisfaction'			Desire	JPM

*ters-	dry become dry, dry up	Lat torreō 'dry' ON þerra 'dry' Alb ter 'dry off' Grk térsomai 'become dry' Arm t'aṙamim 'wilt, fade' Skt tŕ̥ṣyati 'thirsts'		Present IV: tŕ̥ṣyant- [ptc.act.] (RV+) Aorist A: tr̥ṣat [3sg.inj.act.] (AV+) Aorist R: tr̥ṣāṇá- [ptc.med.] 'thirsty' (RV), +atr̥ṣta [3sg.med.] (AVP 5.31.3) Perfect: tātr̥ṣúr [3pl.act.] (RV) Caus: vi-tarṣay° (KS+) Aorist RED: atītr̥ṣāma [1pl.act.] (RV 04.034.11 +) TA-Ptc.: tr̥ṣitá- 'thirsty' (RV 01.016.05 +)		Qualities	JPM Beekes IIAL
*teru-no-	tender						IIAL
*teter-	gamebird	MIr tethra 'hooded crow' ON þiðurr 'capercaillie' Lith tetervà 'capercaillie' OCS tetrěvĭ 'pheasant' Rus teterev 'capercaillie' Grk tetráōn 'capercaillie' NPers tadharv 'pheasant' Skt tittirá- 'partridge'	The range of meanings suggests a large gamebird such as the capercaillie, pheasant, or partridge			Bird	JPM
*tetḱ-	fashion			Present II: tákṣati [3pl.act.] (RV+) tāḍhi [3sg.impv.act.] (RV) tāṣṭi [3sg.act.] (AB) Present V: takṣṇoti [3sg.act.] (ŚB, JB) Aorist IS: atakṣiṣur [3pl.act.] (RV) Aorist A: átakṣat [3sg.act.] (RV) Perfect: tatákṣa [3sg.act.] (RV+) TA-Ptc.: taṣṭá- (RV+), takṣitá- (MS)	'to fashion a song of praise': Skt. mántram takṣ- (RV) — OAv. mąθrəm tašat_ 'to fashion the speech': Skt. vácas-takṣ- (RV) — YAv. vacas-tašti- — Gr. (Pind.) ἐπέων … τέκτονες		IIAL

*tetḱon-	carpenter		{1} Cf. also Gr. τέχνη [f] 'skill' OIr. tál 'axe' OHG dehsa(la) 'axe', which seem to point to *teḱs-.				IIAL
*teu-	look on with favour	OIr tūath 'north' Lat tueor 'observe, protect' OE þēaw 'custom' Luvian cognate tāwa/i- 'eye'				Values	JPM
*teubʰ-	steal	NE thief Toch B cowai 'theft'				Exchange & Property	JPM
*teuh□-	swell (with power), grow fat	Av tav- 'be capable of' Skt távīti 'is strong, powerful' ORus tyju 'become fat' Grk sáos 'healthy'	{1} [LK] Thus Kümmel 2000: 220f., with convincing argumentation less plausible is the analysis as (intensive) perfect injunctive (Hoffmann, Narten, Bendahman 1993: 206f.). {2} [AL] The Greek adjectives reflect an ablauting paradigm *tueh₂us, *tuh₂-u-os (Lubotsky 1988: 123).	Present II: út tavīti [3sg.act.] (RV 10.059.01) Perfect: tūtāva [3sg.act.] 'to be strong' (RV 01.094.02) Aorist RED {1}: tūtot [3sg.inj.act.] 'to make powerful' (RV) Intensive: saṃ-távītvat [ptc.act.nom.sg.m.] 'to become stronger again and again' (RV 04.040.04)		Blow Up	JPM IIAL
*teus-	be happy	Hit duski- 'be happy' Skt túṣyati 'is delighted with'				Values	JPM
*teus-	be still	{1} [LK] Uncertain form: Orissa mss. Kashmir ms. trpyant- eds. +tr̥ṣyant- 'thirsty' see Kulikov 2001: 406f. {2} Cf. Jamison 1983: 50f.	Present IV: tuṣyant- [ptc.act.] (AVP 2.79.3) (?) {1}, tuṣyet [3sg.opt.act.] (ŚrSū.+) Present X: tuṣáyantī- [ptc.act.f.] 'being content' (RV 10.027.16 {2}) Caus: toṣayati [3sg.act.] (JB, Sū.+) TA-Ptc.: tuṣṭa- (KāṭhB, GB+)			IIAL
*teutéh□-	the people (?under arms)	OIr tūath 'a people, nation [common] people' Oscan touto 'community' OE þēod 'folk' Lith tautà 'people' ?Hit tuzzi- 'army'	West Central			Social Organization	JPM

*tih□n-	(be) dirty	Toch B tin- 'be dirty' OCS tina 'mire, Wlth'				Earth	JPM
*tkeh₁-	rule own, obtain	Grk ktáomai 'procure' Av xšayati 'has power' Skt kṣáyati 'possesses, rules' OPers xāyaθiya 'king' NPers šāh 'king, shah'	{1} [AL] The reconstruction *tkeh₂- seems hardly possible, because we need palatalization in order to account for the Indo-Iranian facts. The consistent ē-vocalism in Greek is consistent with this reconstruction.	Present AYA: kṣáyati [3sg.act.] (RV)		Social Organization	JPM IIAL
*tḱei-	settle, dwell live			Present II: kṣéti [3sg.act.] (RV+), kṣiyánti [3pl.act.] (RV+), kṣáyat [3sg.subj.act.] (RV+) Aorist S: kṣeṣat [3sg.subj.act.] (RV 06.003.01) Fut: kṣeṣiyánt- [ptc.act.] (RV 02.004.03) Caus: kṣayáyā [2sg.impv.act.] (RV 03.046.02) kṣepayat [3sg.inj.act.] (RV 05.009.07)	to abide the roads': Skt. pathó … ấ kṣiyema (AV 6.117.3) — OAv. paθō … ā šaēitī (Y 43.3)	Dwelling	JPM IIAL
*tḱei-tro- *tḱei-tlo-	land				'lord of the ground': Skt. kṣétrasya páti- (RV+), kṣáitrapatya- [n] 'dominion, property' (RV, AVP), kṣaitrapatyá- [n] 'belonging to the lord of the ground' (YV+) — YAv. šōiθrahe paiti- (Y 2,16) 'land with(out) good pasturage for cattle': Skt. agavyūtí kṣétram (RV 06.047.20) — YAv. šōiθra-gaoiiaoiti-		IIAL
*tḱen-	strike	Grk kteínō 'kill' Skt kṣaṇóti 'hurts, injures, wounds'	West Central			Conflict	JPM
*tḱítis	settlement	Grk ktísis 'settlement' Av šiti- 'settlement' Skt kṣití- 'settlement'				Dwelling	JPM
*tkʷreh₁yot-	clay	OIr crē 'clay' Lat crēta 'chalk' Toch A tukri and Toch B kwriye both 'clay'	Found only at eastern and western fringes			Earth	JPM
*todéh□	then	Lith tadà 'then' Av taδa 'then' Skt tadā́ 'then'	Baltic-Indo-Iranian			Pronouns	JPM
*tóksom	bow	Grk tókson Mycenaean to-ko-so-wo-ko 'bow-makers' Scyth taxša-				Weapons	JPM

Sheet1

*tolko/eh□-	sacrifice, sacrificial meal	Lith talkà 'collective assistance feast after such a work' Rus toloká 'afterwork feast' Toch B telki 'sacrifice'				Food & Drink	JPM
*tolkʷ-	speak	OIr ad-tluichetar 'gives thanks, rejoices' Lat loquor [<*tloquor] 'speak' OCS tlŭkŭ 'meaning, explanation'	North-West			Speech	JPM
*tómh□es- *temh□-os- ??	dark	Lith tamsà Av təmah- Skt támas- Lith témti 'become dark' Lat temere 'by chance' from 'in the dark'.				Light & Dark	JPM IIAL
*tór	there	OE þǣr 'there' (> NE there) Skt tár-hi 'at the time, then'	Germanic and Indic {1} [AL] In spite of the late attestation in the RV, it must be a PIE formation, because there was no model available for an analogy (pace Mayrhofer).			Pronouns	JPM IIAL
*tóti	so much, many	Lat tot Grk tósos	West Central			Pronouns	JPM
*tr-no-	grass		{1} From root *ster- 'to be rigid' ?				IIAL
*trēbs	dwelling	OIr treb 'habitation' Lat trabs 'wooden beam' ON þorp 'farm, estate' Lith trobà 'house, building' Grk téramna □ téremna 'house, dwelling'				Dwelling	JPM
*treg-	gnaw	Grk trṓgō 'gnaw [particularly raw fruit] Arm t'urc 'jaw' Toch B tresk- 'chew'				Food & Drink	JPM
*tregʰ-	run	Goth þragjan 'run' ON þræll 'servant' OIr traig 'foot' NWels troed 'foot'	North-West			Run & Jump	JPM
*treh₂-	protect		{1} Indicative forms only in late Vedic. {2} Connection with trā- very uncertain.	Present IV: trā́yase [2sg.med.] (RV+) Aorist S: trāsate [3sg.subj.med.] (RV), trā́dhvam [2pl.impv.med.] (RV), atrāsmahi [1pl.med.] (Br.) {1} Perfect: tatre [3sg.med.] (RV 10.132.07 (bis), BĀU 5.14.4) TA-Ptc.: trātá- (Br.+)	'there is no other protector except you who is another protector except you?': Skt. na … trātā vidyate … tvad anyaḥ (Ep.) — OAv. kə̄ … θrātā vistō ańiiō … θβat_-cā (Y 50.1) 'protection for the cows': Skt. go-trá- [n] 'cow-shed, barn' (RV+) 'family, lineage' (YV+) — YAv. θrāθrəm … gə̄uš … (Yt 19.69) 'to protect men (and) cattle': Skt. trā́yantām … púruṣaṃ paśúm (AV 8.7.11) — θrāθrāi pasuuā̊ vīraiiā̊ (Yt 13.10)		IIAL
*treio-	3x triple						Beekes

*trem-	shake, tremble (in fear)	Lat tremō 'shake' Lith trìmti 'shake' Alb tremb 'scare, startle, shock' Grk trémō 'shake' Toch A träm- 'be enraged'				Motion	JPM
*trep-	turn	Lat trepit 'turns' Grk trépō 'turn' Skt trápate 'becomes perplexed' ?Hittite cognate is tēripp- 'plough' (unless from *drep-)				Motion	JPM
*tres-	tremble, fear	MIr tarrach 'fearful' Lat terror 'terror' Lith trišù 'tremble' Grk tréō 'tremble, flee' Av tərəsaiti 'fears' Skt trásati 'trembles, is afraid'				Values	JPM
*tres-	tremble, shake with fear	MIr tarrach 'fearful' Lat terrēre 'terrify', terror 'terror' Lith trišù 'tremble' OCS tręsǫ 'tremble' Grk tréō 'tremble, flee' Av tərəsaiti 'fears' Skt trásati 'trembles, is afraid'				Motion	JPM
*treu(h□)-	rub away, wear away	NE throw OCS tryjǫ 'rub' Grk trúō 'rub down'	West Central an enlargement of *ter(i)-			Reductive Activities	JPM
*treud-	thrust, press	OIr trom 'oppressive' Lat trūdō 'thrust' Goth us-þriutan 'bother, persecute' OCS truditi sę 'exert oneself' Alb tredh 'castrate'	West Central			Bend and Press	JPM
*trewk-	cut						Celt.
*tréyes	3 three	OIr trī Lat trēs NE three Lith trỹs OCS trije [m.], tri [f./nt.] Alb tre [m.], tri [f.] Grk treîs Arm erek' Hit tēri- Av θrayō [m./f.], θri [nt.] Skt tráyas [m./f.], trī [nt.] Toch B trai [m.], tarya [f.]	In some languages we have reflections of a very unusual feminine form, *t(r)is(o)res, i.e. OIr teōir, Av tišrō , Skt tisrás. The underlying derivation of *tréyes is generally sought in either *ter 'further', i.e. the number beyond 'two', or from a *ter- 'middle, top, protruding', i.e. the middle finger, assuming one counted on one's Wngers in Proto-Indo-European. Again, the probability that either suggestion is correct is very low. {1} [AL] Due to the introduction of the stem tray- into trídhā, i.e. *trayidhā, which accounts for the fact that this adverb is mostly trisyllabic in the RV.	tráyas [nom.pl.m.] (RV+) tribhyás [dat.abl.pl.m.n.] (RV+) triṣú [loc.pl.m.n.] (RV+) trī́ [nom.acc.pl.n.] (RV, ŚB) tisrás [nom.acc.pl.f.] (RV+), etc.	'three-footed': Skt. tri-pád- (RV+) — YAv. θri-paδa- [n] 'length of three feet' — Gr. τρί-πους [adj], Gr. (Myc.) ti-ri-po-de [nom.du.] — Lat. tri-pēs [adj] — OE Þri-fēte [adj] 'thrice': Skt. trís [adv] (RV+) — YAv. θriš [adv] — Gr. τρίς [adv] — Lat. ter (OLat. terr) [adv] 'thirteen': Skt. tráyo-daśa [num] (YV+) — MP, NP sēzdah [num], Pash. dyárlas [num] — Lat. trēdecim [num]	Numbers	JPM

*trh₂-we	overcome		{1} [AL] The secondary root tur/tūr(v) is probably extracted from the -va-present tū́rva-. In Vedic, the two zero grades are largely semantically divided, tir-/tīr- meaning 'to cross', and tur-/tūr- meaning 'to conquer', cf. Lubotsky 1997b: 139, fn. 2. The only exceptions are aptúr- 'crossing the waters', aptū́rya- 'crossing of the waters'. {2} [AL] Hajnal 1999: 95 assumes that Skt. tárus- goes back to *tarur (cf. s.v. párvan-) and originally formed one paradigm with the precursor of Av. tauruuan- (< *trH-uan-), attested in the compounds vərəθra-tauruuan-, t_baēšō.tauruuan-. {3} Probably for *tauruuāmā-.	Present I<VA: tū́rvasi [2sg.act.] (RV), tū́rvant- [ptc.act.] (RV, YVm) Aorist R: turyā́ma [1pl.opt.act.] (RV) Perfect: tuturyā́t [3sg.opt.act.] (RV) Intensive: ví tartūryante [3pl.med.] (RV), vi-tárturāṇa- [ptc.med.] (RV) Desid: tū́tūrṣati [3sg.act.] (RV 10.100.12) Abs: vi-tū́rya (RV) Inf: turváṇe (RV) TA-Ptc.: a-tū́rta-, á-tūrta- (RV)	'conquering all, everything': Skt. viśva-túr-, viśvá-tūrti- (RV) — YAv. vīspa.tauruuairī- [f] PN — OIran. *Vispa-tar-va- [m] PN 'overcoming Vṛtra': Skt. vṛtra-túr- (RV) — YAv. vərəθra-tauruuan-		IIAL
*trh₂os	through						Beekes
*tri-	3 three-		Used in compounds				Beekes
*trī-ḱomt(h☐)	30 thirty	OIr trīcho Lat trīgintā Grk triā́konta Arm eresun Av θrisa(n)t- Skt triśát Toch B tåryāka				Numbers	JPM IIAL
*trih☐tōn	watery (one?)	OIr trīath 'sea' Greek sea god Trī́tōn	Highly speculative	?		Dieties	JPM
*tris	3x thrice	Lat ter Grk trís Av Triš Skt tríṣ				Numbers	JPM
*tris-	± vine	SC trs 'grapevine reed' Alb trishë 'offshoot, sapling, seedling' Cretan Grk thriníā 'vineyard'				Plants	JPM

*triy-os *tri-to-	3rd third	Arm eri 'third' Hit teriyan 'third', tariyanalli- ' third officer') *tri-to- Alb tretë Grk trítos Skt tritá- Toch B trite *t(e)r(e)tiyo- NWels tryddyd Lat tertius NE third Lith trẽčias Rus trétij Av Tritiya- Skt tṛtíya-				Numbers	JPM Beekes IIAL
*tṛnu-	thorn	NE thorn OCS trŭnŭ 'thorn' Khot tarra- 'grass' Skt tṛ́ṇam 'grass'	Finnish tarna 'sedge, grass' is borrowed from some early form of Indo-Iranian			Plants (Wild)	JPM
*trosdos	thrush	Lat turdus, NEthrush, Lith strãzdas Rus drozd Grk stroûthos				Bird	JPM
*tṛsus *tṛstos	dry	Lat torrus 'dried out' ON þurr 'parched' Av taršu- 'dry' Skt tṛṣú- 'greedy, desirous, vehement'	{1} Plr. *tṛšna- instead of *ṣ̊ṅā- is probably due to the influence of *šud- 'hunger'.	tṛṣvī́- [f]	*trs-neh₂- 'thirst'	Qualities	JPM IIAL
*trus-	reed, rush	Lith tr(i)ušìs 'reed, horsetail' Rus trostĭ 'reed, cane' Grk thrúon 'reed, rush'	West-Central			Plants (Wild)	JPM
*tu(e)rḱ-	cut		{1} [AL] For the reconstruction see Lubotsky 1994b.		the shaper fashioned': Skt. tváṣṭā … tatakṣa (RV) — OAv. θββōr		IIAL
*tuh□s-ḱṃṭyós	1000 thousand	NE thousand Lith túkstantis OCS tyšęsti	North-West literally a 'swollen (or 'strong') hundred'			Numbers	JPM
*túh□ *tuh□óm (emphatic)	2S thou	OIr tū 'thou, thee' Lat tū 'thou', tē 'thee' OE þū 'thou' [> NE thou], þe [> NE thee] Lith tù 'thou', tavẽ 'thee' OCS ty 'thou', tę 'thee' Alb ti 'thou', ty 'thee' (enclitic të Doric Grk tú 'thou' Arm du 'thou', z-kʻez (< *twe-) 'thee' Hit zīg 'thou' (with a -g from the first person) Skt tvám thou, tvā́m 'thee' Toch B tuwe 'thou', ci 'thee'	accusative *téwe, and enclitic *te			Pronouns	JPM
*tuh□ri-s	cheese						Beekes
*tum-bʰ-	mound						Celt.

*tusskʲos	empty	Lith tùscias 'empty, poor' Rus tóščyj 'empty' NPers tuhī 'empty' Skt tucchyá- 'empty' Av taošayeiti 'lets fall, lets go'				Measure & Quantity	JPM
*tweis-	shake	Grk seíō 'shake' Av θwaēšah- 'fear, anxiety' Skt tvéṣate 'is excited'	Greek-Indo-Iranian isogloss			Motion	JPM
*twéks	skin	Skt tvák- 'skin' Hit tuekka- 'self body, person' Grk sák(k)os 'shield' (< skin shield)				Body (Upper)	JPM
*twem-	grow, swell	Lat. tumulus					Celt.
*twer-	stir, agitate	Lat trua 'scoop, ladle' OE þweran 'stir, churn, agitate' Grk otrū́nō 'drive, agitate' Skt tvárate 'hurry'				Motion	JPM
*twer-	take, hold	Lith tveriù 'seize, take hold of', turiù 'have, hold' OCS tvoriti 'shape, make' Grk seirá 'band, bond'	West Central			Give & Take	JPM
*twóh□r̥	curds, curdled milk	Grk tūrós, boútūros literally 'cow-cheese', i.e. 'butter' Rus toróg 'curds, soft cheese' Av tūiri- 'curdled milk, whey'				Meals	JPM
*tworkʲós	boar	OIr torc Av θβərəsa-		?		Fauna	JPM
*tyegʷ-	give way, pull oneself back	Grk sébomai 'worship, honour', sobéō 'frighten off, drive away' Skt tyájati 'stands back from something'	Greek-Indo-Iranian isogloss			Sacred	JPM
*u	interrogative particle (maybe which)						Beekes
*u(e)ihₗ-(o)n	wine		very very possibly not IE				Beekes
*ūd	upward, out (from under)	NE out dialectal Grk hu- 'on' Skt ud- 'out'				Position	JPM
*ud-	up, out		{1} Ir. us, uz has been generalized from the position before dentals.		with raised arms': Skt. úd-bāhu- [adj] (ŚB+) — YAv. uz-bāzu- [a		IIAL
*ud-tero-	higher						IIAL
*ud-tmh□o-	highest						IIAL
*udero-	abdomen, stomach	Lat uterus 'abdomen, womb' Grk húderos 'dropsy' [<*'swollen stomach'] Av udara- 'stomach' Skt udára- 'stomach'	Derives from *ud 'out'			Organs	JPM IIAL

*udrós	otter	Lat lutra NE otter Lith ū́dra Rus výdra Grk énudris Av udra- Skt udrá	formed from the word for 'water',*			Fauna	JPM IIAL
*udskʷeh₁	upwards		{1} [AL] For the reconstruction see Lubotsky 2001a.				IIAL
*udstero-	abdomen, stomach	Grk hustérā 'womb', hústros 'stomach' Toch B wästarye 'liver')	Derives from *ud 'out'			Organs	JPM
*uēnto-	wind						Beekes
*uh₂-no-	wane						IIAL
*uk(ʷ)sēn-	ox	OIr oss 'stag, cow' NWels ych 'ox' NE ox Av uxšan- 'bull' Skt ukṣán- 'bull' Toch B okso 'ox'	{1} [AL] aukṣá- [m] (AV+) is the name of a fragrance (cf. Griffiths - Lubotsky 1999 : 481). In spite of the common opinion, its etymological connection with the word for 'bull' is very uncertain.			Fauna	JPM Beekes IIAL
*ul-	howl, hoot	Lat uluc(c)us '[screech] owl' Skt úlūka- 'owl' Grk huláō 'howl' Lat ululāre 'howl' Skt ulūlú- 'ululating' Lith ulūlóti 'shout hello'				Animal Noises	JPM
*ulh□-mi-	wave						IIAL
*ulu-	owl	Lat uluc(c)us Skt úlūka-				Bird	JPM
*unsi-	bladder		{1} The Latin and Skt. words can be related if we assume that PIE *unsi- has acquired a secondary suffix -ti- in Sanskrit.				IIAL
*upo	under						Beekes
*ured	become weak		{1} Intransitive ('they became weak') or transitive-causative ('they made weak') (see Gotō 1987: 301f.). {2} The connection with the Greek word seems very uncertain as well as other cognates mentioned by Pokorny.	Present I: ávradanta [3pl.inj.med.] (RV 02.024.03) {1}			IIAL
*ureiḰ	turn (around)						IIAL
*urs-ni-	ram		{1} [AL] Cf. Gr. ἀρνειός [m] 'ram' ?	+vr̥ṣṇyā [instr.sg.] AVP 5.28.8			IIAL
*ursn-bʰo-	bull						IIAL
*usme	you (pl.)		{1} Contamination of *ušma- with *iu°(yūyám). {2} The form xšma- comes from *ušma- with an unexplained loss of the initial *u-.	acc. yuṣmā́n (RV+), abl. yuṣmát (RV+) gen. yuṣmā́kam (RV+, also yuṣmā́ka in RV 07.059.09 and 07.059.10), etc. yuṣmé [dat.gen.loc.] (RV)			IIAL

*usr- *uks-ēn	aurochs	OE ūr 'aurochs' OHG ūro □ ūrochso 'aurochs' Skt usrá- 'bull' usrā- 'cow' Pashto ūš- 'camel'	Note that the meaning shifted in Indo-Iranian	?		Fauna	JPM Beekes
*w(e)h□stos	empty	OIr fās 'empty' Lat vastus 'empty, unoccupied' NE waste	North-West may be an enlargement of the PIE *h₁eu(h□)- 'empty'			Measure & Quantity	JPM
*w(e)iḱ-	village, seat of tribe						Beekes
*w(e)rsēn	male	Lat verrēs 'boar' Latv vḗrsis 'ox' Av varəšni 'ram' (also 'male') Toch B kau□rṣe 'bull'.	Indicates the 'male as sire' In Avestan *ṛsḗn is added to words to create a special term for the (adult) male of the species, e.g. aspa-rəšan- 'stallion' or gau-arəšan- 'bull', while both in Sanskrit and Tocharian it is *wersēn that is so used, e.g. Skt go-vṛṣa- 'bull' and Toch B kau□rṣe 'bull' {1} [AL] For the middle verb vṛṣāy° (RV+), often translated 'to be horny, act like a bull' see vaṛṣ [2]. {2} [AL] The connection with the verb vaṛṣ [1] 'to rain' seems semantically not compelling and phonologically extremely difficult in view of Greek forms.	nom.sg. vṛ́ṣā, acc.s	having virile horses': Skt. vṛṣaṇ-aśvá	Family	JPM IIAL
*w(n)nákts	leader, lord	Grk (w)ánaks 'ruler, lord, prince' Toch A nātäk 'lord'				Social Organization	JPM
*w(o)h₂stu-	settlement						IIAL
*wadʰ-	wade	Lat vādō 'ford a river' NE wade Lat vadum 'ford' OE gewæd 'ford'	North-West			Swim	JPM
*wa ǵ -	split	Grk ágnūmai 'break apart, snap, crush' Hit wāki 'bites' Toch AB wāk- 'split open, separate but remain attached bloom' Lag vāgīna 'sheath, scabbard' Skt vájra-, the 'club' or 'splitter' of the god Indra.				Reductive Activities	JPM
*wá ǵ ros	cudgel	Av vazra- 'mace, cudgel'	The latter gives us the mythical vájra- 'cudgel' of the Indic god Indra where it also indicates the 'thunderbolt'. In Greek it occurs in the personal name of Meleāgros which means 'caring for the cudgel'.			Weapons	JPM
*wai	alas; woe	OIr fae Lat vae OE wā Lith va Grk ouaí Av vayōi NE woe Alb vaj 'lament' Arm vay 'woe, misfortune'				Human Sounds	JPM Beekes

*wailos	wolf	OIr fáel 'wolf' Arm gayl 'wolf'	possible from the 'wail' of the wolf			Fauna	JPM
*wak-	be empty	Lat vacō 'am empty' Hit wakk- 'fail, be lacking'				Measure & Quantity	JPM
*wal-	be strong, rule	Lat valeō 'am strong' OE wieldan 'govern' [> NE wield] Lith valdy´ti 'rule' OCS vladǫ 'rule' Toch B walo 'king'				Social Organization	JPM
*wálsos	stake	Lat vallus 'post, stake' NE wale 'stripe left on the skin by a blow' Skt vala- 'pole, beam'				Construction	JPM
*wápōs	vapour, steam	Lat vapor 'vapour, steam' Skt vāṣpá- □ bāṣpá- 'vapour, steam tears'				Air	JPM
*we(h□)	or		{1} [AL] The usual reconstructions *uē, uō seem less probable, because lengthening in an enclitic particle is hardly feasible.		or not': Skt. ná vā (RV 10.029.01, AVŚ 1.32.2, etc.) — YAv. na		IIAL
*we/obʰel-	weevil, beetle	NE weevil Lith vãbalas Rus veblica '(intestinal) worm'				Bug	JPM
*we/oh□r-	water	Luv. wār(sa) 'water' Av. vār 'rain'	{1} [AL] ToA wär, ToB war 'water' does not belong here, but rather reflects *udr-. {2} [AL] It is even conceivable that PIE *ueh ı r derives from PIE *uedr, so that originally this paradigm was not suppletive.	In the RV, the word is often disyllabic /vaH-ar/ < /*uaH-r/. It is only attested in the nom.sg. and may form a suppletive paradigm with udán-. {2}	Water	JPM IIAL
*we/oiḱ-	place of habitation						Beekes
*we/ondʰso-	facial hair	MIr fēs 'lip beard pubic hair' OPrus wanso 'Wrst beard' OCS vǫsŭ 'mustache' Khot vatca 'facial hair'				Hair	JPM
*we/osno-	price						Beekes
*wēben	cutting weapon, knife	NE weapon Toch AB yepe 'weapon, knife'				Weapons	JPM

*wed-	make wet		{1} [AL] Full grade *(H)aud- must be secondary in Indo-Iranian.	Present VII: unátti [3sg.act.] (RV+) undánti [3pl.act.] (RV+) undánt- [ptc.act.] (RV+) Perfect: ūdur [3pl.act.] (AV) Passive: udyate [3sg.] (RV) TA-Ptc.: utta- (Br.)			IIAL
*wed-	raise ones voice	OHG far-wāzan 'deny, disavow' Lith vadinù 'call, name' OCS vaditi 'accuse' dialectal Grk wodáō 'lament' Skt vádati 'speaks, says raises one's voice, sings'				Speech	JPM
*wedʰ	bride, young woman						IIAL
*wedʰ-	marry, carry off						Beekes
*wedʰ-	push, strike	OIr fāiscid 'presses' but fodb 'weapon' Lith vedegà 'a kind of axe' Grk éthei 'destroys' Hit wezz- 'strike, urge' Skt vadh- 'strikes, pushes, slays' Toch B wät- 'fight' *wedʰris 'castrated' Grk ethrís Skt vádhri-				Conflict	JPM
*wédʰris	castrated	Grk ethrís 'eunuch' Skt vádhri- 'castrated' NE wether	Has a more basic meaning 'strike' in Luvian so it is not entirely certain that 'castration' was the meaning in Proto-Indo-European.			Health&Sickness	JPM
*wedmo/eha-	bride-price	OE witumo OCS věno Grk hédnon [< *wedmon]	The price paid by the groom's family to the bride's to compensate the latter for the loss of a worker			Marriage	JPM
*wedns	water (gen)		heteroclitic?				Beekes
*weg-	plait, weave	OIr figid 'weaves' Lat vēlum 'sail, cloth' NE wick Skt vāgurā- 'net for catching animals'	Skt vāgurā suggests something plaited rather than woven.			Textiles	JPM
*weǵ-	strong	Lat vegeō 'enliven, stir up' Skt vắja- 'strength'				Health&Sickness	JPM

*weǵʰ-	bear, carry also ride drive?	Lat vehō 'bear' NE weigh (as in 'weigh anchor') Lith vežù 'drive' OCS vezǫ 'drive' Alb vjedh 'steal' Grk (w)ekhéto 'he should bring' Skt váhati 'carries'		Present I: váhati [3sg.act.] (RV+), váhate [3sg.med.] (RV+) Aorist S: vakṣat [3sg.subj.act.] (RV+), ávāṭ [3sg.act.] (RV 10.015.12) Aorist SIS: vākṣīt [3sg.inj.act.] (AV+) SI-impv: vakṣi (RV-YVm), later vákṣva [med.] (VS+) Aorist R: voḷhám [2du.impv.act.] (RV) uhīta [3sg.opt.med.] (RV) Perfect: uvāha [3sg.act.] (RV+) ūhire [3pl.med.] (RV) Passive: uhyáte [3sg.] (RV+) Intensive: ūhyā́te (?) [3sg.subj.med.] (RV 01.120.11) vanīvahy° (ŚB+) Fut: vakṣy° (AV+) TA-Ptc.: ūḍhá- (RV+) Inf: vóḷhum,		Convey	JPM
*wegʰ- *weǵʰ-	shake, set in motion	Lat vexāre 'shake, vex' Goth wagjan 'shake' Grk gaiḗ-okhos 'earth-shaking' Toch wāsk-/wäsk- 'move, budge, have motion [intr.] move [tr.]'				Movement	JPM
*weǵʰitlom	vehicle	Lat vehiculum, Skt vahítram				Transport	JPM
*weǵʰnos	wagon	OIr fēn Toch B yakne 'way, manner' OE wægn > NE wain *weǵʰitlom Lat vehiculum Skt vahítram OCS vozŭ 'wagon' Grk ókhos 'chariot' Mycenaean wo-ka 'chariot'	from the verbal root *weǵʰ- 'ride in a vehicle' and the word is found in the e-grade in Celtic and Tocharian			Transport	JPM

*we ǵʰos	way, path	Lat via 'way, road' Latv veža 'track'	North-West From *we ǵʰ- 'move'			Roads	JPM
*wegʷ-	wet	Lat ūvidus 'wet' ON vǫkr 'wet, moist' Grk hugrós 'liquid, fluid'	West Central			Qualities	JPM
*wegʷʰ-	speak solemnly	Lat voveō 'vow, promise solemnly, consecrate' Skt vāghát- 'sacrificer, supplicant, institutor of a sacrifice' Arm gog 'say'				Formal Speech & Song	JPM
*wehₐros	true	OIr fīr Lat vērus OHG wār OCS věru 'belief	North-West			Values	JPM
*wehₐt-ehₐ-	poet, seer, song, fury		meaning unclear				Beekes
*wehₐuot	so long as						Beekes
*wehₐb-	cry, scream	NE weep Lith võbyti 'summon at court' OCS vabljǫ 'cry'	North-West			Speech	JPM
*wehₐt-	(suppurating) wound	Lith votìs 'ulcer, abscess, boil' Grk ōteilḗ 'wound'				Health&Sickness	JPM
*wehₐp-	body of water	Lith ùpė 'river' OCS vapa 'lake' Hit wappu- 'wadi, river bank' Skt vāpī- 'large pond'				Water	JPM
*wéi *weyóm (emphatic)	1P we	OIr nī 'we, us' Lat nōs 'we, us' OE wē 'we' Lith mēs 'we' OCS my 'we' Alb ne (< *nōs) 'we, us' Grk hēmeîs 'we' Arm mek' 'we' Hit wēs 'we' Skt vayám 'we' Toch B wes 'we, us'	Here again there have been shifts from other forms and influences from different numbers seen, for example, in the tendency of Baltic, Slavic, and Armenian to replace the initial *n- by m-, either influenced by the first person singular pronoun or because of the influence of the first person plural verbal endings in *-m-, or both.	obl. asmá-, encl. nas		Pronouns	JPM IIAL
*wei(hₐ)-	plait, wattle twist	Lat vieō 'bind, interweave' Skt váyati 'weaves' NE withy Lat vītis 'vine' ON veggr 'wall'				Textiles	JPM

| *wei(h□)- | go after | Lat vīs 'thou wantest'
Lith vejù 'chase, drive, pursue'
Grk híemai 'strive'
Skt véti 'follows, strives'
Toch B wāyā- 'will drive, lead' | {1} [AL] For v(a)iiemi (Yt 15.43) and apa …v(a)iieiiti (Yt 8.23) see Kellens 1984: 89. | Present II: véti [3sg.act.] (RV+), viyánti [3pl.act.] (RV+), véḥ [2sg.inj.act.] (RV), vayati [3sg.subj.act.] (RV), vīhí [2sg.impv.act.] (RV
next to irregular vihí and 2pl. vitā)
Aorist S: véṣat [3sg.subj.] (RV)
SI-impv: véṣi (RV)
Perfect: vivā́ya [3pl.act.] (RV)
vivye [3sg.med.] (RV)
Intensive: veveti [3sg.act.] (RV), vevīyate [3sg.med.] (RV)
TA-Ptc.: vītá- (RV+) | | Travel | JPM
IIAL |

*weid-	see, know (as a fact)	Lat videō, NE wit, Grk oîda,	{1} Roots ved [1] and [2] are etymologically identical, but they function as separate roots already in PIIr.	Present VII>VI: vindáti [3sg.act.], vindáte [3sg.med.] (RV+) Aorist A: vidát [3sg.inj.act.] (RV+), vidất [3sg.subj.act.] (RV+) Aorist S: avitsi [1sg.med.] (RV) Perfect: vivéda [3sg.act.], vividé [3sg.med.] (RV+) Passive: vidyáte [3sg.] (RV+) Aorist mediopass: avedi [3sg.], (saṃ-)vidāná- [ptc.] (RV) Intensive: vi-vévidat- [ptc.act.] (RV), vévidāna- [ptc.med.] (RV) TA-Ptc.: vittá- 'found' (RV+) Inf: vidé, ā-víde (RV)	'looking for … finds': Skt. icchán … avidat (RV 10.005.05) — YAv. isəmnō … vīnasti (V 7.79) 'to find the way/place': Skt. gātúm … vividrire (RV 02.021.05) — YAv. gātuuō viṇdən (V 2.8) 'to find the cow(s)': Skt. gấ ávindan (RV 01.062.02) — OAv. gąm vīdat_ (Y 51.5), YAv. vīdat_.gu-[m] PN (Yt 13.127) 'to acquire fame': Skt. śrávo vivide (RV 04.026.05) — YAv. vīđisrauuah- [m] PN (Yt 13.119)	Knowledge & Thought	JPM IIAL
*weides-	what is seen	MIr fīad 'face to face' NE -wise as in 'lengthwise' Lith véidas 'face' OCS vidŭ 'appearance' Grk eiudos 'appearance' Skt védas- 'knowledge'				Knowledge & Thought	JPM
*weig/k-	turn, yield	ON vīkja ⟶ vīkva 'turn' OE wīcan 'yield' Grk eíkō 'yield' Av vaēg- 'throw' Toch AB wik- 'disappear'				Motion	JPM

*weihₗ	wrap, envelop		{1} [AL] The meaning of prá vīyáte is 'to be covered = impregnated'. {2} [AL] The root actually always appears in the zero grade in IIr., the present reflecting *uiH-aia-.	Present AYA: vyáyati [3sg.act.] (RV+) Aorist A: ávyata [2pl.act.] (RV 01.166.04), avyata [3sg.med.] (RV) Perfect: -vivyathur [2du.act.] (RV 06.072.05, Ep.), vivyé [3sg.med.] (RV) Passive: vīyáte [3sg.] (AV+) {1} TA-Ptc.: vītá- 'veiled' (RV+)		IIAL
*wéihₗ(e)s-	strength, vitality	Lat vīs 'power' Grk Ís 'power' Skt váyas- 'vitality, growth'	{1} Relation to vayi is uncertain.		Health&Sickness	JPM IIAL
*weihₗs	vital force strength	Lat vīs Grk Ís	A 'vital force' and has been linked with one of the words for 'man', *wihₗrós		Conflict	JPM
*weik-	appear	Lith výkti 'come, go' Grk eîke 'it appeared good' Av visaiti 'presents itself' Skt viśati 'enters' OE wīh ᴅ wēoh 'image, idol' Grk eikṓn 'image, likeness'			Sight	JPM
*weik-	consecrate	Lat victima 'sacrificial victim' NE witch Goth weihan 'consecrate' NHG Weihnachten 'Christmas Eve' Skt vinákti 'select out'.			Sacred	JPM
*weik-	fight	OIr fichid 'fights' Lat vincō 'conquer' OE gewegan 'fight' Lith apveikiù 'defeat' Rus vek 'force'	North-West		Conflict	JPM

Sheet1

*weiḱ-	settle down			Present IV: viśanti [3pl.act.] (RV+), áviśat [3sg.impf.act.] (RV+), viśánte [3pl.med.] (RV+) Aorist R: áviśran [3pl.med.] (RV 08.027.12) Aorist S: ávikṣmahi [1pl.med.] (RV) Aorist IS: veśīt [3sg.inj.act.] (RV 08.060.20) Perfect: vivéśa [3sg.act.] (RV+), áviveśīḥ [2sg.ppf.act.] (RV 03.032.10), viviśre [3pl.med.] (RV 08.101.14+) Fut: vekṣy° (Br.+) Caus: veśáy° (RV+) TA-Ptc.:°viṣṭa- (RV+) Inf: ā-víśam (RV 02.024.06)	*weiḱ-mn- 'abode'		IIAL
*weip-	set in motion, agitate	Av vip- 'throw, ejaculate' Skt vépati 'trembles' Toch B wip- 'shake'	Indo-Iranian-Tocharian isogloss			Movement	JPM
*weip-	swing, shake		{1} For the meaning see Kümmel 2000: 498.	Present I: vépate [3sg.med.] (RV) Present AYA: vipáy° 'to become inspired' (RV) Aorist R: vipāná- [ptc.med.] (RV) Perfect: vivipre [3pl.med.] (RV 03.032.04) {1} Caus: vepáy° 'to shake, agitate' (RV+) Aorist RED: avīvipat [3sg.act.] (RV)			IIAL

*weip- *weib-	turn	Lat vibrāre NE wave, wipe Skt vépate				Motion	JPM
*weis-	ooze out	Skt aveṣan 'they flowed' NE ooze a number of European river names, e.g. Weser, Vistula	it underlies the noun *wis- 'poison'			Liquid Motions	JPM
*weis-	twist, wind around	NE ware (seaweed Lith vy´styti 'swaddle' Skt véṣa- 'dress' Rus víkh(o)rĭ 'whirlwind' Arm gi 'juniper'				Motion	JPM
*weit-	willow	OIr fēith 'some kind of twining plant' Lat vītis 'vine' NE withy Lith vytìs 'willow' Rus vítina 'branch' Grk ītéā 'willow' Av vaēiti- 'willow' Skt veta- 'reed'				Trees	JPM
*weḱ-	wish, want	Hit wēkmi 'I wish' Av vasəmi 'I wish' Skt váśmi 'I wish' Grk hekṓn 'willingly'	{1} [AL] Further nonce forms are Present III: vavákṣi [2sg.] 08.045.06, vivaṣṭi [3sg.] 07.016.11, and Present I: ávaśat [3sg.impf.] 02.022.01.{2} [AL] uśánā [adv] 'eagerly' (RV) most probably does not exist, cf. Jamison 2007: 156f. See s.v. uśánā-. {3} [AL] According to Kümmel 2000: 479f., these perfect forms rather belong to vāś.	Present II: váṣṭi [3sg.act.] (RV+) uśmási [1pl.act.] (RV+ 02.031.06 irregularly śmasi) uśánt- [ptc.act.] (RV+) váśas [2sg.subj.act.] (RV) medial forms are rare: uśānáḥ [ptc.med.] and nonce uśámānaḥ {1} Perfect: vāvaśúr [3pl.act.] (RV), vāvaśe [3sg.med.] (RV) {3}		Desire	JPM IIAL

*wekʷ-	speak	OIr focal 'word' Lat vocō 'call' OHG giwahanem 'recall' OPrus wackitwei 'entice' Grk eiupon 'spoke' Arm gočem 'call' Av vak- 'say' Skt vívakti 'speaks, says' Toch B wesk- 'speak, say'	O-grade present formation *wokʷti {1} [AL] The RV perfect forms vavāca [3sg.act.] and vavakṣé [2sg.med.] are nonce (cf. Kümmel 2000: 441ff.). {2} [AL] Cf. already vivakṣú- [adj] (AV) RV vívakṣase is unclear, for a discussion see Heenen 2006: 219.	Present III: vívakti [3sg.act.] (RV+) Aorist RED: ávocat [3sg.act.] (RV+), vócat [3sg.subj./inj.act.] (RV), vóce [1sg.subj.med.] (RV) Aorist mediopass: avāci [3sg.] (RV+) Perfect: uvā́ca [3sg.act.] (RV+), ūcúḥ [3pl.act.] (RV+), ūciṣe [2sg.med.] (RV+) {1} Passive: ucyáte [3sg.] (RV+) Fut: vakṣyá° (RV+) Intensive: ávāvacīt [3sg.impf.act.] (RV) Caus: vācay° (Br.+) Desid: vívakṣant- [ptc.act.] (VS+) {2} TA-Ptc.: uktá- (RV+) Inf: váktave (RV), pra-vā́ce (RV)	to say with the tongue': Skt. uváktha	Speech	JPM IIAL
*wekʷ-	speak utter forth	Grk. v. ēpēn, n. épos Skt. vacas- 'speech, pronouncement', ukhtam 'hymn' Av. vaca-tašti- fashioning of an utterance Toch A wäktasurñe 'eulogy' OHG giwahan 'mention, tell of' giwaht 'fame'	Also, OIr anocht 'not (to be) uttered cf. Skt anukta.			Poetics	JPM
*wekʷ-es-	word, speech				'sweet speech': Skt. vácaḥ svādóḥ svā́dīyaḥ (RV 01.114.06) — Gr. ἡδυεπής 'to pronounce a speech': Skt. ávocāma … vácaḥ (RV 01.078.05) — Gr. ἔπος εἰπεῖν 'well-spoken word': Skt. sūktá-vácas (RV) — YAv. hūxtəm vacō		IIAL

*wekʷésh₂	song					Beekes
*wel-	die	ON Valhalla 'hall of the dead' ON valr 'one who dies on the battlefield' Latv velis 'spirit of the dead' Czech valěti 'fight, make war' Toch A wäl- 'die', walu 'dead'				Health&Sickness	JPM
*wel-	grass	NWels gwellt 'grass' OPrus woltis 'head of grain' Hit wellu(want)- 'grass'				Plants	JPM
*wel-	see	NWels gweled 'see' Toch B yel- 'examine, investigate' Lat voltus 'facial expression, appearance, form' OE wuldor 'fame'				Sight	JPM
*wel-	turn, wind, roll	Lat volvō Grk eiléō Skt válati				Motion	JPM
*wel-	warm, heat	NE well as 'well up' [from *'boil'] Alb valē 'heat, boiling' Arm gol 'heat'	West Central			Qualities	JPM
*wel-	wish, want	MWels gwell 'better' Lat volō 'want' NE will Lith pa-vélmi 'wish' OCS veljǫ 'wish' Arm geł 'beauty' Av var- 'choose, wish' Skt vṛṇīté 'chooses'				Desire	JPM
*wel(h₂)-	strike, tear at	Hit walh- 'strike, attack' as well as 'pluck, tear' Lat vellō 'strike' H.Luvian wal(a)- Toch A wäl- 'die' ON valr (whence we have both Valhalla and Valkyrie)				Reductive Activities	JPM
*weld-	crush, grind, wear out	NWels gwlydd 'mild, soft, tender' NEwilt Toch B wālts- 'crush, grind'				Reductive Activities	JPM

*welg-	move up and down			{1} [AL] On semantic grounds, it is difficult to connect valgú- [adj] 'handsome, beautiful' (RV+) with this verb (< 'lively'?). {2} [AL] The appurtenance of Old Khotanese valj- [verb] 'to go astray, be decieved' (< *u̯arǰai̯a- ?) is very uncertain. {3} [AL] The non-palatal -g- in this thematic present is unique and in need of explanation. AiGr. I: 141 points out that -lc- and -lj- do not occur in Sanskrit, which is not really surprising because the cluster -lg- is extremely rare. Jasanoff Heth. und Idg. (ed. Neu / Meid) 85 (XXX) assumes an original athematic present with o- grade in the root, which, considering the semantics (intensive), seems attractive, but the phonological problem remains.	Present I: válgati [3sg.act.] (AV+) Caus: abhi-valgay ° (Sū.)			IIAL
*welh₁	want, wish			{1} [AL] 2du.act. avṛṇītam (RV 01.180.04) is nonce. {2} [AL] The sigmatic forms 3pl. avṛṣata (AV+), 1sg. avṛṣi (Up.), etc. are secondary. {3} [AL] The aniṭ forms of this root in Sanskrit are of secondary origin. The metrics of the RV clearly shows that the root was still seṭ in this text: vavṛṣé and vavṛmáhe must be scanned /vavūrṣe/ and /vavūrmahe/, respectively avri must be trisyllabic /avuri/ for 3sg. vṛta and for the TA-Ptc. vṛtá- we can read /(v)ūrta/, cf. Kümmel 2000: 459.	Present IX (med.) {1}: vṛṇīté [3sg.med.] (RV+) Aorist R: avri /avuri/ [1sg.med.] (RV 04.055.05) vṛta [3sg.inj.med.] (RV+) {2} váras [2sg.conj.act.] (RV) vurīta [3sg.opt.med.] (RV, with restored v-), urāṇá- [ptc.med.] (RV) Perfect: vavṛṣé [2sg.med.] (RV), vavṛmáhe [1pl.med.] (RV) TA-Ptc.: vṛtá- (RV+) {3}	'choice share': Skt. váreṇyam bhāgám (RV 10.035.07) — OAv. vairīm bāgəm — Elam.-Iran. *varya-bāga- PN 'to make a (right) choice': Skt. pravará- [n] 'choice of the priest' (KS+) — OAv. frauuaši- 'guardian spirit' (< *u̯ár-ti-) 'to choose for praising': Skt. práśastaye … avṛṇīta (RV 09.070.06) — OAv. sąstrāi vərənē (Y 46.3)		IIAL
*welh₁bʰr-	pull smbds leg			{1} [AL] Considering the form of the root, this must be an original compound.	Present I: úpa-valhāmasi [1pl.act.] (VS 23.51), úpa-valhante [3pl.med.] (ŚB 12.4.2.8), upa-válheta [3sg.opt.med.] (ŚB 11.4.1.9) TA-Ptc.: pra-valhita- (GB+)			IIAL

*weliko/ehₐ-	willow	NE NE willow Grk elíkē 'willow'			Trees	JPM
*welk- *welg-	wet	OIr folc 'heavy rain' OHG welk 'wet, moist, mild' Lith vìlgau 'moisten' OCS vlaga 'moisture juice of plants'	North-West		Qualities	JPM
*wélsu-	meadow, pasture	Hit wēllu- Grk Elysian ēlúsios	Derives from *wel- 'grass'		Plants	JPM
*welutrom	case	Lat involūcrum 'case' Grk élutron 'case' Skt varútra- 'cloak'	As a derivative from ?*wel- 'wind, turn', it may have been independently formed in some or all the languages		Containers	JPM
*wemhₐ	vomit			Present II: avamīt [3sg.impf.act.] (RV+), váman [3pl.subj.] (RV 10.108.08) Perfect: uvāma, vavāma [3sg.act.] (ŚB/ŚBK) TA-Ptc.: abhí-vānta- 'spit out' (MS+)		IIAL
*wémhₐmi	spew, vomit	Lat vomō Lith vémti Grk eméō Av vam- Skt vámiti			Vital Functions	JPM

*wen	get, win		{1} [AL] RV 09.072.08 vasīmahi with secondary loss of the nasal. {2} The seṭ-forms are analogical after the root sani. The same is probably valid for class V present, as opposed to Avestan thematic one. {3} [AL] As demonstrated by Kümmel 2000: 447ff., perfect forms with long reduplication belong to vani 'to love'. {4} [AL] vaṇíj- [m] 'merchant' (RV+) can hardly be related to van-.	Present V: vanóti [3sg.act.] (RV+), vanute [3sg.med.] (RV+) Aorist R: vánāva [1du.subj.act.] (RV), vanate [3sg.subj.med.] (RV), vanémā́ [1pl.opt.] (them.) (RV), vanemahi [1pl.opt.med.] (them.) (RV) Aorist S: váṃsi [1sg.inj.med.] (RV), váṃsat [3sg.subj.act.] (RV), vaṃsate [3sg.subj.med.] (RV), vaṃsīmáhi [1pl.opt.med.] (RV) {1} váṃsva [2sg.impv.med.] (RV) Aorist IS: vaniṣīṣṭa [3sg.opt.med.] (nonce) (RV) Perfect: vavanmá́ [1pl.act.] (RV), vavanvā́ṃs- [ptc.act.] 'winner' (RV) {3} vavné [3sg.med.] (RV)			IIAL
*wen-	strike, wound	NWels gweint 'bored through' Hit wen- 'copulate with' suggest a piercing motion NE wound Arm vandem 'destroy'				Conflict	JPM
*wendʰ-	(a single) hair	MIr Wnd 'a single hair' OHG wint-brāwa 'eyelash' Grk íonthos 'hair root, young beard acne'				Hair	JPM
*wendʰ-	wind, twist	NE wind Grk kánnathron 'basketcarriage' Skt vandhúra- 'wicker carriage' Umbrian pre-uendu 'turn' Arm gind 'ring' Toch AB wänt- '+cover, envelop'	nominal forms that suggest any object produced by twisting flexible branches or osiers		*wendʰ-ur- 'wickerwork' ?	Motion	JPM

*weng-	bend	NE wink Lith véngti 'try to avoid' Alb vang 'felloe' Skt váṅ gati 'limps'				Bend and Press	JPM
*wenh□-	desire, strive to obtain	ON vinr 'friend' Av vantā 'wife', across 'lust' Lat venus Skt vánas- Hit wen- 'copulate' Toch B wīna 'pleasure' An *-sk- suffixed form gives NE wish Skt váñchati 'wishes, desires'				Desire	JPM
*wenk-	curve		{1} [AL] For a recent discussion of this form see Kulikov 2001 s.v.	Present: váñcati [3sg.act.] (RV-Kh., AV+) Perfect: vāvakre [3pl.med.] (RV) Passive: vacyáte [3sg.med.] (RV) {1}			IIAL
*wenVst(r)-	(ab)omasum	Lat venter 'belly' OHG wenist 'belly, omasum' Grk ḗnustron 'abomasum' Skt vaniṣṭhú- 'part of the entrails of a sacrificial animal'				Organs	JPM
*wer-	boil, cook	Lith vérdu 'cook, boil' OCS vĭrjǫ 'cook, boil' Hit war- 'burn' Toch A wrātk- 'cook'				Food Prep	JPM
*wer-	crow	Lith várna Rus voróna Toch B wrauña				Bird	JPM
*wer-	find	Arm gerem 'take prisoner' Lith su-resti 'catch'	West Central			Give & Take	JPM
*wer-	perceive, give attention to	Lat vereor 'honour, fear' NE ware and wary Latv vẽrt 'look, gaze, notice' Grk oûros 'guard', oráō 'see' Hit werite- 'put one's attention' Toch AB wär- 'smell'				Sight	JPM
*wer-	surround, cover, contain	Lat aperio Grk érumai Skt vṛṅóti				Motion	JPM
*wer-b(ʰ)-	oversee, protect	OPrus warbo 'protects' Toch AB yärp- 'oversee, observe, take care of '				Sight	JPM
*wer ǵ -	shave, shear	Toch B wärk- 'shear' Arm gercum 'shave, cut hair'	poorly attested (an Armenian-Tocharian isogloss)			Hair	JPM

*werǵ -	work ?strength, fury	NE work Grk hrézō 'do' Av vərəzyeiti 'works' Toch B warkṣäl 'power, strength, energy'				Being & Doing	JPM Celt.
*werh□-u-	protector		{1} [AL] For an analysis and separation from var [2] see Lubotsky 2000.				IIAL
*wérh□us	broad, wide	Grk eurús 'broad, wide' Av vouru- 'broad, wide' Skt urú- 'broad, wide' Toch B wartse				Shape	JPM
*werno/eh□-	alder	MIr fern 'alder' Alb verr 'alder' Arm geran 'alder' Skt varaṇa- 'Crataeva roxburghii'				Trees	JPM
*wers	lift oneself		{1} [AL] For a recent discussion of the verb see Kümmel 2000: 474ff. {2} [AL] For a discussion of possible derivatives, attested in the RV (svávr̥ṣṭi-, vr̥ṣad-añji-), see Scarlata 1999: 526f. {3} [AL] See Kloekhorst 2008: 969ff. for the semantics.	Present ĀYA: (ā́) vr̥ṣāyáte [3sg.med.] (RV+) Aorist A: ā́ vr̥ṣasva [2sg.impv.med.] (RV) Perfect: úd vāvr̥ṣasva [2sg.impv.med.] (RV), (ud)vāvr̥ṣāṇá- [ptc.med.] (RV) {1}			IIAL
*wers-	± thresh	Lat verrō 'sweep (grain after threshing)' Latv vārsmis 'unwinnowed heap of grain' OCS vrěšti 'thresh' Hit warsi 'plucks, harvests'				Agriculture	JPM
*wers-	peak	OIr ferr 'better' [< *'higher'] Lat verrūca 'varus, pimple' OE wearr 'sill' Lith viršùs 'highest point' Rus verkh 'peak' Grk hérma 'point, top' Skt várṣman- 'height, peak'	The Greek word for 'heaven', ouranós, may belong here as well if, as has been suggested, it comes from *worsmnó-	*wers-men-		Position	JPM IIAL

*wert-	turn	OIr do-fortad 'pour out' Lat vertō 'turn' Lith verčiù 'turn' OCS vrĭtĕti sę 'draw around' dialectal Grk bratánon 'ladle' Av varət- 'turn' Skt vártate 'turns' Toch A wärt- 'throw' Sog wrtn 'chariot' Mitanni -wartanna 'lap around a horse track' OE weorþan 'become' OHG werdan 'become'	{1} [AL] For the distribution of the reduplication vowel in the perfect, for its meaning and an analysis of the other reduplicated forms see Kümmel 2000: 463ff.	Present I: vártate [3sg.med.] (RV+) Aorist R: avart [2,3sg.act.] (RV+) Aorist mediopass: varti [3sg.] (RV+) ávr̥tran [3pl.] (RV), later replaced by avr̥tsata (RV+) to pf. stem samā́-avavarti [3sg.] (RV+), ā́-avavr̥tran [3pl.] (RV) Aorist RED: vavr̥tat [3sg.act.] (them.) (RV) Perfect: vāvárta [3sg.act.] (RV), vāvr̥túḥ [3pl.act.] (RV) {1} Intensive: (ā́) varīvarti, várvarti [3sg.act.] (RV+) ā́varīvar [3sg.impf.] (RV) ánu ā́varīvur [3pl.impf.] (RV analogical) (RV) Desid: vívr̥tsa- (RV+) Caus: vartáyati [3sg.act.] (RV+) Aorist RED: avīvr̥tat [3sg.act.] (RV+) TA R'...		Motion	JPM IIAL
*werwer-	squirrel	ScotsGael feòrag Lat vīverra OE āc-weorna (<*'oak-squirrel') Lith véverìs Rus véverica OPers varvarah				Fauna	JPM

*wes-	be dressed	Grk énnūmi 'get dressed' Arm z-genum 'get dressed' Hit wess- 'be dressed' Skt váste 'wear' Toch B wäs- 'be dressed' Lat vestis 'clothes'	As we can see, in Baltic and Slavic it speciWcally pertains to the wearing or putting on of shoes.	Present II: váste [3sg.med.] (RV+) avasran [3pl.impf.med.] (RV 04.002.19) vásāna- [ptc.med.] (RV+) Aorist IS: avasiṣṭa [3ag.med.] (RV), vásiṣvā́ [2sg.impv.med.] (RV) Perfect: vāvase [3sg.med.] (RV 08.004.08), vāvasāná- [ptc.] (RV) Caus: vāsáy° (RV+) 'to clothe', Fut: (to the caus. stem) vāsayiṣyáse [2sg.med.] (RV)	to wear clothes': Skt. vástrāṇi vas- (F	Textiles	JPM IIAL
*wes-	crush, grind, pound, wear o	Hitt wesuriya- 'press, oppress' OE wisnian 'dry up, wither, waste away' Alb veshk 'wither, shrivel, wilt'				Reductive Activities	JPM
*wes-	graze	OIr fess 'food' OE wesan 'feast, cause to graze' Hit wesi- 'pasture', wesiya- 'graze' Av vāstar- 'herdsman' Toch A wäsri 'grassy area, pasture'		(< *su-vásar-a-)		Food & Drink	JPM IIAL
*wes-ent-o-	spring						IIAL
*wes-no-	purchase	Lat vēnum 'that which is sold' OCS věno 'bride-price' Arm gin 'price' Skt vasná- 'price' Grk ônos 'price [usually of a captive]'	derives from *wes- 'buy' (e.g. Hit wasi 'buys')			Exchange & Property	JPM
*wes-tro-	garment				'to make clothes': Skt. vástrā kar, vástrā … súkṛtā (RV 05.029.15) — YAv. vastrā̊sca kəšā̊ (Yt 17.14) 'to wear clothes': Skt. vástrā … vásāna- (RV 09.097.02) — YAv. vastrā̊ vaṇhaiti (Yt 10.126)		IIAL

*wésperos *wékeros	evening	Lat vesper Lith vãkaras OCS vec̃erŭ Grk hésperos Arm gišer	West Central			Time		JPM
*wésr̥	spring	Lith vãsara Skt vasantá- OIr errach Lat vēr OCS vesna Grk éar Arm garun Av vaŋri 'in spring' Toch B ysāre < *wes-eh□-ro-, originally 'spring wheat'	r/n heteroclitic {1} [AL] The deviating meaning of the Skt. words is strange. We might look for the original meaning 'spring' in the compound vasarhá 'killing in the spring (?)' and possibly in RV 08.048.07 sóma rājan prá ṇa āyūṃṣi tārīr áhānīva sū́ryo vāsarā́ṇi 'O king Soma, prolong our life-time, as Sūrya prolongs the days in the spring' (or áhāni vāsarā́ṇi means 'day-time'?). {2} [AL] In spite of the fact that it is attractive to reconstruct *h₂– in this word and to connect it with the root for 'to shine' (vas [2]), Gr. ἔαρ clearly points to an absence of the initial laryngeal			Time		JPM IIAL
*wéstor-	herdsman	Hit westara- 'herdsman' Av vāstar- 'herdsman'	Derives from the verbal root *wes- 'graze'.			Occupations		JPM
*wesu- ??*h₁wesu-	excellent, noble	OIr feib 'in excellence' Luv wāsu 'good' Av vohu- 'good' Skt vásu- 'good' Names: Gaul Vesu-avus Lat Vesuna (name of a goddess) Germanic tribal name Wisi (e.g. the Visigoths)		vásvī- [adj f] (RV+) vásyas- [comp] (RV+), vásīyas- [comp] (TS+) vásiṣṭha- [sup] (RV+)	'(possessing/encompassing) all goods': Skt. viśvávasu- [adjj] (RV+), vásu víśvam (RV+) — OAv. vīspā.vohu- [adj], vīspācā vohū 'provider of goods': Skt. dā́tar- … vásu- (RV+) — YAv. dātārəm vohunąm — Gr. δωτῆρες ἐάων 'having goods as fame': Skt. vásu-śravas- (RV+) — OAv. vaŋhāu srauuahī — Elam.-Iran. *vau-çavah- [m] PN — Illyr. Ves-cleves- [m] PN 'possessing the light of goods': Skt. vásu-rociṣ- [m] PN (RV+) — YAv. vohu-raocah- [m] PN — Elam.-Iran. *vahu-raučah- [m] PN — NP behrōz [m] PN 'most excellent, the best': Skt. śréṣṭham … vásiṣṭham (AV) — OAv. vahištəm … sraēštəm	Values		JPM IIAL
*wésu-ḱléuos	fame (good)							Beekes

*wet-	see (truly)	OIr fethid 'sees, pays attention to' Lat vātēs 'seer, prophet' Skt ápi vatati 'is familiar with, is aware of'		Present I: ápi ... vatema [1pl.opt.act.] (RV) Caus: apivātáyant- [ptc.act.] (RV), Aorist RED: ápy-avīvatan [3pl.act.] (RV 10.013.05)		Sight	JPM IIAL
*wet-s-o-	yearling		{1} A derivative of PIE *uet-es- 'year', cf. vatsará-. Similar formations are Alb. viç 'calf', Go. wiþrus 'lamb' Gr. ἔταλον [n] 'young animal'.				IIAL
*wet-us	old						Beekes
*wet(-es)	year	OIr feis 'sow' NE wether with -u(so)- 'old' Lat vetus Lith vẽtušas OCS vetŭchŭ Sogdian wṯšnyy				Time	JPM IIAL
*wételos	yearling	Lat vitulus 'calf, yearling' Grk ételon 'yearling' Skt sa-vātára- 'having the same calf'	A related form gives NE wether			Fauna	JPM
*weyt-i-	willow						Celt.
*wi-	apart, in two, asunder	Av vi- 'apart, off' Skt vi- 'asunder' Lat vitium 'defect' [> by borrowing NE vice] NHG wider				Position	JPM
*wi-dʰhᵢ-	put asunder	Lat dīvidō 'divide' Latv vidus 'interior' Hit widā(i)- 'bring' Skt vidhā́ 'distribute'				Measure & Quantity	JPM
*wi(n)ǵ-	common elm (Ulmus glabra)	Kurdish viz NE wych-elm Lith vìnkšna 'elm' Rus vjaz 'elm' Alb vidh 'elm'				Trees	JPM
*widʰeweh□- *hᵢuidʰh₂eweh₂-	widow	OIr fedb Lat vidua NE widow OPrus widdewu Rus vdová ?Alb ve (if not a loan from Latin) Hit SALu(i)dati- Av viavā Skt vidhávā- Grk ēítheos 'bachelor'	This word is usually taken as a nominal derivative of a verb *wi- hehᵢ- attested only in Anatolian, meaning 'separate' {1} [AL] For the reconstruction see Lubotsky 1994a.			Marriage	JPM IIAL

Root	Meaning	Cognates	Notes	Forms	Citations	Category	Source
*widʰu	tree, forest	OIr fid 'tree' NE wood	North-West			Trees	JPM
*widmén-	knowledge	Grk ídmōn 'skilled' Skt vidmán- 'wisdom' Toch B ime 'consciousness, awareness, thought'				Knowledge & Thought	JPM
*wih□iḗn	grapevine					Plants	JPM
*wih□rós	man warrior, hero	OIr fer 'man' Lat vir 'man' NE werewolf Lith výras 'man, husband' Av vīra- 'man' Skt vīrá- 'man, husband'	{1} With laryngeal loss in compounds? {2} Possibly related to Skt. váyas-.		killing men': Skt. vīra-hán- [adj] (RV,	Health&Sickness	JPM IIAL
*wih□rós	man, husband	OIr fer 'man, husband' Lat vir 'man, husband' OE wer 'man, husband' [NE werewolf] Lith výras 'man, husband' Av vīra- 'man person [as opposed to animals]' Skt vīrá- 'hero [eminent] man husband'	May derive from a word meaning 'young' (e.g. Toch A wir 'young fresh' or Alb ri 'young', if the latter is from *wrihxos < *wihxros)			Family	JPM
*wiḱ-	extended family, clan	Av vis- 'clan' Skt viś- 'dwelling clan' OCS vĭsĭ 'village' Lat vīcus 'village' Gothic weihs 'village' Grk oikíā 'house, household' Toch B īke 'place'	Indicates a residence unit larger than the nuclear family and is generally translated as 'extended family' or 'clan'	víṭ [nom.sg.] (RV+)		Family	JPM IIAL
*wīkitiḥ₁ *dui-dḱmti *h₁ui-h₁ḱmt-i-	20 twenty	OIr fiche Lat vīginti Alb njëzet Grk eíkosi Arm kʻsan Av vīsaiti Skt viṃśatí Toch B ikäm	Easily analysable as *dwī- 'two' + *ḱm̥tiḥ₁ 'tens' while the other decades are formed on the full-grade {1} [AL] It seems very unlikely to me that Skt. viṃś° is a hypercorrection for *vīś°. It is also difficult to explain away Oss. ssæȝ / insæj 'twenty'.			Numbers	JPM
*wiḱpots *wiḱ-poti-	master of the clan	Lith viēšpatis 'master' Av vispaiti- 'master of the clan' Skt viśpáti- 'head of the household'		viṭpati- (TB+ accent uncertain)	'lord of all tribes': Skt. víśvāsāṃ viśā́m pátim (RV 06.015.01) — YAv. vīspō vīsō vīspatōiš (Vyt 16) 'lord of the tribes': Skt. viśā́m …viśpátiḥ (RV 09.108.10) — YAv. vīsąm vīspaitiš (Yt 10.18)	Social Organization	JPM IIAL
*wiḱs	(social unit of) settlement,	OCS vĭsĭ 'village' Av vīs- 'village' Doric Grk -(w)ikes 'tribes' Lat vīlla (< *weiḱs-leha-) 'country-house, country estate'	It also yields derived forms, e.g. *weiḱs- which gives us Lat vīlla (< *weiḱs-leha-) 'country-house, country estate' and *woiḱos which underlies Lat vīcus 'village, hamlet quarter of a city' and Grk (w)oîkos 'household' (the source of NE economy).			Dwelling	JPM

*wikso-	mistletoe, birdlime	Lat viscum 'birdlime' OHG wīchsila 'black cherry [Prunus cerasus]' Rus víšnja 'cherry' Grk iksós 'mistletoe'				Trees	JPM
*wís	poison	Lat vīrus 'potent liquid, poison, venom' Grk iós '[organic fluid] poison stagnant smell and taste', Skt viṣa 'poison' MIr fī 'poison' Av viš(a)- 'poison' Toch B wase 'poison'	derives from *weis- 'flow (slowly)' {1} [AL] It is unclear whether the scarcely attested Skt. verb veṣ- 'to flow' (RV 3pl.impf. aveṣan ptc.pres. véṣantīḥ) and Av. vaēšah- [n] 'filth, fustiness (?)' are related.			Meals	JPM IIAL
*wis-	bison	OHG wisant				Fauna	JPM
*witeros	far	NE withershins Av vītara- 'a further one' Skt vitarám 'far away'	a compound of *wi- 'apart, in two' and *-tero-, the comparative suffix.			Position	JPM
*wl(o)p-	(red)fox	Lat vulpēs Lith lãpė Grk alṓpēks ⟷ alōpós Arm ałuēs Hit ulip(pa)na- 'wolf' Av urupis 'dog' raopi- 'fox, jackal' Skt lopāśá- 'jackal, fox'				Fauna	JPM
*wĺh₂neh□- ?*h₂ulh₁-neh₂-	wool	NWels gwlan Lat lāna NE wool Lith vìlna Rus vólna Grk léĥos Hit hulana- Av varənā- Skt ū́ rn .ā-	{1} [AL] The variant ū́rṇā-vábhi-, given by the EWAia with reference to Debrunner, FS Sommer 22, is not found in Viśvabandhu. XXX			Hair	JPM IIAL
*wĺkānos *wĺkeh□nos	smith god	Lat Volcānus Oss woergon, a smith god				Dieties	JPM
*wĺkʷíh□- *ulkʷih₂-	she-wolf					Fauna	JPM IIAL
*wĺkʷo- *ulkʷo-	wolf	Lat lupus NE wolf Lith vil̃kas Rus volk Alb ujk Grk lúkos Av vəhrka- Skt vŕ̥ka- Toch B walkwe	Explained as a nominalization of the unattested adjective 'dangerous' (*wĺkwó-) or derived from a verbal root *wel- 'tear'			Fauna	JPM IIAL
*wṇdstí-	bladder	Lat vēs-(s)īca Skt vastí-	Italic-Indic correspondence			Organs	JPM
*wṇṇáktih□	lady, queen	Grk (w)ánassa 'queen' Toch A nāśi 'lady'				Social Organization	JPM

*wódr̥-	water		{1} [AL] It is highly uncertain that YAv. vaiδi-[f] 'watercourse, irrigation channel' belongs here. It can easily be a derivative of the verbal root vad- 'to lead'. Cf. further Sogd. w'δ /wāð/ 'bed', Pash. wāla 'river bed', which were connected with the Avestan word by Henning (Sogdica, London 1940, p. 25).	The RV forms are: udnā́ [instr.sg.], udnás [gen.abl.sg.],	Water	JPM IIAL
*wo ǵ -eie-	incite			Present X: vājáyati [3sg.act.] (RV+), vājáyant- / vājayánt- [ptc.act.] (RV+)		IIAL
*wo ǵ -o-	incitement		{1} [AL] There are no certain cognates in Iranian. For Av. vāzišta- [adj] 'most respected' see vāh, the meaning and interpretation of OAv. vāzā [du] Y 51.12 is uncertain.			IIAL
*wogʷʰnis	ploughshare	Lat vōmis 'ploughshare' OHG waganso 'ploughshare' OPrus wagnis 'coulter' Grk ophnís 'ploughshare'	West Central		Tools	JPM
*wóh₁	2D ye two, you two	OE git 'ye two', inc□ incit 'you two' Lith jùdu 'ye/you two' OCS va 'ye/you two' Skt yuvā́ m 'ye/you two' Toch B yene 'ye/you two'	accusative *uh₁wé 'you two'		Pronouns	JPM
*woiḱ-ó-	inhabitant / abode					IIAL
*wóinom	?wine	Lat vīnum Alb verë Grk oînos Arm gini Hit wiyana-	From the verbal root *wei(hx)- 'twist', hence originally 'that of the vine'		Plants	JPM
*woḱéh□-	cow	Lat vacca 'cow' Skt vaśā́- 'cow'	No semantic distinction between these three		Fauna	JPM
*wokʷ-	speech			vā́k [nom.sg.] (RV+) vā́cam [acc.sg.] (RV+) vācás [gen.sg.] (RV+), etc.		IIAL
*wōkʷs	voice	Lat vōx Grk [acc.] ópa Av vāxš Skt vāk Toch B wek	A nominal derivative from *wekʷ- 'speak'		Human Sounds	JPM Beekes
*wolḱo-	hair		{1} With a different interpretation.			IIAL
*wolno/eh□-	(bloody) wound	Lat volnus 'wound, injury' Alb varrë 'wound, injury, sore' Grk oulḗ 'scar' Rus rána 'wound' Skt vraṇá- 'wound'	*wo[l/r]n[o/e]ha-		Health&Sickness	JPM

*wólos	tail hair (of a horse)	Lith valaĩ[pl.] 'tail of a horse' Skt vǎ́la- vǎ́ra- 'tail of a horse horsehair'	Attested only in Lithuanian and Old Indic and in both languages specifies the 'tail hair of a horse' {1} [AL] Thieme's explanation of vǎ́ra- as 'warding off (flies)' (following Yāska, Nir. 11.31) has a strong flavour of folk etymology. Moreover, the root vr̥- does not mean 'to ward off', which renders the idea even less probable (Lubotsky 2000)			Hair	JPM IIAL
*wólswom	gums	Grk oûlon Skt bársva-	from *wels- 'bulge'			Head	JPM
*wór(h□)ǵs	nourishment, strength	Hit wargant- 'fat' Grk orgḗ'natural impulse, mood, anger' Av varəz- 'power' Skt ūrj- □ ūrjá- 'strength, nourishment'				Food & Drink	JPM
*wórgʰs	chain, row, series	Alb varg 'chain, row, string, strand' Grk órkhos 'row of vines' Toch B warke 'chain, garland'				Placement Verbs	JPM
*worh□d-i/o-	frog	Latv var̃de Arm gort				Fauna	JPM
*worh□dʰus	upright, high	Grk (w)orthós 'upright, standing' Skt ūrdhvá- 'upright high' Toch A orto 'from above'				Position	JPM
*worh□do-	wart	NE wart Latv ap-vir̃de 'abscess' Rus véred 'abscess' NPers balū 'wart'	Suggests that the association between warts and frogs is quite old			Health&Sickness	JPM
*worm-	ant	Grk hórmikas Skt valmī́ka- Toch B warme				Bug	JPM
*worPo-	enclosure	Hit warpa 'enclosures' Toch A warp 'enclosure' ??Lat urbs 'city' (< *'ritual enclosure')				Dwelling	JPM
*wortokʷ-	quail	Grk órtuks Skt vartaka-				Bird	JPM IIAL
*worwos	furrow	Lat urvāre 'to mark out a boundary with a furrow' Grk oûron 'range (of area that could be ploughed up in a day)'	West-Centra			Agriculture	JPM
*wos	you (pl.)		{1} Cf. *us-me in Ilr. *ušma- (Skt. yuṣmá-).				IIAL
*wos(h□)-ko-	wax	NE wax Lith vãškas 'wax' OCS voskŭ 'wax'					JPM
*wosn-éie	buy, to sell		Denominative				Beekes

*wospo/eh□-	garment	Lat vespa 'one who steals clothes from the dead'. Hit was(sa)pa- 'garment, shroud' Luv waspant 'wearing funeral shrouds'				Textiles	JPM
*wósu	goods	Luv wāsu 'goods' Skt vásu- 'wealth, goods, riches, prosperity'	Suggests the possibility of a PIE *wósu 'goods' if these are not independent creations (cf. the same semantic development in NE goods)			Exchange & Property	JPM
*wōtis	god-inspired	OIr fáith 'prophet' or gods ON Ōðinn 'Odin' Skt api-vat- 'inspires'				Sacred	JPM
*wōto-	(true) knowledge, shamanic	OIr fáth 'prophetic wisdom' OE wōþ 'song, poetry' OE wōd 'furious, frenzied' > archaic NE wood 'mad' *wōtonó 'who incarnates' OE Woden ON Oðinn				Sight	JPM
*wr(h□)d-	root branch	Lat rādīx 'root', rāmus 'branch' Grk hrádix 'branch palm-frond' ON rōt 'root' [NE root is borrowed from Old Norse] OIr frēn 'root' OE wyrt 'herb, plant' [> NEwort] Grk hríza 'root' Toch B witsako 'root' ??				Trees	JPM
*wrb-	branch, sprig, twig	Lat verbēna 'leaves and saplings for sacral use' Lith virȓbas 'twig, switch' Grk hrábdos 'twig, rod'				Trees	JPM
*wredʰ-	grow, stand, take shape	Latv rādīt 'bear' Rus rodítī 'produce' Grk orthós 'upright, straight, true' Av verədaiti 'grows' Skt vṛdháti 'grows, increases, becomes strong', vrādhant- 'upright', Toch AB wrāt- 'form, shape'				Vital Functions	JPM
*wreg-	press, oppress	Lat urgeō 'press, oppress' ON reka 'avenge, punish', OE wrecan 'avenge, punish' > NEwreak	North-West			Conflict	JPM
*wreg-	track, hunt, follow	Lat urgēre 'press' NE wreak Hit ūrki- 'track' Toch B werke 'chase, hunt'				Travel	JPM
*wreh₁ǵ-	break, tear to pieces	Lith rḗžti 'cut, scratch' OCS rězati 'cut, hew' Grk rhḗgnūmi 'break'	West Central			Reductive Activities	JPM

*wreh□gʰ-	thorn	MIr fraig 'needle' Lith rãžas 'dry stalk, stubble prong of fork' Grk hrākhós 'thornhedge', hrákhis 'spine, backbone'	West-Central			Plants (Wild)	JPM
*wrētos	flock, herd	OE wrǣþ 'herd of swine' Skt vrắta- 'flock, swarm'	May have been formed on the verbal root *wer- 'bind'.			Fauna	JPM
*wr̥hₗế̄n *urhₗ-en-	lamb	Grk arḗn Arm gaṙn Av varən- Skt urán- Toch B yrīye		[nom.sg.] úrā (RV 10.095.03), [acc.sg.] úraṇam (RV 02.014.04 PN, ŚB 11.5.1.2), úrām (RV 08.034.03 secondary)		Fauna	JPM IIAL
*wr̥h□os	pimple	Lat varus 'pimple' Lith vìras 'measles' Toch B yoro '+pimple'				Health&Sickness	JPM
*wriyo/eh□-	fort	Grk hríon 'promontory' Thrac bría 'city, town built on a hill', Messapic (the city name Uria) Toch B rīye 'city'	Both the specific Thracian meaning and the fact that the Greek cognate hríon means 'promontory' suggests an original meaning of 'acropolis' in those IE traditions where the word came to mean 'city' and a derivative from *wer- 'high'.			Dwelling	JPM
*wr̥mis	worm, insect	Lat vermis NE worm Lith var̃mas 'mosquito' OCS vermije 'grasshoppers' Grk rhómoks 'woodworm'				Bug	JPM
*wr̥to/eh□-	enclosure	OE worþ 'court, courtyard, farm' Lith var̃tai 'gate, gateway' OCS rata 'gate' Skt vr̥ti- 'enclosure' ?Toch B warto 'forest' < *'sacred grove' < *'sacred enclosure'	May reflect independent creations in these various groups, all derived from the root *wer- 'cover, enclose, protect'.			Dwelling	JPM

*ya ǵ - *yeh₂ ǵ - (Beekes) *h□ieh₂ ǵ - (IIAL)	honor, worship	Grk házomai 'dread' (hágios 'holy') Skt yáǰati 'worships'	Greek-Indo-Iranian isogloss {1} [AL] In Indo-Iranian, the second laryngeal has disappeared in front of the cluster IE *ǵC, on which see Lubotsky 1981: 135 ff. The initial laryngeal seems to be indicated by īǰé [3sg.pf.med.] and by the reflex in Greek. {2} [AL] Hajnal 1999: 95 interprets yáǰuṣ- as an original stem in ß-ur-, forming one paradigm with yáǰvan-.	Present I: yáǰati [3sg.act.] (RV+) Aorist S: yákṣat [3sg.subj.act.] (RV+), ayās [2sg.act.] (RV 03.029.16 +), áyāṭ [3sg.act.] (RV-Kh.+) SI-impv: yákṣi (RV) Perfect: īǰé [3sg.med.] (RV+) Fut: yakṣyá˚ (RV+) Caus: yāǰáy˚ 'to cause someone to sacrifice' (YV+) Passive: iǰyáte (YVp+) Inf: yáǰadhyai (RV+) Abs: iṣṭvấ (AV) TA-Ptc.: iṣṭá- (RV+)	'to worship the Truth': Skt. r̥tám … yaj (RV+) — OAv. ašǝm … yaz 'to worship (and) to please': Skt. yákṣat … pipráyac ca (RV) — OAv. yazamaidē … friiąnmahī 'to praise (and) to worship': Skt. stuhí … yákṣvā (RV 05.042.11), stavat … yaǰāte (RV 06.047.15) — OAv. yazǝmnašca … stauuas 'worshipping the gods': Skt. deva-yáǰ- [adj] (KS+) — YAv. daēuua-iiaz- 'worshipping the Daēuuas' 'well-worshipping': Skt. su-yáǰ- [adj] (RV+) — YAv. hu-iiešti- [f] 'good worship' 'goal of the worship': Skt. yaǰñásya … ártham (RV) — OAv. arǝθā … yasnǝm 'the goals … the worship' (Y 33.8) 'Mitra / Miθra, worthy to be worshipped': Skt. mitró … yaǰñíyaḥ — YAv. yesniiō miθrō Aram.-Iran. mtr-yzn PN 'to worship with a worship': Skt. yaǰñám yaj- (RV) — YAv. yasnǝm yaz- 'the worship … the word': Skt. yaǰñám … vácaḥ (RV) — OAv. vacaŋhā … yasnā (Y 34.1)	Sacred	JPM
*yak(k)-	± cure, make well	OIr īcc 'cure, treatment' Grk ákos 'cure, treatment'				Health&Sickness	JPM
*yam *yau	now, already	Lat iam 'now, already' OHG ju 'already' Lith jaũ 'already' OCS ju 'already'	North-West			Time	JPM
*yébʰe/o-	enter, penetrate, copulate	Rus jebú Grki oíphō Skt yábhati Toch B yäp- 'enter, set [of sun]'	Eastern			Vital Functions	JPM
*yeg-	ice, icicle	OIr aig 'ice' NE icicle Hit eka- 'ice'	Possibly 'solid expanse of ice'			Water	JPM
*yeh₁ -	do, make act vigorously	Hit iēzi 'does, makes' Toch A ya- 'do, make' Grk hḗrōs 'hero', Hḗrā Skt yātú- 'witchcraft'				Being & Doing	JPM
*yeh₁ -	throw	Latin iaciō Greek híēmi	West Central			Throw	JPM

*yeh₁gʷeh□-	power, youthful vigour	Lith jegà 'strength, power' Grk hḗbē 'youth, vigour, puberty'	West Central		Conflict	JPM
*yéh₃s-	gird	Lith júosiu 'gird, girdle, buckle on [a sword]' OCS po-jašǫ 'gird' Alb n-gjesh 'gird, buckle on' Grk zṓnnūmi 'gird' Av yāh- 'gird' Grk zṓnē 'belt'			Textiles	JPM IIAL Beekes
*yeh□-	ask for, beg	Skt yā- 'beg, entreat' Toch B yāsk- 'beg'	Indo-Iranian-Tocharian isogloss {1} Attested both in the active ('imploring') and passive ('implored') usages. {2} An enlargement of the root yā- is Skt. yāc [verb] 'to implore' (RV yāc- +): yācāmi [1sg.pres.act.], yắcante [3pl.pres.med.] (RV+), ayāciṣta [3sg.aor.med.] (MS+), yāciṣat [3sg.aor.subj.act.] (RV), yayāce [3sg.pf.med.] (Br.+), yācáy° [caus.] (AV+), yāciṣy° [fut.] (Br.+), yācitá- [TA-Ptc.] (AV+), yắcitum [inf.] (AV+) yācñá- [m] 'request' (AV+) yācñá- [f] 'id.' (TS+). {3} [AL] For the semantic analysis of these Vedic forms and their relationship to Gr. Ζητήρ and other Greek forms like ζῆλος [m] 'zeal, jealousy', δίζημαι [verb] 'to search, seek out, desire', see García-Ramón 1999.	Present II: yắmi [1sg.act.] (RV), yāti [3sg.act.] (RV 07.038.06) Ῑmahe [1pl.med.] (RV+), iye [1sg.med.] (RV 02.017.07), iyāná- [ptc.med.] (RV) {1} Aorist S: áva yāsat [3sg.subj.act.] (RV 06.066.05), yāsīṣṭa [3sg.opt.med.] (RV) Aorist SIṢ: ayāsiṣam [1sg.act.] (RV 01.018.06), yāsisīṣṭhās [2sg.opt.med.] (RV 04.001.04) Passive: īyate [3sg.] (RV) Inf: iyádhyai (RV 06.020.08) {2}	Formal Speech & Song	JPM IIAL
*yeh□-	go, travel	Lith jóju 'ride' OCS jadǫ 'ride' Av yā- 'go' Skt yắ ti yā- 'goes, travels' Toch AB yā- 'go, travel'	possibly an iterative-intensive derivative of *h₁ei-, i.e. *h₁y-eh□-		Come & Go	JPM
*yéh□wot(s)	as many, as long	Grk héōs 'as long as' Skt yāvat 'as much, as many as great, as large as often, as far'			Relative Pronouns	JPM
*yek-	express, avow	Lat iocus 'joke' Umb iuka 'prayers' MWels ieith 'speech' OHG jëhan 'express, explain' Skt yắcati 'asks, solicits, entreats'	Meaning is unclear		Formal Speech & Song	JPM

*yékʷr̥(t) *(h□)iekʷ–r-	liver	Lat iecur, Lith (j)ēknos [pl.], Grk hễpar Av yākarə Skt yákr̥t	{1} The laryngeal is based on Greek and is uncertain.	yákr̥t [nom.acc.sg.] (AV) yaknás [gen.abl.sg.] (RV+) yakani [loc.sg.] (AVP)		Organs	JPM IIAL
*yem-	hold	Av yam- 'hold' Skt yam- 'hold, sustain, offer, grant' Toch B yām- 'achieve, obtain reach' [< * 'come to hold' or the like] Toch B yām- 'do, make, effect'	Eastern			Exchange & Property	JPM
*yemos	twin	Lat geminus Skt yamá- OIr emon 'twins' Av yəma- 'twin'				Marriage	JPM
*yes-	boil	NWels ias 'boiling' OE gist 'foam, yeast' [> NE yeast] Grk zéõ 'boil, cook' Av yaēšya- 'boil' Skt yásyati 'boils' Toch A yās- 'boil' Toch B yās- 'excite, ravish' [< *'make boil'] Hittite is(s)na- 'dough'		Present III: yayastu [3sg.impv.act.] (RV) Present III>I: yéṣant-ī- (< *įa-įṣa-) [ptc.act.f.] (RV 03.053.22 +) Present IV: pra-yasyati [3sg.act.] (AVP 9.28.3), pra-yásyantī- [ptc.act.f.] (AVŚ 12.5.31 = AVP 16.144.5) TA-Ptc.: prá-yasta- 'made hot, boiling' (RV+)		Food Prep	JPM IIAL

*yet-	put in the right place be in place?	NWels addiad 'longing' SC jatiti se 'flock together' Av yataiti □ yatayeiti 'puts oneself in the right or natural place' Skt yátati 'puts oneself in the right or natural place' Toch AB yät- 'adorn', yāt- 'be capable of [intr.] have power over tame'		Present I: yátate [3sg.med.] (intr.) (RV+), yátati [3sg.act.] (trans.) (RV) Aorist R: yátāna-, yatāná- [ptc.med.] (RV) Perfect: yetire [3pl.med.] (RV+) Caus: yātáy° (RV+) TA-Ptc.: pári-yatta- 'lined up' (RV+)	Placement Verbs	JPM IIAL
*yeu-	bind, join together	Lith jáutis 'ox, steer' [<*'that which is yoked'] Skt yáuti 'binds, unites' Lat iungō Lith jùngti Grk zeúgnūmi Skt yunákti	{1} [LK] Probably secondary after -stuvāná- (Joachim 1978: 139). {2} [LK] yūpa- [m] 'sacrificial post, pillar (to which sacrificial animals are fastened)' (RV+) most probably does not belong here (Gotō 1997: 1029, fn. 48). {3} This root may have formed the basis of *ieug- > Skt. yoj.	Present VI: -yuváti [3sg.act.] (RV, TSm) -te [3sg.med.] (RV+) Present II: yauti [3sg.act.] (AV+) yuté [3sg.med.] (YVp +) yutām [3sg.impv.med.] (AV 11.10.16) -yuvāná- [ptc.med.] {1} (RV 07.091.05, ŚB, Sū.) Aorist IS: -yǎviṣṭam [2du.inj.act.] (RV 08.005.13) ayāvīt [3sg.act.] (VādhSū.) Aorist S: ayuṣmahi [1pl.med.] (AVP) mā yoṣṭa [2pl.inj.act.] (ŚrSū.m) mā yūḍhvam [2pl.inj.med.] (ŚrSū.m) Perfect: -yuyuvé [3sg.med.] (RV 01.138.01) Intensive: -yoyuve [3sg.stat.] (RV	Binding	JPM IIAL
*yeu-	ripen					JPM

*yeud^h-	moved, stirred up fight	Lat iubeō 'order, command' Lith judù 'move, stir' Grk husmī́nē 'battle' Av yū iyeiti 'fights' Skt yúdhyati 'fights' Toch A yutk- 'be anxious'				Conflict	JPM
*yeud^h-	set in motion, stir up	Lat iubeō 'order' Lith judù move oneself, stir' Pol judzic´ 'incite' Av yaozaiti 'becomes agitated [of water and emotions]' Toch A yutk- 'become upset, worry' Grk husmī́nē 'combat' Skt yúdhyate 'fights'				Movement	JPM
*yeud^hmós	fighter	OCS o-jĭminŭ 'warrior' Skt yudhmá-	from verb *yeud^h- 'fight'			Occupations	JPM
*yeu ǵ -	stir up, incite be unquiet	Goth jiukan 'fight, struggle' Av yaozaiti 'stirs oneself up' Toch B yuk- 'overcome, surpass'				Food Prep	JPM
*yeuh-	mix something moist pottage, soup	Lat iūs Grk zúmē Latv yàut 'mix, mix dough' Skt yáuti 'binds, unites'				Food Prep	JPM
*yew(e)s-	order	Lat iūs 'law, right, justice, duty' Av yaož-dā- 'make ritually pure' Skt śáṃca yóśca 'health and happiness'				Law & Order	JPM
*yéw(e)s-	grain	Hit ewan NPers jˇav Skt yáva- 'grain, Grk zeiaí 'einkorn or emmer wheat' Oss joew 'millet' Toch B yap 'millet'	Derives from the verbal root *yeu- 'ripen, mature'		to cultivate barley': Skt. yávam … ka	Plants	JPM
*yoinis	reed, rush	MIr aīn 'reed' Lat iuncus 'reed' iūniperus 'juniper' ON einir 'juniper'	North-West			Plants (Wild)	JPM
*yóḱu	(animal) body hair	Arm asr 'wool' Skt yā́śu '+pubic hair' Toch AB yok 'body hair, wool'				Hair	JPM
*yórk(o)s	roedeer	NWels iwrch Grk zórks				Fauna	JPM Celt.
*yós *yéh₂ *yód	relative pronoun	Gaul dugiionti-io 'who serve' Lith geràs-is 'good' OCS dobrŭ-jĭ 'kind, good' Grk hós / hḗ / hó 'who, what, that' Skt yás / yā́ / yád 'who, what, that'				Relative Pronouns	JPM

*yoteros	which of the two	Doric Grk óteros 'which of the two' Av yatāra- 'which of the two' Skt yatará- 'which of the two'				Relative Pronouns	JPM IIAL
*yóti	as much, as many	Grk hósos 'as many' Skt yá ti 'as many as, as often as'				Relative Pronouns	JPM
*yu-	± shout (for joy)	MIr ilach 'victory cry' Lat iūbilō 'shout' NE yowl Grk iúzō 'shout'	West Central			Human Sounds	JPM
*yugóm	yoke	OWels iou Lat yugum NE yoke Lith jùngas Grk zugón Arm luc Hit yukan Av yugam Skt yugám	derives from *yeug- 'join, harness'		yoke and yoke pin': Skt. yuga-śamyá	Transport	JPM Beekes IIAL
*yuh-r-	water	Lith júrės 'sea' Thracian iuras [a river name]				Water	JPM
*yuhs *uswé *swe	ye / you	OIr sī 'ye, you' Lat vōs 'ye, you' OE gē 'ye' [> NE ye], ēow 'you' [> NE you] Lith jū̃ s 'ye', jus 'you' OCS vy 'ye, you' Alb ju 'ye' Grk humeius 'ye', huméas 'you' Arm i-jez 'you' Hit sumēs 'ye, you' Skt yūyám 'ye', yuṣmā́ n 'you', enclitic vas Toch B yes 'ye, you').	enclitic *wos the accusative serves as the nominative form for Celtic, Italic, Slavic, Albanian, Greek, and Anatolian.			Pronouns	JPM
*yúhs-	broth	Lat iūs 'broth, sauce, juice' [> NE juice] Lith júše 'fish soup' Rus ukhá 'broth, fish soup' Grk zúmē 'leaven' Skt yūṣ- 'soup, broth, water in which pulses of various kinds have been boiled'				Meals	JPM Celt.
*yust(iy)os	orderly, fitting	OIr uissse 'just right, fitting' OCS istŭ 'actual, true'	Adjective, derived from *yew(e)s-			Law & Order	JPM

Sheet1