

Linguistics 051:

Proto-Indo-European Language and Society

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Houses and Buildings

building

- *dem(h₂)- 'to build': same root as in *dóm(h₂)os 'household'
- *k^wei- 'to make, pile up': ποιέω (-POIESIS, POETRY), Skt *cinōti* 'pile up'
- *teks- 'to hew, fabricate': L *texō* 'weave, put together' (TEXTILE), H taksan 'joint', τέκτων 'ARCHITECT', τέχνη 'art, TECHNIQUE', Skt *tákṣan-* 'carpenter'

Walls and defensive enclosures

- The earliest terms for ‘wall’ point to earthen embankments or fortified walls of enclosures. There is no word for ‘brick’, but ‘**wattle and daub**’ walls were probably used.

*g^hórd^h-o-s ‘enclosure, fence, hedge’: H *gurtas* ‘citadel’, R *górod* ‘city’, NE *YARD*, W *garth* ‘animal pen’

< *g^hérd^h- to enclose, *GIRD*

*d^hiġ^h-s ‘enclosing wall, fort wall’: OPers *didā* ‘(town) wall, fortification’, *τείχος*, *τοιχος* ‘wall (of a city)’, Skt *dehī-* ‘wall, bank’; related to word meaning ‘clay’ (> NE *DOUGH*)

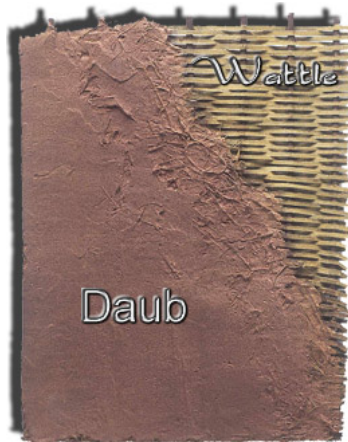
fortified site

*pelh- ‘fort’: *πόλις* (*ACRO-POLIS*, *POLITICAL*), Li *pilis* ‘fort, castle’
Skt *pūr* ‘wall, rampart, palisade’ (*SINGA-PORE*)

Wattle and Daub

wattle: a woven lattice of wooden strips

daub: wet soil, clay, sand and/or dung



The daub is smeared on the wattle to make a wall.

The technique appears to be a combination of two more primitive wall types:

woven fences and earthen embankments



dwelling

- ? *h₂uós-tu ‘place to live’: ἄστυ ‘town’, Skt *vāstu* ‘place, seat’, W *gwas* ‘abode’, TB *ost* ‘house’
- < *h₂ues- ‘to spend the night’: NE *was*

- There is no reconstructible word for ‘city’ or ‘town’, although words for ‘fort’ and ‘enclosure’ suggest settlements of modest size at least.
- No reconstructible form for ‘floor’ or ‘roof’
- The root *u(e)ik-s ‘clan’ was later extended to mean ‘VILLAGE’, ‘house’ or ‘building’: οἶκος ‘house’ (ECO-NOMY), L *vīcus* ‘village, hamlet, neighborhood’ (-WICH), OCS *vīsi* ‘village’

storage pit, cellar > room

- Connection of words meaning ‘room’ with roots meaning ‘hollow out’ or ‘hole’ suggests partially underground rooms or cellars or storage pits

*ket- ‘hole, room’: OE *heaðor* ‘enclosure, prison’, OCS *koťci* ‘chamber’, Av *kata-* ‘chamber’, TB *kotai-* ‘hole’, Av *čāiti* ‘in a hole’, Skt *cātvāla-* ‘hole for the sacrificial fire’

! early borrowing into Uralic > Finnish *kota* ‘dwelling, tent, hut’

*kous- ‘hole, room’: NE HOUSE, TB *kwaşai* ‘village’ (< ‘collection of houses’), Arm *xuc^c* ‘room’, *xul* ‘hut’, Khotanese *kūşda-* ‘mansion’

< *keus- ‘hollow out’: Li *kaĩşti* ‘hollow out’, Skt *kóşa-* ‘vessel’, ON *hauss* ‘skull’

Vocabulary suggests living in solid houses and not just tents

door and doorjamb

*d^huor- ‘door’: NE DOOR, L *forus* + many others; H an-durza ‘within’
< ‘in + doors’

*h₂énHt-eh₂ ‘doorjamb’: L *antae* ‘pillars framing a door’, ON *ǫnd* ‘fore-room’, Arm *dr-and* ‘door posts’, Skt *átā* ‘id.’

hearth, fireplace

*h₂eH-s-eh₂ L *āra* ‘hearth, altar’, H *hāssa-* ‘heath’, NE ASH
< *h₂eH- ‘to burn’

? place within a house

*k̂el-s ? ‘room’: NE HALL, L *cella* ‘storeroom’ (CELL), *καλιᾶ* ‘hut’
< *k̂el- ‘protect, CON-CEAL’

Textiles

- Very little can be reconstructed regarding PIE speakers' clothing styles
- But there is a rich vocabulary referring to the production of cloth

- **dek-* 'thread': ON *tāg* 'fiber', Khot *dasa-* 'thread', Skt *daśā-* 'fringe' (**dok̑-l-o-* 'hair' > OIr *dūal* 'lock of hair', NE TAIL)
- **los-* 'cloth, rag': MHG *lasche*, Lith *lāskana* both 'rags', Khot *r(r)aha-* 'cloth'
- **peh₂n-* ? 'cloth': Mlr *anan* 'linen cloth', L *pannus* 'piece of cloth', πήνη 'thread on a loom', OE *fana* 'flag' (NE FANE, VANE).

Obtaining fibers and spinning thread

- *pek- ‘pull out fibers’ (> ‘comb out wool’ > ‘shear’): L *pectō* ‘to comb’, L *pecten* ‘a comb’, Lith *pešù* ‘to pull, tear out, pluck (fowl)’, *πέκω* ‘to comb, shear’, TB *päk-* ‘comb out wool, shear’, OE *feax* ‘hair of the head’ (FAIR-FAX).
- *(s)neh₁-(i/u)- ‘to twist, bind’ > ‘spin fibers into thread’: L *neō* ‘spin’, *νέω* ‘spin’, OHG *nāen* ‘spin’, Latv *snāju* ‘twist loosely together, spin’; (*neh₁-tl-eh₂ > NE NEEDLE).
- *(s)pen- ‘to SPIN, weave’: Lith *pinù* ‘weave’, Alb *pe* ‘thread’, Arm *hanum* ~ *henum* ‘weave’, TB *pänn-* ‘draw out, stretch’, *πένομαι* ‘toil at household chores’.

Weaving and sewing

*Heu- ~ *Hu-eb^h- ‘to WEAVE’: Skt *u-* ‘to weave’, R *usló* ‘weaving’, Alb *vej* ‘to weave’, *ὕφαινω* ‘weave’, H *huppai-* ‘entangle, ensnare’, Skt *ub^hnāti* ‘tie together’, TB *wāp-* ‘to weave’

*siuh₁- ‘to SEW’, L *suō*, Lith *siuvù*, *κασ-σύω*, Skt *sívyati* +

Plaiting, braiding, making wickerwork

- *plek- ‘to plait, to braid’: L *plectō* ‘plait, interweave’ (> COM-PLEX), OE *fleohtan* ‘braid, plait’, OCS *pleto* ‘braid, plait’, πλέκω ‘braid, plait’, Skt *praś-na-* ‘braiding, basketwork, turban’ (*plok-s-o- > NE FLAX).
- *resg- ‘to wattle, plait coarsely’: L *restis* ‘rope’, NE RUSH, L *rezgū* ‘knit, do network’, Pers *rayza-* ‘woollen cloth’, Skt *rájju-* ‘cord, rope’
- *kert- ‘to make wickerwork’: L *crātis* ‘wickerwork, hurdle, honeycomb’, NE HURDLE, OPrus *corto* ‘hedge’, κάρταλλος ‘basket’, κυρτιά ‘wattle’

Twining and knotting

- *mesg- 'to intertwine, make knots': ON *mōskvi* 'mesh', Lith *mezgù* 'to knit', Lith *māzgas* 'knot', TB *meske* 'joint, knot', MDu *maesche* (> NE MESH)
- *ned- 'to knot, bind': NE NET, L *nōdus* 'knot' (NODE), Av *neska-* 'bundle'

Metals

- Since *iron* and *bronze* were not in use in PIE times, words for *iron* and *bronze* have developed from words which earlier meant just ‘metal’
- If speakers of PIE had a word for *copper* they called it ‘the red metal’: *h₁roud^h-ó-s (ON *rauði* ‘red iron ore’, Pers *rōd* ‘copper’, Skt *lohá-* ‘copper’) using the root for RED: *h₁reud^h-.

*h₂ei-es- ‘metal’: L *aes* ‘copper, bronze’, NE ORE, Skt *áyas-* ‘copper’ > ‘iron’

*h₂éu-s-o-m ~ *h₂u-és-eh₂ ‘shiny metal’ = ‘gold’: L *aurum*, TB *yasa*

*h₂erĝ-nt-o-m ‘white metal = silver’: L *argentum*, TB *ñkante*, Skt *rajatám*, Arm *arcat*ʿ.

Agricultural Tools

- *h₂érh₃-ie- ‘to plow’: L *arō* (ARABLE), ἀρόω, OE *erian*, + others, perh. TA *āre* ? ‘a plow’, H *hars-*(iya)- ‘till the earth’
- *h₂érh₂-tro-m ‘plow’: L *arātrum*, ON *arðr*, Lith *árklas*, ἄροτρον
- *mat- ‘hoe’: L *mateola* (MATTOCK), OCS *motyka*, OHG *medela* ‘plow’, Skt *matyá-* ‘harrow’
- *ok- ‘rake’: OE *egeðe*, L *occa* ‘harrow’, Oss *adæg* ‘furrow’, H *akkata* ? ‘furrow, plow’, ὄγ-μος ‘furrow’
- *srpeh₂~*srpoh₂ ‘sickle’: Latv *sirpis*, Oss *æxsyrf*, ἀρπή, H *sarpa-* ‘agricultural tool (not plow)”; Finnish borrr. from Baltic: *sirppi*
- *ad^h-és- ‘axe’: NE *ADZE*, H *ates-*, *atessa-* ‘axe’

Agricultural Processes

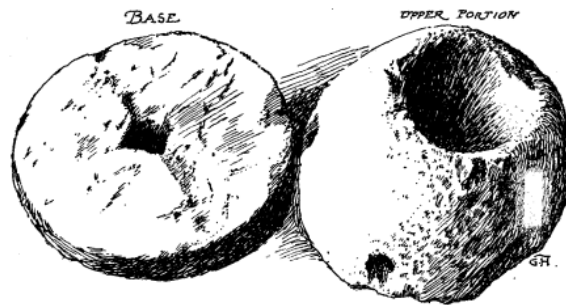
- *seh₁-(i)-, *soh₁-r- ‘to throw’ > ‘to sow (seed)’: H *sā(i)*- ‘to throw, sow’; L *serō* ‘sow’, Lith *sóra* ‘millet’, TA, TB *sāry-* ‘to plant’, Skt *sīra-* ‘plow’, *sītā-* ‘furrow’, TB *ṣito* ‘grainfield’, *σίτος* ‘wheat or barley grain’
- *h₂mei- ‘to MOW’: *ἀμάω*, H *hamesha-* ‘early summer’ (‘mowing time’)
- *peis- ‘to thresh’: L *pīnsō*, Lith *paisýti*; *πίσσω* ‘winnow’, Skt *pináṣṭi* ‘grind, thresh’
- *uers- ‘to thresh, pick’: L *verrō* ‘sweep grain after threshing’, OCS *vrěsti* ‘thresh’, H *warsi-* ‘pluck, harvest’
- *melh₂- ‘to grind’: L *molō*, Lith *malù*, H *mall(a)-*, TB *mely-*, Skt *mṛṇáti*; NE MEAL, *μύλη* ‘mill’

Quern

*g^wréh₂-u-on-

‘QUERN’ (handmill for grinding grain consisting of two circular stones. The lower stone is also sometimes called a *quern-stone*): OIr *brāu*, Lith *gìrnos*, OCS *žrŭny*, Arm *erkan*, all ‘quern’, and poss. TB *kārweñe* ‘stone’

< *g^wreh₂-u- ‘heavy’: βαρύς (BARY-TONE, BAR-IATRIC)



A Quern, now in the Pickering Museum.

Spears, Knife, Dagger

- *g^weru ‘spear, spit/rod’: L *verū* ‘spear, spit’, Av *grava-* ‘staff’
- *uēb-en ‘knife’: NE WEAPON, ON *vápn*, TA, TB *yepē* ‘weapon, knife’
- *Hns-i-s ‘dagger’ > ‘sword, slaughtering knife’: L *ēnsis* ‘sword’, Skt *asi-* ‘dagger, knife’ > ‘sword’, Palaic *hasīra* ‘dagger’
- *kēl(H)- ? ‘spear, spearpoint, point’: ON *hali* ‘point of staff, tail’, OPr *kelian* ‘spear’, Alb *thel* ‘big nail, spike’, κῆλα ‘arrowshafts’, Skt *śalyá* ‘spear, arrowhead’

- **Swords** are generally not found in archaeological remains until around 2000 BCE.
- Some of the words for ‘sword’ developed from *Hns-i-s ‘large dagger’

Bow and Arrow

- Words for ‘bow’ and ‘arrow’ are not securely reconstructible to early PIE
- Gk & IIr share vocabulary, but it cannot be shown to be early PIE:

*g^wi-ēh₂ ‘taut string’: OCS *žī-ca* ‘thread’ (> ‘bowstring’: βίος, Skt *ḷyā*)

*h₁is-u-s ‘arrow’: ἰός, Skt *īṣu-*

*tóks-o-m ‘bow’: Myc *to-ko-so-wo-ko* ‘bow-makers’, τόξον ‘bow’, Scythian *taxša-* ‘bow’ (TOXIC < L *toxicum* ‘poisoned’ < ‘poisoned arrow’ < τόξον)

- Nevertheless it is extremely probable that PIE speakers practiced archery
- Archery was not much used in Bronze Age Europe, so this may have caused the loss of archery terms in many branches

Lake, Sea

- If the PIE speaking people inhabited the Pontic-Caspian steppes, they should not have known an ocean such as the Atlantic or sea such as the Mediterranean.
- ***mór-i** ‘standing water’: L *mare* ‘sea’ (MARINE), NE *MERE* (‘lake’), OIr *muir* ‘sea’ Lith *mãrė* ‘sea’, OCS *morje* ‘sea’; perhaps Oss *mal* ‘deep standing water’, H *marmara-* ‘swamp’
- Although the reflexes of ***móri** point to a saltwater sea in some branches, in Germanic they mean freshwater ‘lake’, and surely Gmc speakers had exposure to a real ocean (the Atlantic).
- The Greeks borrowed the word for sea (*θάλασσα*) from non-IE, which makes little sense if there were a PIE word for a large sea or ocean

Livestock

- There are about 75 reconstructible names for animals in PIE. From an archaeological and historical viewpoint the ones that point to domesticated animals are most noteworthy.
- A basic distinction between ‘wild’ and ‘domesticated’ animals is reconstructible, as well as a word for ‘to tame’:

***péku** ‘livestock, mobile wealth’: L *pecu* (PECUNIARY), NE *fēe*, Skt *páśu-*, Lith *pēcus* ‘cattle’

***ǵ^huer-** ‘wild animal’: L *fera* (FERAL), *θήρ*, Lith *žvėris*, OCS *zvěř*

***demh₂-** ‘to TAME, subdue’: L *domō*, *δάμνημι*, H *damaszi* ‘press, push’, OIr *damnaid* ‘bind, break (a horse)’, Pers *dām* ‘tamed animal’, Skt *dāmáyati* ‘subdues’; (but poss. not specific to animals)

Pigs

- Vocabulary referring to pigs is very well attested and strongly suggests that they were domesticated:

**sū-s* ‘pig’: L *sūs*, NE *sow*, Latv *suvēns* ‘young pig’, Alb *thi* ‘pig’, σύς or ūς ‘pig’, Av *hū-* ‘pig’, Skt *sūkará-* ‘pig, boar’, TB *suwo* ‘pig’

**pórk-o-s* ‘piglet’: L *porcus* ‘piglet’ (PORK), MIr *orc* ‘piglet’, OE *fearh* (> NE FARROW), Lith *paĩšas* ‘piglet, castrated hog’, R *porosėnok* ‘piglet’, Av *pərəsa-* ‘piglet’

Also borrowed into Uralic: Finnish *parsas* ‘pig’

**tuork-ó-s* ‘boar’: OIr *torc*, Av *θβərəsa-*

Cows

- Vocabulary for ‘cow’ is also abundant, with three distinct words:

*g^wōus ‘cow’ (most common term): OIr *bō*, L *bōs*, , Lat *guovs*, *βοῦς*, Arm *kov*, HLuv *wawa-*, Av *gāuš*, Skt *gāu-*, TB *keu*

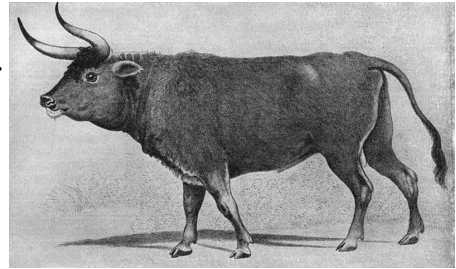
*eĝ^h ‘cow’: OIr *ag*, Arm *ezn*, Skt *ahī-*

*uok^h-eh₂ ‘cow’: L *vacca* ‘cow’, Skt *vaśá-*

- It’s not clear what the difference in meaning, if any, was between these three terms. (Even today dialects of Italian differ in the word used.)
- *g^wōus has the widest distribution and is clearly quite ancient because of the Anatolian cognate in HLuv *wawa-*.

Bulls, oxen and aurochs

The aurochs was the huge wild ancestor of modern cattle and zebus. The last aurochs died in 1627 in Poland. They stood over 6 feet at the shoulder and weighed over a ton.



*uks-ēn ‘ox’: W *ych* ‘ox’, Av *uxšan-* ‘bull’, Skt *ukṣán-* ‘bull’, TB *okso* ‘ox’

*taur-o-s ‘aurochs’ > ‘bull’: OIr *tarb*, L *taurus* ‘bull’, OPrus *tauris* ‘bison’, Lith *taũras* ‘aurochs; bull’, R *tur* ‘aurochs, mountain goat’, *ταῦρος* ‘bull’, Alb *tarok* ‘castrated bull’



↑ zebu

Sheep

- The existence of a large vocabulary for **sheep** and **goats** is significant because these animals were **not** native to the Pontic-Caspian steppe and were introduced from the Balkans (or perhaps Caucasus)
- ***h₂óu-i-s** ‘sheep’: Luv *hāwa-/hāwi-*, TB *āu* ‘ewe’, OIr *oī* ‘sheep’, L *ovis* ‘sheep’, NE *ewe*, Lith *avis* ‘sheep’, OCS *ovǫnŭ* ‘sheep’, *ǫʹis* ‘sheep’, Arm *hoviw* ‘shepherd’
- ***h₂ou-ik-eh₂** ‘female sheep’ = ‘ewe’, W *ewig* ‘female deer’, OCS *oviči* ‘ewe’, Skt *avikā-* ‘ewe’
- ***mois-ó-s** ‘ram, sheep; fleece, sheepskin’: Lith *maĩšas* ‘bag’, R *mekh* ‘skin’, Av *maēša-* ‘ram’, Skt *meṣá-* ‘ram, sheep; fleece, skin’

Goats

- ***dik-s** ‘goat’: OE *ticcen* ‘kid’, Alb *dhi* ‘she-goat’, Ishkashmi (Iranian) *dec* ‘goatskin bag’, perh. *δίζα* ‘she-goat’
- ***h₂eiĝ-s** ‘goat’: Alb *edh* ‘kid’; *աճի*, Arm *ayc* ‘goat’; Av *izaēnā-* ‘goathide’
- ***b^huĝ-o-s** ‘he-goat, BUCK’: OIr *boc* ‘he-goat’, Arm *buc* ‘lamb’; Av *būza-*, Skt *bukka-* ‘goat’
- ***h₂eĝ-ó-s** ‘he-goat’: Lith *ožỹs*, Av *aza-*, Skt *ajā-* (< ***h₂eĝ-** ‘to drive’)
- ***kápr-o-s** ‘he-goat’: OIr *gabor*, L *caper* (CAPRICORN), OE *hæfer*; Pers *kahra* ‘kid’ (< ***kápr** ‘penis’)
- ***ali-** ‘ram, he-goat’: TB *āl*, H *aliyan(a)-* ‘roebuck’ ↑ **roebuck**



Neolithic Founder Crops

barley

emmer and einkorn wheat

lentils

peas

chickpeas

bitter vetch

flax



Barley

First widely domesticated grain, cultivation by 8000, probably in the area of modern Israel and Jordan. Barley was a sacred grain in early Indic and Roman society and might also have been in PIE times.



Emmer and Einkorn Wheat

emmer wheat: wild forms occur naturally in the Fertile Crescent; probably first cultivated in Anatolia; cultivation certain by 7500.



←

einkorn wheat: first domesticated in Anatolia; cultivation certain by 7050.



WWW.FOTOBANK.COM 5F17-6302 Stock Photo
Einkorn wheat (Triticum monococcum)

→

common 'bread' wheat: not cultivated till around 6000

Other grain crops

rye: known cultivation around 9050 in Syria, but fell out of use until reappearing in the Bronze Age in colder parts of Europe



millet: originated in China, known around the Black Sea by 5000 →



Other domesticated plants

lentils: domestication certain by 7000 in Greece

peas: domestication certain by 7000 in Jordan and Anatolia

chickpeas: native to Syria/Anatolia; first certain domestication by 9000

flax: flax cultivation certain in Syria by 6100, although cloth made from wild flax plants is known from much earlier



Bitter vetch (*Sp yero*): a grain legume native to Anatolia, northern Iraq and Lebanon. Cultivated by at least 5000. Widely used as animal feed.



Flax

fibers removed from the stem of the plant are used to make linen
seeds are edible and can be pressed to flaxseed oil

Thread production was a long process.

First, stalks were harvested, bundled in sheaves and dried. Then the seeds were removed and the stalks were soaked for over a week, then dried, then beaten to remove the fibers, which were combed and spun into thread.



PIE domesticated plant vocabulary

- Most etyma are of uncertain meaning and reflexes refer to various grains

- *h₂ed- ? ‘cereal crop, grass’: L *ador* ‘emmer wheat’, Goth *atisk* ‘grain field’, Arm *hat* ‘grain’, Sog *āδuk* ‘crop, cereals’, Lyc *χθθαhe* ‘hay, fodder’, TB *atiyo* ‘grass’
- *ses-(i)ó- ? ‘grain’: H *sesa(na)-* ‘fruit’, Av *hahya-* ‘providing grain’, Skt *sasyám* ‘grain, fruit’, W *haidd* ‘barley’, Ligurian *asia* ‘rye’
- *ǵrh₂-nó-m ‘ripe thing’ > ‘grain’: OIr *grān* ‘grain’, L *grānum* ‘GRAIN’, NE CORN, Lith *žirnis* ‘pea’, OCS *zrīno* ‘grain’, Alb *grurë* ‘wheat’, Pashto *zannai* ~ *zarai* ‘kernel, seed’ (< *ǵerh₂- ‘ripen’)
- *d^hoHn-eh₂ ? ‘harvested grain’: Lith *dúona* ‘bread’, Pers *dāna* ‘grain’, Skt *d^hānās* ‘kernels of grain’, TB *tāno* ‘grain, kernel’

Barley and wheat grains

- ? *sep-it ‘wheat’: H *seppit*, no cogg. but structure is old, compare:
- *álb^h-it ‘barley’: Alb *elb* ‘barley’, *ἄλφι* ‘barley-meal’
- *iéu-(e)s- ‘ripe thing’ > ? ‘barley’: H *ewan*, Pers *jav*, Skt *yáva-* ‘grain, esp. barley’; but *ζειαί* ‘emmer or einkorn wheat’, Oss *jæw* ‘millet’, perh. TB *yap* ‘millet’, Lith *javaĩ* ‘grain’, Av *yava-* ‘grain’ (< *ieu- ‘to ripen or mature’)
- *ĝ^hrés-d^hi ? ‘barley’: L *hordeum*, NHG *Gerste*, *κρῖ*, *κρῖθή*; but H *karas* ‘wheat’, Alb *drithë* ‘cereal grain’
- *Helĝ- ? ‘grain, barley, millet’: H *halki-* ‘barley, grain’, Pers *arzan* ‘millet’, ? *ἄλιξ* ‘spelt’, perh. TB *lyekśye* ‘barley’

Millet and rye grains

- **proks-o-m* ‘grain, millet’: R *próso* ‘millet’, TB *proksa* ‘grain’
- **kér-es-* ‘millet, grain’: NHG *Hirse* ‘millet’, Kalasha (Indic) *karasha* ‘millet’, but L *cerēs* ‘bread, grain’ and L *Cēres* ‘goddess of agriculture’ (cereal)
- ? **pano-* ‘millet’: L *pānicum*, Shughni (Iranian) *pīnj*
- **h₂éir-eh₂* ‘ryegrass’ (a weed infecting rye fields): Latv *âires*, *αἴραι*; but Skt *erakā* ‘sedge’

Other founder crops

- Words for other ‘founder’ crops are not reconstructible to the PIE stage
 - **flax, pea, chickpea** and **bean** and are attested only in regionally restricted (usu. European) words which might have borrowed from non-IE languages (some have unusual shapes for PIE words)
- ***k̑iker-** ‘chickpea’: L *cicer* ‘chickpea’, Macedonian *κίκερροι* ‘birds’ peas’, Arm *sisen* ‘chickpea’
- ***lin-o-m** ‘flax, LINEN’: W *llin* ‘linen, flax’, L *līnum* ‘linen, flax’, Lith *līnai* ‘linen’, R *len* ‘linen’, *λίνον* ‘linen’
- ***ereg^wo-** ‘pea’: L *ervum*, OHG *araweiz*, *όροβος*.
- ***b^hab^h-(n)-eh₂**, ***bhak̑-** ‘BEAN’: L *faba*, OPr *babo*, R *bob*, Alb *bathë*, *φακός*