Houses and Buildings

building

*dem(h₂)- ‘to build’: same root as in *dóm(h₂)os ‘household’

*kʷei- ‘to make, pile up’: ποιέω (-POIESIS, POETRY), Skt cinóti ‘pile up’

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.

*ǵʰórdʰ-o-s  ‘enclosure, fence, hedge’: H gurtas ‘citadel’, R górod ‘city’, NE YARD, W garth ‘animal pen’
< *ǵʰér³dʰ- to enclose, GIRD

*ǵʰigʰ-s  ‘enclosing wall, fort wall’: OPers didā ‘(town) wall, fortification’, τεῖχος, τοῖχος ‘wall (of a city)’, Skt dehī- ‘wall, bank’; related to word meaning ‘clay’ (> NE DOUGH)

fortified site

*pelh-  ‘fort’: πόλις (ACRO-POLIS, POLITICAL), Li pīlis ‘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**


< *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’: oũkos ‘house’ (ECO-NOMY), L vīcus ‘village, hamlet, neighborhood’ (-WICH), OCS viši ‘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


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


< *keus- ‘hollow out’: Li kaūšti ‘hollow out’, Skt kōṣa- ‘vessel’, ON hauss ‘skull’
Vocabulary suggests living in solid houses and not just tents

door and doorjamb

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

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

hearth, fireplace

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

? place within a house

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


*los-*  ‘cloth, rag’: MHG lasche, Lith lāškana both ‘rags’, Khot r(r)aha- ‘cloth’

Obtaining fibers and spinning thread

*pek-* ‘pull out fibers’ (> ‘comb out wool’ > ‘shear’): L pectō ‘to comb’, L pecten ‘a comb’, Lith pešū ‘to pull, tear out, pluck (fowl)’, πékω ‘to comb, shear’, TB pāk- ‘comb out wool, shear’, OE feax ‘hair of the head’ (FAIR-FAX).


Weaving and sewing


*siuh₁- ‘to sew’, L suō, Lith siuvū, κασ-σύω, Skt sīvyati +
Plaiting, braiding, making wickerwork


*kert-* ‘to make wickerwork’: L crātis ‘wickerwork, hurdle, honeycomb’, NE HURDLE, OPrus corto ‘hedge’, κάρταλλος ‘basket’, κυρτία ‘wattle’
Twining and knotting

*mesg-* ‘to intertwine, make knots’: ON mǫskvi ‘mesh’, Lith mezgū ‘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’: *h₁rouchʰ-ó-s (ON rauði ‘red iron ore’, Pers rōd ‘copper’, Skt lohá- ‘copper’) using the root for RED: *h₁reudʰ-.

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

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

* h₂erğ-nt-o-m ‘white metal = silver’: L argentum, TB ūkante, Skt rajatám, Arm arcat‘.
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 ārklas, ἀροτρον

*mat-* ‘hoe’: L mateola (MATTOCK), OCS motyka, OHG medela ‘plow’, Skt matyā- ‘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, ἀρπίνη, H sarpa- ‘agricultural tool (not plow)’; Finnish borr. from Baltic: sirppi

*adʰ-és-* ‘axe’: NE ADZE, H ates-, atessa- ‘axe’
Agricultural Processes


*h₂mei- ‘to mow’: ἀμάω, H hamesha- ‘early summer’ (‘mowing time’)

*peis- ‘to thresh’: L pīnsō, Lith paisyti; πτισσόω ‘winnow’, Skt pināṭi ‘grind, thresh’

*uers- ‘to thresh, pick’: L verrō ‘sweep grain after threshing’, OCS vrēsti ‘thresh’, H warsi- ‘pluck, harvest’

*melh₂- ‘to grind’: L molō, Lith malū, H maḷḷ(a)-, TB mely-, Skt mrṇāti; NE meal, μύλη ‘mill’
**Quern**

*\(^{g^{\text{w}}}\text{réh}_{2}\text{-}u\text{-}on\)*  

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

< *\(^{g^{\text{w}}}\text{reh}_{2}\text{-}u\)* ‘heavy’: βapίς (BARY-TONE, BAR-IATRIC)
Spears, Knife, Dagger

*gw*eru  ‘spear, spit/rod’: L verū ‘spear, spit’, Av grava- ‘staff’

*uēb-en  ‘knife’: NE WEAPON, ON vápn, TA, TB yepe ‘weapon, knife’

*Hns-i-s  ‘dagger’ > ‘sword, slaughtering knife’: L ēnsis ‘sword’, Skt asi- ‘dagger, knife’ > ‘sword’, Palaic hasīra ‘dagger’

*kel*(H)-  ‘spear, spearpoint, point’: ON hali ‘point of staff, tail’, OPr kelian ‘spear’, Alb thel ‘big nail, spike’, κῆλα ‘arrowshafts’, Skt śalyā ‘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:

  *$g^w_i-\text{eh}_2$ ‘taut string’: OCS źi-ca ‘thread’ (> ‘bowstring’: $\betaι\acute{o}s$, Skt $\text{ji}^\prime\acute{a}$)
  *$h_1\text{i}s-u$- ‘arrow’: $\acute{i}\acute{o}s$, Skt $\acute{i}\acute{s}u$-
  *$\text{tóks-o-m}$ ‘bow’: Myc to-ko-so-wo-ko ‘bow-makers’, $\tau\acute{o}k\acute{\o}v$ ‘bow’, Scythian $\text{tax}\acute{s}a$- ‘bow’ ($\text{TOXIC} < \text{L toxicum} ‘poisoned’ < ‘poisoned arrow’ < $\tau\acute{o}k\acute{\o}v$)

- 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.


• 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’:

  *pëkù  ‘livestock, mobile wealth’: L pecu (PECUNIARY), NE FEE, Skt pášu-, Lith pëcus ‘cattle’

  *gʰuer-  ‘wild animal’: L fera (FERAL), θήρ, Lith žvēris, OCS zvērī

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

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


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

Also borrowed into Uralic: Finnish parsas ‘pig’

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

- Vocabulary for ‘cow’ is also abundant, with three distinct words:
  - *gʷōus* ‘cow’ (most common term): OIr bō, L bōs, , Lat guōvs, βoûς, Arm kov, HLuv wawa-, Av gāuš, Skt gāu-, TB keu
  - *egʰ* ‘cow’: OIr ag, Arm exn, Skt ahī-
  - *uok-eh₂* ‘cow’: L vacca ‘cow’, Skt vaśā-

- 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.)

- *gʷōus* has the widest distribution and is clearly quite ancient because of the Anatolian cognate in HLuv wawa-.
Bulls, oxen and aurochses

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 *ukšán- ‘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)


*h₂ou-ik-eh₂  ‘female sheep’ = ‘ewe’, W ewig ‘female deer’, OCS ovǐći ‘ewe’, Skt avikā- ‘ewe’

*mois-ó-s  ‘ram, sheep; fleece, sheepskin’: Lith maĩšas ‘bag’, R mekh ‘skin’, Av maërša- ‘ram’, Skt meśā- ‘ram, sheep; fleece, skin’
Goats


*h₂eig-s* ‘goat’: Alb *edh* ‘kid’; *αἰξ*, Arm *ayc* ‘goat’; Av *izaēnā* - ‘goathide’

*bʰug-o-s* ‘he-goat, *BUCK*: OIr *boc* ‘he-goat’, Arm *buc* ‘lamb’; Av *būza*-, Skt *bukka* ‘goat’

*h₂eğ-ó-s* ‘he-goat’: Lith *ožys*, Av *aza*-, Skt *ajā* (< *h₂eğ-* ‘to drive’)

*káp-r-o-s* ‘he-goat’: OIr *gabor*, L *capr* (*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.

**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


*ses-(i)ó- ? ‘grain’: H sesa(na)- ‘fruit’, Av hahya- ‘providing grain,’, Skt sasyám ‘grain, fruit’, W haidd ‘barley’, Ligurian asia ‘rye’

*_{g}^{r}rh_{2}nó-m ‘ripe thing’ > ‘grain’: OIr grān ‘grain’, L grānum ‘GRAIN’, NE CORN, Lith žírnis ‘pea’, OCS zrīno ‘grain’, Alb grurē ‘wheat’, Pashto zaṇnai ~ zaṟai ‘kernel, seed’ (< *_{g}^{r}erh_{2}- ‘ripen’)

*d_{b}^{h}OHn-eh_{2} ? ‘harvested grain’: Lith dúona ‘bread’, Pers dāna ‘grain’, Skt dānās ‘kernels of grain’, TB tāno ‘grain, kernel’
Barley and wheat grains

? *sep-it  ‘wheat’: H seppit, no cogg. but structure is old, compare:

*álbʰ-it  ‘barley’: Alb elb ‘barley’, ḍḷϕ ‘barley-meal’


*ǵʰrés-dʰi  ? ‘barley’: L hordeum, NHG Gerste, κρῆ, κρῆθῇ; but H karas ‘wheat’, Alb drithë ‘cereal grain’

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 aîres, aĩpau; 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)

  *ki̮ḳer-* ‘chickpea’: L cicer ‘chickpea’, Macedonian κίκερροι ‘birds’ peas’, Arm sisen ‘chickpea’


  *eregʷo-* ‘pea’: L ervum, OHG araweiz, ῥοβος.

  *bʰabʰ-(n)-eh₂, *bhȧk-* ‘**bean**’: L faba, OPr babo, R bob, Alb bathē, φακός