

REVISITING GREEK ἄχθος

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ABSTRACT

*The etymology of Greek ἄχθος, ἄχθομαι ‘burden, to be loaded, to be vexed’ is uncertain. It has been compared to Hittite hatk-^i ‘to shut, to close,’ with derivatives appearing to connote ‘tight, pressing.’ Its analysis as a disyllabic root, $*h_2éd^h\tilde{g}^h-e-$, is also problematic since PIE roots were, in most cases, monosyllabic. The present paper will consider the possibility that Greek ἄχθος is a compound consisting of two separate PIE roots, one of which is $*d^h\acute{e}g^h-$ ‘earth’ as attested in Greek χθών.*

HOMER AND HESIOD’S USE OF ἄχθος ‘BURDEN, WEIGHT’

1. “Telemachus, no man is more unlucky in his guests than you, seeing that you keep such a filthy vagabond as this man here, always wanting bread and wine, and skilled neither in the works of peace nor those of war, but a mere burden on the earth.”¹

The Greek phrase here translated as “... burden on the earth” is ἄχθος ἀρούρης, where ἀρούρης is literally ‘arable land.’²

2. “They pelted us from the cliffs with rocks huge as a man could lift, and at once there rose throughout the ships a dreadful din...”³

The phrase here translated as “huge as a man could lift” is ἀνδραχθέσι. LSJ glosses this word as “loading a man, as much as a man can carry.”⁴

3. “And as when a shepherd easily carries the fleece of a ram, taking it in one hand, and but little does its weight burden him, so Hector lifted up the stone and carried it...”⁵

Here “little does its weight burden him” translates ὀλίγον τέ μιν ἄχθος ἐπείγει.

4. “He carried a mighty weight of dry wood...”⁶

¹ Homer, *Odyssey* 20.379, Murray translation, vol. 2, 308–309; see also *Iliad* 18.104 where the same phrase is repeated.

² Beekes, *Etymological Dictionary of Greek*, 137.

³ Homer, *Odyssey* 10.121, Murray translation, vol. 1, 366–367.

⁴ LSJ, s.v. ἀνδραχθήσ, 128.

⁵ Homer, *Iliad* 12.452, Murray translation, vol.1, 588–589.

⁶ Homer, *Odyssey* 9.233, Murray translation, vol. 1, 332–333.

This translates φέρε δ' ὄβριμον ἄχθος ὕλης ἀζαλέης...

5. "... it is bad if you put too great a load on your wagon and break the axle..."⁷

"put too great a load on your wagon" translates ἐπ' ἄμαξαν ὑπέρβιον ἄχθος αἰείρας.

Homer, Hesiod, and later authors also employed ἄχθος, ἄχθομαι and related forms to indicate the concepts: hated, vexed, pained, or grieved, but these uses are considered to be metaphorical derivations by Chantraine (2009: 143–144). With respect to both nominal and verbal forms of this Greek word, Frisk (1960: 200–201) considers them "nicht sicher erklärt."

MODERN LEXICOGRAPHERS

Risch (1964: 78) proposed an etymological connection between Greek ἄχθομαι and Hittite *hatk-i* 'to shut, to close.' This has been accepted by Puhvel, Beekes, Kloekhorst, and LIV (doubtfully).⁸ Beekes suggests that the semantic value 'shut' in Hittite must have arisen from the original concept, 'to squeeze.' The proposed root is **h₂ed^hg^h-*, which Kloekhorst calls an "awkward looking form." The vast majority (perhaps originally all) of PIE roots are monosyllabic and this, along with the semantic divergence, raises questions about the etymological correspondence.⁹

An Alternative Analysis based on PIE **d^héǵ^h-* 'earth'

Alternatively, ἄχθος could be considered an ancient compound ἄ-χθος. The second half of this compound would then be parallel to Grk. χθών 'earth, ground, land,' a reflex of PIE **d^héǵ^h-om-*, **d^hǵ^h-om-* 'earth, ground, man (as earth worker), slave' as seen in the following cognates: Hit *tēkan* 'earth, ground,' Ved *kṣám-* 'earth, ground,' Skt *kṣa* 'field, protector or cultivator of a field, peasant,' Lat *humus* 'earth,' *homo* 'human being,' OE *guma* 'man, (bride)groom,' Lith *žėmė* 'earth,' OCS *zemlja* 'earth, land,' Phrygian *zemel* 'slave,' TochA *tkam* 'earth, ground,' Alb *dhe* (from **d^hǵ^h-em-*) 'earth.'¹⁰

As is well-known, this root often appears in radical metathesis form (with inversion in the ordering of root consonants) and often is attested in zero grade (as in the Greek and Vedic).

If such a compound form was originally a Greek construction, the initial element of ἄ-χθος would either be the well-known alpha-copulative signifying 'with, together with'¹¹, or else an assimilated form of Grk. ἄγω 'drive, lead, carry.'¹²

⁷ Hesiod, *Works and Days*, 692.

⁸ See Beekes, *Etymological Dictionary of Greek*, 183; Kloekhorst, *Etym. Dict. Of Hittite Inherited Lexicon*, 134–135; LIV 255; Puhvel, HED 3, 266f.

⁹ In Haynes (2023:59), I argue that PIE root structure can be generalized as **(s)-C [+/- R (R)] -C-*, where (s) is the s-mobile, C is any consonant, and R is any resonant or laryngeal (or a zero-grade of the same), and that apparently disyllabic roots, including any additional element that follows the final consonant of the monosyllabic root, is a root-extension, a derivational ending, a suffix, or the remnant of some ancient compound that will not have been a part of the original root.

¹⁰ Haynes 2023, Table 17; IEW 414–416; EIEC 174; NIL 86–88; Mallory & Adams 120; Watkins 20; DELG 143; Ringe 19; EDHIL 858–862; Bomhard 145; EIEC 247–248; Illič-Svityč no. 69; Ruhlen and Bengtson 323–326; Fortson 461 (*zemel*); MW 324; Blažek, *Tocharian 'man' vs. 'god' in Perspective of Semantic Oppositions*, 105–145

¹¹ Smyth, 250; Beekes 1.

¹² Beekes 18–19; LSJ 17–18.

If the first, this would then signify ‘with earth,’ and would originally have been applied to commoners or slaves tasked with carrying loads of earth, clay, mud, or stones for construction projects, indicating that they were loaded, weighed down, burdened. From here it is not difficult to imagine the semantic shift to vexed, pained, or grieved, since those emotions would be a natural outcome of being burdened with heavy loads and worked to one’s extreme limits.

If the second case is the correct one, then the compound would be ἄγ-χθ-ος, where the gamma was assimilated to the following chi, signifying: *carrying earth* → *loaded, burdened*.

On the other hand, if ἄχθος reflects an ancient PIE rather than a later Greek compound, then the two possibilities would be the following:

- 1) PIE **sṃ-* or *som-* as attested in Lat *sem-* ‘at the same time, together,’ OHG *samn* ‘together,’ Lith *sam-* ‘with,’ OCS *so-* ‘with,’ Av *ha(m)-* ‘together,’ Skt *sam-* ‘with,’ Grk ἄ ‘with, together with.’¹³

Plus: PIE **dʰéǵʰ-* **dʰǵʰ-* ‘earth, ground, land’ as attested in the previously listed examples.
yielding:

**sṃ-dʰǵʰ-* or (in metathesis form) **sṃ-ǵʰdʰ-* → Grk ἄχθ-ος ‘with earth, weighted, loaded.’

Or, if the first element of the PIE compound was an assimilated form of **h₂eǵ-* ‘lead, carry, drive’ (instead of **sṃ-* as above), then the components would be:

- 2) PIE **h₂eǵ-* ‘lead, carry, drive’ as seen in the following PIE cognates: Lat *agō*; Grk ἄγω ‘lead, carry, fetch, bring; Ved *ájati* ‘to drive’; Arm *acem* ‘leads,’ OIr *-aig, -agat* ‘drive, lead,’ *tāin* (from **to-ag-no*) ‘raid,’ ON *aka* ‘go, travel, drive,’ Mlr *āg* ‘fight, warrior’s ardor,’ TochAB *āk-* ‘lead, guide, drive,’ *āsām* ‘lead.’¹⁴

Plus: PIE **dʰéǵʰ-* **dʰǵʰ-* ‘earth, ground, land’ as described above
yielding (with metathesis):

**h₂eǵ-ǵʰdʰ-* (then with assimilation) → **h₂e-ǵʰdʰ-* → Grk ἄχθ-ος ‘carrying earth, weighted, loaded.’

A third (more remote) possibility is that the initial ἄ in ἄχθ-ομαι is a prothetic vowel¹⁵ parallel to Grk. χθές ‘yesterday’ and ἐχθές ‘yesterday,’ in which case the meaning of ἄχθομαι would be simply ‘to be *earthed* → to be weighed down with earth.’

¹³ Beeks 1; M&A 291; de Vann 553; IEW 902–905; Blažek, *The Prefix *Sṃ-/Som- in the Indo-European Tree- and Plant-Names*, 5–11.

¹⁴ Haynes 2024, Table 7; LIV 255–256; IEW 4–6; LSJ 8, 14, 17–18; OLD 85, 87; Monier-Williams 9; DELG 9, 16; Bosworth and Toller 5 (see LIV 256, n. 3); Mallory and Adams 280, 403; Buck 191; EIEC 201, 284, 348; Frisk I-18, II-348; EWAia 50–52; Beekes 18–19; de Vries 3; Adams 36; Anttila 1ff and Anttila, “Aggression and Sustenance, 121; NIL 267–270; Watkins 1; Bomhard 706–707; Dolgopolsky no. 17.

¹⁵ Smyth §41, p. 17; LSJ 748, 1991.

COGNATE WITH HITTITE?

If either of the above cases is correct, then it could not be possible for Hittite *h^hatk⁻ⁱ* ‘shut, close’ to be cognate with Grk ἄ-χθ-ος for the following reasons:

- No reflex of PIE **h₂eg-* is found in Hittite.
- The PIE prefix **sm* ‘with, together with’ is attested in Hittite in the form =(š)šan, not as the *ha* in *h^hatk⁻ⁱ*.

WHAT ABOUT THE GODDESS Ἀχθεία ?

Hesychius defines Ἀχθεία as ἡ Δημήτηρ, μυστικῶς ‘Demeter, according to the mysteries.’ Since Demeter is typically taken as “Mother Earth,” this would confirm a link between the word ἄχθος and the concept *Earth*. The second element of Δημήτηρ is obviously ‘mother.’ The first is thought by some as a pre-Greek word for ‘earth,’ and by others as Illyrian (attested by Alb. *dhe* ‘earth’) and therefore a cognate of Grk χθών, arising from PIE **d^hǵh-* ‘earth, ground, land.’¹⁶

ADDITIONAL EVIDENCE FROM THE SANSKRIT

As mentioned above, PIE **d^hǵh-em* became Ved *kṣám-*, Skt *kṣā́* ‘earth, ground.’ The initial and final consonants of this zero-grade root (via an intermediate Proto-Indo-Iranian *džh-*) fused to become Skt *kṣ* as in *kṣám-* and in a number of other derivatives, not all of which are typically viewed as being based on the root **d^hǵh-*. The following are a few such instances (with comments):

1. *kṣmā́* ‘the earth,’ *kṣmā́tala* ‘the surface of the earth,’ *kṣā́ma* ‘ground, earth.’¹⁷

These are straightforward attestations of PIE **d^hǵh-em*.

2. *kṣa* ‘field, protector or cultivator of a field, peasant’¹⁸
3. *kṣoná* ‘a multitude of men, people (as opposed to the chief),’ *kṣonī* ‘the earth,’ *kṣonimaya* ‘containing or representing the earth,’ *kṣauṇī* ‘the earth,’ *kṣauṇītala* ‘the surface of the earth.’¹⁹

In an earlier article (Haynes 2023: 106–109) I have argued that attestations of PIE **d^hǵh-em* with the semantic value ‘man’ (Lat *homo* ‘human being,’ Goth *guma* ‘man,’ Phrygian *zemel* ‘slave’), as well as another root of the same consonantal form, **d^h—ǵh-* (i.e., **d^heuǵh-*, with the Greek attestation τυγχάνω carrying as one of its meanings ‘common, or vulgar men’), refer not to men in general, but rather to men of a lower class, i.e., earth workers, cultivators of the soil, or builders employing earth, stones, mud, or clay. The preceding two Sanskrit forms: *kṣa* ‘cultivator of a field, peasant’ and *kṣoná* ‘a multitude of men, people (as opposed to the chief)’ clearly fit into the same

¹⁶ Beekes, 324; see also EIEC, s.v. Earth Goddess, 174; and OCD, s.v. Demeter, 263.

¹⁷ MW 333; KEWA 288; 295; EWAia 423–425. (Note: MW employs the notation /sh/ to indicate what in modern usage is written /ṣ/. In the list to follow, these will be normalized to /ṣ/.)

¹⁸ MW 324.

¹⁹ MW 333.

rubric. These terms do not refer to the rulers or chiefs, but rather to the commoners and slaves. According to the ancient logic: they are low, they are dirty, they are dirt.

4. *kṣétra* ‘landed property, land, soil, field, place region, country, enclosed plot of ground,’ *kṣétrakara* ‘cultivating a field,’ *kṣétrakarṣaka* ‘soil-plougher, husbandman,’ *kṣétraja* ‘produced in a field,’ *kṣétrajeśá* ‘contest for landed property, acquisition of land,’ *kṣétratā* ‘seat, place of residence,’ *kṣétrapati* ‘owner of a field, land owner, landlord, farmer,’ *kṣétrasāti* ‘acquisition of fields or land,’ *kṣatrá* ‘dominion, supremacy, power, might,’ *kṣatríya*, ‘governing, endowed with sovereignty, dominion, supremacy, power, might, the second or military caste.’²⁰

KEWA expresses uncertainty as to the etymology of these terms, as does EWAia. I would argue that the derivation from **d^hǵ^h-* is very likely, considering the many references to ‘earth, land, soil, field, plot of ground, cultivation, plowing, acquisition of land, possession of land, lordship over lands and countries.

5. *kṣubh*, *kṣubhita*, *kṣubdha*, *kṣobha*, *kṣóbhaṇa*, *kṣobhya* ‘shake, tremble, be agitated or disturbed, be unsteady, stumble, cause to shake, stir up, excite, frightened, alarmed, angry, enraged, causing emotion’²¹
6. *kṣip* ‘to utter abusive words, insult, revile, abuse.’²²

The semantic values of these two Sanskrit terms are directly parallel to those derivations of Grk ἄχθομαι and ἄχθος that have been glossed as: ‘mental oppression, to be hated, vexed, pained, or grieved; burden, trouble; burdensome, oppressive; annoyance, suffering; vexed at being conquered, etc.’²³ I would argue that these are compound roots based on PIE **d^hǵ^h-* as the first element with some root containing a strong labial consonantal component as the second.

7. *kṣi* ‘possess, have power over, rule, govern, be master of,’ *kṣi* ‘abide, stay, dwell, reside, inhabit,’ *kṣití* ‘dwelling, habitation, house, the earth, soil of the earth, settlements, colonies, nations,’ *kṣitíja* ‘earth-born, produced of or in the earth, son of the earth, daughter of the earth,’ *kṣititrāṇa* ‘protection of the earth’ *kṣitidhārin* ‘carrying soil or earth,’ *kṣitípati* ‘lord of the earth,’²⁴

These Skt words are typically ascribed to the PIE roots **tk-ej-* and **te-tk-*. In that previously mentioned earlier article (Haynes 2023: 107–108) I have argued that these two PIE roots:

1. **tk-ej-* ‘cultivate soil, settle a land, dwell in a place’

²⁰ MW 332; KEWA 285, 293; EWAia 422, 432.

²¹ MW 331; KEWA 292; EWAia 440 s.v. *kṣobh*.

²² MW 328.

²³ Beekes 183; MW 296.

²⁴ MW 324–328; KEWA 289; EWAia 427, 431

Ved *kṣéti* ‘dwells, lingers,’ Myc *ki-ti-je-si* = /*kʰiensi*/ ‘to build on, cultivate, or work land,’ Lat *pōnō* ‘put, place, sit down,’ Grk *κτίσις* ‘settlement,’ *κτίζω* ‘people a country and build houses and cities in it,’ Av *šiti* ‘settlement,’ Arm *šēn* ‘dwell, build on, farm, town.’²⁵

and

2. **tek-s*, **te-tk-* ‘establish, produce, hew, cut, fabricate, fashion, axe’

Lith *tašyti* ‘hew, trim,’ OCS *tesati* ‘hew,’ Skt *tákṣati* ‘fashions, creates, carpenters, cuts,’ Grk *τέκτων* ‘architect,’ *τέχνη* ‘art, craft, skill, technique,’ Skt *tákṣan* ‘carpenter,’ Hit *taksanzi* ‘undertake, prepare, cause, joint,’ OHG *dehsa* ‘axe.’²⁶

are de-voiced and de-aspirated variants of PIE **d^hǵ^h-*, showing phonetic development similar to that which occurred in Tocharian. The first shows a clear connection to the earth: ‘settling, building, and dwelling on land; cultivating and farming the ground.’ The second refers fundamentally to the practice of building with earth as the basic material of walls and houses constructed of mud bricks. Later, builders began using wood and other materials, but the term for building (originally working with stones, mud, and clay) was later applied to other materials and techniques.

Examples of this phonetic reduction (loss of voicing and aspiration) were given in that earlier article. The part of the introduction of that article that describes this process is reproduced below by way of example, but many more instances are given there.

PHONETIC REDUCTION

Another type of root mutation could be called *reduction*. This concept is also familiar, since something very close to it is seen in Tocharian (and to some extent in Hittite) where the rich PIE obstruent inventory has been reduced to include only the simple, unvoiced, unaspirated (lenis) forms.²⁷ It has been suggested that this change may have been due to the influence of a substrate language with a similarly limited range of obstruents.²⁸ This same dynamic can be seen in distinct synonymous PIE roots. Obvious examples are often remarked upon in the standard handbooks. The following are some examples of this transformation:

- **gol(H)uos* ‘bare, bald’ **k_lHuos* ‘bald’²⁹
- **-d^hro-*, **d^hlo-* = instr. suffix **-tro-*, **-tlo-* = instr. suffix³⁰

²⁵ Beekes 788–789; LIV **tkei-* 643; IEW 626; Watkins 95; Mallory and Adams 223; EIEC 622. Compare possible metathesis form: TochB *²keta* ‘parcel of land, estate, field,’ Adams, *Dictionary of Tocharian B*, 191; and Adams, *History and Significance of Some Tocharian B Agricultural Terms*, 373.

²⁶ LIV **tek-* 638; IEW **tekp-* 1058–1059; Watkins 92; Mallory and Adams 220, 243, 283; Bomhard 206; EIEC 139; Beekes 1460; EDHIL 813–814.

²⁷ See EIEC 14, 28, 592. See also Kloekhorst, “Chapter 5: Anatolian,” in Thomas Olander, ed., *The Indo-European Language Family*, 2022, “...the merger of PIE mediae and aspiratae into a single series that is called lenis (PIE **d*, **d^h* > PANat. **t*...)” See Hodge, “Indo-European Consonant Ablaut,” 143–162, for an early attempt to systematize some of these features along with a good survey of the prior literature on the subject.

²⁸ Peyrot, “The deviant typological profile of the Tocharian branch of Indo-European may be due to Uralic substrate influence,” 72–121.

²⁹ EIEC 45; IEW 554.

³⁰ EIEC 52; IEW 692; Mallory and Adams 57.

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|--|--|
| • <i>*h₂eng-</i> ‘bend’ | <i>*h₂enk-</i> ‘bend’ ³¹ |
| • <i>*peh₂ǵ-</i> ‘fasten securely’ | <i>*peh₂k-</i> ‘fasten securely’ ³² |
| • <i>*peǵ-</i> ‘draw, color’ | <i>*peǵk-</i> ‘draw, color’ ³³ |
| • <i>*sred^h-</i> ‘boil, be agitated, move’ | <i>*sret-</i> ‘boil, be agitated, move noisily’ ³⁴ |
| • <i>*b^hend^h-ǵros</i> ‘relation’ | <i>*pent-h₂ǵros</i> ‘father-in-law’ ³⁵ |
| • <i>*h₂eug-</i> ‘increase, become strong’ | <i>*h₂euk-s-</i> ‘grow, become large’ ³⁶ |
| • <i>*greh₂b^h-</i> ‘hornbeam’ | <i>*karp-</i> ‘hornbeam’ ³⁷ |
| • <i>*g^hab^h-</i> ‘take, seize’ | <i>*kap-</i> ‘have, hold, seize’ ³⁸ |
| • <i>*pleh₂g-</i> ‘strike, beat’ | <i>*pleh₂k-</i> ‘strike, beat’ ³⁹ |
| • <i>*k₂uoidis</i> ‘white’ | <i>*k₂uoi₂ós</i> ‘white’ ⁴⁰ |
| • <i>*sab-</i> ‘sap’ | <i>*sap-</i> ‘sap’ ⁴¹ |
| • <i>*steǵb-</i> ‘make stiff’ | <i>*steǵp-</i> ‘make stiff’ ⁴² |
| • <i>*deǵ-</i> ‘teach, show, indicate’ | <i>*deǵk-</i> ‘preach, say, index’ ⁴³ |
| • <i>*ueǵb^h-</i> ‘vibrate, be agitated’ | <i>*ueǵp-</i> ‘move back and forth, vibrate’ ⁴⁴ |
| • <i>*g^heb^hól</i> ‘head’ | <i>*kapolo-</i> ‘head’ ⁴⁵ |
| • <i>*g^hrd-</i> ‘heart’ | <i>*kér₂d-</i> ‘heart’ ⁴⁶ |

Many more examples of this dynamic can be observed once the variation of medial resonants in PIE roots is allowed for. The evidence suggests that an ancient dialectal subset of PIE speakers experienced a phonetic influence similar to that which occurred in Tocharian, and then, during a later period of reunification with a group that had not experienced this linguistic change, the dialects became merged. The result is that, after this merger, synonymous pairs (doublets) coexisted within the basic vocabulary of PIE and these have persisted down into the various daughter languages. These synonyms are now considered separate roots, but they should, it will be argued, be seen as variants of an ancient original.

In their most strict formulation, these phonetic reductions can be summarized as follows:

- d, d^h became t
- b, b^h became p

³¹ EIEC 61; IEW 45–46.

³² EIEC 64; IEW 787–788.

³³ EIEC 64; IEW 794–795; LIV 464.

³⁴ EIEC 76; IEW 1001–1002.

³⁵ EIEC 196; IEW 127; Beekes 1171.

³⁶ LIV 274–275, 288–289; EIEC 248; IEW 84–85.

³⁷ EIEC 273; de Vaan 94; Mallory and Adams 161.

³⁸ EIEC 563; IEW 407–409, 527–528; Watkins, s.v. “*kap-*” 38.

³⁹ LIV 484–485, see 485, n. 1 regarding the original identity of these roots.

⁴⁰ Mallory and Adams 332; Watkins 46; IEW 628–629; see below, Table 19.

⁴¹ Mallory and Adams 158; IEW 880.

⁴² LIV 592, 594.

⁴³ Watkins 15; IEW 188.

⁴⁴ de Vaan 674; IEW 1131; LIV 671.

⁴⁵ See Haynes 2023, Table 18.

⁴⁶ IEW 580; EIEC 262–263; Mallory and Adams 187; Michael Witzel, “Comparison and Reconstruction,” 48.

- $\hat{g}$, $\hat{g}^h$ became k ,
- g , g^h became k
- g^u , g^{uh} became k or k^u

The semantic parallels of **tek-s*, **te-tk-* to the voiced and aspirated form of this root can best be seen by way of comparison to the following, also quoted from that earlier article:

**d^heġġ^h-*, **d^hiġġ^hs-* ‘form, build, mold mud or clay, knead, smear, plaster; wall of mud’ Skt *dēhmi* ‘spread, fill,’ *dēhī* ‘wall, rampart, dam,’ Goth *digan* ‘form, fashion, knead, make pottery,’ ON *deig* ‘dough,’ *digr* ‘thick,’ NE *dough*, Lith *žiedžiù* ‘form from mud,’ TochB *tsikale* ‘to form,’ Lat *fingō*, *finxī* ‘form, shape,’ *figūra* ‘form, shape, figure,’ *fictilis* ‘fashion out of clay, made of earth or clay,’ *figulus* ‘potter,’ Av *pairi-daēza-* ‘enclosure’ (> NE *paradise*); Grk *τείχος*, *τοιχος* ‘wall, embankment,’ possibly Grk *θιγγάνω* ‘touch with the hand,’ OIr *digen* ‘build, firm, solid, hard, strong, fixed.’⁴⁷

Mallory and Adams (223-224, 371) write, “The underlying semantics of **dheġġh* indicate that it was specifically associated with the working of clay (e.g. Lat *fingō* ‘fashion,’ Skt *dēhmi* ‘smear, anoint,’ TochAB *tsik-* ‘fashion [pots, etc.],’ hence the English cognate *dough*; in Greek and Indo-Iranian it is also associated with building walls, e.g. Av *pairi-daēza* ‘build a wall around’ ... but there are also cognates of more general meaning, e.g. OIr *con-utainc* ‘builds,’ Lith *diežti* ‘whip, beat,’ Arm *dizanem* ‘heap up’.” And in EIEC (629) they write: “The substance from which the walls were made, [earth] came to be applied both to the finished product, e.g., Grk *τείχος* ‘wall’, Av *uz-daēza-* ‘wall’, and clay-like substances, e.g. Germanic *dough*.”

Another probable example of a reduced form of *ἄχθος* ‘load, burden, mental oppression; vexed, pained, or grieved; burden, trouble,’ can be seen in a Greek word denoting the same semantic field: *ἀγανακτέω* ‘be indignant or irritated.’ This is a word of uncertain etymology, with Beekes even doubting its source in Greek at all.⁴⁸ This word could be analyzed as *ἀγαν-α-κτέω*, with the first element being the familiar Greek adverb *ἄγαν* ‘much, too much,’ and the remaining compound *-α-κτέω* being a phonetically reduced version of *ἄχθος*, *ἄχθομαι*. The original meaning of the compound would therefore be ‘overloaded, overburdened, literally: too much with earth, or carrying too much earth.’

CONCLUSION

The preponderance of the evidence suggests that Greek *ἄχθος*, *ἄχθομαι* is a compound based on the PIE root **d^heg^h-* ‘earth, ground, field, earth worker.’

⁴⁷ LIV 140; IEW 244; NIL 118; de Vries 194; Mallory & Adams 223–224, 228; Watkins 18; EIEC 283, 649; Bomhard 166.

⁴⁸ Beekes 8.

ABBREVIATIONS OF LITERATURE

Adams	Douglas Q. Adams, <i>Dictionary of Tocharian B</i>
AHD	<i>American Heritage Dictionary</i>
ALEW	Hock, Wolfgang, <i>Altltitaisches etymologisches Wörterbuch</i>
CLL	Melchert, Craig, <i>Cuneiform Luvian Lexicon</i>
DELG	Chantraine, Pierre, <i>Dictionnaire étymologique de la langue grecque</i>
de Vaan	de Vaan, Michiel, <i>Etymological Dictionary of Latin & other Italic Languages</i>
EDHIL	Kloekhorst, Alwin, <i>Etymological Dictionary of the Hittite Inherited Lexicon</i>
EIEC	Mallory, James P., and Douglas Q. Adams, <i>Encycl. of Indo-European Culture</i>
EWAia	Mayrhofer, Manfred, <i>Etymologisches Wörterbuch des Altindoarischen</i>
IEW	Pokorny, Julius, <i>Indogermanisches etymologisches Wörterbuch</i>
KEWA	Mayrhofer, Manfred, <i>Kurzgefaßtes etymologisches Wörterb. des Altindischen</i>
LIV	Rix, Helmut, <i>Lexicon der indogermanischen Verben</i> . 2 nd edition
LSJ	Liddell, Scott, and Jones, <i>A Greek-English Lexicon</i>
Mallory and Adams	Mallory and Adams, <i>The Oxford Introduction to Proto-Indo-European and the Proto-Indo-European World</i>
NIL	Wodtko, Irslinger, and Schneider, <i>Nomina im Indogermanischen Lexikon</i>
OCD	<i>Oxford Classical Dictionary</i>
OLD	<i>Oxford Latin Dictionary</i>

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ABBREVIATIONS OF NAMES OF INDO-EUROPEAN LANGUAGES

Alb	Albanian	Corn	Cornish
Arm	Armenian	Cymr	Cymric
Av	Avestan	Gall	Gallo-Roman
Bret	Breton	Gaul	Gaulish
Bulg	Bulgarian	Goth	Gothic
CLuv	Cuneiform Luvian	Grk	Greek

HLuv	Hieroglyphic Luvian	OLat	Old Latin
Hit	Hittite	OLith	Old Lithuanian
Illyr	Illyrian	ON	Old Norse
Khot	Khotanese	OPers	Old Persian
Lat	Latin	OPrus	Old Prussian
Latv	Latvian	ORus	Old Russian
Lith	Lithuanian	OSax	Old Saxon
Luv	Luvian	Osc	Oscan
Lyc	Lycian	Oss	Ossetic
Lyd	Lydian	OSwed	Old Swedish
Mcymr	Middle Cymric	OWels	Old Welsh
ME	Middle English	Phryg	Phrygian
MHG	Middle High German	PIE	Proto-Indo-European
Mlr	Middle Irish	Pol	Polish
MPers	Middle Persian	Rus	Russian
MWels	Middle Welsh	SC	Serbo-Croatian
Myc	Mycenaean Greek	Skt	Sanskrit
NE	New English	Slav	Slavic
Norw	Norwegian	Sogd	Sogdian
NPers	New Persian	Swed	Swedish
NWels	New Welsh	TochA	Tocharian A
OAv	Old Avestan	TochB	Tocharian B
OCS	Old Church Slavonic	Ukr	Ukrainian
OE	Old English	Umb	Umbrian
OFris	Old Frisian	Ved	Vedic
OHG	Old High German	YAv	Young Avestan
OIr	Old Irish		