

Alexander Nikolaev  
Boston University, USA. alexander.s.nikolaev@gmail.com

## Luwian *LUHANUWA-*, Lycian *Б ЛУГА-* ‘TO BURN’\*

This paper proposes a new etymology for Luw. (FLAMMAE)*la<sub>x</sub>-há-nú-wa/i-ta<sub>x</sub>/luhanuwata/* ‘he burned’ and Lyc. *Б ni ... lugātu* ‘may they not burn’: these verbal stems are analyzed as factitives ultimately based on the Proto-Anatolian nominal stem *\*louH-á(H) < \*h<sub>2</sub>louh<sub>2/3</sub>-áh<sub>2</sub>* ‘burning’ (with the loss of the initial laryngeal by the Saussure Effect), made from the PIE root *\*h<sub>2</sub>leu<sub>h</sub>2/3-* ‘to burn’.

*Keywords:* Luwian language, Luwian hieroglyphic script, Lycian B language, Anatolian verbal stem formation, Indo-European etymology.

A. С. Николаев  
Бостонский университет, США. alexander.s.nikolaev@gmail.com

### Лув. *luhanuwa-*, лик. *Б луга-* ‘сжигать’

В статье предлагается новая этимология для лув. (FLAMMAE)*la<sub>x</sub>-há-nú-wa/i-ta<sub>x</sub>/luhanuwata/* ‘он сжег’ и лик. *Б ni ... lugātu* ‘да не сожгут’: эти глагольные основы возводятся к фактивным дериватам от праанат. именной основы *\*louH-á(H) < и.-е. \*h<sub>2</sub>louh<sub>2/3</sub>-áh<sub>2</sub>* ‘горение’ (с выпадением начального ларингала по закону де Соссюра), от и.-е. корня *\*h<sub>2</sub>leu<sub>h</sub>2/3-* ‘гореть’.

*Ключевые слова:* лувийский язык, лувийское иероглифическое письмо, ликийский Б язык, анатолийское глагольное основообразование, индоевропейская этимология.

The modest purpose of this note is to elaborate on a suggestion made in passing in my earlier publication in this journal<sup>1</sup> and to discuss the possible Anatolian descendants of PIE *\*h<sub>2</sub>leu<sub>h</sub>2/3-* ‘to burn’.

In lines 3–4 of the Luwian hieroglyphic TOPADA inscription<sup>2</sup> we find the following passage (see fig. 1 below):

§ 13 *wa/i-sa pa+ra/i-za<sub>x</sub>-ta<sub>x</sub>-wa/i-ni<sub>x</sub>* (URBS) “TERRA”-*kwa/i<sub>x</sub>+ra/i \*273-ti* (“PES<sub>2</sub>”) *i+ra/i*

---

\* Warm thanks are due to Craig Melchert, Massimo Poetto, and David Sasseville, and Andrei Sideltsev; all errors of fact and judgment are, however, mine alone.

<sup>1</sup> Nikolaev 2021a: 957 n. 14.

<sup>2</sup> The inscription is notorious for the problems of interpretation it poses, cf. e.g. Weeden 2010: 47: “due in part to its highly idiosyncratic use of archaizing or unusual sign-forms, it is extremely difficult to interpret”.

§ 14 *wa/i<sub>5</sub>-ta<sub>x</sub>* || URBS+MI.AEDIFICIUM-*ta<sub>x</sub>-na* (FLAMMAE)(-)*la<sub>x</sub>-há-nú-wa/i-ta<sub>x</sub>*

§ 15 \*274-*ia-pa-wa/i* FEMINA.MANUS-*zi/a-ha* SERVUS-*sa* (“PES”) *u-pa-ta<sub>x</sub>*<sup>3</sup>

Payne 2012: 58 translates: “he (the Royal Horse?<sup>4</sup> the cavalry?) went into the land of Parzata(?) with strength and burnt(?) building(s)(?), and he reduced the region, (including) women (and) children (in) (to) servitude”. The form of interest here is (FLAMMAE)*la<sub>x</sub>-há-nú-wa/i-ta<sub>x</sub>* plausibly interpreted by Hawkins 2000: 456 as ‘he burnt’: by analogy with other cases where the sign FLAMMAE (\*477)<sup>5</sup> is used as a determinative with words referring to fire<sup>6</sup>, Hawkins concludes that the “interpretation of the present verb as ‘(cause to) burn’ would fit the context as understood”.<sup>7</sup> The

<sup>3</sup> The transliteration follows the *ACLT*; for this inscription see Hawkins 2000: 451–61, plate 253; Woudhuizen 2007; Weeden 2010; Payne 2012: 54–9; d’Alfonso 2019. Per convention, determinatives are written in parentheses, while the presence of a logogram marker (\*410) is indicated by placing a logogram in quotes. The numbering of hieroglyphic signs follows Laroche 1960; for an updated sign-list see Payne 2014: 161–96.

<sup>4</sup> Viz. REX+*RA/I-ti* (ANIMAL)EQUUS-*wa/i-ti* (§ 5, 10). Note *zi/a-lá/i-ta<sub>x</sub>*- ‘galloped’ (Weeden 2010: 51) in § 11.

<sup>5</sup> The reversed form of the sign FLAMMAE in the inscription “seems no good reason to doubt its identity” (Hawkins 2000: 456), but see Weeden 2010: 52 for a position of skepticism; however, the vertical cross-bar mentioned by Weeden is likely to represent the division between two “tongues” of the flame.

<sup>6</sup> See Laroche 1960: 241: *kinu(wa)*- ‘to burn’, *marusana*- ‘fire-brand’, and *la/i/u-sà-la/i/u-sà* ‘to burn’ (?), on which see the following footnote.

<sup>7</sup> Hawkins’ reading and interpretation of the form have been widely accepted. A sole dissenter is d’Alfonso (2019: 137) who reads \*477 in TOPADA as a logogram: he transcribes FLAMMAE-*la<sub>x</sub>-há-nú-wa/i-ta<sub>x</sub>* as \**laslahhanuwata* without discussing either his reasons for this reading or the resulting form. The number of phonetic complements following the logogram (five!) makes his reading *a priori* less convincing. The form \**laslahhanuwata* posited by D’Alfonso is probably made from the same root as reduplicated *la/i/u-sà-la/i/u-sà-ta* in HAMA 4, § 11: (“BOS”) *u-su-pa||-ta-tà-ha-wa/i* (“FLAMMAE”) *la/i/u-za-li-na* NEG<sub>2</sub>- (“FLAMMAE”) *la/i/u-sà-la/i/u-sà||-ta* DEUS-*ni-i* SUPER+*ra/i-* ‘INFRA-*ta* “they did not burn the burnt offering, a sacrificial ox, up and down to the god” (trans. Payne 2012: 65). In view of the triple vocalization of the sign \*445, the writing system does not allow distinguishing between *laslassa-*, *lulussa-*, or *lislissa-* ‘to burn (habitually)’; the reduplicated formation is clearly an iterative of some kind, construed with the likewise phonologically

verb recurs in § 24 of TOPADA in the same spelling and with the same meaning: URBS [(FLAMMAE)<sup>7</sup>]*la<sub>x</sub>-ha-nú-wa/i-ta<sub>x</sub>* ‘burnt the city’.<sup>8</sup>



Fig. 1. TOPADA § 14 (Hawkins 2000, plate 253)

The first sign in the form under discussion, transliterated by Hawkins as *la<sub>x</sub>*, is \*455 (the third sign on the bottom line in fig. 1). This rare syllabogram is also found in § 4 of the same inscription where it is used to write the personal name *wa/i<sub>5</sub>+ra/i-pa-\*455-wa/i-sa<sub>x</sub>*. This ruler was identified by Hawkins 1979a: 166 and Poetto 1982: 282 n. 22 with Warpalawa of Tuwana known to the Assyrians as Urbala’a and attested in Assyrian sources from 738 BCE through at least 709 BCE. The value <la> was thus tentatively established for the sign \*455.<sup>9</sup> However, Hawkins’ identification of the ruler

---

ambiguous *laz(z)ali-* / *liz(z)ali-* / *luz(z)ali-* ‘holocaust’ as its direct object in a quasi *figura etymologica* (so *ACLT*). Importantly, the usage of *IVslVsta IVz(z)alin* in this passage is not immediately comparable with that of *IVhanuwata* in the TOPALA inscription where the object is ‘buildings’.

Contra Hawkins 2000: 406, it does not appear possible to directly compare Luwian *IVslVs-* with Hittite *lukki/a-* ‘set fire to’: PIE \**leuk-* ended in a plain velar, and as Luwian *kišā(i)-* ‘to comb’ shows, one would expect Luwian †*luk-* as the outcome; note that there is no evidence for PIE (or Proto-Anatolian) \**luk-skē/o-* (which would not have meant ‘to light up, to put on fire’ anyway). Poetto 1979: 677 n. 19 (whose study of this difficult passage remains influential) chooses *laslas-* as the transcription and compares Hittite *lazzi-* ‘good, right’, while Sasseville 2020: 135 compares unreduplicated Luwian (OCCIDENS)*la/i/u-si-* (which he transcribes as *lus-* and translates as ‘to disappear’) and Lycian *lusalija* ‘destructive’ and proposes a derivation from PIE \**leuH-* ‘to cut off’ (on which see Nikolaev 2010: 232–6).

<sup>8</sup> To judge from the drawing in Hawkins 2000 (plate 253), the edge of the inscription is mutilated and it is impossible to ascertain whether the determinative (FLAMMAE) was present.

<sup>9</sup> The only other word written in Iron Age Luwian texts with the sign \*455

also allowed dating the inscription to the last third of the 8<sup>th</sup> cent. BCE, and it is known that another sign in the *l*-series showed alternating vowel values in the Late Period, namely, \*445: the sole reading attested for this sign in the Empire Period is <lu>, but in the Iron Age inscriptions it could also be used to write <la> and <li>. <sup>10</sup> The vocalization of *la<sub>x</sub>* (\*455) is therefore uncertain; note that in his commentary on *la/i/u-sà-la/i/u-sà-ta* in HAMA § 11 (see n. 7), Hawkins (2000: 406) actually suggests *luhanuwata* as the bound transcription of the form in TOPADA.

Other potentially relevant Luwian forms are too unclear to be useful. One that has the highest chance of being from the same verb is found in MARAŞ 8 § 2: *wa/i-ta ku-ma-na mi-<sup>1</sup>ia<sup>2</sup>-ti<sup>3</sup>(<sup>1</sup>)-i* | FLUMEN.REGIO-*ia-ti-i* || DOMUS-*na-x*[...] ARHA (FLAMMAE) *la/i/u-x(-x<sup>3</sup>)* “when from my river-land the house[s?]... burned down”. This morsel of an (allegedly) verbal form is written with \*445, which, again, does not allow deciding between <la>, <li> or <lu>.

To sum up, under the assumption (which is not independently supported) that both *l*-signs, \*445 and \*455, had triple vocalization <la/i/u> in Luwian hieroglyphic script, the sequence \*455-*há-nú-wa/i-ta<sub>x</sub>* in the TOPADA inscription may be analyzed as 3 sg. pret. *luhanuwata* ‘he burned’.

This verbal form is clearly made with the suffix *-nuwa<sup>i</sup>* (Hitt. *-nu<sup>mi</sup>*, Lyc. *-nuwe-*) used in Anatolian to make a) causatives from verbal stems (e.g. Luw. *ta-* ‘to stand’ → *tanuwa-* ‘cause to stand’, *hwiya-* ‘to walk’ → *hwinuwa-* ‘cause to walk’) and b) factitives from nominal stems (e.g. *ura/i-* ‘great’ → *uranuwa-* ‘to magnify’, *arla-* ‘place’ → *arlanuwa-* ‘to relocate’). <sup>11</sup> It will be argued here that Luw. *luhanuwata* is best analyzed as a denominative factitive formation.

A cognate of the Luwian form was identified by Ševoroškin 2002: 183 in Lycian B (Milyan) 3 pl. ipv. *ni ... lugātu* (TL 44d.60) referring to some kind of a forbidden action (Neumann 2007: 187) which Ševoroškin translated as ‘let them not burn X’: this attractive

---

is \*455-*li-ia-na*, the meaning of which is unknown. The word is attested in KARKAMIŞ A1a: § 24 ARHA-*pa-wa/i kwa/i-i PES-wa/i-i-ha* § 25 *wa/i-mi-i<sup>1</sup> za-i<sup>1</sup>-na DEUS-ni-si-i-na* | \*455-*li-ia-na i-zi-i-ha* “when I came forth, I made myself this X of gods” (Hawkins 2000: 88 translates ‘assemblage’ with reservations).

<sup>10</sup> See Marazzi 1990: 270; Hawkins 2000: 28.

<sup>11</sup> See Shatskov 2017: 108–234 and Sasseville 2020: 462–88.

interpretation nicely matches the preceding mention of “destructive (viz. hot) autumns” (*lusalija zēna*) which the *xruwasa*-deities should make quick (*nuniti*).

Lycian B *luga-* — which appears to be a transitive verb — can be analyzed as a factitive stem based on a nominal stem *\*luga-* ‘burning’<sup>12</sup>, compare Lycian A *kumazati* ‘performs a sacrifice’ ← *kumaza-* (c.) ‘sacrificer’ or Lycian B *mrssxati* ‘desecrates’ ← *mrssxa-* (c.) ‘offense, deceit’.<sup>13</sup> The putative nominal stem *\*luga-* can be traced back to Proto-Luwic *\*lūHā-* with a regular development of *\*H > g* (cf. Proto-Anat. *\*HauHa-* > Luw. *hūha-*, Lyc. B *xuga-* ‘grandfather’); Proto-Luwic *\*lūHā-*, in turn, can go back to Proto-Anatolian *\*louHá(H)-* with monophthongization (cf. Luw. *ū-* < *\*au-* ‘away, off’ or *kutaš(ša)ra/i-* ‘orthostat’ < *\*g<sup>h</sup>ou-t-*) and regular loss of final *\*H*. The same Proto-Luwic *\*lūHā-* may have served as the derivational basis of Luw. *luhanuwa-*: under this analysis, the middle /a/ in the Luwian form is linguistically real and represents the stem vowel of the underlying nominal stem (/luhanu-/ , not /luhnu-/). Luw. *luhanuwata* and Lycian B *lugātu* can thus be shown to be derived from the same Proto-Anatolian stem.<sup>14</sup>

<sup>12</sup> For Lycian verbs in *-a<sup>ti</sup>* (Luw. *-a-*, Hitt. *-ahh-*) in general see Sasseville 2015; Sasseville 2020: 16–77.

<sup>13</sup> *mrssxa-* (c.) ← *\*mrsax-* ‘to desecrate’ (= Hitt. *maršahh-*), see Melchert 2015: 161; Sasseville 2020: 48.

<sup>14</sup> It is tempting to believe that a direct reflex of Proto-Luwic nominal stem *\*lūHā-* is, in fact, attested in cuneiform sources as *lūha-* (c.), in two of its three occurrences written with a Glossenkeil and thus likely a Luwianism. The translation ‘light’, going back to Laroche 1959: 63 (“lumière?”), rejected by Melchert 1993: 128 and Tischler 2001: 95), finds no support in the actual texts: as *CHD* (s.v.) admits: “the suggested meaning “light” is based on the similarity of this word to the root of Hittite *lalukkima-*, *luk-*, and *lukatta*”. This view can no longer be upheld: there is no evidence for a systematic relationship of Hitt. *-k(k)-* to Luw. *-h-* / *-h-*. But even if PIE *\*leuk-* is left out of the picture, it is uncertain whether 2<sup>nd</sup>-millennium Luwian *lūha-* has anything to do with the 1<sup>st</sup>-millennium Luwian *luhanuwa-* and Lycian B *luga-*. The form *lūha-* is listed in a “Sitzordnung” of deified abstracts in a ritual text (KUB 17.20 ii 9–12; CTH 492.1): EGIR-ŠU=*ma hantantatar=ya ēšzi*, EGIR-ŠU=*ma dušgarašza ēšzi*, EGIR-ŠU=*ma :nūš :dummanteiaš ēšzi*, EGIR-ŠU=*ma kariyašha :lu-u-ħa-aš* MU.KAM SIG<sub>5</sub> [...] *ħattulatar :ušašš=a ašanzi* “behind it sits providence, behind it sits joy, behind it sits contentment, behind it sit mercy, *lūha-*, a good year, [...] health, (length<sup>3</sup>) of years” (ed. S. Melzer, hethiter.net/: CTH 492.1, trans. Puhvel 2001: 102), and a similar phrase *kari]yašhi lu-u<sup>1</sup>-ħa*

It remains to discuss the Indo-European etymology of Proto-Anatolian *\*louHá(H)-* ‘burning’. As a “τομή-type” formation with an *o*-grade of the root, *\*louHá(H)-* can be mechanically back-reconstructed as either *\*louh<sub>2/3</sub>áh<sub>2</sub>-* or *\*h<sub>x</sub>louh<sub>2/3</sub>áh<sub>2</sub>-*, since the root-initial laryngeal would be expected to be lost in an *o*-grade environment (“Saussure Effect”). The latter option allows aligning Proto-Anatolian *\*louHá(H)-* ‘burning’ with PIE *\*h<sub>2</sub>leu<sub>x</sub>-* ‘to burn’ which can be reconstructed on the basis of the following forms: Ved. *rūra-* ‘burning hot’ (< *\*h<sub>2</sub>luh<sub>x</sub>-ro-*), Iranian *\*(H)rau-* ‘to burn’ (Chorasm. *pcr w̄y-* ‘to heat up’, Ossetic (Iron.) *arawyn* ‘to burn in fire, to parch’), Gk. *ἀλέα* ‘heat’ (< *\*h<sub>2</sub>leu<sub>x</sub>-eh<sub>2</sub>* ← *\*h<sub>2</sub>leu<sub>x</sub>-o-*), (-)ἀλεής ‘hot’, ἀλεινός ‘id.’ (< *\*h<sub>2</sub>leu<sub>x</sub>-es-*), OIr. *loscaid* ‘burns’ (< *\*h<sub>2</sub>luh<sub>x</sub>ske/o-*) and possibly Latin *lūstrum* (if ‘fire ritual’).<sup>15</sup> If Luw. *luhanuwata* ‘he burned’ and Lyc. B *ni ... lugātu* ‘may they not burn’ belong to this root, its root-final laryngeal should be specified as *\*h<sub>2/3</sub>*, to give Luw. *-h-* and Lyc. B *-g-*.

### References and abbreviations

- ACLT* = Ilya Yakubovich (ed.), *Annotated Corpus of Luwian Texts*, 2013–2016 (<http://web-corpora.net/LuwianCorpus>).
- Beckman, G. 2001: Hantili I. *Kulturgeschichten. Altorientalische Studien für Volkert Haas zum 65. Geburtstag*, ed. by Th. Richter, D. Prechel, J. Klinger, 51–58. Saarbrücken: Saarbrücker Druckerei und Verlag.
- CHD* = *The Hittite dictionary of the Oriental Institute of the University of Chicago*, ed. by H. G. Güterbock, H. A. Hoffner, Th. P. J. van den Hout, & P. Goedegeburre. Chicago, Oriental Institute, 1980–.
- d’Alfonso, L. 2019: War in Anatolia in the Post-Hittite Period: The Anatolian Hieroglyphic Inscription of Topada Revised. *Journal of Cuneiform Studies* 71, 133–152.

MU.KAM S[IG<sub>5</sub> (dat.-loc. sg.) is found in IBoT 3.83 5. KBo 3.65 rev. 4’ (CTH 655) has acc. sg. :*lu-u-ḫa-an* in a broken context (see Beckman 2001: 55): the text *may* be saying that *lūḫa-*, along with other favorable things, has been taken away from the murderers of Muršili I (*nu=šmaš ... uīyan ḫarkir*), but this interpretation is very uncertain. All in all, *lūḫa-* is unlikely to have a negative meaning related to burning (‘heat’, ‘warmth’ *vel sim.*) and is therefore best analyzed as etymologically unrelated to Luw. *luhanuwata* and Lyc. B *lugātu* and homophonous with the reflex of Proto-Anatolian *\*louHá(H)-* posited in this paper. (N. Oettinger *apud* Melchert (*forthcoming*) derives *lūḫa-* ‘letting go, acquiescence’ from the root *\*leu<sub>h2</sub>-*, *\*luh<sub>2</sub>-* ‘cut off’ (Gk. *λύω* ‘let go’, Skt. *lūnāti* ‘cuts’, Old Norse *lé* ‘scythe’ < *\*leuōn-*), see n. 7 above).

<sup>15</sup> See Nikolaev 2021b for details.

- Hawkins, J. D. 1979a: Some Historical Problems of the Hieroglyphic Luwian Inscriptions. *Anatolian Studies* 29, 153–167.
- Hawkins, J. D. 1979b: The Hieroglyphic Luwian Stelae of Meharde-Sheizar. *Florilegium Anatolicum: Mélanges offerts à Emmanuel Laroche*, 145–56. Paris: de Boccard.
- Hawkins, J. D. 2000: *Corpus of Hieroglyphic Luwian Inscriptions*. Vol. 1: *Inscriptions of the Iron Age*. Berlin and New York: de Gruyter.
- Laroche, E. 1959: *Dictionnaire de la langue louvite*. Paris: Librairie Adrien-Maisonneuve
- Laroche, E. 1960: *Les hiéroglyphes hittites*. Paris: Éditions du Centre national de la recherche scientifique.
- Marazzi, M. 1990: *Il geroglifico anatolico. Problemi di analisi e prospettive di ricerca*. Con la collaborazione di N. Bolatti-Guzzo e un'appendice di C. Mora. Roma: Dipartimento di studi glottoantropologici, Università «La Sapienza».
- Melchert, H. C. 1993: *Cuneiform Luvian Lexicon*. Chapel Hill, N.C.: self-published.
- Melchert, H. C. 2015: Lycian *alaha-* and *alada/ehali-*. *Genre épigraphiques et langues d'attestation fragmentaire dans l'espace méditerranéen*, ed. by E. Dupraz, and W. Sowa, 153–163. Rouen: Presses universitaires de Rouen et du Havre.
- Melchert, H. C. (forthcoming): *A Dictionary of Cuneiform Luvian*. Ann Arbor; New York: Beech Stave Press.
- Neumann, G. 2007: *Glossar des Lykischen*. Überarbeitet und zum Druck gebracht von J. Tischler. Wiesbaden: Harrassowitz.
- Nikolaev, A. 2010: *Issledovanija po praindoevropejskoj imennoj morfologii*. St. Petersburg: Nauka.  
Николаев А. С. 2010: *Исследования по праиндоевропейской именной морфологии*. СПб.: Наука.
- Nikolaev, A. 2021a: Etyma Graeca II. *Indo-European Linguistics and Classical Philology* 25, 953–976.
- Nikolaev, A. 2021b: Vedic *rūrā-* ‘burning hot’, Ossetic *arawyn* ‘to scorch in fire’, Greek *ἄλέα* ‘heat’, Old Irish *loscaid* ‘burns’, and Latin *lūstrum* ‘ritual purification’. *Münchener Studien zur Sprachwissenschaft* 74, 109–132.
- Payne, A. 2012: *Iron Age Hieroglyphic Luwian Inscriptions*. (Writings from the Ancient World 29). Atlanta: Society of Biblical Literature.
- Payne, A. 2014: *Hieroglyphic Luwian: An Introduction with Original Texts*. 3<sup>rd</sup> revised ed. Wiesbaden: Harrassowitz.
- Poetto, M. 1982: Osservazioni sull'iscrizione luvio-geroglifica di Aksaray. *Serta Indogermanica: Festschrift Günter Neumann*, ed. by J. Tischler, 275–284. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Puhvel, J. 2001: *Hittite Etymological Dictionary*. Vol. 5: *Words beginning with L*. Berlin; New York: Mouton de Gruyter.
- Sasseville, D. 2015: Anatolische verbale Stammbildung: das Faktitivsuffix \*-eh<sub>2</sub>-. *Münchener Studien zur Sprachwissenschaft* 69, 281–297.
- Sasseville, D. 2020: *Anatolian Verbal Stem Formation: Luwian, Lycian and Lydian*. Leiden; Boston: Brill.

- Shatskov, A. 2017: *Hittite Nasal Presents*. Leiden University Ph.D. Dissertation.
- Shevoroshkin, V. 2002: Word Combinations in Milyan and Lycian Inscriptions. *Studia Linguarum* 3/1 (= *Memoriae A. A. Korolëv dicata*, ed. by A. S. Kassian, A. V. Sidel'tsev), 117–189. Moscow: Languages of Slavonic Culture.
- Tischler, J. 2001: *Hethitisches Handwörterbuch mit dem Wortschatz der Nachbarsprachen*. 2nd ed. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.
- Weeden, M. 2010: Tuwati and Wasusarma: Imitating the Behaviour of Assyria. *Iraq* 72 (= *In Honour of the Seventieth Birthday of Professor David Hawkins*), 39–62.