

THE DAWN OF INDO-EUROPEAN LITERACY

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A hundred years ago the earliest documentary evidence of Indo-European languages consisted of the Aryan Rig Veda and the Greek Iliad & Odyssey: stories and hymns orally transmitted for centuries which received their final written form in Antiquity. These frozen remains of longlasting fluid tradition held in honour by travelling bards afforded a glimpse, however distorted, into the Late Bronze Age history of the Aryan and Greek tribes, respectively. Since that time the situation concerning documentary evidence of Indo-European languages has changed dramatically. Decipherment of Linear B in the early fifties of our present century gave access to a pre-Homeric form of Greek which, in its earliest attestation for the palace of Knossos in Crete, dates back to the beginning of the 14th century BC. Before this, in the first decades of this century, the time-barrier for direct testimony of Indo-European speech had already been shifted to the second half of the 17th century BC owing to the identification of central Anatolian Hittite as an Indo-European language concealed in cuneiform script. Thus our Bronze Age knowledge of the language family concerned can now be nourished by hard facts unbiassed by the question of how reliable orally transmitted data are.¹

In contrast to Greece, Anatolia proved to be a key-area for the earliest indirect evidence of Indo-European presence as well. Writing is introduced in Asia Minor by Assyrian merchants, settling in trading colonies or Karums, at the beginning of the second millennium BC. As observed by Albrecht Goetze in a series of articles devoted to the subject, their records of primarily economic nature contain the names of indigenous Anatolian business associates, military functionaries or protective deities, some of which definitely are of IE Anatolian, if not actually Luwian (= language closely related to Hittite), type.² In terms of absolute

¹ Mallory 1989.

² Goetze 1951, 1954 (Lang.), 1954 (JCS) and 1960. Easily recognizable as Indo-European are the GNs *Innara* (< PIE **(ə)ner-* "man, strength"), *Išput* (< **kšpant-* "night, evening"), *Pirwa* or *Perwa* (< PIE **pōu-*, *pāu-*, *pū-* "small, little (often for young animals)", cf. esp. Lat. *parvus* "boy" and Greek πῶλος "foal"), and *Šiwat*

chronology, the tablets in which these names occur are datable to c. 1910-1780 BC and therefore this indirect testimony of Indo-European presence far exceeds the limits set for its Near Eastern counterpart in form of Mitannian and Kassite Babylonian royal names of Aryan type, which stem from Hyksos times (= c. 1650-1550 BC) onwards.³

It has been suggested, but so far not convincingly proved, that the IE Anatolians of the Karum period were not illiterate themselves, but mastered their own script distinct from the old Assyrian cuneiform of the merchant-colonists. Thus Helmuth Bossert, who can be credited with the decipherment of Luwian hieroglyphic, interpreted the passage in the old Hittite Anitta-text according to which an inscription is placed in the gates of Nesha as a reference to this monumental class of Anatolian writing. At the moment, the reign of Anitta can be dated as simultaneous with the second generation of Assyrian merchant-colonists, which means that, if Bossert's suggestion is correct, Luwian hieroglyphic had already been devised in the first half of the 19th century BC.⁴ The suggestion has particularly been defended by Turkish scholars like Sedat Alp and Nimet Özgüç, who took a special interest in the study of the Anatolian type of cylinder seals which developed under the influence of Assyrian (or Near Eastern more in general) models. They are well prepared to take the rows or columns of animals or animal heads, which distinguish Anatolian type of cylinder seals from their Near Eastern counterparts, as an early form of Luwian hieroglyphic writing.⁵

(< PIE **deiu(o)*- "shine, etc."). The same Indo-European roots recur in MNs, cf. *Išputaḥšu* (literally "Night King") and *Peruwa*. *Išput* and *šiwat* are related to Hittite *išpant*- "night" and *šiwat*- "day", but the first also to the Luwian MN *Išputaḥšu*, *Innara* is related to Hittite *innaru*- and Luwian *annaru*- "strong", *Pirwa/Perwa* corresponds to the Luwian horse god *Pirwa* and is related to Luwian MNs like *Pirwaššuwa* (< *Pirwa*- and *aššuwa*- "horse"). Preference for the Luwian nature of this IE Anatolian material is based on the fact that non-Indo-European onomastic elements typical of later Luwian, like *aššiya*- "to (be) love(d)", *muwa*- "strength", *nana*- "brother, servant", *piya*- "to give", *Tarḫu(nt)*- (= storm- or weather-god), *warpa*- (cf. *Warpalawa*), etc., are much more numerous than the ones typical of later Hittite.

³ Lewy 1971; Mayrhofer 1966 & 1974, cf. also Drews 1988: 58-9. I leave aside here the question of the Indo-European nature of the Uman Manda and Guthi as mentioned in legendary stories about Narâmsin.

⁴ Lewy 1971: 715. The dagger of Anitta, found in the settlement mound of Kültepe/ Kanesh, is inscribed in old Assyrian cuneiform, which script therefore may have been mastered by indigenous Anatolian scribes. The recently discovered bronze tablet from Boğazköy/Khattusha proves that cuneiform could be used for monumental inscriptions as well. It is interesting to note here that, as far as cuneiform writing is concerned, there is a break in scribal traditions between the Karum period and the period of Hittite dominance, in the latter a Babylonian type of syllabary being preferred to the earlier old Assyrian one, cf. Sommer 1947: 8 f.

⁵ Alp 1968: 281 ff.

Until recently, specialists in the field have virtually discarded these arguments in favour of an early development of Luwian hieroglyphic and silently followed the authoritative opinion of the late Emmanuel Laroche, who considered the seal of Išputaḫšu, a king of Kizzuwatna and contemporary of Hittite Telepinu (c. 1520-1500 BC), as the earliest document classifiable to this particular form of writing.⁶ This situation is now definitely altered owing to the publication of seals and seal impressions from Boğazköy/Khattusha by Rainer Michael Boehmer and Hans Gustav Güterbock, in which arguments pro and contra for the first time receive critical examination.⁷ As an outcome of their studies, it is proposed to consider the Indilima seal as the earliest Luwian hieroglyphic inscription because this exhibits stylistic features which enable us to assign it to the period of the level VII archive of Tell Atchana/Alalakh, i.e. c. 1720-1650 BC. Earlier seals or seal impressions characterized by motifs suggestive of later Luwian hieroglyphic signs, like the Tyskiewicz cylinder seal with a combination on its stamp side paralleled for later impressions ending in L 312-3 *ZITI* and Anatolian type of cylinder seals from Konya/Karahöyük and Acemhöyük with rows of heads or animals in columnar arrangement, are not taken for evidence of writing in the strict sense of the word: the motifs are merely attributed here with a symbolic or decorative function. In effect, however, the history of the Luwian hieroglyphic script is thus enriched with two extra centuries.

In a recent reaction to Boehmer & Güterbock, I have, while accepting their chronological framework in main outlines, criticized the arbitrary nature of the dividing-line between signs with a specific phonetic value on the one hand and mere symbols of as yet undetermined function on the other, placed by them, as we have just seen, at the beginning of the level VII archive of Tell Atchana/Alalakh c. 1720 BC.⁸ In my opinion, this flaw results from neglect of a number of relevant documents. Most serious is the omission of seal impression Collon 1975: no. 154 from the level VII archive of Tell Atchana/Alalakh (see Fig. 1d). Firstly, because it provides the closest analogy for the seal impression of king Aplakhanda of Carchemish, recently found in Acemhöyük (Özgüç 1980: Fig. III-17 [see Fig. 1c]), which for the preserved correspondence of this king with Zimri-lim of Mari can be accurately dated to the first half of the 18th century BC.⁹ Secondly, because insertion of the phonetic values of later

⁶Laroche 1960: 274 & tableau chronologique.

⁷Boehmer & Güterbock 1987.

⁸Woudhuizen 1992.

⁹For the dating, see Drews 1988: 99; the seal in question is (*mea culpa, mea maxima culpa*) also omitted in Woudhuizen 1992. It contains the glyphs L 19 á (1x),



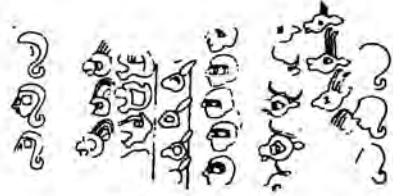
(a) Kültepe/Kanesh (Matouš 1984: no. 73)



(c) Achemhöyük (Özgülç 1980: Fig. III, 17)



(b) Kültepe/Kanesh (Garelli & Collon 1975: pl. 48, no. 2)



(d) Tell Atchana/Alalakh (Collon 1975: no. 154)



(e) Eskiypar (Dinçol 1988)



(f) Klavdia, Cyprus (Collon 1987: no. 202)



(g) Henri Frankfort's First Syrian Group (Erlenmeyer 1965)

Fig. 1. Examples of early Luwian hieroglyphic seal impressions.

Luwian hieroglyphic counterpart signs exposes its semi-bilingual nature with Akkadian cuneiform information from the same level VII archive, in which the MN *Ammusama* of a functionary stationed in the outlying district of *Tuba* (= later *Tabal* in eastern Cappadocia?) is recorded as well.¹⁰ But one should also add seals or seal impressions from the Karum of Kültepe/Kanesh in which animals in columnar arrangement appear, sometimes even as a substitute of previous cuneiform inscriptions like it is the case with Garelli & Collon 1975: pl. 48, no. 2 (see Fig. 1a-b).¹¹ Or seals from Henri Frankfort's First Syrian Group, assigned to the overall period of c. 2000-1700 BC on the basis of stylistic criteria only, which exhibit similar features like Hogarth 1920: pl. VI, no. 154 and the Erlenmeyers' seal, the latter sharing entire combinations of signs (see Fig. 1g).

On the basis of the evidence omitted by Boehmer & Güterbock, then, it seems most likely that Luwian hieroglyphic already existed as a form of writing in the period immediately antedating the level VII archive of Tell Atchana/Alalakh (think especially of the relationship between the bilingually assured reading of Collon 1975: no. 154 and the hieroglyphic part of the seal impression of king Aplakhanda found at Acemhöyük). Furthermore, this evidence seems to be favourable to the opinion that the formative phase of Luwian hieroglyphic falls in the period of the Assyrian merchant-colonies, and that the ones responsible for its development are indigenous Anatolians looking for a vehicle to become literate as well (think especially of the replacement of a former cuneiform inscription by animals in columnar arrangement attested for Garelli & Collon 1975: pl. 48, no. 2 and realize that similar designs are a specialty of the indigenous Anatolian type of cylinder seals).

It still needs to be investigated, however, whether indigenous Anatolian means IE Anatolian in this connection. The onomastic material of the Cappadocian tablets provides evidence for the presence of Hurrians and Amorites alongside Assyrians in the trading colonies.¹² Like the Assyrians

L 97 *urmah* (2x) and L 107 *MUWA, mu* (3x). In connection with our inquiry into the Indo-European nature of the creators of Luwian hieroglyphic below, it is interesting to observe that the name of this king of Carchemish contains the onomastic element *hanta-* "first" of Indo-European origin, cf. Celtic *cinto-*, Thracian *-kenthos*. It has been suggested that the name of his daughter, *Matrunna*, resembles Latin *Matrona* too much to be merely coincidental. The correspondence referred to deals with horses and identifies Aplakhanda as an intermediary between horse-breeders on the one hand and Near Eastern kings on the other.

¹⁰ Best & Woudhuizen 1989: 134-5.

¹¹ Matouš & Matoušová-Rajmová 1984: sealing no. 73. Unfortunately, I could not find any specification of the layer (period II or Ib) from which these sealings stem.

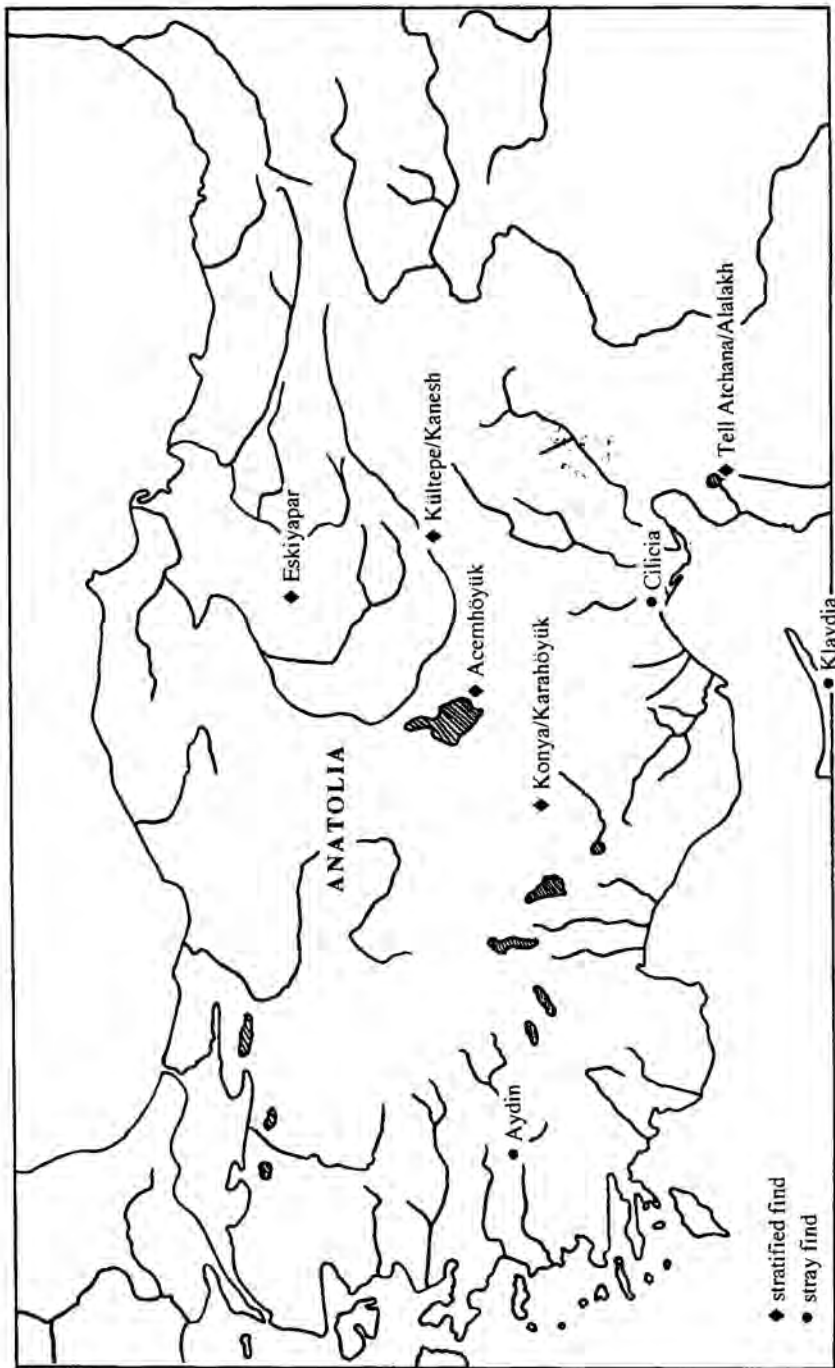
¹² Lewy 1971: 717 ff.

themselves, these might be identified as colonists or resident alien merchants. Furthermore, we have to reckon with the (as it seems) really indigenous Hattic population which, certainly as far as the capital Khattusha is concerned, preceded the Indo-European Hittites in their historical habitat: the records have preserved the memory of presumably Hattic-speaking rulers like Pamba and Pijušti.¹³ If we want to answer the question which component of the indigenous Anatolian population must be held responsible for the creation of Luwian hieroglyphic as a writing system, we will have to turn our attention to the inscriptions themselves in order to see what clues these have to offer.

For the sake of clarity, the relevant linguistic features of the earliest LH inscriptions have been set out in a diagram which at once shows their relationship to, on the one hand, the simultaneous Cappadocian clay tablets and, on the other hand, the later IE Anatolian languages Luwian and Hittite (see Table I). As an explanatory note to the diagram, it needs to be stressed that the distinction between Hittite and Luwian is not yet fully developed in the period of the Assyrian trading colonies—an observation duly illustrated by the previously mentioned material Goetze selected to substantiate his case for IE Anatolian presence at the time.¹⁴ Consequently, what is labelled here “LH inscriptions” for the sake of convenience might with equal justification, or perhaps preferably, be labelled “IE Anatolian inscriptions”. The same conclusion seems to recommend itself when the distribution pattern of the seals in question is taken into consideration, which shows a marked concentration in the historical habitat of the Luwians but nonetheless includes later Hittite territory as well (see Map I). Next, it might be adduced as a favourable argument for the reliability of the proposed readings that they contain a high percentage of semi-bilinguals with the old Assyrian cuneiform texts of the type recorded for sealing no. 154 from the level VII archive at Tell Atchana/Alalakh. At any rate, it seems difficult to believe that the appearance of such readings by insertion of later Luwian hieroglyphic counterpart signs is merely coincidental, because at random readings thus achieved should rather be expected to produce correspondences with later LH texts. All this being said, it seems relevant to our inquiry into the nature of the indigenous population responsible for the creation of the script that of all linguistic features listed in Table I only one (no. 4 *unara*, cf. Table II, no. 6) can plausibly be traced back to a Proto-Indo-European root, whereas the remainder must be attributed to substrate or adstrate influences exercised by non-Indo-European tongues on Hittite

¹³ Sommer 1947: 11.

¹⁴ See note 2.



Map 1. Distribution of earliest Luwian hieroglyphic sealimpressions c. 1800-1650 BC.

and Luwian.¹⁵ It is well known that these influences have been particularly strong in the realm of the lexicon of the IE Anatolian languages, but this circumstance cannot cover up the fact that the enlisted lexical items are by no means diagnostic of the IE nature of the earliest users of the script.

category	early LH seals	Cappadocian texts	Luwian/Hittite
1. MN	<i>ḫa-mu-ra</i>	<i>Ḫamuria</i>	<i>Tarḫunt-</i>
2. MN	<i>TARKU-ti</i>	<i>Tārḫualá, etc.</i>	<i>muwa-</i>
3. MN	<i>TARKU-ti-mu-wa</i>	<i>Punamuwatí</i>	<i>annaru-</i>
4. MN	<i>u-na-ra</i>	<i>Inaar,</i>	<i>/innaru-</i>
		<i>Inarawa, etc.</i>	<i>Išputaḫšū</i>
5. title	<i>gà-as-su</i>	<i>ḫaššu-, -aḫšū</i>	<i>labarna-</i>
6. title	<i>TAPAR-sà</i>	<i>labarša-</i>	<i>piya-</i>
7. verb	<i>PIA, pi-á</i>	<i>Nanapi,</i>	
		<i>Šuḫurpía, etc.</i>	

Table I. Correspondences between early LH seals, Cappadocian texts and Luwian/Hittite of later date.

Proto-Indo-European root	early LH seals	Luwian/Hittite
1. *am(m)u-, me- "for me"	L 19 <i>á</i>	<i>amu/ammuk</i>
2. *er-, or- "eagle"	L 132-4 <i>ar(a)</i>	<i>ara-/hara(n)-</i>
3. *esu- "good"	L 370 <i>(a)su</i>	<i>wasu-/aššu-</i>
4. *nau- "ship"	L 35 <i>na</i>	
5. *owi- "sheep"	L 111 <i>ḫa</i>	<i>ḫawa-</i>
6. *(ə)ner- "man, strength"	MN <i>u-na-ra</i>	<i>annaru-/innaru-</i>

Table II. Reflections of PIE roots in the earliest LH seal impressions.

On the other hand, if one is willing to pay due attention to the principles underlying the value of the signs used in these earliest inscriptions, the percentage of Indo-European influence appears to increase significantly. Thus at least five (of the total of 15 applied in the linguistic features listed in Table I) signs render syllabic values which are regularly derived according to the acrophonic principle from the Indo-European word for the notion depicted by the glyphs in question (see Table II). When checked in Laroche 1960 most of the given connections are self-evident

¹⁵I do not agree with Goetze in his analysis of *ḫaššu-* (1954 (Lang.): 355), *Tarḫu(nt)-* (1954 (JCS): 80) and *-umana-* (1960: 46) as being of Indo-European origin. Thus I prefer to follow Bossert and Laroche in their interpretation of *ḫaššu-/aḫšū* as "king". Next, I am inclined to the opinion that the graphic rendering of the value *TARKU* by a goat head, *pace* Greek τρῆγοϋς, points into the direction of

Only the identification of L 35 as a simplified rendering of a ship and the acrophonic derivation of its value *na* from PIE **nau-* are in need of additional confirmation. As far as the epigraphical side of the problem is concerned, this might be provided by drawing attention to the fact that the stylization of the ship sign in Cretan hieroglyphic offers some good examples of hypothetical intermediary stages in the development. The sign which renders the value *na* in the MN *u-na-ra*, however, actually constitutes a birdlike misrepresentation of a hippocamp. Although the relationship of the latter to a ship may not seem clear at first sight, one should not overlook the fact that Mediterranean Bronze Age ships are frequently decorated with a bow-ornament in the shape of a hippocamp, which in stylized variants is often identified as a bird head.¹⁶ Describing ships as “horses of the sea” in figurative speech, like Homer does, no doubt did sound good to Indo-European ears.¹⁷ It might be relevant to observe, then, that ships with bow-ornamentation in the shape of an animal head, once even occurring in form of a hippocamp with oars, are depicted on seals or seal impressions from the Assyrian trading colony of Kültepe/Kanesh (see Fig. 2a-b).¹⁸ As far as the linguistic side of the problem is concerned, it has to be fairly admitted that attestations of the PIE root **nau-* are, to the best of my knowledge, entirely lacking in later Hittite and Luwian.

The five Indo-European roots serving as a startingpoint for the



(a) Matouš 1984: no. 83



(b) Matouš 1984: no. 119

Fig. 2. Kültepe/Kanesh seal impressions with ship design.

a Semitic origin of the word in the light of Akkadian *turhalu-* “capricorn”. Finally, the Hittite ethnic *-umana-* is certainly distinct from its Luwian counterpart *-wanni-*, whereas its formal resemblance to Akkadian *uman* “people” is suggestive of a borrowing from Semitic, be it applied in an Indo-European manner.

¹⁶ See, for example, I. Pini, “Ergänzende Bemerkungen zum Ring des Minos”, *Archäologischer Anzeiger* (1989, 1) 1-4.

¹⁷ Od. IV, 708.

¹⁸ Garelli & Collon 1975: pl. 48, no. 2; Matouš & Matoušová-Rajmová 1984: sealing no. 83 (mark the circular decoration at the side of the animal headed object, suggestive of oars) and cf. no. 119.

syllabic values of an equal number of early Luwian hieroglyphic signs are, at least in my opinion, diagnostic of the nature of the indigenous Anatolians who devised the script. The significance of this argument cannot be undermined by syllabic values acrophonically derived from non-Indo-European words, like L 105 *mu* < *muwa*- "strength", L 66 *pi* < *piya*- "to give", L 128 *ti* (later *zi*) < **tintapu*- (later *zinzapu*-) "dove", etc., which at a later date are fully integrated into the IE Anatolian vocabulary as well. Consequently, it may safely be concluded that the Luwian hieroglyphic inscriptions from the Karum period or its immediate aftermath bear the earliest testimony of Indo-European literacy.

LITERATURE

Alp, Sedat

1968 Zylinder- und Stempelsiegel aus Karahöyük bei Konya. Ankara.

Best, Jan, & Fred Woudhuizen

1989 Lost Languages from the Mediterranean. Leiden: Brill.

Boehmer, Rainer Michael, & Hans Gustav Güterbock

1987 Glyptik aus dem Stadtgebiet von Boğazköy. Grabungskampagnen 1931-1939. Berlin.

Collon, Dominique

1975 The Seal Impressions from Tell Atchana/Alalakh. Neukirchen.

1987 First Impressions. Cylinder Seals in the Ancient Near East. London.

Diñcol, Ali M., & Belkis Diñcol

1988 Hieroglyphische Siegel und Siegelabdrücke aus Eskiyapar. In: Documentum Asiae Minoris Antiquae. Festschrift für Erich Neu zum 75. Geburtstag, eds. Erich Neu & Christel Rüster. Wiesbaden.

Robert Drews

1988 The Coming of the Greeks. Indo-European Conquests in the Aegean and the Near East. New Jersey.

Erlenmeyer, Marie Louise, & Hans Erlenmeyer

1965 *Kadmos* 4. Pp. 1-4.

Garelli, Pierre, & Dominique Collon

1975 Cuneiform Texts from Cappadocian Tablets in the British Museum VI. London.

Goetze, Albrecht

1951 On the Hittite words for "year" and the seasons and for "night" and "day". *Language* 27. Pp. 467-476.

1954 The Linguistic continuity of Anatolia as shown by its proper names. *Journal of Cuneiform Studies* 8. Pp. 74-81.

1954 Some Groups of Ancient Anatolian Proper Names. *Language* 30. Pp. 349-359.

1960 Suffixes in "Kanesite" Proper Names. *Revue Hittite et Asiatique* 66. Pp. 45-50.

Hogarth, D. G.

1920 Hittite Seals. Oxford.

Laroche, Emmanuel

1960 Les hiéroglyphes hittites. Première partie: l'écriture. Paris.

- Lewy, Hildegard
 1971 Anatolia in the Old Assyrian Period. In: Cambridge Ancient History (3rd edition) I, 2. Pp. 707-728. Cambridge.
- Mallory, James P.
 1989 In Search of the Indo-Europeans. Language, Archaeology and Myth. London.
- Matouš, Lubor, & Marie Matoušová-Rajmová
 1984 Kappadokische Keilschrifttafeln mit Siegeln aus den Sammlungen der Karlsuniversität in Prag. Praha.
- Mayrhofer, Manfred
 1966 Die Indo-Arier im Alten Vorderasien. Wiesbaden.
 1974 Die Arier im Vorderen Orient—ein Mythos? Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse, Sitzungsberichte 294, 3. Wien.
- Özgüç, Nimet
 1980 Seal Impressions from the Palaces at Achemhöyük. In: Ancient Art in Seals, ed. Edith Porada. Pp. 61-99. New Jersey.
- Sommer, Ferdinand
 1947 Hethiter und hethitisch. Stuttgart.
- Woudhuizen, Fred C.
 1992 The earliest evidence of Luwian hieroglyphic writing. *Orpheus, Journal of Indo-European and Thracian Studies* 1 (in the press).