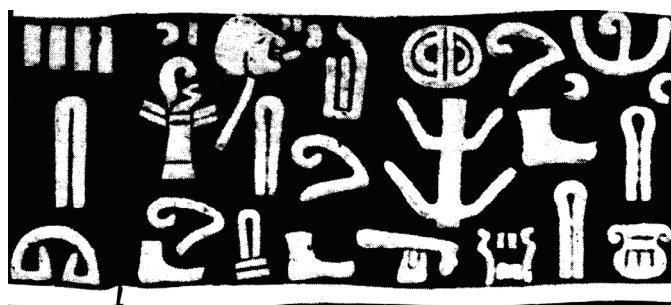


ipamati kistamati pari tumatimis
LUWIAN AND HITTITE STUDIES
PRESENTED TO J. DAVID HAWKINS
ON THE OCCASION OF HIS 70TH BIRTHDAY

ITAMAR SINGER

Editor



EMERY AND CLAIRE YASS PUBLICATIONS IN ARCHAEOLOGY
INSTITUTE OF ARCHAEOLOGY TEL AVIV UNIVERSITY
TEL AVIV 2010

Under the auspices of the
Friends of the Institute of Archaeology of Tel Aviv University

With the support of the
Israel Science Foundation

Published by the Emery and Claire Yass Publications in Archaeology
(Bequeathed by the Yass Estate, Sydney, Australia)
of the Institute of Archaeology, Tel Aviv University

ISBN 965-266-026-4

©

Copyright 2010

All rights reserved

Printed in Israel by Top Print



John David Hawkins

Photograph by Takayuki Oshima, courtesy of the Middle East Cultural Centre of Japan.

("OCCIDENS") *i-pa-ma-ti-i* (DEUS.ORIENS) *ki-sá-ta-ma-ti-i* PRAE-ia AUDIRE+MI-*ma-ti-mi-i-sa*
"Far famed to West and East" (KARKAMIŠ A 6, 1; Yariri)

CONTENTS

Preface	ix
List of Abbreviations	xii
Publications by J. David Hawkins	xiii
 LUWIANS IN ALEPPO? Sanna Aro	1
SITES, ROUTES AND HISTORICAL GEOGRAPHY IN CENTRAL ANATOLIA Gojko Barjamovic	10
ON HITTITE DREAMS Gary Beckman	26
SHORTENED NAMES IN EMAR AND ELSEWHERE Yoram Cohen	32
KURUNTA E L'ANATOLIA OCCIDENTALE Stefano de Martino	44
THE WOODEN HORSE: SOME POSSIBLE BRONZE AGE ORIGINS Donald F. Easton	50
IL FRAMMENTO DI LETTERA KBo 8.14: UN NUOVO TENTATIVO DI INTERPRETAZIONE Mauro Giorgieri	64
THE LUWIAN DEMONSTRATIVES OF PLACE AND MANNER Petra M. Goedegebuure	76
SOUVENIRS ANATOLIENS Hatice Gonnet	95
BEMERKUNGEN ZU DER HETHITISCHEN PHRASE "UND SIE BEGANNEN IHRE HÄUSER ZU FRESSEN" Volkert Haas	102
ASYNDETON BEI VORANGESTELLTEN TEMPORALEN NEBENSÄTZEN MIT <i>KUWAPI</i> Susanne Heinhold-Krahmer	106
THE BULLS ON THE SEALS OF MUWATALLI II Suzanne Herbordt	123
THE POLITICAL ANTITHESIS AND FOIL OF THE LABARNA Harry A. Hoffner, Jr.	131
DUMANLI KALE: A POLITICISED LANDSCAPE IN LATE BRONZE AGE ANATOLIA Roger Matthews	140
SPELLING OF INITIAL /A-/ IN HIEROGLYPHIC LUWIAN H. Craig Melchert	147
SOME DISPUTED PASSAGES IN THE TAWAGALAWA LETTER Jared L. Miller	159

SEALS AND SEALINGS OF KARKAMIŠ, PART III Clelia Mora	170
'WRITING' IN HIEROGLYPHIC LUWIAN Annick Payne	182
UN NUOVO FRAMMENTO IN LUVIO GEROGLIFICO DA ANCOZ (ANCOZ 12) Massimo Poetto	188
FURTHER COMMENTS ON A HITTITE KINSHIP TERM Jacquie Pringle	193
THE NEW VALUES OF LUWIAN SIGNS L 319 AND L 172 Elisabeth Rieken and Ilya Yakubovich	199
AFTER THE EMPIRE: OBSERVATIONS ON THE EARLY IRON AGE IN CENTRAL ANATOLIA Jürgen Seeher	220
A LOST SEAL OF TALMI-TEŠUB Itamar Singer	230
THE HIEROGLYPHIC LUWIAN SIGNS L. 255 AND 256 AND ONCE AGAIN KARATEPE XI Theo van den Hout	234
NOTES ON THE HITTITE FUNERARY RITUAL FOR A PRINCE OR A PRINCESS Calvert Watkins	244
A HITTITE SEAL FROM KAMAN-KALEHÖYÜK Mark Weeden	249
REMARKS ON THE HITTITE CUNEIFORM SCRIPT Gernot Wilhelm	256

PREFACE

John David Hawkins was born on September 11th 1940 in Exmouth, Devon, as the eldest of the three children of John Alexander Sneyd Hawkins and Audrey Joan Spencer. His parents had met and married in India, where John Hawkins served as an officer in the Royal Artillery, and came back to England shortly before David's birth. In 1948, John Hawkins, who had studied at Cambridge, bought a farm in Devon where David was brought up. It was an old and distinguished family which had a multiplicity of interests both cultural and practical. David's friends were impressed by the casual and tolerant atmosphere which prevailed at home. In the Hawkins household there was no snobbishness or insularity; all sorts of people mingled and the vagaries of the British upper classes were looked at with affectionate irony. These qualities have been perpetuated by David, as anyone who has known him even briefly can readily confirm. Cats were a great source of amusement in the family and David expanded on his father's eccentric way of talking to them. Probably David's first linguistic achievement was the composition of the *Official Cat Phonology*, which is still put to use when stray cats occasionally visit his village house. There was no television in the Hawkins home, so reading aloud in the evenings in front of a roaring fire was the norm, preferably Dickens, Tolkien and Agatha Christie. The latter was a not-too-distant neighbour and David used to visit her and her husband Sir Max Mallowan, the renowned Mesopotamian archaeologist, from time to time. Could these visits have sparked his first interest in the ancient Near East?

David was educated at a local private school, Upcott House, and at the age of 13 he went to Bradfield College, Berkshire, a renowned school with a good tradition of Greek and Latin teaching. He excelled in his studies and took an active part in the school plays, especially Greek drama, for which Bradfield was famous. One of his teachers was the classicist David Raeburn, who authored a number of translations of the classics and books on the performance of classical plays. David has remained in touch with him ever since.

From 1958 David studied, on a state scholarship, Classics and Philosophy (*Literae Humaniores* or 'Greats') at University College, Oxford. He was lucky in his tutors: A.E. (Freddie) Wells for classical languages and literature, George Cawkwell for ancient history and P.F. Strawson and G. Paul for philosophy. His natural inclination was clearly for the linguistic and textual subjects and he finished that part of the course (Honour Moderations) with a First. He received his BA in 1962 and his MA in 1965.

From 1962 he worked for a postgraduate diploma in Western Asiatic Archaeology at the Institute of Archaeology in London. He studied archaeology with Seton Lloyd, history with Peggy Drower, Ancient Hebrew with Raphael Loewe and Akkadian with Harry Saggs and Donald Wiseman. He obtained his diploma with distinction in 1964 and won the Gordon Child Prize. By this time he had already switched his interests from Classics to the Ancient Near East, apparently under the strong impression left on him by the Gilgamesh Epic.

In 1964 he became a Research Fellow in Akkadian at the School of Oriental and African Studies, University of London, and then remained in the Near and Middle East Department where he taught until his retirement in 2005. In 1993 he was appointed to a personal chair in Ancient Anatolian Languages. He also contributed courses in archaeology to the Institute of Archaeology where he became an Honorary Visiting Professor.

In 1993 David was elected a Fellow of the British Academy, and in 1998 a Foreign Member of the American Philosophical Society. Most recently (2009) his old Oxford college, University College, made him an Honorary Fellow. He served as the honorary secretary of the British School of Archaeology in Iraq from 1976 to 1986 and edited its journal *Iraq* from 1970 to 1995. Concomitantly he sat on the council and on the executive committees of the British School of Archaeology at Ankara.

In the 1960s David started to go regularly from London to Oxford to study Hittite with Oliver R. Gurney and there got involved in a seminar on the so-called Hieroglyphic Hittite inscriptions led by Leonard Palmer and attended, among others, by Anna Morpurgo Davies and Jill Hart; this is the subject on which he eventually focused and which he revolutionized. His friendship and scientific cooperation with Morpurgo Davies continues to play an important role in his life. In the country cottage at Minster Lovell near Oxford, which he shares with his life partner, Geoff Ryman, a well known writer, she and countless other friends and colleagues are always welcome for a good chat on professional matters and a hearty drink and meal. David's culinary capacities are only surpassed by his scholarship, and as a devoted gardener he proudly makes use of his self-grown freshly picked vegetables in his perfect cuisine, which puts pay to the myth that there is no independent British cooking.

From 1965 onwards David traveled regularly to Turkey, Syria and Iraq in order to inspect Hieroglyphic monuments in museums and open-air sites. He immediately realized how inaccurate and incomplete the available drawings and publications were and consequently initiated an ambitious project of copying and obtaining good photographs of the entire corpus of inscriptions. This Sisyphean enterprise was crowned by the publication in 2000 of the three parts of his monumental *Corpus of Hieroglyphic Luwian Inscriptions, Vol. I, The Iron Age Inscriptions*, exactly a hundred years after the pioneering enterprise of L. Messerschmidt's *Corpus Inscriptionum Hettitarum*. He also played an instrumental role in the definitive publication of the Hieroglyphic text of the Karatepe bilingual by Halet Çambel as *Volume II* of the Corpus. A third volume in preparation will include *Addenda* to the Iron Age material, the Empire period inscriptions, and a general Signary, Glossary and Grammar of Hieroglyphic Luwian.

David's enormous black briefcase containing the full documentation for the Corpus travelled with him everywhere and miraculously has never been lost or damaged even in dire situations (see H. Gonnet's contribution to this volume). His idiosyncratic handwriting and neat hand copies can be traced back to two of his greatest talents, drawing and close scrutiny: 1. From his early days he developed an interest in political cartoons and for a while even contemplated turning this skill into a profession. 2. His talent for drawing is enhanced by a remarkable ability to notice even the minutest details and changes in other peoples' appearance or outfit. Many a detail in an inscription or on a seal that went unnoticed by others has immediately been detected and recorded by David. His spectacular decipherment of the Karabel inscription, a western Anatolian monument which was previously visited by countless travellers and specialists, may serve as a notable example. He never gets tired of inspecting a worn down inscription in different lighting conditions, not even the hopeless Nişantaş rock in Boğazköy which he is about to publish shortly.

In tandem with his strenuous efforts to produce an accurate documentation of the Hieroglyphic materials, David is one of the greatest contributors to Anatolian philology, history and culture. Suffice it to mention here, as notable examples, the new interpretation of four wrongly deciphered signs in the early 1970s (in collaboration with Anna Morpurgo Davies and Günter Neumann) which brought about the elucidation of the language and the (re)unification of Cuneiform Luwian and Hieroglyphic Hittite (now Hieroglyphic Luwian); the discovery in 1975 of the signs for the negatives which had been confused with the relatives and which suddenly made sense of countless texts; the demonstration in the 1980s of

the continuity of the royal house of Bronze Age Carchemish in the Iron Age genealogy at Malatya; the decipherment of the inscription at the sacred pool complex at Boğazköy in 1995 and its Underworld connections; the refinement of western Anatolian geography in 1998 through the identification of the figure depicted at Karabel as a king of Mira. Recently he has been working on the spectacular discovery of the Aleppo citadel inscriptions and their far-reaching historical implications. As anyone who has collaborated with David will readily confirm, he is a most generous colleague always ready to offer his expertise and cooperate in publication projects, e.g., his recent involvement in the publication of the enormous glyptic corpus from Nişantepe in Boğazköy.

As a token of our long friendship, I hope that this Festschrift presented to David by his students and friends, will serve as an appropriate tribute to this incomparable individual and scholar. A parallel Festschrift with non-Anatolian articles appears in the journal *Iraq* 2010, edited by Dominique Collon and Andrew George. I wish to express my gratitude to several persons who have provided assistance in the preparation of this volume: Sanna Aro, Natalia Bolatti-Guzzo, Donald Easton, Shirley Gassner, Graciela Gestoso-Singer, Sivan Kedar, Anna Morpurgo Davies, Denzil Verey and Mark Weeden.

The Institute of Archaeology of Tel Aviv University is congratulated for exceptionally accepting this volume in its Monograph Series. This book was published with the support of the Israel Science Foundation.

ABBREVIATIONS

ABoT	<i>Ankara Arkeoloji Müzesinde Bulunan Boğazköy Tabletleri</i> . Istanbul 1948
AHw	W. von Soden, <i>Akkadisches Handwörterbuch</i> . Wiesbaden 1958-1981
Bo	Unpublished Boğazköy text (inventory number)
CAD	<i>Chicago Assyrian Dictionary</i> . Chicago Oriental Institute 1956 ff.
CHD	<i>Chicago Hittite Dictionary</i> . Chicago Oriental Institute 1980 ff.
CHLI 1	J.D. Hawkins, <i>Corpus of Hieroglyphic Luwian Inscriptions Vol. 1: Inscriptions of the Iron Age</i> . Berlin/New York 2000
CL, CLuw.	Cuneiform Luwian
CLL	H.C. Melchert, <i>Cuneiform Luvian Lexicon</i> . Chapel Hill 1993
CTH	E. Laroche, <i>Catalogue des Textes Hittites</i> . Paris 1971
HED	J. Puhvel, <i>Hittite Etymological Dictionary</i> . Berlin/New York/Amsterdam 1984 ff.
HEG	J. Tischler, <i>Hethitisches Etymologisches Glossar</i> . Innsbruck 1977 ff.
Hit.	Hittite
HKM	S. Alp, <i>Hethitische Keilschrifttafeln aus Maşat-Höyük</i> . Ankara 1991
HL, HLuw	Hieroglyphic Luwian
Hur.	Hurrian
HW	J. Friedrich, <i>J. Hethitisches Wörterbuch</i> . Heidelberg 1952-1966
HW2	J. Friedrich and A. Kammenhuber, <i>Hethitisches Wörterbuch</i> , 2nd ed. Heidelberg 1975 ff.
HZL	C. Rüster and E. Neu, <i>Hethitisches Zeichenlexikon</i> . Wiesbaden 1989
IBoT	<i>Istanbul Arkeoloji Müzelerinde Bulunan Boğazköy Tabletleri</i> . Istanbul/Ankara
IE	Indo-European
KBo	<i>Keilschrifttexte aus Boghazköi</i> . Berlin
KUB	<i>Keilschrifturkunden aus Boghazköi</i> . Berlin
Lyc.	Lycian
RIA	<i>Reallexikon der Assyriologie und vorderasiatischen Archäologie</i> . Berlin
RS	Ras Shamra/Ugarit texts (inventory number)
SBo I-II	H.G. Güterbock, <i>Siegel aus Boğazköy I-II</i> , Berlin 1940, 1942
VBoT	A. Götze, <i>Verstreute Boghazköi-Texte</i> . Marburg 1930

PUBLICATIONS BY J. DAVID HAWKINS

Compiled by Sanna Aro and Natalia Bolatti-Guzzo

BOOKS AND MONOGRAPHS

- 1995.** *The Hieroglyphic Inscription of the Sacred Pool Complex at Hattusa (Südburg).* (StBoT Beiheft 3) Wiesbaden.
- 2000.** *Corpus of Hieroglyphic Luwian Inscriptions I: Inscriptions of the Iron Age*, Volumes 1-3. Berlin - New York.

BOOKS WRITTEN CONJOINTLY WITH OTHERS

- 1976.** with S. Dalley and C.B.F. Walker, *The Old Babylonian Tablets from Tell al Rimah*. With an Introduction by David Oates. London.
- 2006.** with G. Bunnens and I. Leirens, *Tell Ahmar II. A New Luwian Stele and the Cult of the Storm-God at Til Barsib-Masuware*. Leuven.
- 2010** with S. Herbordt and D. Bawanypeck, *Die Siegel der Großkönige und Großköniginnen auf Tonbullien aus dem Nişantepe-Archiv in Hattusa*. (Boğazköy-Hattuša XXIII).

BOOKS EDITED

- 1977.** *Trade in the Ancient Near East. Papers of the XXIII Rencontre Assyriologique Internationale. Birmingham 5-9 July, 1976.* Iraq 39.

ARTICLES

- 1969.** A Hieroglyphic Hittite inscription from Porsuk. *Anatolian Studies* 19:99-109.
- 1969.** The Babil Stele of Assurnasirpal. *Anatolian Studies* 19:111-120.
- 1970.** Hieroglyphic Hittite inscriptions of Commagene. *Anatolian Studies* 20:169-110.
- 1971.** "To Come" and "To Build" in Hieroglyphic Hittite. *Revue Hittite et Asianique* 29:113-131.
- 1972.** Building inscriptions of Carchemish: The long wall of sculpture and great staircase. *Anatolian Studies* 22:88-114.
- 1973.** with A. Morpurgo Davies and G. Neumann, Hittite Hieroglyphs and Luwian: New evidence for the connection. *Nachrichten der Akademie der Wissenschaften in Göttingen I. Phil.-Hist. Klasse* 6:143-197.
- 1974.** Assyrians and Hittites. *Iraq* 36:67-83.
- 1975.** The negatives in Hieroglyphic Luwian. *Anatolian Studies* 25:119-156.
- 1975.** Von Kummuh nach Kommagene. In: F.K. Dörner, ed. Kommagene. Geschichte und Kultur einer antiken Landschaft. *Antike Welt* 6:5-10.
- 1975.** with A. Morpurgo Davies, Hieroglyphic Hittite: Some new readings and their consequences. *Journal of Royal Asiatic Society of Great Britain and Ireland* 76:121-133.
- 1977.** A Late Hittite rock-relief on the River Karasu. *Anatolian Studies* 27:167-173.

1978. The Luwian word for “daughter”, *Zeitschrift für vergleichende Sprachforschung* 92:112-116.
1978. with A. Morpurgo Davies, Il sistema grafico del luvio geroglifico. *Annali della scuola normale superiore di Pisa, Classe di lettere e filosofia*, Serie III, vol. VIII/3: 755-782.
1978. with A. Morpurgo Davies, On the problems of Karatepe: The Hieroglyphic text. *Anatolian Studies* 28:103-119.
1979. Some historical problems of the Hieroglyphic Luwian inscriptions. *Anatolian Studies* 29:153-167.
1979. The Hieroglyphic Luwian stelae of Meharde-Sheizar. In: *Florilegium Anatolicum, Mélanges offerts à E. Laroche*. Paris. pp. 145-156.
1979. with A. Morpurgo Davies, The Hieroglyphic inscription of Bohça. In: O. Carruba, ed. *Studia Mediterranea I, P. Meriggi dicata*, volume 2. Pavia. pp. 387-405.
1980. The “Autobiography of Ariyahinas’s Son”: An edition of the Hieroglyphic Luwian stelae Tell Ahmar I and Aleppo 2. *Anatolian Studies* 30: 139-156.
1980. The Hieroglyphic Luwian word “to die”. *Zeitschrift für vergleichende Sprachforschung* 94:109-119.
1980. Late Hittite funerary monuments. In: B. Alster, ed. *Death in Mesopotamia. Papers read at the XXVI Rencontre Assyriologique Internationale*. Copenhagen. pp. 213-225.
1980. The logogram “LITUUS” and the verbs “to see” in Hieroglyphic Luwian. *Kadmos* 19:123-142.
1981. Kubaba at Karkamiš and elsewhere. *Anatolian Studies* 31:147-176.
1982. with A. Morpurgo Davies, Buying and selling in Hieroglyphic Luwian. In: J. Tischler, ed. *Serta indogermanica. Festschrift für G. Neumann*. Innsbruck. pp. 91-105.
1983. The Hittite name of Til Barsip: Evidence from a new Hieroglyphic fragment from Tell Ahmar, *Anatolian Studies* 33:131-136.
1986. Rulers of Karkamiš: The House of Astiruwas. *IX Türk Tarih Kongresi, Ankara 1981*, 259-271. Ankara.
1986. Writing in Anatolia: Imported and indigenous systems, *World Archaeology* 17:363-376.
1986. Royal statements of ideal prices: Assyrian, Babylonian and Hittite. In: Canby, J.V., Porada, E., Ridgway, B.S. and Stech, T., eds. *Ancient Anatolia. Aspects of Change and Cultural Development. Essays in Honor of M.J. Mellink*. Madison/London. pp. 93-102.
1986. with A. Morpurgo Davies, Studies in Hieroglyphic Luwian. In Hoffner, H.A. and Beckman, G., eds. *Kaniššuar. A Tribute to H.G. Güterbock on his Seventy-fifth Birthday*. Chicago. pp. 69-81.
1987. The Kululu lead strips. Economic documents in Hieroglyphic Luwian. *Anatolian Studies* 37:135-162.
1987. with A. Morpurgo Davies, The Late Hieroglyphic Luwian corpus: Some new lexical recognitions. *Hethitica* 8:267-295.
1988. Kuzi-Tešub and the “Great Kings” of Karkamiš. *Anatolian Studies* 38:99-108.
1988. The lower part of the Meharde stele. *Anatolian Studies* 38:187-190.
1988. with A. Morpurgo Davies, A Luwian heart. In: Imparati, F., ed. *Studi di Storia e di Filologia anatolica dedicati a G. Pugliese Caratelli*. Firenze. pp. 169-182.
1988. with J.N. Postgate, Tribute from Tabal. *State Archives of Assyria. Bulletin* 2/1:31-40.
1989. More Late Hittite funerary monuments. In: Emre, K., Hrouda, B., Mellink, M. and Özgüç, N., eds. *Anatolia and the Ancient Near East, Studies in Honor of T. Özgüç*. Ankara. pp. 189-197.
1989. with M. Kalaç, The Hieroglyphic Luwian rock-inscription of Malpınar. *Anatolian Studies* 39:107-112.
- 1989-1990. Religions hittite at asianique III. Exposés. *Annuaire École Pratique des Hautes Études. Section des Sciences Religieuses* 98:232-235.
1990. Doubts on the Seal AO 29722. *Syria* 67:735-741.
1990. The new inscription from the Südburg of Boğazköy-Hattuša. *Archäologischer Anzeiger*, 305-314.

1992. The inscriptions of the Kızıldağ and the Karadağ in the light of the Yalburt inscription. In: Otten, H., Akurgal, E., Ertem, H. and Süel, A., eds. *Hittite and Other Anatolian and Near Eastern Studies in Honour of S. Alp*. Ankara. pp. 259-275.
1992. What does the Hittite Storm-God hold? In: Meijer, D.J.W., ed. *Natural Phenomena. Their Meaning, Depiction and Description in the Ancient Near East*. Amsterdam/Oxford/New York/Tokyo. pp. 53-82.
1993. The historical significance of the Karahöyük (Elbistan) stele. In: Mellink, M.J., Porada, E. and Özgüç, T., eds. *Aspects of Art and Iconography: Anatolia and Its Neighbors, Studies in Honor of Nimet Özgüç*. Ankara. pp. 273-279.
1993. A bowl epigraph of the official Taprammi. In: Mellink, M.J., Porada, E. and Özgüç, T., eds. *Aspects of Art and Iconography: Anatolia and Its Neighbors, Studies in Honor of Nimet Özgüç*. Ankara. pp. 715-717.
1993. with A. Morpurgo Davies, Running and relatives in Luwian. *Kadmos* 32:50-60.
1993. with Dinçol, A.M., Dinçol, B. and Wilhelm, G. The 'Cruciform Seal' from Boğazköy-Hattuša, *Istanbul Mitteilungen* 43:87-106.
1994. The end of the Bronze Age in Anatolia: New light from recent discoveries. In: Çilingiroğlu, A. and French, D.H., eds. *Anatolian Iron Ages 3*, Proceedings of the Third Anatolian Iron Ages Colloquium, Van, 6-12 August 1990 (The British Institute of Archaeology at Ankara Monograph 16). Oxford. pp. 91-94.
1995. "Great Kings" and "Country Lords" at Malatya and Karkamiš. In: van den Hout, Th.P.J. and de Roos, J., eds. *Studio Historiae Ardens, Ancient Near Eastern Studies Presented to Philo H.J. Houwink ten Cate on the Occasion of his 65th Birthday*. Leiden. pp. 73-86.
1995. Les Hittites et leur empire. In: Westenholz, J. G., ed. *Les cités royales des pays de la Bible reconstituées. Les Dossiers d'Archéologie* 210:30-35.
1995. The political geography of north Syria and south-east Anatolia in the Neo-Assyrian period. In: Liverani, M., ed. *Neo-Assyrian Geography* (Quaderni di Geografia Storica 5). Roma. pp. 87-101.
1995. with H.D. Baker, D. Collon, T. Pollard, J.N. Postgate, D. Symington and D. Thomas, Kilise Tepe 1994. *Anatolian Studies* 45:139-191.
1996. Eine Stele Tudhaliyas IV. aus Delihasanlı, *apud* J. Seeher, Die Ausgrabungen in Boğazköy-Hattuša 1995. *Archäologischer Anzeiger*: 356-359.
1996. with D.F. Easton, A Hieroglyphic seal from Troia. *Studia Troica* 6:111-118.
- 1996-1997. A new Luwian inscription of Hamiyatas, King of Masuwari. *Abr-Nahrain* 34:108-117.
1997. A Hieroglyphic Luwian inscription on a silver bowl in the Museum of the Anatolian Civilizations. *Anadolu Medeniyetleri Müzesi 1996*. Ankara. pp. 7-24.
1997. Ein hethitisches Stelenfragment von Büyükkaya, *apud* J. Seeher, Die Ausgrabungen in Boğazköy-Hattuša 1996. *Archäologischer Anzeiger*: 326-327.
1997. Kargamis and the Museum of Anatolian Civilizations. *1996 Anadolu Medeniyetleri Müzesi Konferansları*. Ankara. pp. 115-126.
- 1997-1998. Hittites on the Aegean coast: New evidence. *Bulletin of the Institute of Classical Studies* 42:231-232.
1998. Hittites and Assyrians at Melid (Malatya). In: Erkanal, H., Donbaz, V. and Uğuroğlu, A., eds. *XXXIV. Uluslararası Assirioloji Kongresi*. Ankara. pp. 63-77.
1998. The Land of Išuwa: The Hieroglyphic evidence, In: Alp, S. and Süel, A., eds. *III. Uluslararası Hititoloji Kongresi Bildirileri, Çorum 16-22 Eylül 1996 – Acts of the IIIrd International Congress of Hittitology, Çorum, September 16-22, 1996*. Ankara. pp. 281-295.

1998. Tarkasnawa King of Mira: 'Tarkondemos', Boğazköy sealings and Karabel. *Anatolian Studies* 48:1-31.
1998. Hattusa: Home to the thousand gods of Hatti. In: Westenholz, J. G., ed. *Capital Cities. Urban Planning and Spiritual Dimensions*. Jerusalem. pp. 65-82.
1998. Corpus of Hieroglyphic Luwian inscriptions: a project. In: Matthews, R., ed. *Ancient Anatolia, Fifty year's work by the British Institute of Archaeology at Ankara*. London. pp. 69-83.
1998. Il geroglifico anatolico: stato attuale degli studi e delle ricerche. In: Marazzi, M., ed. *Il geroglifico anatolico. Sviluppi della ricerca a venti anni dalla sua "ridecifrazione"*. (Atti del Colloquio e della tavola rotonda, Napoli-Procida 1995) Napoli. pp. 149-164.
1998. with A. Morpurgo Davies, Of donkeys, mules and Tarkondemos. In: Jasanoff, J. Melchert, H.C. and Oliver, L., eds. *Mír Curad – Studies in Honor of Calvert Watkins*. Innsbruck. pp. 243-260.
1999. Karabel, "Tarkondemos" and the Land of Mira – new evidence on the Hittite empire period in western Anatolia. *Würzburger Jahrbücher für die Altertumswissenschaft*, Neue Folge 23:7-12.
2001. Urḫi-Tešub, tuḫkanti, In: Wilhelm, G., ed. *Akten des IV. Internationalen Kongresses für Hethitologie, Würzburg, 4.-8. Oktober 1999* (StBoT 45). Wiesbaden. pp. 167-179.
2001. with H. Gonnet and J.-P. Grélois, Remarques sur un article récent relatif a Telibinu et Apollon fondateurs. *Anatolica* 27:191-197.
2002. Anatolia: The end of the Hittite empire and after. In: Braun-Holzinger, E.A. and Matthäus, H., eds. *Die nahöstlichen Kulturen und Griechenland an der Wende vom 2. zum 1. Jahrtausend v. Chr.: Kontinuität und Wandel von Strukturen und Mechanismen kultureller Interaktion*. (Kolloquium des Sonderforschungsbereiches 295 "Kulturelle und sprachliche Kontakte" der Johannes Gutenberg-Universität Mainz, 11.-12. Dezember 1998) Möhnesee. pp. 144-151.
2002. Eunuchs among the Hittites. In: Parpola, S. and Whiting, R.M., eds. *Sex and Gender in the Ancient Near East*. (Proceedings of the 47th Rencontre Assyriologique Internationale, Helsinki, July 2-6, 2001, Vol. I.) Helsinki. pp. 217-233.
2002. with D.F. Easton, A.G. Sherratt and E.S. Sherratt, Troy in recent perspective. *Anatolian Studies* 52:75-109.
2002. with H. Gonnet and J.-P. Grélois, Kurucu Tanrı Telibinu ve Apollon'a Değgin Yeni Bir Yayın Üzerine Gözlemler. *Archivum Anatolicum* 5:69-78.
2003. The Storm-God seal of Mursili III. In: Beckman, G., Beal, R. and McMahon, G., eds. *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday*. Winona Lake, IN. pp. 169-175.
2004. The Stag-God of the countryside and related problems. In: Penney, J.H.W., ed. *Indo-European Perspectives. Studies in Honour of Anna Morpurgo Davies*. Oxford. pp. 355-369.
2004. The new Sargon stele from Hama. In: Frame, G. and Wilding, L.S., eds. *From the Upper Sea to the Lower Sea. Studies on the History of Assyria and Babylonia in Honour of A.K. Grayson* (PIHANS 101). Leiden. pp. 151-164.
2005. A Hieroglyphic Luwian inscription on a silver bowl in the Museum of Anatolian Civilizations, Ankara. *Studia Troica* 15:193-204.
2006. Tudḫaliya the Hunter. In: van den Hout, Th.P.J., ed. *The Life and Times of Hattušili III and Tuthaliya IV*. (Proceedings of a Symposium held in Honour of J. de Roos, 12-13 December 2003, Leiden) (PIHANS 103) Leiden. pp. 49-76.
- 2007-2008. with R. Akdoğan, Kirşehir-Yassıhöyük'ten ele geçen luvi hiyeroglif kurşun levha. *Anadolu Medeniyetleri Müzesi* 2007-2008:7-14.
2008. The Disappearance of Writing Systems: Hieroglyphic Luwian, In: Baines, J., Bennet, J. and Houston, S., eds. *The Disappearance of Writing Systems: Perspectives on Literacy and Communication*. London. pp. 31-43.
2010. A unique Hieroglyphic Luwian document, In: Cohen, Y., Gilan, A. and Miller, J. L., eds. *Pax Hethitica: Studies on the Hittites and their Neighbours in Honour of Itamar Singer*. StBoT 51. Wiesbaden.

CHAPTERS IN BOOKS

- 1979.** The Origin and Dissemination of Writing in Western Asia In: Moorey, P.R.S., ed. *Origins of Civilization*. Oxford - New York. pp. 128-166.
- 1982.** The Neo-Hittite States in Syria and Anatolia, In: Boardman, J., Edwards, I.E.S., Hammond, N.G.L. and Sollberger, E., eds. *Cambridge Ancient History III/1*. Cambridge. pp. 372-441, pls. 65-92.
- 1993.** Hittiti e Neohittiti nel Tauro e in Siria. In: Rouault, O. and Masetti-Rouault, M.G., eds. *L'Eufate e il tempo - Le civiltà del medio Eufrate e della Gezira siriana*. Milano. pp. 90-93.
- 1995.** Karkamish and Karatepe: Neo-Hittite city-states in north Syria. In: Sasson, J. M., Baines, J., Beckman, G. and Robinson, K., eds. *Civilizations of the Ancient Near East*, vol. II. New York. pp. 1295-1307.
- 1996.** The Hittites and their Empire. In J. G. Westenholz, ed. *Royal Cities of the Biblical World*. Jerusalem. pp. 69-79.
- 1999.** Die Hethiter und ihr Reich. In: Seipel, W. and Wiczorek, A., eds. *Von Babylon bis Jerusalem. Die Welt der altorientalischen Königsstädte*, Bd. 1. Milano. pp. 63-69.
- 2002.** Die Erbe des Großreiches I. Die Geschichte der späthethitischen Kleinkönigreichen Anatoliens und Nordsyriens im Überblick (ca. 1180 – 700 v. Chr.). In: *Die Hethiter und ihr Reich. Das Volk der 1000 Götter*. (Katalog der Ausstellung, Bonn, 18. Januar-28. April 2002) Bonn. pp. 56-59.
- 2002.** Die Erbe des Großreiches II. Die archäologischen Denkmäler in den späthethitischen Kleinkönigreichen Anatoliens und Nordsyriens im Überblick (ca. 1180 – 700 v. Chr.). In: *Die Hethiter und ihr Reich. Das Volk der 1000 Götter*. (Katalog der Ausstellung, Bonn, 18. Januar-28. April 2002) Bonn. pp. 264-273.
- 2003.** Scripts and texts. In: Melchert, H.C., ed. *The Luwians*. (Handbuch der Orientalistik I, 68) Leiden-Boston. pp. 128-169.

CONTRIBUTIONS TO ENCYCLOPAEDIAS AND ANTHOLOGIES

E. Ebeling et al., eds. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*. München 1928-.

Band 4 (1972-75)

Ḫalab: The 1st millennium: 53.

Hamath: 67-70.

Ḫatti: The 1st millennium B.C.:152-159.

Ḫattin: 160-162.

Ḫazazu: 240.

Ḫilakku: 402-403.

Ḫulli: 490-491.

Band 5 (1976-80)

Idamaraz: 28-30.

Illil: 60.

Irhuleni: 162.

Irqata: 165-166.

Irrite: 171.

Izrijaw: 227.

Jahan: 238-239.

Jau-bi'di: 272-273.

Jaudu: 273.

Karatepe A. Inschriften, Geschichte: 409-411.

Karkamiš: 426-446.

Kinalua: 597-598.

Band 6 (1980-1983)

ktk: 254-256.

Kubaba, A. Philologisch: 257-261.

Kullani(a): 305-306.

Kummuh: 338-340.

Kuwatna-muwa: 398.

Band 7 (1987-1990)

Luhuti: 159-161.

Manšuate: 342-343.

Maraš: 353-353.

Marqas: 431-432.

Mati'ilu: 586.

Band 8 (1993-1997)

Melid. A. Historisch: 35-41.

Mita: 271-273.

Mugallu: 406.

Muksas: 413.

Muli: 414.

Muttallu: 501-502.

Band 9 (1998-2001)

Nișantaş: 579-581.

Band 10 (2003-2005)

Pinali: 566.

Pisiri(s): 578-579.

Band 11 (2006-2008)

Puranda: 115

Puranda-muwa: 115

Qalparu(n)da: 152

Que. A. Geschichte: 191-195.

Sagillu: 524.

Sam'al. A. Philologisch: 600-605.

E.M. Meyers, ed. *The Oxford Encyclopedia of Archaeology in the Near East*. Oxford 1997.

Volume 1: *Carchemish*: 423-424.

Volume 4: *Neo-Hittites*: 126-127.

Volume 5: *Tyana*: 246-247.

W.W. Hallo and K.L. Younger, eds. *Monumental Inscriptions from the Biblical World*. Leiden/Boston/Köln 2000.

Volume II

Ideal Prices § 2.20: 123-124.

Royal Inscriptions. Azatiwata § 2.21: 124.

Funerary Inscriptions § 2.22: 126-128.

B.Janowski and G. Wilhelm, eds. *Texte aus der Umwelt des Alten Testaments*, Neue Folge, Band 2: *Staatsverträge, Herrscherinschriften und andere Dokumente zur politischen Geschichte*. Gütersloh 2005.

Späthethitische Herrscherinschriften: 151-159

REVIEWS

1966. J. Mellaart, *Earliest Civilizations of the Near East*, London 1965, *Bulletin of the School of Oriental and African Studies* 29: 667-668.

1968. S. Lloyd, *Early Highland Peoples of Anatolia*, London 1967, *Bulletin of the School of Oriental and African Studies* 31: 444-445.

1968. A.L. Oppenheim, *Letters from Mesopotamia*, Chicago/London 1967, *Bulletin of the School of Oriental and African Studies* 31: 668-669.

1968-1969. G. Buccellati, *The Amorites of the Ur III Period*, Napoli 1966, *Bulletin of the Institute of Archaeology* 8-9: 266.

1969. A. Kammenhuber, *Die Arier im Vorderen Orient*, Heidelberg 1967, *Bulletin of the School of Oriental and African Studies* 32:593-594.
1969. J.-R. Kupper, ed., *La civilisation de Mari, XV^e Rencontre Assyriologique Internationale*, Liège 1967, *Bulletin of the School of Oriental and African Studies* 32:225-226.
1971. M. Veyra, Les textes Hittites, In: Labat, R., Caquot, A., Szymer, M. and Veyra, M. *Les religions du Proche-Orient asiatique*. pp. 461-566, Paris 1970, *Journal of Royal Asiatic Society of Great Britain and Ireland*: 183-184.
1971. L. Orlin, *Assyrian Colonies in Cappadocia*, The Hague 1970, *Bulletin of the School of Oriental and African Studies* 34:391-392.
- 1971-1972. Ph.H.J. Houwink ten Cate, *The Records of the Early Hittite Empire (c. 1450-1380 B.C.)*, Istanbul 1970, *Anatolica* 4:179-183.
1972. G. Giacumakis, *The Akkadian of Alalah*, The Hague/Paris 1970, *Bulletin of the School of Oriental and African Studies* 35:135-136.
1973. W. Orthmann, *Untersuchungen zur späthethitischen Kunst*, Bonn 1971, *Zeitschrift der Assyriologie und vorderasiatische Archäologie* 63:307-311.
1973. V. Haas, *Der Kult von Nerik*, Roma 1970, *Bulletin of the School of Oriental and African Studies* 36: 128.
1976. L. Jacob-Rost, *Das Ritual der Malli aus Arzawa gegen Behexung (KUB XXIV 9+)*, Heidelberg 1972, *Bulletin of the School of Oriental and African Studies* 39:639-640.
1976. J. Grothus, *Die Rechtsordnung der Hethiter*, Wiesbaden 1973, *Bulletin of the School of Oriental and African Studies* 39:640-641.
1976. J.G. Macqueen, *The Hittites and their contemporaries in Asia Minor*, London 1975, *Times Literary Supplement* 75:533.
1977. A. Kammenhuber, *Materialien zu einem hethitischen Thesaurus*, Lieferung 1-2, Heidelberg 1973; A. Kammenhuber, *Materialien zu einem hethitischen Thesaurus*, Lieferung 3, Heidelberg 1976; A. Kammenhuber and A. Archi, *Materialien zu einem hethitischen Thesaurus*, Lieferung 4, Heidelberg 1976, *Bulletin of the School of Oriental and African Studies* 40:135-136.
1978. A. Kammenhuber, *Orakelpraxis, Träume und Vorzeichenschau bei den Hethitern*, Heidelberg 1976, *Bulletin of the School of Oriental and African Studies* 41:357-358.
1981. O.R. Gurney, *Some Aspects of Hittite Religion*, Oxford 1977, *Bulletin of the School of Oriental and African Studies* 44:155.
1981. A. Kammenhuber, *Materialien zu einem hethitischen Thesaurus*, Lfg. 7-9, Heidelberg 1978-1979, *Bulletin of the School of Oriental and African Studies* 44:155-156.
1981. K. Bittel, *Beitrag zur Kenntnis hethitischer Bildkunst. Vorgetragen am 21. Juni 1975*, Heidelberg 1976, *Bulletin of the School of Oriental and African Studies* 44:217.
1981. with O. Gurney, E. Masson, *Le panthéon de Yazılıkaya. Nouvelles lectures*, Paris 1981, *Bibliotheca Orientalis* 39:606-616.
1983. S. Heinhold-Krahmer, *Arzawa. Untersuchungen zu seiner Geschichte nach den hethitischen Quellen*, Heidelberg 1977, *Bulletin of the School of Oriental and African Studies* 46:139-141.
1983. P. Matthiae, *Ebla. An Empire Rediscovered*, London/New York 1980-1981, *Bulletin of the School of Oriental and African Studies* 46:547-548.
1984. V. Haas and H.J. Thiel, *Die Beschwörungsrituale der Allaiturah(h)i und verwandte Texte*, Neukirchen 1978; I. Wegner, *Gestalt und Kult der Ištar-Šawuška in Kleinasien*, Kevelaer/Neukirchen-Vluyn 1981, *Bulletin of the School of Oriental and African Studies* 47:333-334.
1988. F. Starke, *Die keilschrift-luwischen Texte in Umschrift*, Wiesbaden 1985, *Wiener Zeitschrift für die Kunde des Morgenlandes* 78:274-280.

MISCELLANEOUS

- 1968.** “TR 124-125” (copies). In: Wiseman, D.J. *The Tell al Rimah Tablets, 1966. Iraq* 30:175-205.
- 1986.** Tuthaliya Stele with hieroglyphic Inscription (drawing). In: Neve, P. Boğazköy-Ḫattuša 1985 kazı mevsiminin sonuçları. *Kazı Sonuçları Toplantısı* 8/I. Ankara. pp. 233-251:249, Fig. 23.
- 1999.** *Text Tables of Karatepe-Aslantaş*, In: Çambel, H. *Corpus of Hieroglyphic Luwian Inscriptions*, Vol. II: *Karatepe-Arslantaş*, Appendix III. Berlin/New York. pp. 90-93.
- 2005.** Commentaries on the Readings. In: Herbordt, S. *Die Prinzen- und Beamtensiegel der hethitischen Grossreichszeit auf Tonbullen aus dem Nişantepe-Archiv in Hattusa*. Mainz. pp. 248-313; Commentary on the Sign List, *ibid.*:426-436.

OBITUARIES

- 1996.** Seton Lloyd, *The Independent* January 13.
- 2000.** with O. Gurney: Hans Gustav Güterbock, *The Independent* April 8.
- 2001.** Oliver Robert Gurney; 1911-2001, *The Independent*, January. 17.
- 2003.** Oliver Robert Gurney; 1911-2001, (Academic Obituary) *Proceedings of the British Academy* 120: 219-240.
- 2005.** Manfred Korfmann, *The Independent*, August 29.
- 2005.** Tahsin Özgüç, *The Independent*, December 1.
- 2006.** Hayim Tadmor, *The Independent*, February 27.

THE HIEROGLYPHIC LUWIAN SIGNS L. 255 AND 256 AND ONCE AGAIN KARATEPE XI

Theo van den Hout

Chicago

Rarely has a scholar shaped an entire field as David Hawkins has Hieroglyphic Luwian studies. He has done so, moreover, in a wholly open, accessible and generous manner, always welcoming and thereby stimulating younger colleagues. It is due largely to the seeds he sowed that in recent years Luwian has become an absolutely essential branch of Hittite studies. To continue the agricultural metaphors in the spirit of this modest contribution, I wholeheartedly wish him many more years of fruitful labour and for us to continue to reap those fruits for a long time to come.¹

1. INTRODUCTION

Hieroglyphic Luwian (HLuw.) inscriptions contain several attestations of a word (L. 255/L. 256)*kaluna-* or (L. 255/L. 256)*karuna-* c. “granary.” With its sg. acc. *kal/runan* it belongs to those *a*-stems that do not show *i*-motion. The meaning “granary” seems well established based on a combination of contexts with the verb *suwa-/susu-* “to fill” (see below 1, 4, 5, 6), the mention of cereal (6 and possibly also 5) and a (cereal?) measure (3) as well as the shape of one of the inscriptions in the form of a grinder or a scoop of some kind (3). The Phoenician version of the bilingual KARATEPE inscription gives *‘qrt* as the corresponding word but its meaning is based on the HLuw. text (See Younger 1998:14 n. 21, and Röllig *apud* Çambel 1999:58). The attestations are as follows:

(1) KARATEPE VII

(“MANUS<”>)su-wá/i-ha-ha-wa/i | pa-há+ra/i-wa/i-ní-zi(URBS) | (<”>L. 255”)ka-ru-na-zi
“and I filled the Paharean granaries.”

Note: ed. Hawkins 2000:49; for the photo and handcopy see Çambel 1999:Pls. 59-60

(2) HAMA 8 §2

a-wa/i (“L. 255”)ka-la/i/u-na-na || EGO | (MANUS+MANUS)pa-ha-la-x-x ...
“(This) granary I myself for Ba‘alatis ...”

Note: ed. Hawkins 2000:410 w. Pl. 214.

(3) ISKENDERUN §§3-4

a-wa/i | za || -naⁱ (“L. 255/6”)ka-ru-na-na (“CAPERE”)u-pa-haⁱ
wa/i-tu-u-taⁱ 4XMILLE 4XCENTUM a-ta (“CAPERE”) | u-pa-ha | zi-i-na (“L. 255/6”)zi-pa-ta-na-ti
“I brought/established this granary and I brought into it 4400 <measures of cereal?> here with this *zipatani*.”

Note: ed. Hawkins 2000:259 w. Pls. 110-111. The circle or square inside the determinative is missing,

1. I am very grateful to my colleagues Petra Goedegebuure, Rebecca Hasselbach, Craig Melchert, and Dennis Pardee for reading earlier versions of this article and for their very helpful comments. Needless to say, I alone am responsible for the views expressed here.

possibly abraded, so that one cannot distinguish between L. 255 and L. 256; note that similar details are missing in other signs in this inscription. Instead of taking it as a variant of *DOMUS* (likewise without the inner markings) as suggested by Laroche 1960: sub 255, Meriggi 1962:213 (sign no. 220), and Marazzi1990:184, I read it as L. 255/L. 256 following Hawkins. According to Hawkins 2000:259, the monument has the form of a “grinder.” On *zīn* as the abl. of the demonstrative *za-* and the shape of this monument as a kind of scoop see P. Goedegebuure 2007:323 with n. 19. On the verb *upa-* used twice in this passage see Melchert 2004 and Yakubovich 2005.

(4) KARKAMIŠ A30h

ʽ(DEUS)KU+ʽAVIS (L. 256)ka-ʽ282-na NEG₃ REL-i-sa-ha su-su-tá

“No one used to fill Kubaba’s(?) granary.”

Note: ed. Hawkins 2000:177 w. Pl. 61.

(5) MARAŞ 8

(L. 255/256)ka-la/i/u-na-ʽwa/iʽ | (L. 255/256)ka-la/i/u-na x-ta | (ʽMANUSʽ?) su-wa/i-ha

“I filled granary on granary.”

Note: ed. Hawkins 2000:253 w. Pls. 106-107. Hawkins reads twice L. 255 but the hand copy gives L. 256; the photos are difficult to judge. For the sign rest preceding *suwa/iha* see Hawkins, *ibid.* 254.

(6) TEL AHMAR 5 §2

a-wa/i za-a-zi | (L. 256)ka-la/i/u-na-zi *a-mi-i-sa-ʽ | tá-ti-i-sa | MANUS.HORDEUM su-wa/i-ta ... | za-a-zi-wa/i |
(L. 256)ka-la/i/u-na-zi | REL-sa | x x [...]

“My father filled these granaries (with) ... barley ... and whoever ... [...] these granaries [...].”

Note: ed. Hawkins 2000:232 w. Pls. 95-96.

(7) TEL AHMAR 5 §16

za-a-zi-pa-wa/i | (L. 256)ka-la/i/u-na-zi | REL-i-sa | (SA₄)sa-n[i]-ti-i

“He who will topple these granaries”

Note: ed. Hawkins 2000:232 w. Pls. 95-96.

The determinative signs L. 255 and 256 preceding *kal/runa-* “granary” both represent a square with in its center either a small circle (L. 255) or another smaller square (L. 256). Probably due to its resemblance with *DOMUS*, Emmanuel Laroche (1960 sub no. 255) tentatively interpreted it as a “Sorte de bâtiment.” Based on the meaning of the word, Massimiliano Marazzi (1998:103 n. 3) suggested to assign it the value *HORREUM* “granary.”

The same signs are used as determinatives in two other instances: once with the word *zipatana/i-* in *ISKENDERUN* §4 (see above 3) and once with *mariyana(/i)-* in *KARATEPE XI*. The use of the determinative with *zipatana(/i)-* presents no problem. Although often depicting a single specific object, the use of determinatives in HLuw. can be extended to a wider range of words all sharing a certain association with the object depicted by the determinative. Think of the foot sign that is used not only with the word for foot itself but also with a series of words denoting different activities that imply movement. In the case of *zipatana(/i)-* we are dealing with a measure of content that is well-known from Hittite sources (*zipadanni-*) where it is often but not exclusively used with cereals (see van den Hout, *RIA* 7, 525a). That this word shares the determinative with a word meaning “granary” is hardly surprising.

More problematic is the occurrence of L. 255 with the word *ma_x+ra/i-ia-ní-zi* in

(8) KARATEPE XI

REL-pa-wá/i | (“L. 255”) *ma_x+ra/i-ia-ní-zi* | *ARHA* | *ma-ki-sa-ha*

The Phoenician version (Phu/A I 8, Pho/B I 5’ and PhSt/C I 14-15) reads

(9) *wšbrt mlšm*

This passage has been discussed by many scholars. The main difficulty is that three of the four key terms, the two HLuw. words *mariyana/i-* and *makisaha* and Phoen. *mlšm* (in this particular form), are all hapax legomena. The fourth, Phoen. *šbrt* might be a hapax as well depending on whether it occurs once more as a sg.1 pers. imperfect (*šbr*) on the statue of the Stormgod at KARATEPE (PhSt/C IV 20). The likely context is that of the destruction of a statue of Ba‘al-KRNTRYŠ. The most recent editor, Röllig (*apud* Çambel 1999:66-68), notes how “the reconstruction and reading of this part of the text [is] extremely difficult ... [and] a satisfactory elucidation ... impossible.” Yet, instead of the reading *šbb* from *šbb* “to cut out, hew, destroy” in earlier editions he follows a reading by Lipiński with an *r* for the last letter.

Although differing considerably in the details, there are two basic interpretations of KARATEPE XI, both taking their cue from the Phoenician version. In the first of these *šbrt* is taken as a verb “I broke” from the root *šbr*, known from Hebrew and, for instance, Akkad. *šebēru* “to break.” Phoen. *mlšm* is much less straightforward but with the next clause referring to the removal of evil in the land (XII-XIII: “and the evils which were in the land, I [remov]ed out of the land”) and the verb “breaking” in XI being compatible at least with adversaries, it has been derived from the root known in Hebrew as *lyš* “to be unruly” and rendered as “proud, rebels, dissenters” vel sim. (see the very useful discussion of the Old Testament evidence by Schwemer 1996:33-34).

Completely different is the explanation by Stanley Gevirtz (1990) who took Phoen. *šbrt* as a noun and the clause as a further extension of the preceding phrase “thanks to Baal and the gods” and then continued “and the assembly of the (divine) intermediaries.” He arrived at the meaning “assembly” by linking Phoen. *šbr* to Hebrew *šbr* “to heap (up).”

On the HLuw. side *ma-ki-sa-ha* is an obvious sg. 1 pret. indicative of an imperfective (-*sa*-) verbal stem *makis(a)-* which makes Gevirtz’ analysis of XI as a noun clause less plausible (cf. Younger 1998:31f.). Although nothing is said about it in the commentary the *sa* in *ma-ki-sa-ha* is not visible in the handcopy and at best only with difficulty on the photo (for both see Çambel 1999:Pls. 59-60): the stem therefore might as well be *maki(ya)-*. The translation of HLuw. *maki(sa)ha* as “I broke” is completely dependent on the Phoenician *šbrt* in its verbal interpretation. If so, the Phoenician “proud, rebels” vel sim. would have to find its equivalent in *ma_x+ra/i-ia-ní-zi*. Hawkins (2000:60) tentatively wondered whether we have here a first millennium reference to or reminiscence of the Hurrian *maryannu*, the Mittanian warrior elite. It is, however, a problem that the *maryannu* are otherwise attested in second millennium sources only. Quite ingenious and avoiding the *maryannu* problem is Daniel Schwemer’s (1996:30-35, now also mentioned as a possibility by Hawkins 2004:364) derivation of *mariyaninzi* from the Hitt. verb *mad-* “to resist” with rhotacism of the dental: “ich zerbrach[?]/vernichtete[?] die Rebellen.” However, none of the explanations mention the fact that *ma_x+ra/i-ia-ní-zi* shares its determinative with *kal/runa-* “granary” and *zipatana(i)-* (a (cereal) measure) or tries to account for it.

2. THE SIGNS L. 255 AND L. 256

In the late 1990's the excavators at Boğazköy-Hattuša brought to light a series of underground silos meant for the storage of cereals and other agricultural products. Similar structures have been found at Alaca Höyük, Kaman-Kalehöyük and Kuşaklı. As explained by Jürgen Seeher (2000 and 2006) underground silos provide a secure method for long-term storage successfully keeping out rodents, all kind of bacteria and fungi as well as water. Such silos were found on Büyükkaya in the north-east corner of Boğazköy and in the Lower City lining the postern wall about halfway between the acropolis Büyükkale and the area surrounding Temple 1. In most cases the walls of the silos did not yield much information on how they were once prepared, that is, whether they were plastered or covered with other materials like straw or reed. But well preserved in all cases are the floors of the silos. The silos are either rectangular or square, and the floors are paved with stones. Three types of silo can be distinguished depending on the drainage system. The square ones on Büyükkaya have a small drain still clearly visible in the center of the floor (see Fig. 1²). The more rectangular ones on Büyükkaya had a drain hole on the side. Those in the Lower City, finally, had a floor consisting of multiple layers of stones through which excess water could simply trickle down. According to Seeher (2000:278 and 270 respectively) the latter date at the latest to around 1400 BCE, the ones on Büyükkaya with the drain hole to the (later) 13th century.

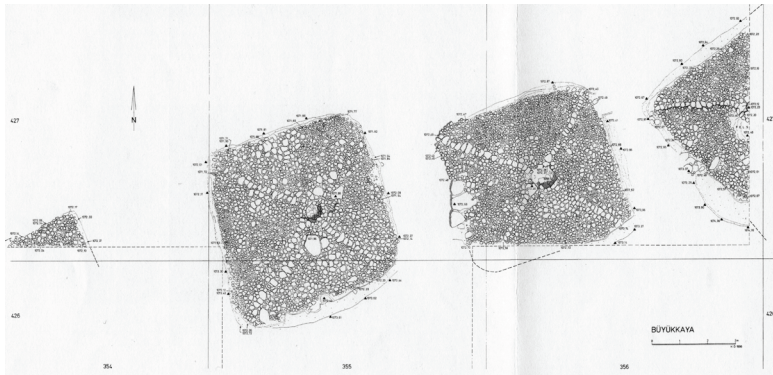


Fig. 1: Underground silos in Büyükkaya

The term used in Hittite texts to refer to such silos is the Sumerogram ÉSAG. In his *Alimenta Hethaeorum* Harry Hoffner (1974:34-37, see also A. Fairbairn/S. Omura 2005:15-23) already described them as being structures dug into the ground. Given the general meaning of *kal/runa-* as “granary” the design of both L. 255 and L. 256 makes perfect sense as two-dimensional renderings of the later type of silos with the central drain as they would have appeared to any viewer and Marazzi’s suggestion (1998:103 n. 3) to transcribe them as HORREUM is therefore fully justified. As far as the supposed view from above is concerned, there does not seem to be an overall principle in depiction for the recognizable pictographic signs of the Hieroglyphic Luwian sign inventory other than the way objects normally appeared to the viewer. An interesting interchange between a bird’s eye view vs. a (more frequent) side view can be seen, for instance, in the LIS sign (“quarrel, disagreement”) which in its Iron Age form (L. 24) shows a stamp seal seen in side view between the profiles of two individuals facing each other while the Empire Period shape (L. 23, cf. Hawkins *apud* S. Herboldt 2005:300) has one or two plain circles between them in which I propose to see the seal impression(s) left on a tablet as seen from above by the reader of the tablet. The difference between the two signs L. 255 and 256 (having either the small circle or the small square) does not seem essential and if necessary one could think of HORREUM and HORREUM₂ to keep them apart. If the

2. Reproduced from Seeher 1997 with kind permission of the author.

identification proposed here is correct the meaning of *kal/runa-* can be narrowed down to 'underground silo/granary' as opposed to architectural structures with a silo function above ground.³

According to Hawkins (2000:261, 371) the word *zipatani* would also occur in TELL TAYINAT 2 frag. 1b, but preceded in the latter text by the determinative for stone objects *LAPIS*. This would suggest “that the latter is some variant of” L. 255/L. 256. However, the reading of *zipatani* in TELL TAYINAT requires an order of reading the signs that is not found elsewhere in the same monument: as Hawkins himself (ibid. 261) concedes, the more “natural” reading would yield *zi-ta-pa-ni-i*. Given the extremely fragmentary context it seems safer to keep *zipatana/i-* separate from a possibly different noun *zipatana/i-* in TELL TAYINAT than to draw conclusions on the nature of the determinatives on the basis of this very uncertain reading.

3. HLUW. *MA_x+RA/I-IA-NÍ-ZI* AND PHOEN. *MLŠM*

If we assume that the determinatives L. 255 and 256 depict a concept belonging to the world of agriculture (underground silo) a direct link for *mariyana(i)-* with Hitt. ^{A.ŠÀ}*mariyana-* (since only the dat.-loc. *mariyani* is attested an *i*-stem *mariyani-* is equally possible) seems attractive. The CHD L-N s.v. glosses it as “a kind of field” as do others based on the Sumerian determinative A.ŠÀ “field” (cf. J. Tischler, HEG L-M s.v. *mariyani*, J. Puhvel, HED M s.v. *mariyana-*, B. Christiansen 2006:359). It is attested only in a single composition, one of the rituals of the woman Ambazzi (CTH 429), performed for a child or even a baby (for which cf. van den Hout 2006:282):

(10) (“The one who has uttered an evil day, an evil word over the child, [may he/she ...]
it back to that place! May you (pl.) give back to the child life, health, long years, future,
growing up, heroism, valour (and) strength!”) ^{GIS}*paddur≈ma≈kan apiy[a AN]A^{A.[S]À}mar[iyan]i*
šuhḫai “He/She dumps (the contents of) the basket there on the *mariyana*-field.” (§ ... §)
k[aša HUL-la]muš EME.MEŠ^{A.ŠÀ}*mariyanī šuhḫ[a]i* “N[ow] he/she scatters the [ev]il tongues
on the *mariyana*-field. ([What evil] the evil person has spoken against me before the deity,
be it [the Sun deity, b]e it the Stormgod, be it the Tutelary deity,) *kinun≈a x[...]x HUL-luš*
EME.MEŠ-*uš* *INA^{A.ŠÀ}mar[ya]nī šuhḫawe[ni ANA DUMU-RI≈]ia-kan HUL-luš* EME-*aš*
QĀTAMMA merdu ‘now w[e] dump ... (and) the evil tongues on the *mari[ya]na*-field and
[for the child] let the evil tongue likewise vanish!’”

Note: KBo 10.37 12-17, 21-26, ed. Christiansen 2006:198-201.

Jaán Puhvel suggested a *figura etymologica* between *mariyana-* and the verb *mer-*, *mar-* “to vanish, disappear” tentatively analyzing it as coming from a PIE **mryono-* “lethal place.” Although not expressing herself quite as explicitly, the most recent editor of the text Birgit Christiansen also saw the *mariyana*-field as “eine Art Abfallstätte” (2006:240) where the evil tongues are brought in order to get rid of them. Disposing of ritual ingredients in places with a negative connotation was certainly practiced but also remote areas or even holy spots could be used as such (see V. Haas, RIA Bd. 7, 253f., see also Haas *apud* H. Hauptmann 1975:64-70, for the burial of a piglet nailed to the ground in Yazılıkaya Felsspalte D). So, although a play of words between *mariyana-* and *mer*, *mar-* is possible or even likely, the *mariyana*-field was not necessarily a place rife with feelings of taboo. Looking for a connection with cereals or crops one might adduce HLUw. *mara/iwali-* (SULTAN HAN §§6 and

3 Hoffner 1974:36f., identified the Hittite term behind ÉSAG as being a stem ending in *-na-*. Although Luw. *kal/runa-* would fit this, to my knowledge no Hitt. **kaluna-* or **karuna-* is attested. A Hitt. term for above-ground grain storage is (É)*šeli/a-* for which see CHD Š s. v. forthcoming.

15, see Hawkins 2000:466, 2004:364 “beneficial vegetation, ‘barley’?”; for a possible Hitt. derivation *marawalliya/i-* “Kornfeld” see J. Lorenz/E. Rieken 2007:476f.; to what extent *mar-* in Hitt. *marnuwa-*, *marnuwant-*, a beverage “made from a cereal” [CHD L-N s.v.] might be related remains unclear). In this case a *mariyana*-field would be a field for the growing of cereal crops, a grain field. The determinative L. 255 might either go with the field or, perhaps more likely, *mariyaninzi* could stand for **mariyaniyinzi* “that which belongs to the *mariyana*-field > *mariyana*-field crops” with the regular contraction of *-iyi-* > *-i-* in HLuw. For the latter phenomenon compare, for instance,

(11) KARATEPE XVI (Ho.)

á-pa-sa-há-wa/i-ta-‘ tá-ti-i (“THRONUS”)i-sà-tara/i-tí-i (“SOLIUM”)i-sà-nu-wà/i-há-‘

“and I made them sit on their father’s (lit. fatherly, paternal) throne”

Note: ed. Hawkins 2000:50. The dat. sg. *tatī* stands for contracted *tatiyi* from the derived stem *tatiya-* “fatherly, paternal, father’s ...”

4. Phoen. (w)*šbrt* and HLuw. *ma-ki-sa-ha*

With this reinterpretation of (L. 255)*mariyaninzi* it is clear that the rendering of the verb *maki(sa)ha* as “I broke” vel sim. based on the Phoen. version is no longer possible. As already mentioned, Gevirtz’ interpretation of Phoen. *šbrt* as a noun leaves the sentence without a verb which is difficult to reconcile with the obvious HLuw. verb *maki(sa)ha*. Theoretically, if we were to combine Gevirtz’ derivation of the Phoen. form from a root linked to Hebrew *šbr* “to heap up” with the verbal interpretation of other scholars we would arrive at “I heaped up, accumulated.” The Hebrew root is attested with grain as object, for instance, in the Biblical story of Joseph when he accumulates grain for Pharaoh (Gn 41, 49 “Joseph garnered grain in quantities like the sands of the sea” [tr. New American Bible]).⁴ However, although Gevirtz’s conclusions on the writing of Semitic sibilants in the Phoenician version and the possibility of linking the Phoen. radicals *šbr* to Hebrew *šbr* instead of *šbr* seem not to have been objected to, at least not explicitly, such a link seems unlikely.⁵ But there is a second root *šbr* in Hebrew meaning “to buy grain” with a noun *šēber* “grain.” It is not inconceivable that in Phoenician a contamination of the two roots **šbr* “to heap up” often used with grain and a root **šbr* “to buy grain” led to a merger. For the latter note also in KARATEPE LIII the use of *šb’* “(new) grain” as “a rare synonym of the common word *dgn*” following H.L. Ginsberg (1973:138).

The HLuw. stem *maki(sa)-*, with the *-sa-* extension forming an imperfective from the shorter stem *maki-*, can be considered a cognate of Hitt. *mekk(i)-* “much, many, numerous, plentiful.” To what extent this word is attested in other Anatolian languages beside Hittite, has been a matter of some debate (see Tischler, HEG M 181-185). Given the regular loss of initial and intervocalic voiced velars in Luwian, it has been claimed that CLuw. **maya-* (in *mayalla/i-* “adult” and its gen. adj. *mayašša/i-*) continues PIE **meg’h₂-*. According to Craig Melchert (1987:184 n. 5, cf. also *ibid.* 1994:255), however, the velar should be preserved when followed by a laryngeal as is the case here. Hypothetically, he expects the Luwian continuation of that stem to have been either **makk-* or **mazz-*. The latter form would show the assibilation before a high vowel. The only form of **meg’h₂-* attested thus far would be HLuw. *ma* “much” from the endingless sg. nom.-acc. neut. **meg’h₂* > **mak* with regular loss of the final stop. This proves an original **mak*, because if it had been **maz* the sibilant would have been preserved (cf.

4. If one accepts the reading *šbr* (PhSt/C IV 20) on the KARATEPE statue as discussed above (§1) one must assume for Phoen. a homophone pair I *šbr* = Hebr. *šbr* “to break” and II *šbr* = Hebr. *šbr* “to heap up.” As pointed out, however, this reading is highly uncertain.

5. I am grateful to my colleague Rebecca Hasselbach for pointing this out to me and alerting me to the Hebrew *šbr* “to buy grain.”

Melchert 1994:278). Just like the Hebrew *šbr* in the Joseph story, the Hitt. root is attested with grain (or more general crops) as well. In his Proclamation the Hittite king Telipinu (c. 1500 BC) proudly says: *nu≈kan ḫalkiuš EGIR-an ma[(knunun)]* “I made the crops abound again” (KBo 3.1 iii 44 w. dupls. KUB 11.1 iii 8, KBo 3.67 iii 1 + KUB 31.17:5, ed. I. Hoffmann, THeth. 11, 46f.).

5. KARATEPE XI IN CONTEXT

The resulting interpretation of KARATEPE XI REL-*pa-wa* (“L. 255”) *mariyaninzi ARHA maki(sa)ha* would be something like: “so I accumulated the *mariyana*-field crops” with the adverb *ARHA* reinforcing (“in great quantities” vel sim.) the meaning of the verb as in KARATEPE §LI (DEUS)TONITRUS-*huzas ARHA usanuwamis* “Tarhunzas the highly (*ARHA*) blessed.” This has consequences for the function of the initial REL-*pa*. As convincingly argued by Petra Goedegebuure (1998) the initial REL-*pa* is a focus particle with “emphatic or reinforcing use.” In KARATEPE the particle generally functions to mark a climax or to conclude a string of clauses in a resumptive manner. As noted by Hawkins (2000:60, 62, 66) in his commentary the latter function seems the one most frequently used. Compare the following two sequences:

XIX-XXIV “And I built strong fortresses [...] on the frontiers, wherein were bad men, robbers, who had not served(?) under Muksas’s house, and I, Azatiwatas, put them under my feet. So (REL-*pa*) I built fortresses in those places, so that Adanawa might dwell peacefully.”

Note: tr. Hawkins 2000:51.

LI-LV “And may Tarhunzas the highly blessed and this fortress’s gods give to him, to Azatiwatas, long days and many years and good abundance , and let them give him all victory over all kings. And so (REL-*pa*) let this fortress become (one) of the Grain-God and the Wine-God, and so (REL-*pa*) the nations that dwell in (it), let them become (those) of sheep, oxen, the Grain-God and the Wine-God!”

Note: tr. Hawkins 2000:55f.

This explanation accounts for six (XXIII, XXXI, XXXV, XL, LIII-LIV) out of the seven instances of REL-*pa* in KARATEPE, the seventh one being XI, the clause under consideration here. The same usage of REL-*pa* can be observed in other HLuw. texts (see Goedegebuure 1998, Melchert 2002). All cases have in common that the use of the particle is tied to the preceding context. It never serves to introduce a new topic. As rightly noted by Hawkins, the climactic or resumptive function is not discernable in XI in any of the previous interpretations. Rather, it seems to introduce something new, contrasting his constructive contributions with the destructive one of “breaking the rebels.” After having listed all his benefactions for the material life of the people of Adana:

IV-X: “I caused Adanawa to prosper, and I extended(?) the Adanawa plain on the one hand towards the west and on the other hand towards the east, and in my days there were to Adanawa all good things, plenty and luxury, and I filled the Paharean granaries, and I made horse upon horse, and I made army upon army, and I made shield upon shield, all by Tarhunzas and the gods”

Note: tr. Hawkins 2000:49f.

Azatiwata continues in XII by saying:

XII-XIII: “but (–*pa*) I removed the evils which were in the land, out of the land.”

This may have been a reason for Melchert's claim (2002:227) that the REL-*pa* in XI is not the focus (or asseverative particle as he calls it) but the subordinating REL-*i* with the regular contrastive -*pa*, functionally equivalent to Hitt. -*ma*: "while on the other hand I un-__ed the *mariyanni*." However, in this case the following -*pa* of XII no longer has any function. In KARATEPE, once a contrast has been introduced by -*pa* subsequent clauses continuing the contrast do not repeat the particle. Compare:

XXV-XXX: "I defeated the strong fortresses towards the west that eminent kings who were before me had not brought down but (-*pa*) I, Azatiwata, did defeat them, brought them down and settled them towards the east in my territory.

Note: ed. Hawkins 2000:52.

Contrastive -*pa* thus occurs only once in a series of related clauses in KARATEPE while there is one instance of serial -*pa* just like Hitt. -*ma* "marking the correlation of single words in adjacent clauses appended to all but the first member of a series" (CHD L-N -*ma* 91). This is the case in the sequence KARATEPE VIII-X just quoted ("Horse (Ø) upon horse I made, army (-*pa*-) upon army I made, shield (-*pa*-) upon shield I made").

In the interpretation of KARATEPE XI offered here, REL-*pa* has its resumptive function and caps the long list of Azatiwata's positive contributions to the land of Adana while the -*pa* of §XII has its full force contrasting the good things he brought into the land with the evil ones that he forced out. Azatiwata's filling of the granaries created the conditions that made his land and people prosper so that animals bred, armies marched and the land was safe. The final sentence of this sequence, XI, takes up again the theme of agricultural wealth that made it all possible:

IV-XIII: "I made Adanawa prosper and extended(?) the Adanawa plain on the one hand towards the west and on the other hand towards the east, and in my days Adanawa enjoyed all good things, plenty and luxury. I filled the Paharean granaries, and I made horse upon horse, army upon army, shield upon shield, all through Tarhunzas and the gods. I thus accumulated the *mariyana*-field crops in great quantities while I removed out of the land the evils that were in the land."

The above interpretation thus offers an explanation for the HLuw. determinative L. 255-256 in combination with clear Hittite-Luwian cognates for the key terms *mariyaninzi* and *makisaha* as well as a more consistent usage of the element REL-*ipa* in the HLuw. version. Moreover, it seems that the Phoen. *šbrt* may be reconciled with this. The latter cannot be claimed for Phoen. *mlšm*, however, which formed the basis for the rendering of HLuw. *mariyaninzi* thus far. Either one has to look to the HLuw. version now in order to establish its meaning or, abiding by the traditional interpretation for the entire Phoenician clause, one has to take recourse to the unsatisfactory option that the HLuw. and Phoenician went separate ways here.

REFERENCES

- Çambel, H. 1999. *Corpus of Hieroglyphic Luwian Inscriptions, Volume II: Karatepe-Aslantaş. The Inscriptions: Facsimile Edition*. Berlin-New York.
- Christiansen, B. 2006. *Die Ritualtradition der Ambazzi. Eine philologische Bearbeitung und entstehungsgeschichtliche Analyse der Ritualtexte CTH 391, CTH 429 und CTH 463*. (Studien zu den Boğazköy-Texten 48) Wiesbaden.

- Fairbairn, A. and Omura, S. 2005. Archaeological identification and significance of ÉSAG (agricultural storage pits) at Kaman-Kalehöyük, central Anatolia. *Anatolian Studies* 55:15-23.
- Gevirtz, S. 1990. Phoenician *WŠBRT MLŠM* and Job 33:23. *Maarav* 5-6:145-158.
- Ginsberg, H.L. 1973. Ugaritico-Phoenicia. *The Journal of the Ancient Near Eastern Society of Columbia University* 5:131-147.
- Goedegebuure, P.M. 1998. The hieroglyphic luwian particle REL-i=pa. In: Alp, S. and Süel, A., eds. *III. Uluslararası Hititoloji Kongresi Bildirileri. Acts of the IIIrd International Congress of Hittitology*. Ankara. pp. 233-245.
- Haas, V. 1987-1990. Magie und Zauberei. B. Bei den Hethitern. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*. 7. Band. Berlin-New York. pp. 234-255.
- Hauptmann, H. 1975. Die Felspalte D. In: Bittel, K., Boessneck, J., Damm, B., Güterbock, H.G., Hauptmann, H., Naumann, R. and Schirmer, W. *Das hethitische Felsheiligtum Yazılıkaya*. Berlin. pp. 62-75.
- Hawkins, J. 2000. *Corpus of Hieroglyphic Luwian Inscriptions, Volume I: Inscriptions of the Iron Age*. Berlin-New York.
- Hawkins, J. 2004. The stag-god of the countryside and related problems. In: Penney, J.W., ed. *Indo-European Perspectives. Studies in Honour of Anna Morpurgo Davies*. Oxford. pp. 355-369.
- Herbordt, S. 2005. *Die Prinzen- und Beamtensiegel der hethitischen Grossreichszeit auf den Tonbulln aus dem Nişantepe-Archiv in Hattusa*. (Boğazköy-Hattuša 19) Berlin-New York.
- Hoffner, H.A. 1974. *Alimenta Hethaeorum. Food Production in Hittite Asia Minor*. (American Oriental Series, Vol. 55) New Haven, CT.
- Laroche, E. 1960. *Les hiéroglyphes hittites*. Paris.
- Lorenz, J and Rieken, E. 2007. Auf dem Weg der Stadt Šaššūna... In: Groddek, D. and Zorman, M., eds. *Tabularia Hethaeorum. Hethitologische Beiträge. Silvín Kořak zum 65. Geburtstag*. (Dresdner Beiträge zur Hethitologie 25) Wiesbaden. pp. 467-486.
- Marazzi, M. 1990. *Il geroglifico anatolico. Problemi di analisi e prospettivi di ricerca*. (Biblioteca di ricerche linguistiche e filologiche 24) Roma.
- Marazzi, M., Bolatti-Guzzo, N. and Dardano, P., eds. 1998. *Il Geroglifico Anatolico. Sviluppi della ricerca a venti anni dalla sua "ridecifrazione". Atti del Colloquio e della tavola rotonda Napoli-Procida, 5-9 giugno 1995*. (Istituto universitario orientale. Dipartimento di studi Asiatici. Series Minor LVII) Napoli.
- Melchert, H.C. 1987. PIE velars in Luvian. In: Watkins, C., ed. *Studies in Memory of Warren Cowgill (1929-1985)*. Berlin - New York. pp. 182-204.
- Melchert, H.C. 1994. *Anatolian Historical Phonology*. Amsterdam.
- Melchert, H.C. 2002. Hieroglyphic Luvian REL-*ipa* 'indeed, certainly'. In: Southern, M., ed. *Indo European Perspectives*. (Journal of Indo-European Studies Monograph No. 43) Washington DC. pp. 223-232.
- Melchert, H.C. 2004. A Luwian dedication. In: Penney, J.W., ed. *Indo-European Perspectives. Studies in Honour of Anna Morpurgo Davies*. Oxford. pp. 370-379.
- Meriggi, P. 1962. *Hieroglyphisch-hethitisches Glossar*. Wiesbaden.
- Puhvel, J. 2004. *Hittite Etymological Dictionary. Vol. 6 Words beginning with M*. Berlin-New York.
- Schwemer, D. 1996. Hethitisch *mad-* "widerstehen" und hieroglyphen-luwisch *mariyaninzi* "Rebellen" in der Karatepe-Inschrift. *Welt des Orients* 27:30-35.
- Seeher, J. 1997. Die Ausgrabungen in Boğazköy-Hattuša 1996. *Archäologischer Anzeiger* 1997:317-341.

- Seeher, J. 2000. Getreidelagerung in unterirdische Großspeichern: Zur Methode und ihrer Anwendung im 2. Jahrtausend v.Chr. am Beispiel der Befunde in Hattuša. *Studi micenei ed egeo anatolici* 42:261-301.
- Seeher, J. 2006. Der althethitische Getreidesilokomplex. In: Seeher, J., ed. *Ergebnisse der Grabungen an den Ostteichen und am mittleren Büyükkale-Nordwesthang in den Jahren 1996-2000*. (Boğazköy-Berichte 8). Mainz am Rhein. pp. 45-84.
- Tischler, J. 1990. *Hethitisches etymologisches Glossar. Lieferungen 5 und 6: L-M*. Innsbruck.
- van den Hout, Th. 2006. Review of Otten, H. and Rüster, Chr., KBo 44. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 96:280-283.
- Yakubovich, I. 2005. Carian monument. In: Kazansky, N., ed. *Hrda Manasa. Studies presented to Professor Leonard G. Herzenberg on the occasion of his 70-birthday*. Saint Petersburg. pp. 240-251.
- Younger, K.L. 1998. The Phoenician inscription of Azatiwada. An integrated reading. *Journal of Semitic Studies* 43:11-47.