

THEORETICAL APPROACH FOR THE SO-CALLED MYCENAEAN MIGRATION IN TURKEY*

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The natural and human-made habitat east of the Aegean Sea always captured the attention of the inhabitants of the Greek mainland. As a direct or indirect result, migrations to Asia Minor took place in various periods, movements about which our knowledge is based mainly on written sources. The first migration, which remains the most exotic and highly debated, is assigned to the transition period from the Bronze Age to the Iron Age and was related to the Mycenaean collapse, which was followed by the so-called Dark Age of the Mediterranean region. Advancing theoretical and practical approaches in archaeology have increasingly called into question this concept of a 'Dark Age', gradually and slowly illuminating the previously presumed gloom. It seems that the 'Dark Age' was not as dark as traditionally thought.

The reasons offered by scholars for the collapse of the Mycenaean palatial hegemony in Greece and in the 'middle Mediterranean' vary¹ and remain uncertain today, especially since the theory of a 'Doric Invasion'² is no longer accepted by many scholars. The most exotic and appealing explanation for the Mycenaean collapse is, no doubt, the one involving the 'Sea People'. This hypothesis is connected to some preserved Egyptian and Hittite inscriptions in which 'Sea People'

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¹ Bryan Feuer, *Mycenaean Civilization: An Annotated Bibliography through 2002 (Revised Edition)*, McFarland & Company Inc. Publishers, Jefferson 2004, pp. 12-14; Oliver Dickinson, *The Aegean from Bronze Age to Iron Age*, Routledge, London and New York 2006, pp. 43-57; Jonathan M. Hall, *A History of the Archaic Greek World. ca. 1200-479 BCE*, Blackwell, Oxford 2007, pp. 51-55; Sigrid Deger-Jalkotzy, "Decline, Destruction, Aftermath", in: Cynthia W. Shelmerdine (ed.), *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008, pp. 390-391.

² Bernhard Schweitzer, *Greek Geometric Art*, Phaidon Press, London 1971, p. 10; Anthony McElrea Snodgrass, *The Dark Ages of Greece*, Edinburgh University Press, Edinburgh 1971, pp. 311-312; Vincent Robin d'Arba Desborough, *The Greek Dark Ages*, Ernst Benn, London 1972, pp. 22-23, 111.

are mentioned numerous times in the context of battles with Hittite, Egyptian and Levantine kingdoms³. Another theory which has been discussed in relation to the ‘Sea People’ focuses on the introduction of new weaponry, enabling a new type of warfare. According to this theory, this new weaponry was introduced by the ‘Sea People’ to the Late Bronze Age kingdoms⁴. Other theories attribute the ‘system collapse’ to various economic factors, such as increased taxes imposed to cover the high expenses incurred by the palaces or a series of bad harvests which, because of extreme specialization in agricultural production, no longer allowed the palaces to feed the wider population⁵. Recently, Sherratt returned to an economic explanation. In her hypothesis, the palaces depended on the control of specific segments of long-distance trade routes to maintain their position. She explains the collapse of the system as a result of the development of direct routes between areas east and west of the Mediterranean⁶.

Other scholars, however, have observed the situation from different angles and have attempted to end the debate by employing theoretical explanations

³ Nancy Katharine Sandars, “The last Mycenaeans and the European Late Bronze Age”, *Antiquity* 38, 1964, pp. 258-262; Nancy Katharine Sandars, *The sea peoples. Warriors of the ancient Mediterranean 1250-1150 BC*, London 1985 (2nd ed), pp. 184, 187; Sinclair Hood, “(review) Sandars (N.K.) The sea peoples: warriors of the ancient Mediterranean 1250-1150 B.C. (Ancient peoples and places, 89), Thames and Hudson, London 1978”, *JHS* 99, 1979, p. 201; Klaus Kilian, “Mycenaeans up to date, trends and changes in recent research”, Elizabeth B. French, Ken A. Wardle (eds.) *Problems in the Greek Prehistory*. Bristol Classical Press, Bristol 1988, p. 134; Penelope A. Mountjoy “Mycenaeans Connections on the Near East in LH IIIC: Ships and Sea Peoples”, in: Robert Laffineur/Emanuele Greco (eds.) *Emporia. Aegeans in the Central and Eastern Mediterranean*, Aegeum 25, Liège/Austin 2005, pp. 423-428; Assaf Yasur-Landau, *The Philistines and Aegean Migration at the end of the Late Bronze Age*, Cambridge University Press, New York 2010, pp. 335-345.

⁴ Robert Drews, *The Bronze Age: changes in warfare and the catastrophe ca. 1200 B.C.*, Princeton University Press, Princeton 1993, chapter 3; Mervyn R. Popham, “The Collapse of Aegean Civilization at the end of the Late Bronze Age”, in: Barry Cunliffe (ed.) *The Oxford Illustrated Prehistory of Europe*, Oxford University Press, Oxford 1994, pp. 277-303.287-288; Oliver Dickinson, “Robert Drews’s Theories about the Nature of Warfare in the Late Bronze Age”, in: Robert Laffineur (ed.) *POLEMOS: Le contexte guerrier en Égée à l’Âge du Bronze*, Aegeum 19, Liège and Austin 1999, pp. 21-29; Cyhntia W. Shelmerdine, “Review of Aegean Prehistory VI: The Palatial Bronze Age of the Southern and Central Greek Mainland”, in: Tracey Cullen (ed.), *Aegean Prehistory: A Review*, AJA Suppl. I, Boston 2001, pp. 372-376.

⁵ Cyhntia W. Shelmerdine, “Architectural Change and Economic Decline at Pylos”, in: John Tyrell Killen, José L. Melena, Jean Pierre Olivier (eds.), *Studies in Mycenaean and Classical Greek Presented to John Chadwick*, Ediciones Universidad de Salamanca, Salamanca 1987, pp. 557-568; Joseph A. Tainter, *The Collapse of Complex Societies*, Cambridge University Press, Cambridge 1988; Colin Renfrew, *Archaeology and language: The Puzzle of Indo-European Origins*, Cambridge University Press, New York 1987, pp. 133-134, pp. 204-205, pp. 557-568; Muhly, James D., “The Crisis years in the Mediterranean world: transition or cultural disintegration?”, in: William A. Ward, Martha Sharp Joukowsky (eds.), *The crisis years: the 12th century BC from beyond the Danube to the Tigris*. Kendall/Hunt Publishing, Dubuque 1992, pp. 11-12.

⁶ Susan Sherratt, “Potemkin palaces and route-based economies”, in: Sofia Voutsaki, John T. Killen (eds.), *Economy and Politics in the Mycenaean palace states*. Cambridge Philological Society, Cambridge 2001, p. 238.

based on changing internal factors, such as the existence of prolonged periods of major internal unrest. These upheavals may have originated from the increasing stresses being placed upon the economic and social systems of palace societies, but the possibility that they emerged from disputes among the ruling elite over territory or resources, or even as a consequence of civil wars, cannot be ruled out. The latter hypothesis would explain the capture and destruction of some of the citadels⁷. Another analysis has developed from geological sciences, claiming that a contraction of the polar ice caps resulted in a chain reaction that negatively affected the availability of essential resources to Late Bronze Age people⁸. The end of the kingdoms has also been attributed to an earthquake⁹.

It is very difficult to determine the chronology of the age of migration after the Mycenaean collapse, since the evidence is very scanty. The relative chronology is based upon the type and decoration of Mycenaean ceramics and it more or less correlates with the dates gained from dendrochronology and radiocarbon dating, thus providing an absolute chronology. Most scholars date the period of destruction to the early twelfth century, the end of LH IIIB2, and therefore the timespan between the beginning of LH IIIC, ca. 1190 BC, and the end of the LH IIIC period, 1070 BC, is the age of migration after the collapse; in other words, the so-called Dark Age of Aegean civilization¹⁰.

⁷ John T. Hooker, *Mycenaean Greece*, Routledge & Kegan Paul, New York 1976, p. 177.

⁸ Manuel Robbins, *Collapse of the Bronze Age: The Story of Greece, Troy, Israel, Egypt and the Peoples of the Sea*, Author Choice Press, San Jose 2001, pp. 139-145.

⁹ Philip P. Betancourt, "The end of the Greek Bronze Age", *Antiquity* 50, 1976, pp. 40-47; Kilian, op. cit., p. 134; Stathis C. Stiros, "Identification of Earthquakes from Archaeological Data: Methodology, Criteria and Limitation", in: Stathis C. Stiros, Richard E. Jones (eds.), *Archaeoseismology. Fitch Laboratory Occasional Paper 7. Athens: Institute of Geology and Mineral Exploration and the British School at Athens*, Short Run Press, Exeter 1996, pp. 145-146; Amos Nur, "The collapse of ancient societies by Great Earthquakes", in: Benny Joseph Peiser, Trevor Palmer, Mark E. Bailey (eds.), *Natural Catastrophes during Bronze Age Civilisations: Archaeological, Geological, Astronomical and Cultural Perspectives*. BAR International Series 728, Archaeopress, Oxford 1998, pp. 140-147; Amos Nur, Eric H. Cline, "Poseidon's horses: plate tectonics and earthquakes storms in the Late Bronze Age in the Aegean and eastern Mediterranean", *Journal of Archaeological Science* 27, 2000, pp. 43-63.

¹⁰ Desborough, op. cit., p. 55; Penelope A. Mountjoy, "The east Aegean-west Anatolian interface in the Late Bronze Age: Mycenaeans and the Kingdom of Ahhiyawa", *Anatolian Studies* 48, 1988, pp. 35-36; Popham, op. cit., p. 281; Penelope A. Mountjoy, "The destruction of the palace at Pylos reconsidered", *Annual of the British School at Athens* 92, 1997, pp. 109-137; Peter M. Warren, Vronwy Hankey, *Aegean Bronze Age Chronology*, Bristol Classical Press, Bristol 1989, pp. 159-161; Cynthia W. Shelmerdine, "Review of Aegean Prehistory VI: The Palatial Bronze Age of the Southern and Central Greek Mainland", in: Tracey Cullen (ed.), *Aegean Prehistory: A Review*, AJA Suppl. I, Boston 2001, p. 373, n. 277; Bryan Feuer, *Mycenaean Civilization: An Annotated Bibliography through 2002 (Revised Edition)*, McFarland & Company Inc. Publishers, Jefferson 2004, pp. 5-6; Dickinson, op. cit., pp. 10-23; Deger-Jalkotzy, op. cit., pp. 392-393.

How appropriate is the term ‘Dark Age’ with reference to this period and how does it fit with events in Asia Minor? How might the various current hypotheses for the Mycenaean collapse and the succeeding ‘Dark Age’ relate to the Anatolian context? Did the collapse of Mycenaean palaces and the cause or causes for it really drive migrants from mainland Greece to Asia Minor? Solving the last question is usually — consciously or not — one of the major aims of archaeologists working on the Bronze Age of Asia Minor. Here I will try to respond to the same question by referring to the material cultures of some Late Bronze and Early Iron Age cities in Asia Minor. I will concentrate on the material culture of each city individually, within its own context, in order to develop models which could inform responses to the migration questions. By studying developments in Lycia in the 5th- 4th centuries BC, the aim is to determine whether a model for answering questions related to the so-called migration to Asia Minor can be derived.

The data analysed together with information on the acculturation process in 5th- to 4th-century Lycia, will be questioned in order to derive a common model to be used for explaining all developments, but especially the so-called Mycenaean migration.

Evidence and Interpretations: The Mycenaean Collapse and Western Asia Minor

Previously, scholars have identified a Mycenaean presence at various excavated sites in Anatolia on the basis of the presence of Mycenaean ceramics, as well as testimonies in later literary sources. Recent studies, however, have demonstrated that the pottery which was previously thought to be Mycenaean is not always so and that variations on local productions have been incorrectly considered to be imports. There have been some misleading data and observations published, which might have prompted faulty interpretations by scholars. Many burnt layers have been, for example, linked to a single destruction phase on the basis of the location of Mycenaean pottery in one of these burnt layers. It was sometimes, however, not verified whether these layers were contemporary or not, since parallels for Mycenaean artefacts, such as pottery, architectural remains or small finds like seals, related to the various strata were lacking.

Compared to Mycenaean ceramics, the locally produced, undecorated non-Mycenaean or Mycenaean-imitation ceramics are much less well known and therefore often neglected by scholars. However, the quantitative and qualitative appearance of this type of ceramic in contexts with Mycenaean artefacts is very

relevant, because in many cities examples of it are superior in number to the Mycenaean artefacts themselves. Additionally, the results of ongoing excavations in western and southern Turkey have created a need to review our knowledge of the Late Bronze and Early Iron Ages of Asia Minor as well as the associated migration phenomenon.

The earliest dated evidence for the city of Ephesos was found under the oldest peripteral temple and around the eastern edge of the Temple of Artemis. The context and artefacts are dated from the late 13th and early 12th centuries BC. Amongst the finds, Mycenaean ceramics are visible. Ephesos also offers archaeological evidence from another area, known as Ayasuluk, a hilltop located to the northeast of the Artemision and on a hilltop. The hill is surrounded by a Seljuk citadel. An early city wall and Late Bronze Age to Middle Bronze Age geometric ceramics were uncovered on the southern slope of the hill. The results emphasize that the hill was continuously inhabited from the Early Bronze Age until the sixth century BC. This was probably the oldest settlement of Ephesos¹¹. These circumstances have been related to the texts of Strabo and Pausanias, who both mention that old Ephesos was inhabited by Carians, Lydians, Lelegs and Luwians¹². The city walls have been compared with contemporary Hittite examples from Hattusha and Eflatunpınar. Taken together, the results have led the excavator¹³ to suggest that the site should be identified with Appassas, old Ephesos, the capital of the Arzawa-Mira kingdom. Archaeological evidence shows that Ephesos had contact with the Mycenaean, but was also in contact with the Hittites.

The excavations at Miletos have unearthed much more archaeological evidence for relations with Mycenae — such as Mycenaean pottery, jewellery and tombs as well as terracotta figurines — than has been found at other cities in western Asia Minor. As a result, the city has been considered one of the centres for Mycenaean settlers¹⁴. Early Miletos, considered to be the Millawanda of the

¹¹ Otto Benndorf, *Die Besiedlungen bis auf König Kroisos, Forschungen in Ephesos I*, Vienna 1906, p. 23; Anton Bammer, “Zur Topographie und Städtebaulichen Entwicklung von Ephesos”, *Jahreshefte des Österreichischen Instituts in Wien* 46, 1961-1963, pp. 136-157; Brein, Friedrich, “Zur ephesischen Topographie”, *Jahreshefte des Österreichischen Instituts in Wien* 51, 1976-1977, pp. 65-76; Mustafa Büyükkolancı, “Selçuk Ayasuluk Tepesi (Eski Efes) ‘Appassas’ mı? - Is Selçuk Ayasuluk (Old Ephesos) ‘Appassas’?”, in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınları, Ankara 2008, pp. 41-55.

¹² Strabo XIV, 641; Pausanias 7.2, 8; Büyükkolancı, op. cit., pp. 47-48.

¹³ Büyükkolancı, op. cit., pp. 47-48.

¹⁴ Niemeier, Wolf-Dietrich, “Milet von den Anfängen menschlicher Besiedlung bis zur ionischen Wanderung”, in: Justus Cobet, Volkmar Von Graeve, Wolf-Dietrich Niemeier, Konrad Zimmermann (eds.),

Hittite texts, was assigned the status of a vassal of the Ahhijawa kingdom, mentioned in the texts, the centre of which is located at Boeotian Thebes. Archaeological evidence — such as Mycenaean pottery, terracotta figurines, weapons, jewellery, tombs and domestic architecture — from some sites to the south of Miletos, including Müskebi and Iasos, seems to suggest the existence of a zone containing Mycenaean settlements extending from Miletos to Halikarnassos in the south and also including nearby islands, from Samos to Rhodes, in the course of the 14th as well as the 13th and 12th centuries BC¹⁵. Many scholars believe that the archaeological remains prove that not only Mycenaean settlers came to Miletos, but in an earlier period people from the island of Crete also came to settle there¹⁶. It should be kept in mind, however, that the situation as it emerges at Miletos may partially be related to the fact that this site has the largest excavated area for the corresponding period amongst the excavated cities of western Asia Minor and has provided, therefore, much more material from which to draw conclusions. As a matter of fact, the recent excavations at Ayasuluk in Ephesos also yielded LH IIIA pottery with Minoan motifs¹⁷. Future excavations may thus lead to a new starting point from which to assess the degree of influence of Crete and to study the possibility of movements from Crete to Ephesos or, rather, the Ionian coast.

Approximately 50 chamber tombs from Müskebi contain mainly inhumation burials and take the form of dromoi, stomia and rock-cut chambers with typical Mycenaean pottery, bronzes and jewellery as grave gifts. The pottery repertoire dates from LH IIIA to LH IIIC and contains imports from Miletos and also probably Rhodes, since ceramics with very specific Rhodian features have been found¹⁸. Among the remains of later buildings at Iasos in Caria some Mycenaean

Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposium Güzelçamlı 26. September-1. Oktober 1999, Milesische Forschungen 5, Philipp von Zabern, Mainz am Rhein 2007, pp. 3-96; Christopher Mee, "Mycenaean Greece, The Aegean and Beyond", in: Cynthia W. Shelmerdine (ed.), *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008, pp. 372-374.

¹⁵ However a study on burial customs on Rhodes shows that the type and the tradition of burials as well as their grave goods were results of the acculturation process rather than a massive migration: Georgiadis Mercourios, "Migration on Rhodes during the Mycenaean Period, *Mediterranean Archaeology and Archaeometry* 4.1, 2004, pp. 61-72

¹⁶ Niemeier, op. cit., pp. 7-13; Jack L. Davis, "Minoan Crete and The Aegean Islands", in: Cynthia W. Shelmerdine (ed.), *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008, p. 199; Mee, op. cit., p. 373.

¹⁷ Büyükkolancı, op. cit., pp. 42-43, fig. 4; Mee, op. cit., p. 373.

¹⁸ Coşkun Özgünel, "Selçuk Arkeoloji Müzesinde Saklanan Miken Pyxisi ve Düşündürdükleri", *Belleten* 51, 1987, pp. 535-547; Niemeier, op. cit., pp. 51-60; Mee, op. cit., pp. 372-373.

pottery from LH IIIA-B as well as a few terracottafigurines resembling Mycenaean examples were unearthed¹⁹.

At Liman Tepe near Clazomenae three different architectural strata have been recorded, providing much evidence for the LH IIIA-C period, although the excavated area is limited in size. Mycenaean ceramics were found in all three layers. However, while for the first period, LH IIIA, the number of Mycenaean ceramics was low, it gradually increased. Nevertheless by the third phase, LH IIIC, locally produced imitations of Mycenaean wares were far more numerous than imported Mycenaean examples. One issue to bear in mind, though, is that the latest architectural phase partially destroyed the second phase underneath it. The buildings in this third layer were often monumental and of rectangular shape²⁰.

As yet, very recent excavations in the site, called Çeşme-Bağlararası, have uncovered no architectural or ceramic remains from the LH III C period. However, ceramics and a few remains of a wall from the LH III A2- III B showed that the site had a strong connection not only with the Mycenaean world but especially with the Crete²¹.

Close to Limantepe, located to its north, lies another site called Panaztepe. The rich cemetery at this site has yielded various types of tombs, such as cist graves, built chamber tombs with dromoi, pithos graves, and chamber tombs with

¹⁹ Niemeier, op. cit., pp. 51-60; Mee, op. cit., pp. 372-373.

²⁰ Mee, Christopher, "Aegean Trade and Settlement in Anatolia in the Second Millennium B.C.", *Anatolian Studies* 28, 1978, pp. 121-156: 125; Armağan Erkanal, Hayat Erkanal, "Vorbericht über die Grabungen 1979 im prähistorischen Klazomenai/Limantepe", *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi* 1/1, 1983, pp. 163-183; Sevinç Günel, "Vorbericht über die mittel- und spätbronzezeitliche Keramik von Limantepe", *Istanbul Mitteilungen* 49, 1999, pp. 60-62; Armağan Erkanal-Öktü, "The Late Bronze Age Cemeteries of Panaztepe", in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Geç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayinevi, Ankara 2008, pp. 91-100; Sevinç Günel, "Mycenaean cultural impact on the Çine (Marsyas) plain, southwest Anatolia: the evidence from Çine-Tepecik", *Anatolian Studies* 60, 2010, pp. 25-39; Sila Mangaloğlu-Votruba, "Liman Tepe'de Geç Hellas III C Dönemi", *Anadolu/Anatolia* 37, 2011, pp. 43-73; Ayşegül Aykurt, "An example of Mycenaean Pictorial Pottery: Crater from Liman Tepe", in: Nazlı Çınardalı-Karaaslan, Ayşegül Aykurt, Neyir Kolankaya-Bostancı, Yiğit Hayati Erbil (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal'a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014, pp. 53-73.

²¹ Ayşegül Aykurt, "Late Bronze Age Pottery from Çeşme Bağlararası", *Olba* 18, 2010, pp. 1-63; Vasif Şahoğlu, "Çeşme-Bağlararası (2002-2005, 2009-)", *Anadolu/Anatolia Ek Dizi*. 3/2, 2012, pp. 83-90; Ayşegül Aykurt, "An example of Mycenaean Pictorial Pottery: Crater from Liman Tepe", in: Nazlı Çınardalı-Karaaslan, Ayşegül Aykurt, Neyir Kolankaya-Bostancı, Yiğit Hayati Erbil (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal'a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014, p. 58.

stone platforms, as well as grave offerings including seals, bronzes, jewellery and imported and locally produced Mycenaean pottery. The finds derive from widely varying origins, which could be due to the location of the site. It is situated on a hill which formed an island or peninsula in antiquity, a city with a harbour, and was therefore more easily influenced by external commercial ties and political events. Panaztepe is one of the very few sites in Anatolia at which necropoleis have been excavated. It may very well reflect what the necropoleis of Mycenaean Miletos, also a vital harbour city and commercial centre on the coast of the Aegean, looked like. There were also many Mycenaean ceramics and artefacts found during excavations in the ancient city of Panaztepe²².

Another site close to Ephesos is Bademgediği Tepe. It is located in the immediate vicinity of Metropolis and is often identified with the Arzawan city of Puranda²³. It includes a small number of examples of Mycenaean pottery types amongst its assemblage. These belong, however, to LH IIIC and were produced locally. In the layer with the ceramics, three building phases were recorded, the two most important of which reveal the construction of fortifications and their restoration.

²² Armağan Erkanal, Hayat Erkanal, "A New Archaeological Excavation in Western Anatolia: Panaztepe", *Türkisch Review* 1/3, 1986, pp. 67-76; Yaşar Ersoy, "Finds from Menemen-Panaztepe in the Manisa Museum", *British School at Athens* 83, 1998, pp. 56-72, pp. 81-83; Sevinç Günel, "Vorbericht über die mittel- und spätbronzezeitliche Keramik von Limantepe", *Istanbuler Mitteilungen* 49, 1999, pp. 62-64, 170-174; Sevinç Günel, *Panaztepe II. M. Ö. 2. Bine Tarihlendirilen Panaztepe Seramiğinin Batı Anadolu ve Ege Arkeolojisindeki Yeri ve Önemi/Die Keramik von Panaztepe und ihre Bedeutung für Westkleinasien und Ägäis im 2. Jahrtausend*. Türk Tarih Kurumu Yayınları, Ankara 1999; Neimeier, op. cit., pp. 56-59; Mee, op. cit., p. 373; Armağan Erkanal-Öktü, "The Late Bronze Age Cemeteries of Panaztepe", in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınevi, Ankara 2008, pp. 69-90; Nazlı Çınardalı-Karaaslan, "The East Mediterranean Late Bronze Age Glass Trade within the Context of the Panaztepe Finds", *Oxford Journal of Archaeology* 31/2, 2012, pp. 121-141; Ayşegül Aykurt, "An example of Mycenaean Pictorial Pottery: Crater from Liman Tepe", in: Nazlı Çınardalı-Karaaslan, Ayşegül Aykurt, Neyir Kolankaya-Bostancı, Yiğit Hayati Erbil (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal'a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014, pp. 57-58.

²³ Recep Meriç, Penelope A. Mountjoy, "Mycenaean Pottery from Bademgediği Tepe (Puranda) in Ionia: A preliminary report", *Istanbuler Mitteilungen* 52, 2002, pp. 79-98; Recep Meriç, *Metropolis. City of Mother Goddess*, Metropolisli Sevenler Derneği, İzmir 2004, pp. 31-34; Recep Meriç, "Ein Vorbericht über eine spätbronzezeitliche befestigte Höhensiedlung bei Metropolis in Ionien: Die Arzawa-Stadt Puranda?", in: Justus Cobet, Volkmar Von Graeve, Wolf-Dietrich Neimeier, Konrad Zimmermann (eds.), *Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposium Güzelçamlı 26. September-1. Oktober 1999*, Milesische Forschungen 5, Philipp von Zabern, Mainz am Rhein 2007, pp. 27-36; Ayşegül Aykurt, "An example of Mycenaean Pictorial Pottery: Crater from Liman Tepe", in: Nazlı Çınardalı-Karaaslan, Ayşegül Aykurt, Neyir Kolankaya-Bostancı, Yiğit Hayati Erbil (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal'a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014, p. 58.

The restoration is believed to have been undertaken by newcomers to the site. The ceramics allow the layer to be dated shortly after ca. 1200 BC.

Recent results from excavations at Çine-Tepecik höyük show that Mycenaean artefacts were used not only in the coastal cities but also at inland centres easily accessible via rivers. In an excavated area of approximately 50x50m, a burnt stratum with some burnt Mycenaean pottery testifies to a significant destruction during the LH IIIC period. Amongst the Mycenaean pottery, examples of locally produced Mycenaean imitations predominate over the imported examples. Both types, however, represent a maximum of only 20 per cent of the total quantity of ceramic finds from the excavated areas of Çine-Tepecik. The undecorated productions, the so-called local ceramics, form the bulk of the ceramic repertoire from the site. These are typically executed in one colour, either buff or reddish-buff, and coated²⁴. Together with these local productions, a stamp seal mentioning the name of a king of the Mira, Tarkaschnawa, found in the same level as the Mycenaean ceramics and their local imitations, suggests that the area belonged, at least during the LH IIIC period, to the Mira kings, who formed a satrapy of the Hittite kingdom in Asia Minor. On a second stamp seal from Tepecik another prince's name, Tamipiya, was engraved²⁵. In a burnt level just above the floor of the building, remains of arrowheads and spearheads have been found. Carian geometric ceramic examples so far have been found in only one area, of 10x10m, above the LH IIIC level. Corresponding architectural remains from LH IIIC are lacking (this could be due to recent use of the land for agricultural purposes). The architectural remains, such as a defence wall and towers, are from

²⁴ Sevinç Günel, "A New Early Settlement on the Plain of Çine (Marsyas) in Western Anatolia: Tepecik Höyüğü in the Light of Surface Survey", in: Armağan Erkanal, Engin Özgen, Sevinç Günel, Tuba Ökse, Halime Hüryılmaz, Bora Uysal, Halil Tekin, Nazlı Çınardalı-Karaaslan, Atilla Engin, Ayşegül Aykurt, Rıza Tuncel, Ulaş Deniz (eds.), Ash Rennie, Reinhild Spiess, (eds.), in: *Hayat Erkanal'a Armağan: Kültürlerin Yansıması - Studies in Honor of Hayat Erkanal: Cultural reflections*, Homer Yayınları, İstanbul 2006, pp. 401-410; Sevinç Günel, "Çine-Tepecik Kazıları ve Bölge Arkeolojisine Katkıları - Excavations at Çine-Tepecik and Its Contributions to the Regional Archaeology", in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınevi, Ankara 2008, pp. 132-139; Sevinç Günel, "Mycenaean cultural impact on the Çine (Marsyas) plain, southwest Anatolia: the evidence from Çine-Tepecik", *Anatolian Studies* 60, 2010, pp. 25-39; Ayşegül Aykurt, "An example of Mycenaean Pictorial Pottery: Crater from Liman Tepe", in: Nazlı Çınardalı-Karaaslan, Ayşegül Aykurt, Neyir Kolankaya-Bostancı, Yiğit Hayati Erbil (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal'a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014, p. 59.

²⁵ Sevinç Günel, Suzanne Herboldt, "Mykenische Kraterfragmente mit figürlichen Darstellungen und ein Siegelabdruck eines hethitischen Prinzen aus der spätbronzezeitlichen Siedlung von Çine-Tepecik", *Archäologischer Anzeiger* 2014/1, pp. 1-14.

the Middle Bronze Age and early stages of LH III period. These examples were, however, found together with a new type of grey ceramic which does not resemble the previously known grey ceramics of the second millennium²⁶.

Archaeometrical methods such as Optical Emission Spectral analysis (OES), X-ray fluorescence spectrometer analysis, chemical mineralogical analysis and, most recently, Neutron Activation Analysis (NAA) have been applied to answer questions concerning the origin of the Mycenaean ceramics in Asia Minor²⁷. Results of these studies have confirmed various qualities of Mycenaean imports, but also local products, in Rhodes, Panaztepe and Troy. At Ialysos on Rhodes and probably elsewhere on the island, the imported ceramics of LH IIIA2 and LH IIIB were from Argolis, but from LH IIIC onwards most of the ceramics were produced locally. Amongst the analysed Mycenaean pieces from Panaztepe, two-thirds consist of ceramics from Argolis. Miletos seemed hardly to have imported Mycenaean ceramics at all, instead producing them locally; however, in a recent NAA study of ten Mycenaean ceramic fragments from Ephesos and Miletos the results indicate that the two cities imported Mycenaean ceramics from Argolis in LH IIIB, just like Panaztepe and Troy. The still limited amount of analysed material should, however, invoke caution when utilizing the results. When more material has been analysed in the future, it will be possible to interpret the results more firmly.

²⁶ Sevinç Günel, "Mycenaean cultural impact on the Çine (Marsyas) plain, southwest Anatolia: the evidence from Çine-Tepecik", *Anatolian Studies* 60, 2010, pp. 25-39; Sevinç Günel, Suzanne Herbordt, "Ein hethitischer Siegelabdruck aus Çine-Tepecik", *Archäologischer Anzeiger* 2010/1, pp. 1-11; Sevinç Günel, "Ein Terrakotta-Modell aus Çine-Tepecik", *Istanbuler Mitteilungen* 61, 2011, pp. 7-20.

²⁷ Hans Mommsen, "Naturwissenschaftliche Keramikanalysen durch Neutronenaktivierung (NAA): Methode und Ergebnisse", in: Meral Akurgal, Michael Kerschner, Hans Mommsen, Wolf-Dietrich Niemeier (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahresheften des Österreichischen Archäologischen Institutes 3, Vienna 2002, pp. 11-24; Niemeier, Wolf-Dietrich, "Archäologische Fragestellung und Interpretation der Analysedaten. Problemstellung und Forschungsgeschichte. Die Keramik der mykenischen Epoche", in: Meral Akurgal, Michael Kerschner, Hans Mommsen, Wolf-Dietrich Niemeier (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahresheften des Österreichischen Archäologischen Institutes 3, Vienna 2002, pp. 25-28; Niemeier, Wolf-Dietrich, "Die analysierten mykenischen Keramikfunde aus Milet und Ephesos", in: Meral Akurgal, Michael Kerschner, Hans Mommsen, Wolf-Dietrich Niemeier (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahresheften des Österreichischen Archäologischen Institutes 3, Vienna 2002, pp. 56-62; Penelope A. Mountjoy, Hans Mommsen, "Neutron Activation Analysis of Mycenaean Pottery from Troia (1998-2003 Excavations)", *Studia Troica* 16, 2006, pp. 97-123.

In summary, it is clear that the archaeological evidence and scientific analyses do not provide proof of a large-scale movement of mainland Greek inhabitants to Asia Minor as a result of the collapse of the Mycenaean palaces in the transitional period from the Late Bronze Age into the Iron Age in LH III C. Rather, the analyses show that Mycenaean ceramics were imported into Asia Minor during the earlier periods of the Bronze Age. These imports gradually increased in number while simultaneously imitations were locally produced. In LH III C the locally produced Mycenaean imitations occur much more frequently than the imported examples. Production of local Anatolian ceramic wares continued alongside the manufacture of local imitations of Mycenaean ceramics. The existence of Mycenaean ceramics and artefacts before LH III C may hint at an already existing network of strong cultural and commercial links between Mycenaean centres in mainland Greece and western Anatolian cities. The strongest ties were undoubtedly between Mycenae and Miletos, but political and cultural connections seem to have existed between other cities as well. This is illustrated by Mycenaean imports having been found in the many ‘Prince Kingdoms’ of western Asia Minor, such as Arzawa, Mira, Seha River Land and Lukka²⁸. However, the increasing number of Mycenaean imitations in LC III C is relevant. This development was probably due to the ceramic and trade markets of Mycenae coming to a standstill as a result of Mycenaean collapse. It is very well possible that at least some craftsmen — among them ceramic painters and producers, artists and businessmen — left their homeland in order to work in the lands of the ‘Prince Kingdoms’.²⁹ No doubt the power of the rulers of Millawanda (Miletos) must have been tempting for commercial and political reasons, prompting increased migration. This development

²⁸ Hans Gustav Güterbock, “Notes and Some Hittite Monuments”, *Anatolian Studies* 6, 1956, pp. 53-56; John Garstang, Oliver Robert Gurney, *The Geography of the Hittite Empire*, Occasional Publications of the British Institute of Archaeology in Ankara 5, London 1959, pp. 75-79; Hans Gustav Güterbock, Robert L. Alexander, “The Second Inscription on Mount Sipylus”, *Anatolian Studies* 33, 1983, pp. 29-32; Frank Starke, “Troia im Kontext des historisch-politischen und sprachlichen Umfeldes Kleinasiens im 2. Jahrtausend”, *Studia Troica* 7, 1997, pp. 446-487; John David Hawkins, “Tarkasnawa King of Mira. ‘Tarkondemos’, Boğazköy Sealings and Karabel”, *Anatolian Studies* 48, 1998, pp. 14-29; Ahmet Ünal, *Hittiter Devrinde Anadolu*, Arkeoloji Sanat Yayınları, İstanbul 2003, pp. 4-44; Christopher H. Roosevelt, *The archaeology of Lydia from Gyges to Alexander*, Cambridge University Press, Cambridge 2009, pp. 13-19; Sevinç Günel, Suzanne Herbordt, “Ein hethitischer Siegelabdruck aus Çine-Tepecik”, *Archäologischer Anzeiger* 2010/1, pp. 7-8.

²⁹ Sicily in 11th century AD represents a similar case. Sicily had always been a cultural contact zone throughout its history. In the 11th century, many artists and businessmen left Muslim and Christian Sicily after a civil war in order to look for new markets, and this put the island into a so-called Dark Age (Alex Metcalfe, “Transkultureller und sozioreligiöser Wandel im muslimischen und frühen normannischen Sizilien”, in: Wolfgang Gruber, Stephan Höhler (eds.), *Siziliens Geschichte. Insel zwischen den Welten*, Mandelbaum Verlag, Wien 2013, pp. 83-85).

must have created a greater challenge for the workshops producing Mycenaean imitation ceramics, as the Mycenaean workshop network had collapsed, but at same time it would have increased the volume of ceramics produced.

The quantities of local undecorated Anatolian ceramic wares are much higher than those of the imitation Mycenaean wares and Mycenaean imports in many cities. Furthermore, architectural remains, such as fortifications, as well as tomb types and grave goods, show mixed cultural effects deriving from both Mycenaean and Hittite origins.

As a result, it looks as if only a limited, rather than a massive, proportion of the population left their homeland just after the Mycenaean palaces collapsed. The developments in western Asia Minor are the result of an acculturation process rather than of a massive Mycenaean migration. In this acculturation process Western Anatolia remained a multicultural contact zone for two major powers, the Hittites and the Mycenaeans, and the inhabitants variously suffered or benefitted depending on the politics of the time. Therefore, over time the changing picture of Mycenaean ceramics in Asia Minor should be associated with the attitudes and reactions of the inhabitants of Western Anatolia within the framework of an acculturation process which developed after the distribution network for the Mycenaean ceramic industry had collapsed.

An answer should therefore be sought for the question of the origin of the burnt layers: are they the result of destructive Mycenaean migration, or of Hittite attacks against the disloyal western cities and vassal kingdoms, supporters of Mycenae?

Alternative Theoretical Approach: Acculturation of Fifth and Fourth Centuries B.C. Lycia as an Explanation?

The answer to this question might be found by using a theoretical approach: attempting to create an explanatory model by observing a comparable development which occurred in another cultural period and material culture. The work of various scholars has concentrated on Lycia and the Lycians, as well as their relations with the Greeks, and Greek influence on Lycian culture. This influence can be traced in various elements of material culture; for example, sculpture, architecture and literary works. In addition to results from excavation projects in Lycia, such as those at Xanthos, Limyra and Patara, results of the extensive and intensive surveys undertaken by the Kyeneai Project and supported by some test

trenches have opened new perspectives on Lycia to scholars³⁰. The Kyaneai Project has identified a site, known today as Avşar Tepesi, located close to Kyaneai. This is, so far, the only known site for which the settlement plan, building forms and other elements of material culture, as reflected in the remains, do not match Greek norms but are of an entirely local type. The site was abandoned after the Classical period and has been identified with the Lycian city of Zagaba, known from historical records³¹. The remains at this site seem to illustrate that widespread Greek influence in Lycia started only after the 5th century BC.

At many Lycian cities, the archaeological remains and the appearance of the sites today reflect the nature of the cities in the Hellenistic and Roman periods. Although archaeological remains on the acropolis of Xanthos date back to the seventh century BC, they do not reflect monumental building activities. Archaeological evidence indicates that buildings remained rather modest until the Persian period. Herodotus recounts (I. 176), however, that after the invasion of the Persians and their crushing victory over the Xanthians the city was reinhabited by some families who had successfully defended the acropolis against the Persian army. Research has shown that in the sixth century BC many cities in Lycia, such as Xanthos, Limyra, Patara and Avşar Tepesi, already had an acropolis with fortifications surrounding some public and other structures, including storage buildings, tower-shaped constructions, residences, pillar-shaped tombs, honorific monuments and theatre-like buildings, which may well have formed the centres of the settlements and the living areas of the aristocracy or local dynasts. The cities continued to be ruled by local dynasts, who seem to have maintained their hold over the area as satraps under the Persian hegemony until the so-called satrapy revolt³².

³⁰ Jürgen Borchhardt, *Die Steine von Zémuri*, Phoibos Verlag, Vienna 1993; Jürgen Borchhardt, Gerhard Dobesch, (eds.), *Akten des II. Internationalen Lykien-Symposium, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993; Thomas Marksteiner, *Die Befestigte Siedlung von Limyra, Forschungen in Limyra*, Forschungen in Limyra 1, Phoibos Verlag, Vienna 1997; Fahri Işık, Havva Işkan, (eds.), *Grabtypen und Totenkult im südwestlichen Kleinasien. Internationales Kolloquium Antalya 1999*, Lykia 6, 2005; Kayhan Dörtlük, Burhan Varkivanç, Tarkan Kahya, Jacques des Courtis, Meltem Doğan Alparslan, Remziye Boyraz, *The 3rd International Symposium on Lycia, Antalya 2005*, Suna ve İnan Kiraç Akdeniz Araştırmaları Enstitüsü Yayınları, Antalya 2006; Frank Kolb, *Burg-Polis-Bischofssitz. Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei*, Philipp von Zabern, Mainz am Rhein 2008, pp. 2-51.

³¹ Andreas Thomsen, *Die lykische Dynastensiedlung auf dem Avşar Tepesi*, Antiquitas Reihe 3, Bd. 43, Rudolf Habelt Verlag, Bonn 2002; Frank Kolb, *Burg-Polis-Bischofssitz. Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei*, Philipp von Zabern, Mainz am Rhein 2008, pp. 33-65.

³² Bruno Jacobs, "Die Stellung Lykiens innerhalb der achämenidisch-persischen Reichsverwaltung", in: Jürgen Borchhardt, Gerhard Dobesch (eds.), *Akten des II. Internationalen Lykien-Symposium, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993, pp. 27-29, 63-65; Thomas Marksteiner, *Die Befestigte Siedlung von Limyra, Forschungen in Limyra*, Forschungen in Limyra 1, Phoibos Verlag,

In the first quarter of the fourth century BC, a ruler who styled himself King of Lycia, Perikles, made Limyra the capital of his kingdom and aimed to rule the Lycian lands from Phaselis in the east to Telmessos in the west³³. Although he did not succeed in his plan, his dream must have triggered the satrapy revolt of around 360 BC and the Persian political move of inserting Lycia into the Carian administrative zone under the hegemony of the Hecatomnid Mausolos, satrap of the Persians. Mausolos was probably the ruler who introduced the Greek polis system towards the middle of the fourth century³⁴.

Vienna 1997, pp. 177-182; Frank Kolb, "Hanedanlık Yerleşiminden Otonom Kentte Gelişme: Klasik Çağ'da Likya'da Akültürasyon", *Adalya* 3, 1998, pp. 37-62; Marc Domingo Gygax, *Untersuchungen zu den lykischen Gemeinwesen in klassischer und hellenistischer Zeit*, Antiquitas 49, Rudolf Habelt Verlag, Bonn 2001, pp. 92-122; Thomas Marksteiner, "Untersuchungen an den westlichen Stadtmauern von Xanthos", *Anatolia Antiqua* 10, 2002, pp. 197-216; Ingrid Mader, "Die Frühe Keramik von Limyra", in: Birgit Rückert, Frank Kolb, (eds.), *Probleme Keramikchronologie des südlichen und westlichen Kleinasien in geometrischer und archaischer Zeit. Internationales Kolloquium, Tübingen 1998*, Antiquitas Reihe 3, Rudolf Habelt Verlag, Bonn 2003, pp. 31-36; Thomas Marksteiner, "Das achämenidenzeitliche Lykien", in: pierre Briant, Rémy Bouchalat (eds.), *L'archéologie de l'empire achéménide: nouvelles recherches. Actes du colloque organisé au Collège de France par le "Réseau international d'études et de recherches achéménides"*, Paris 2003. Éditions de Boccard, Paris 2005, pp. 27-48; Fahri Işık, "Patara in 2004", *News of Archaeology from Anatolia's Mediterranean Areas* 3, 2005, pp. 61-62; Jacques Des Courtils, "Excavations and Research at Xanthos and Letoon", *News of Archaeology from Anatolia's Mediterranean Areas* 3, 2005, pp. 43-45; Des Courtils, Jacques, "Nouvelles découvertes à Xanthos", in: Kayhan Dörtlük, / Burhan Varkıvanç, Tarkan Kahya, Jacques des Courtis, Meltem Doğan Alparslan, Remziye Boyraz (eds.), *The 3rd International Symposium on Lycia, Antalya 2005*, Suna ve İnan Kıraç Akdeniz Araştırmaları Enstitüsü Yayınları, Antalya 2006, pp. 145-152; Şükrü Özüdoğru, "Ptara and the Dynast Wakhshpeddimi (Wekhessere II)", *Adalya* 10, 2007, pp. 31-42; Frank Kolb, *Burg-Polis-Bischofssitz. Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei*, Philipp von Zabern, Mainz am Rhein 2008, pp. 33-45; Gül Işın, "The building complex on the Tepecik acropolis at Patara", *Anatolian Studies* 60, 2010, pp. 93-104.

³³ Jürgen Borchhardt, *Die Bauskulptur des Heroons von Limyra. Das Grabmal des lykischen Königs Perikles*, *Istanbuler Forschungen* 32, Gebr. Mann Verlag, Tübingen 1976, pp. 99-143; Jürgen Borchhardt, *Die Steine von Zémuri*, Phoibos Verlag, Vienna 1993, pp. 49-50; Jürgen Borchhardt, "Zum Ostfries des Heroons von Zémuri/Limyra", *Istanbuler Mitteilungen* 43, 1993, pp. 351-359; Frank Kolb, Barbara Kupke, *Lykien: Geschichte Lykiens im Altertum*, Philipp von Zabern, Mainz 1989, p. 15; Jürgen Borchhardt, "Zum Kult der Heroen, Herrscher und Gefolgsleute in Lykien zur Zeit der Klassik", in: Fahri Işık, Havva Işkan (eds.), *Grabtypen und Totenkult im südwestlichen Kleinasien. Internationales Kolloquium Antalya 1999*, Lykia 6, 2005, pp. 29-48.

³⁴ Simon Hornblower, *Mausolos*, Clarendon Press, Oxford 1982, pp. 170-182, 308; Bruno Jacobs, *Griechische und persische Elemente in der Grabkunst Lykiens zur Zeit der Achämenidenherrschaft*, *Studies in Mediterranean Archaeology* 68, Åström, Jonsered 1987, pp. 65-67; Frank Kolb, Barbara Kupke, *Lykien: Geschichte Lykiens im Altertum*, Philipp von Zabern, Mainz 1989, pp. 15-16; Bruno Jacobs, "Die Stellung Lykiens innerhalb der achämenidisch-persischen Reichsverwaltung", in: Jürgen Borchhardt, Gerhard Döbesch (eds.), *Akten des II. Internationalen Lykien-Symposiums, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993, pp. 63-69; Thomas Marksteiner, *Die Befestigte Siedlung von Limyra, Forschungen in Limyra*, Forschungen in Limyra 1, Phoibos Verlag, Vienna 1997, p. 184; Marc Domingo Gygax, *Untersuchungen zu den lykischen Gemeinwesen in klassischer und hellenistischer Zeit*, Antiquitas 49, Rudolf Habelt Verlag, Bonn 2001, pp. 92-122; Frank Kolb, *Burg-Polis-Bischofssitz. Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei*, Philipp von Zabern, Mainz am Rhein 2008, pp. 158-159, 430.

The transition to Greek culture, however, did not begin suddenly with Mausolos; Greek material culture, as well as Greek thinking, was already known to the Lycians and had probably already begun to affect their way of thinking and living. In the fifth century, Greek political spies as well as members of a small Greek community consisting of businessmen, artists, educators/philosophers, religious personnel and others may have functioned as agitators against the system of Lycian dynastic rulers and especially Persian satrapies in the area. They were opposed to, for example, heavy taxation and they promoted the Greek way of organization, illustrating the economic and cultural benefits it brought with it. Promotion of the ‘Greek way of life’, better to say ‘Greek standardization’, was a tool they used to demonstrate power and independence to other cities and to opponents. It possibly even reached the palatial environment. Local rulers such as Perikles of Limyra and Mausolos of Halikarnassos voluntarily accepted Greek norms and standards and blended them with local Lycian traditions and characteristics in order to control and balance their positions in the area³⁵.

The case of dynastic Lycia and the changes initiated by Mausolos might lead us to seek answers to questions concerning earlier phases, such as the period of the Mycenaean collapse or of Ionian migration in general, adjusting the model by replacing local rulers of the Mycenaean world with Lycian dynasts.

³⁵ William A.P. Childs, “Lycian Relations with Persian and Greeks in the Fifth and Fourth Centuries Re-examined”, *Anatolian Studies* 31, 1981, pp. 55-93; Frank Kolb, Barbara Kupke, *Lykien: Geschichte Lykiens im Altertum*, Philipp von Zabern, Mainz 1989, pp. 9-20; Martin Zimmermann, *Untersuchungen zur historischen Landeskunde Zentrallykiens*, Antiquitas Reihe 1, Rudolf Habelt Verlag, Bonn 1992, pp. 49-50; Michael Wörrle, “Perikles von Limyra – endlich etwas mehr Griechisches”, in: Jürgen Borchhardt, Gerhard Dobesch (eds.), *Akten des II. Internationalen Lykien-Symposium, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993, pp. 187-190; Thomas Marksteiner, *Die Befestigte Siedlung von Limyra, Forschungen in Limyra*, Forschungen in Limyra 1, Phoibos Verlag, Vienna 1997, pp. 184-185; Frank Kolb, “Hanedanlık Yerleşiminden Otonom Kentte Gelişme: Klasik Çağda Likya’da Akültürasyon”, *Adalya* 3, 1998, p. 46; Thomas Marksteiner, “Das achämenidenzeitliche Lykien”, in: pierre Briant, Rémy Bourchalat (eds.), *L’archéologie de l’empire achéménide: nouvelles recherches. Actes du colloque organisé au Collège de France par le “Réseau international d’études et de recherches achéménides”*, Paris 2003. Éditions de Boccard, Paris 2005, pp. 27-48; Gül İşın, “An Achaemenid Stamp Seal from Patara, in: Delemen, İnci (ed.), *The Achaemenid Impact on Local Populations and Cultures in Anatolia. Papers presented at the International Workshop, Istanbul 2005*, Eski Çağ Bilimleri Enstitüsü Yayınları, Istanbul 2007, pp. 75-81; Novella Vismara, “Some Reflections on Iconographic Motifs in Lycian Coinage: The Central Achaemenid Empire’s Powerful Political Presence in a Border Region”, in: İnci Delemen (ed.), *The Achaemenid Impact on Local Populations and Cultures in Anatolia. Papers presented at the International Workshop, Istanbul 2005*, Eski Çağ Bilimleri Enstitüsü Yayınları, Istanbul 2007, pp. 59-67; Frank Kolb, *Burg-Polis-Bischofssitz. Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei*, Philipp von Zabern, Mainz am Rhein 2008, pp. 154-159, 164-167; Gül İşın, “The building complex on the Tepecik acropolis at Patara”, *Anatolian Studies* 60, 2010, pp. 93-104.

Just as the ‘Prince Kingdoms’, such as Arzawa, Mira and Seha River Land, and the cities under their hegemonies, did in the earlier period against the great Hittite Kingdom, Lycian local dynasts apparently accepted and aimed to use ‘Greek standardization’ as a kind of tool against the great Persian Empire under extreme circumstances, adapting their policies and political activities to suit the circumstances of the times and assert their power and independence.

In various cities of western Asia Minor, the large quantity of locally produced, undecorated ceramics by contrast with the rather small number of Mycenaean and Mycenaean-imitation ceramics (except in Miletos), as well as building remains such as fortifications, tomb types and grave goods showing mixed cultural influence deriving from both Mycenaean and Hittite origins can be explained as manifestations of an acculturation process resulting from interaction with the two great powers, Hittite and Mycenaean. The similarities between foreign features within the local material cultures discussed here may therefore not necessarily reflect the immigration of a foreign population but rather the way that acculturation occurred in the cities of Western Asia Minor under the rule of ‘Prince Kingdoms’ in the contact zone of two great powers.

BIBLIOGRAPHY

- Akurgal, Meral - Kerschner, Michael - Mommsen, Hans - Niemeier, Wolf-Dietrich (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahreshften des Österreichischen Archäologischen Institutes 3, Vienna 2002.
- Aykurt, Ayşegül, “Late Bronze Age Pottery from Çeşme Bağlararası”, *Olba* 18 2010, pp. 1-63.
- _____, “An example of Mycenaean Pictorial Pottery: Crater from Liman Tepe”, in: Nazlı Çınardalı-Karaaslan, Ayşegül Aykurt, Neyir Kolankaya-Bostancı, Yiğit Hayati Erbil (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal’a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014, pp. 53-73.
- Bammer, Anton, “Zur Topographie und Städte bauchlichen Entwicklung von Ephesos”, *Jahreshefte des Österreichischen Instituts in Wien* 46, 1961-1963, pp. 136-157.

- Benndorf, Otto, *Die Besiedlungen bis auf König Kroisos*, *Forschungen in Ephesos I*, Vienna 1906.
- Betancourt, Philip P., "The end of the Greek Bronze Age", *Antiquity* 50, 1976, pp. 40-47.
- Borchhardt, Jürgen, *Die Bauskulptur des Heroons von Limyra. Das Grabmal des lykischen Königs Perikles*, *Istanbuler Forschungen* 32, Gebr. Mann Verlag, Tübingen 1976.
- _____, *Die Steine von Zémuri*, Phoibos Verlag, Vienna 1993.
- _____, "Zum Ostfries des Heroons von Zémuri/Limyra", *Istanbuler Mitteilungen* 43, 1993, pp. 351-359.
- _____, "Zum Kult der Heroen, Herrscher und Gefolgsleute in Lykien zur Zeit der Klassik", in: Fahri Işık, Havva Işkan (eds.), *Grabtypen und Totenkult im südwestlichen Kleinasien. Internationales Kolloquium Antalya 1999*, *Lykia* 6, 2005, pp. 29-48.
- Borchhardt, Jürgen - Dobesch, Gerhard (eds.), *Akten des II. Internationalen Lykien-Symposiums, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993.
- Brein, Friedrich, "Zur ephesischen Topographie", *Jahreshefte des Österreichischen Instituts in Wien* 51, 1976-1977, pp. 65-76.
- Briant, Pierre - Bourchalat, Rémy (eds.), *L'archéologie de l'empire achéménide: nouvelles recherches. Actes du colloque organisé au Collège de France par le "Réseau international d'études et de recherches achéménides"*, Paris 2003. Éditions de Boccard, Paris 2005.
- Büyükkolancı, Mustafa, "Selçuk Ayasuluk Tepesi (Eski Efes) "Appasas" mı?. Is Selçuk Ayasuluk (Old Ephesos) "Appasas"?", in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınları, Ankara 2008, pp. 41-55.
- Childs, William A.P., "Lycian Relations with Persian and Greeks in the Fifth and Fourth Centuries Re-examined", *Anatolian Studies* 31, 1981, pp. 55-93.
- Cobet, Justus, "Das alte Ionien in der Geschichtsschreibung", in: Justus Cobet, Volkmar Von Graeve, Wolf-Dietrich Neimeier, Konrad Zimmermann (eds.), *Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposium Güzelçamlı 26. September-1. Oktober 1999*, *Milesische Forschungen* 5, Philipp von Zabern, Mainz am Rhein 2007, pp. 729-743.
- Cobet, Justus - Von Graeve, Volkmar - Neimeier, Wolf-Dietrich - Zimmermann, Konrad (eds.), *Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposium Güzelçamlı 26. September-1. Oktober 1999*, *Milesische Forschungen* 5, Philipp von Zabern, Mainz am Rhein 2007.

- Cullen, Tracey (ed.), *Aegean Prehistory: A Review*, AJA Suppl. I, Boston 2001.
- Cunliffe, Barry (ed.) *The Oxford Illustrated Prehistory of Europe*, Oxford University Press, Oxford 1994.
- Çınardalı-Karaaslan, Nazlı, “The East Mediterranean Late Bronze Age Glass Trade within the Context of the Panaztepe Finds”, *Oxford Journal of Archaeology* 31/2, 2012, pp. 121-141.
- Çınardalı-Karaaslan, Nazlı - Aykurt, Ayşegül - Kolankaya-Bostancı, Neyir - Erbil, Yiğit Hayati (eds.), *Anadolu Kültürlerine Bir Bakış/Some Observations on Anatolian Cultures. Armağan Erkanal'a Armağan/Compiled in Honor of Armağan Erkanal*, Hacettepe Üniversitesi Edebiyat Fakültesi, Ankara 2014.
- Davis, Jack L., “Minoan Crete and The Aegean Islands”, in: Cynthia W. Shelmerdine (ed.), *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008, pp. 186-208.
- Deger-Jalkotzy Sigrid, “Decline, Destruction, Aftermath”, in: Cynthia W. Shelmerdine (ed.) *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008, pp. 387-415.
- Desborough Vincent Robin d’Arba, *The Greek Dark Ages*, Ernest Benn, London 1972.
- Delemen, İnci (ed.), *The Achaemenid Impact on Local Populations and Cultures in Anatolia. Papers presented at the International Workshop, Istanbul 2005*, Eski Çağ Bilimleri Enstitüsü Yayınları, İstanbul 2007.
- Des Courtils, Jacques “Excavations and Research at Xanthos and Letoon”, *News of Archaeology from Anatolia’s Mediterranean Areas* 3, 2005, pp. 41-45.
- _____, “Nouvelles découvertes à Xanthos”, in: Kayhan Dörtlük, / Burhan Varkıvanç, Tarkan Kahya, Jacques des Courtis, Meltem Doğan Alparslan, Remziye Boyraz (eds.), *The 3rd International Symposium on Lycia, Antalya 2005*, Suna ve İnan Kıraç Akdeniz Araştırmaları Enstitüsü Yayınları, Antalya 2006, pp. 145-152.
- Dickinson Oliver, “Robert Drews’s Theories about the Nature of Warfare in the Late Bronze Age”, in: Robert Laffineur (ed.) *POLEMOS: Le contexte guerrier en Égée à l’Âge du Bronze*, Aegaeum 19, Liège and Austin 1999, pp. 21-29.
- _____, *The Aegean from Bronze Age to Iron Age*, Routledge, London and New York, 2006.
- Domingo Gygas, Marc, *Untersuchungen zu den lykischen Gemeinwesen in klassischer und hellenistischer Zeit*, Antiquitas 49, Rudolf Habelt Verlag, Bonn 2001.

- Dörtlük, Kayhan - Varkıvaç, Burhan - Kahya, Tarkan - des Courtis, Jacques des - Doğan Alparslan, Meltem - Boyraz, Remziye (eds.), *The 3rd International Symposium on Lycia, Antalya 2005*, Suna ve İnan_Kıraç Akdeniz Araştırmaları Enstitüsü Yayınları, Antalya 2006.
- Drews Robert, *The Bronze Age: changes in warfare and the catastrophe ca. 1200 B.C.* Princeton University Press, Princeton 1993.
- Erkanal, Armağan - Özgen, Engin - Günel, Sevinç - Ökse, Tuba - Hüryılmaz, Halime - Uysal, Bora - Tekin, Halil - Çınardalı-Karaaslan, Nazlı - Engin, Atilla - Aykurt, Ayşegül - Tuncel, Rıza - Deniz, Ulaş - Rennie, Ash - Spiess, Reinhild (eds.), *Hayat Erkanal'a Armağan: Kültürlerin Yansıması Studies in Honor of Hayat Erkanal: Cultural reflections*, Homer Yayınları, İstanbul 2006.
- Erkanal-Öktü, Armağan - Günel, Sevinç - Deniz, Ulaş (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınevi, Ankara 2008.
- Erkanal-Öktü, Armağan, "The Late Bronze Age Cemeteries of Panaztepe", in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınevi, Ankara 2008, pp. 69-90.
- Erkanal, Armağan - Erkanal, Hayat, "Vorbericht über die Grabungen 1979 im prähistorischen Klazomenai/Limantepe", *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi* 1/1, 1983, pp. 163-183.
- Erkanal, Armağan - Erkanal, Hayat "A New Archaeological Excavation in Western Anatolia, panaztepe", *Turkish Review* 1/3, 1986, pp. 67-76.
- Ersoy, Yaşar, "Finds from Menemen-Panaztepe in the Manisa Museum", *British School at Athens* 83, 1998, pp. 55-82.
- Feuer, Bryan, *Mycenaean Civilization: An Annotated Bibliography through 2002 (Revised Edition)*, McFarland & Company Inc. Publishers, Jefferson 2004.
- French Elizabeth B. & Wardle Ken A. (eds.) *Problems in the Greek Prehistory*. Bristol Classical Press, Bristol 1988.
- Garstang, John - Gurney, Oliver Robert, *The Geography of the Hittite Empire*. Occasional Publications of the British Institute of Archæology in Ankara 5, London 1959.
- Georgiadis, Mercourios, "Migration on Rhodes during the Mycenaean Period, *Mediterranean Archaeology and Archaeometry* 4, 2004, p. 61-72.

- Gruber, Wolfgang - Höhler, Stephan (eds.), *Siziliens Geschichte. Insel zwischen den Welten*, Mandelbaum Verlag, Wien 2013.
- Günel, Sevinç, “Vorbericht über die mittelund spätbronzezeitliche Keramik von Limantepe”, *Istanbuler Mitteilungen* 49, 1999, pp. 41-82.
- Günel, Sevinç, *Panaztepe II. M. Ö. 2. Bine Tarihendirilen Panaztepe Seramiğinin Batı Anadolu ve Ege Arkeolojisindeki Yeri ve Önemi/Die Keramik von Panaztepe und ihre Bedeutung für Westkleinasien und Ägäis im 2. Jahrtausend*. Türk Tarih Kurumu Yayınları, Ankara 1999.
- _____, “A New Early Settlement on the Plain of Çine (Marsyas) in Western Anatolia: Tepecik Höyüğü in the Light of Surface Survey”, in: Armağan Erkanal, Engin Özgen, Sevinç Günel, Tuba Ökse, Halime Hüryılmaz, Bora Uysal, Halil Tekin, Nazlı Çınardalı-Karaaslan, Atilla Engin, Ayşegül Aykurt, Rıza Tuncel, Ulaş Deniz, Ash Rennie, Reinhild Spiess (eds.), *Hayat Erkanal'a Armağan: Kültürlerin Yansıması Studies in Honor of Hayat Erkanal: Cultural reflections*, Homer Yayınları, İstanbul 2006, pp. 401-410.
- _____, “Çine-Tepecik Kazıları ve Bölge Arkeolojisine Katkıları – Excavations at Çine-Tepecik and Its Contributions to the Regional Archaeology”, in: Armağan Erkanal-Öktü, Sevinç Günel, Ulaş Deniz (eds.), *Batı Anadolu ve Doğu Akdeniz Genç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, Hacettepe Üniversitesi Yayınları, Ankara 2008, pp. 129-139.
- _____, “Mycenaean cultural impact on the Çine (Marsyas) plain, southwest Anatolia: the evidence from Çine-Tepecik”, *Anatolian Studies* 60, 2010, pp. 25-39.
- _____, “Ein Terrakotta-Modell aus Çine-Tepecik”, *Istanbuler Mitteilungen* 61, 2011, pp. 7-20.
- Günel, Sevinç - Herboldt, Suzanne, “Ein hethitischer Siegelabdruck aus Çine-Tepecik”, *Archäologischer Anzeiger* 2010/1, pp. 1-11.
- _____, “Mykenische Kraterfragmente mit figürlichen Darstellungen und ein Siegelabdruck eines hethitischen Prinzen aus der spätbronzezeitlichen Siedlung von Çine-Tepecik”, *Archäologischer Anzeiger* 2014/1, pp. 1-14.
- Güterbock, Hans Gustav “Notes and Some Hittite Monuments”, *Anatolian Studies* 6, 1956, pp. 53-56.
- Güterbock, Hans Gustav - Alexander, Robert L., “The Second Inscription on Mount Sipylus”, *Anatolian Studies* 33, 1983, pp. 29-32.
- Hall Jonathan M., *A History of the Archaic Greek World. ca. 1200-479 BCE*. Blackwell, Oxford 2007.

- Hawkins, John David, "Tarkasnawa King of Mira. ›Tarkondemos‹, Boğazköy Sealings and Karabel", *Anatolian Studies* 48, 1998, pp. 1-31.
- Hood Sinclair, "(review) Sandars (N.K.) The sea peoples: warriors of the ancient Mediterranean 1250-1150 B.C. (Ancient peoples and places, 89), Thames and Hudson, London 1978", *JHS* 99, 1979, pp. 200-201.
- Hooker, John T., *Mycenaean Greece*, Routledge & Kegan Paul, New York 1976.
- Hornblower, Simon, *Mausolus*, Clarendon Press, Oxford 1982.
- Işık, Fahri, "Patara in 2004", *News of Archaeology from Anatolia's Mediterranean Areas* 3, 2005, pp. 57-65.
- Işık, Fahri - İşkan, Havva (eds.), *Grabtypen und Totenkult im südwestlichen Kleinasien. Internationales Kolloquium Antalya 1999*, Lykia 6, 2005.
- Işın, Gül, "An Achaemenid Stamp Seal from Patara, in: Delemen, İnci (ed.), *The Achaemenid Impact on Local Populations and Cultures in Anatolia. Papers presented at the International Workshop, Istanbul 2005*, Eski Çağ Bilimleri Enstitüsü Yayınları, İstanbul 2007, pp. 75-81.
- _____, "The building complex on the Tepecik acropolis at Patara", *Anatolian Studies* 60, 2010, pp. 93-104.
- Jacobs, Bruno, *Griechische und persische Elemente in der Grabkunst Lykiens zur Zeit der Achämenidenherrschaft*, Studies in Mediterranean Archaeology 68, Åström, Jonsered 1987.
- _____, "Die Stellung Lykiens innerhalb der achämenidisch-persischen Reichsverwaltung", in: Jürgen Borchhardt, Gerhard Dobesch (eds.), *Akten des II. Internationalen Lykien-Symposium, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993, pp. 63-69.
- Kilian, Klaus, "Mycenaeans up to date, trends and changes in recent research", in: Elizabeth B. French, Ken A. Wardle (eds.) *Problems in the Greek Prehistory*. Bristol Classical Press, Bristol 1988, pp. 115-152.
- Killen, John Tyrel - Melena, José L. - Olivier, Jean Pierre (eds.), *Studies in Mycenaean and Classical Greek Presented to John Chadwick*, Ediciones Universidad de Salamanca, Salamanca 1987.
- Kolb, Frank, "Hanedanlık Yerleşiminden Otonom Kentte Gelişme: Klasik Çağda Likya'da Akültürasyon", *Adalya* 3, 1998, pp. 37-62.
- _____, *Burg-Polis-Bischofssitz. Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei*, Philipp von Zabern, Mainz am Rhein 2008.

- Kolb, Frank - Kupke, Barbara, *Lykien: Geschichte Lykiens im Altertum*, Phillip von Zabern, Mainz 1989.
- Laffineur Robert (ed.), *POLEMOS: Le contexte guerrier en Égée à l'Âge du Bronze*, Aegaeum 19, Liège and Austin 1999.
- Laffineur, Robert - Greco, Emanuele, *Emporia. Aegeans in the Central and Eastern Mediterranean*, Aegaeum 25, Liège and Austin 2005.
- Lemos, I.S., "The Migrations to the west coast of Asia Minor: Tradition and Archaeology", in: Justus Cobet, Volkmar Von Graeve, Wolf-Dietrich Neimeier, Konrad Zimmermann (eds.), *Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposium Güzelçamlı 26.September-1.Oktober 1999*, Milesische Forschungen 5, Philipp von Zabern, Mainz am Rhein 2007, pp. 713-727.
- Mader, Ingrid, "Die Frühe Keramik von Limyra", in: Birgit Rückert, Frank Kolb, (eds.), *Probleme Keramikchronologie des südlichen und westlichen Kleinasien in geometrischer und archaischer Zeit. Internationales Kolloquium, Tübingen 1998*, Antiquitas Reihe 3, Rudolf Habelt Verlag, Bonn 2003, pp. 31-36.
- Mangaloğlu-Votruba, Sıla, "Liman Tepe'de Geç Hellas III C Dönemi", *Anadolu/Anatolia* 37, 2011, pp. 43-73..
- Marksteiner, Thomas, *Die Befestigte Siedlung von Limyra, Forschungen in Limyra*, Forschungen in Limyra 1, Phoibos Verlag, Vienna 1997.
- _____, "Untersuchungen an den westlichen Stadtmauern von Xanthos", *Anatolia Antiqua* 10, 2002, pp. 197-216.
- _____, "Das achämenidenzeitliche Lykien", in: pierre Briant, Rémy Bouchalat (eds.), *L'archéologie de l'empire achéménide: nouvelles recherches. Actes du colloque organisé au Collège de France par le "Réseau international d'études et de recherches achéménides"*, Paris 2003. Éditions de Boccard, Paris 2005, pp. 27-48.
- Mee, Christopher, "Aegean Trade and Settlement in Anatolia in the Second Millennium B.C.", *Anatolian Studies* 28, 1978, pp. 121-156.
- _____, "Mycenaean Greece, The Aegean and Beyond", in: Cynthia W. Shelmerdine (ed.), *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008, pp. 362-386.
- Meriç, Recep, *Metropolis. City of Mother Goddess*, Metropolisli Sevenler Derneği, İzmir 2004.
- _____, "Ein Vorbericht über eine spätbronzezeitliche befestigte Höhensiedlung bei Metropolis in Ionien: Die Arzawa-Stadt Puranda?", in: Justus Cobet, Volkmar

Von Graeve, Wolf-Dietrich Neimeier, Konrad Zimmermann (eds.), *Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposion Güzelçamlı 26.September-1.Oktober 1999*, Milesische Forschungen 5, Philipp von Zabern, Mainz am Rhein 2007, pp. 27-36.

Meriç, Recep - Mountjoy, Penelope A., "Mycenaean Pottery from Bademgediği Tepe (Puranda) in Ionia: A preliminary report", *Istanbuler Mitteilungen* 52, 2002, pp. 79-98.

Metcalfe, Alex "Transkultureller und sozioreligiöser Wandel im muslimischen und frühen normannischen Sizilien", in: Wolfgang Gruber, Stephan Höhler (eds.), *Siziliens Geschichte. Insel zwischen den Welten*, Mandelbaum Verlag, Wien 2013, pp. 68-98.

Mommsen, Hans "Naturwissenschaftliche Keramikanalysen durch Neutronenaktivierung (NAA): Methode und Ergebnisse", in: Meral Akurgal, Michael Kerschner, Hans Mommsen, Wolf-Dietrich Niemeier (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahresheften des Österreichischen Archäologischen Institutes 3, Vienna 2002, pp. 11-24.

Mountjoy, Penelope A., "The east Aegean-west Anatolian interface in the Late Bronze Age: Mycenaeans and the Kingdom of Ahhiyawa", *Anatolian Studies* 48, 1988, pp. 35-36.

_____, "The destruction of the palace at Pylos reconsidered", *Annual of the British School at Athens* 92, 1997, pp. 109-137.

_____, "Mycenaean Connections on the Near East in LH IIIc: Ships and Sea Peoples", in: Robert Laffineur, Emanuele Greco (eds.) *Emporia. Aegeans in the Central and Eastern Mediterranean*, *Aegeum* 25, Liège/Austin 2005, pp. 423-428.

Mountjoy, Penelope A. - Mommsen, Hans, "Neutron Activation Analysis of Mycenaean Pottery from Troia (1998-2003 Excavations)", *Studia Troica* 16, 2006, pp. 97-123.

Muhly, James D., "The Crisis years in the Mediterranean world: transition or cultural disintegration?", in: William A. Ward, Martha Sharp Joukowsky (eds.), *The crisis years: the 12th century BC from beyond the Danube to the Tigris*, Kendall/Hunt Publishing, Dubuque 1992, pp.10-26.

Niemeier, Wolf-Dietrich, "Archäologische Fragestellung und Interpretation der Analysedaten. Problemstellung und Forschungsgeschichte. Die Keramik der myke-

- nischen Epoche”, in: Meral Akurgal, Michael Kerschner, Hans Mommsen, Wolf-Dietrich Niemeier (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahreshften des Österreichischen Archäologischen Institutes 3, Vienna 2002, pp. 25-28.
- _____, “Die analysierten mykenischen Keramikfunde aus Milet und Ephesos”, in: Meral Akurgal, Michael Kerschner, Hans Mommsen, Wolf-Dietrich Niemeier (eds.), *Töpferzentren der Ostägäis. Archäometrische und archäologische Untersuchungen zur mykenischen, geometrischen und archaischen Keramik aus Fundorten in Westkleinasien*, Ergänzungshefte zu den Jahreshften des Österreichischen Archäologischen Institutes 3, Vienna 2002, pp. 56-62.
- _____, “Milet von den Anfängen menschlicher Besiedlung bis zur ionischen Wanderung”, in: Justus Cobet, Volkmar Von Graeve, Wolf-Dietrich Niemeier, Konrad Zimmermann (eds.), *Frühes Ionien. Eine Bestandaufnahme. Panionion-Symposium Güzelçamlı 26.September-1.Oktober 1999*, Milesische Forschungen 5, Philipp von Zabern, Mainz am Rhein 2007, pp. 37-96.
- Nur, Amos, “The collapse of ancient societies by Great Earthquakes”, in: Benny Joseph Peiser/Trevor Palmer/ Mark E. Bailey (eds.), *Natural Catastrophes during Bronze Age Civilisations: Archaeological, Geological, Astronomical and Cultural Perspectives*, BAR International Series 728, Archaeopress, Oxford 1998, pp. 140-147.
- Nur, Amos - Cline, Eric H., “Poseidon’s horses: plate tectonics and earthquakes storms in the Late Bronze Age in the Aegean and eastern Mediterranean”, *Journal of Archaeological Science* 27, 2000, pp. 43-63.
- Özgül, Coşkun, “Selçuk Arkeoloji Müzesinde Saklanan Miken Pyxisi ve Düşündürükleri”, *Belleten* 51, 1987, pp. 535-547.
- Özüdoğru, Şükrü, “Pttara and the Dynast Wakhseppdimi (Wekhessere II)”, *Adalya* 10, 2007, pp. 31-42.
- Peiser, Benny Joseph - Palmer, Trevor - Bailey, Mark E. (eds.), *Natural Catastrophes during Bronze Age Civilisations: Archaeological, Geological, Astronomical and Cultural Perspectives*, BAR International Series 728, Archaeopress, Oxford 1998.
- Popham, Mervyn R., “The Collapse of Aegean Civilization at the end of the Late Bronze Age”, in: Barry Cunliffe (ed.) *The Oxford Illustrated Prehistory of Europe*, Oxford University Press, Oxford 1994, pp. 277-303.
- Renfrew, Colin, *Archaeology and language: The Puzzle of Indo-European Origins*. Cambridge University Press, New York 1987.

- Robbins, Manuel, *Collapse of the Bronze Age: The Story of Greece, Troy, Israel, Egypt and the Peoples of the Sea*, Author Choice Press, San Jose 2001.
- Roosevelt, Christopher H., *The Archaeology of Lydia from Gyges to Alexander*, Cambridge University Press, Cambridge 2009.
- Rückert, Birgit - Kolb, Frank (eds.), *Probleme Keramikchronologie des südlichen und westlichen Kleinasien in geometrischer und archaischer Zeit. Internationales Kolloquium, Tübingen 1998*, Antiquitas Reihe 3, Rudolf Habelt Verlag, Bonn 2003.
- Sandars, Nancy Katharine, "The last Mycenaeans and the European Late Bronze Age", *Antiquity* 38, 1964, pp. 258-262.
- _____, *The sea peoples. Warriors of the ancient Mediterranean 1250-1150 BC*, London 1985 (2nd ed).
- Schweitzer, Bernhard, *Greek Geometric Art*, Phaidon Press, London 1971.
- Shelmerdine, Cyhntia W., "Architectural Change and Economic Decline at Pylos", in: John Tyrel Killen, José L. Melena, Jean Pierre Olivier (eds.), *Studies in Mycenaean and Classical Greek Presented to John Chadwick*, Ediciones Universidad de Salamanca, Salamanca 1987, pp. 557-568.
- _____, "Review of Aegean Prehistory VI: The Palatial Bronze Age of the Southern and Central Greek Mainland", in: Tracey Cullen (ed.), *Aegean Prehistory: A Review*, AJA Suppl. I, Boston 2001, pp. 372-376.
- _____, (ed.), *The Aegean Bronze Age*, Cambridge University Press, Cambridge 2008.
- Sherratt, Susan, "Potemkin palaces and route-based economies", in: Sofia Voutsaki, John T. Killen (eds.), *Economy and Politics in the Mycenaean palace states*. Cambridge Philological Society, Cambridge 2001, pp. 214-238.
- Snodgrass, Anthony McElrea, *The Dark Ages of Greece*, Edinburgh University Press, Edinburgh 1971.
- Starke, Frank, "Troia im Kontext des historisch-politischen und sprachlichen Umfeldes Kleinasien im 2. Jahrtausend", *Studia Troica* 7, 1997, pp. 446-487.
- Stiros, Stathis C., "Identification of Earthquakes from Archaeological Data: Methodology, Criteria and Limitation", in: Stathis C. Stiros, Richard E. Jones (eds.), *Archaeoseismology. Fitch Laboratory Occasional Paper 7. Athens: Institute of Geology and Mineral Exploration and the British School at Athens*, Short Run Press, Exeter 1996, pp. 129-152.

- Stiros, Stathis C. - Jones, Richard E. (eds.), *Archaeoseismology. Fitch Laboratory Occasional Paper 7. Athens: Institute of Geology and Mineral Exploration and the British School at Athens*. Short Run Press, Exeter 1996.
- Şahoğlu, Vasıf, “Çeşme-Bağlararası (2002-2005, 2009-)”, *Anadolu/Anatolia Ek Dizi*. 3, 2, 2012, pp. 83-90.
- Tainter, Joseph A., *The Collapse of Complex Societies*. Cambridge University Press, Cambridge 1988.
- Thomsen, Andreas, *Die lykische Dynastensiedlung auf dem Avşar Tepesi*, Antiquitas Reihe 3, Bd. 43, Rudolf Habelt Verlag, Bonn 2002.
- Ünal, Ahmet, *Hittitler Devrinde Anadolu*, Arkeoloji Sanat Yayınları, İstanbul 2003.
- Vismara, Novella “Some Reflections on Iconographic Motifs in Lycian Coinage: The Central Achaemenid Empire’s Powerful Political Presence in a Border Region”, in: İnci Delemen (ed.), *The Achaemenid Impact on Local Populations and Cultures in Anatolia. Papers presented at the International Workshop, Istanbul 2005*, Eski Çağ Bilimleri Enstitüsü Yayınları, İstanbul 2007, pp. 59-67.
- Voutsaki, Sofia - Killen, John T. (eds.), *Economy and Politics in the Mycenaean palace states*, Cambridge Philological Society, Cambridge 2001.
- Ward, William A. - Joukowsky, Martha Sharp (eds.), *The crisis years: the 12th century BC from beyond the Danube to the Tigris*, Kendall/Hunt Publishing, Dubuque 1992.
- Warren, Peter M. - Hankey, Vronwy, *Aegean Bronze Age Chronology*, Bristol Classical Press, Bristol 1989.
- Wörle, Michael, “Perikles von Limyra – endlich etwas mehr Griechisches”, in: Jürgen Borchhardt, Gerhard Dobesch (eds.), *Akten des II. Internationalen Lykien-Symposium, Wien 1990*, Verlag der österreichischen Akademie der Wissenschaften Vienna 1993, pp. 187-190.
- Yasur-Landau, Assaf, *The Philistines and Aegean migration at the end of the late Bronze Age*, Cambridge University Press, New York 2010.
- Zimmermann, Martin, *Untersuchungen zur historischen Landeskunde Zentrallykiens*, Antiquitas Reihe 1, Rubelt Habelt Verlag, Bonn 1992.