

**Anadolu'da Etnoarkeoloji
Araştırmaları**

(Prehistorik Dönemlerden Günümüze Kadar)

**Ethnoarchaeological Studies in
Anatolia**

(From the Prehistoric Times to the Present)

ANADOLU'DA ETNOARKEOLOJİ ARAŞTIRMALARI

(Prehistorik Dönemlerden Günümüze Kadar)

ETHNOARCHAEOLOGICAL STUDIES IN ANATOLIA

(From the Prehistoric Times to the Present)

Editörler/ Editors

İsmail AKKAŞ & Murat KARAKOÇ



DORUK- Arkeoloji
Anadolu'da Etnoarkeoloji Arařtırmaları
(*Prehistorik Dönemlerden Günümüze Kadar*)
Ethnoarchaeological Studies in Anatolia
(*From the Prehistoric Times to the Present*)

Editörler/Editors:

İsmail Akkaş & Murat Karakoç

Yayıma Hazırlayan:

Niyazi Koçak

Kapak Tasarımı:

Doruk Can Koçak

Sayfa Tasarımı:

Fatma İrem Erol

© Doruk Yayımcılık 2021

Tüm hakları saklıdır. Kaynak gösterilmeden alıntı yapılamaz.

ISBN: 978-975-553-902-7

Baskı: Aralık 2021

Baskı-Cilt:

Ertem Basım Yayın Dağıtım San. Ltd. Şti

Sertifika No: 48083



e-posta: info@dorukyayinlari.com

www.dorukyayinlari.com

Sertifika No: 43738

İÇİNDEKİLER

Foreword.....	9
Kısaltmalar / Abbreviations	10
Giriş: Anadolu’da Etnoarkeoloji Araştırmaları	11
<i>İsmail AKKAŞ & Murat KARAKOÇ</i>	
İzotoplardan Kemiklere: Antik Çağ Beslenme Örüntülerinin Belirlenmesinde Biyoarkeolojik Çalışmalar.....	37
<i>Ahmet İhsan AYTEK & Alper Yener YAVUZ</i>	
Continuity in Vernacular Architecture: Examples of Wattle and Daub Houses in Anatolia	52
<i>Alev ERARSLAN</i>	
Kırsal Peyzaja Krali Dokunuşlar: Tarımsal Kolonizasyon Bağlamında Asur Su Kanallarının Önemi.....	74
<i>Atakan AKÇAY & Serdar ÖZBİLEN</i>	
Menderes’e Bağlı Hayatlar: Aşağı Büyük Menderes Havzası’nda Etnoarkeolojik Gözlemler.....	99
<i>Aytekin KALKAN</i>	
Günümüzde Pithos Uygulamaları: Avanos (Kapadokya)’Dan Bir Usta Aydın Afacan	122
<i>Billur TEKKÖK KARAÖZ</i>	
Erken Hristiyanlık Dönemi’nden Ortaçağ’a Kadar Doğu Akdeniz ve Kafkasya Bölgesi Hristiyan Hacı Hareketliliğinin Yarattığı Kültürel Miras.....	138
<i>Canan DEMİROK</i>	
Deciphering Göbekli Tepe: The Hidden Potential	147
of Archaeo-Ethnology.....	147
<i>Cédric BODET</i>	
Geç Roma (Erken Bizans) Dönemi Kapaklı Testilerinden Günümüz İbrik ve Güğümlerine Etnoarkeolojik Bir İnceleme.....	166
<i>Cüneyt ÖZ</i>	
Güneydoğu Anadolu Bölgesi Erken Tunç Çağı II – III Dönemlerine Ait Figürin ve İdollerde Saç Stilleri ve Süslemeler.....	180
<i>Çağatay YÜCEL & Umut PARLITI</i>	

Nif Dağı Kazısı Karamattepe Metal İşliklerinin Etnoarkeoloji Katkısıyla Tanımlanması.....	212
<i>Daniş BAYKAN</i>	
Tanrıça'nın Rahminden Şahmeran'ın Hamamına: Tarsus Eski Hamam Yapısının Etnoarkeolojik Bağlamda İncelenmesi	232
<i>Efe ELMAS</i>	
Tarih Öncesi Çağlarda Yakın Doğu'dan Günümüz Anadolu Kırsalına Yansıyan Hesaplama ve Ölçüm Araçları.....	265
<i>Fatma ŞEKER</i>	
Etnoarkeolojik Bir Bakışla Troya Tarihi Milli Parkı'nda Devşirme Malzeme Kullanımı.....	285
<i>Fecri POLAT</i>	
Etnografik ve Etnoarkeolojik Bakış Açısıyla Erzincan'da Tandır: Yapılışı, Kullanımı ve Doğu Anadolu'daki Yeri	318
<i>Funda NALDAN</i>	
Anadolu'da Hocker Tarzı Gömünün Ritüele Dönüşme Evresindeki Tarihsel Süreç ve Etkenler	336
<i>Hacer KUMANDAŞ</i>	
İzmir Kadifekale, Kule 3'te Dekoratif Tuğla Kullanımı: “Hayat Ağacı Motifi”	368
<i>Hakan GÖNCÜ</i>	
Bebek Beslenmesi Üzerine Etnoarkeolojik Bir Değerlendirme	377
<i>Hilal YAKUT İPEKOĞLU & Nalan Damla YILMAZ USTA</i>	
Erzurum Ormanağzı (Karnavas) Köyü Pekmez Yapım İşlikleri Üzerine Etnoarkeolojik Gözlemler.....	402
<i>Mesut CEYLAN</i>	
Bizans Sanatı'nda Perde Semboliğinden Yola Çıkarak Öncülleri ve Ardılları	421
<i>Muhsine Eda ARMAĞAN</i>	
Kastamonu ve Çevresi Özelinde Glykon Kültünün Günümüze Yansımaları	439
<i>Ömer KAYA</i>	
Roma İmparatoriçeleri'nden First Ladylere Uzanan Moda Yolculuğunun Topluma Etkileri ve Etnoarkeolojik Yansımaları.....	447
<i>Özge ALTUN</i>	

A View from Çukuriçi: Multiple, Co-Existing Models of Socio-Political Organisation in Early Bronze Age Western Anatolia.....	466
<i>Sabina CVEČEK & Barbara HOREJS</i>	
Antik Çağ'da Giresun İlinin Yayla ve Obalarındaki Göçebe - Yarı Göçebelerin Yaşam İzleri Üzerine Arkeolojik Bir Değerlendirme	497
<i>Salih KAYMAKÇI & Derya ÇIĞIR DİKYOL</i>	
MÖ 12. Yüzyıldan Bir İkonografinin Geç Roma Dönemi'ne Ait Mezar Stelinde Değerlendirilmesi ve Etnolojik Yansımaları.....	518
<i>Savaş ALTUN</i>	
Vezirköprü'de (Neoklaudiopolis) Antik Çağ'dan Günümüze Pres Denge ve Soku Taşları	538
<i>Sefa TORUN & Akın TEMÜR</i>	
Metropolis Seramik Buluntuları Işığında Bizans ile Beylikler Arasındaki Kültürel Etkileşim.....	559
<i>Zeynep Adile MERİÇ</i>	

Foreword

This book is a compilation of selected research papers dealing with a variety of topics in Anatolian ethnoarchaeology. It aims at providing the reader with insights on recent research and field activities within this discipline. The broad spectrum of topics dealt with refers to different timeframes with a few going back to pre-classical and prehistoric periods. The editors who compiled the research papers and researchers who contributed them obviously share the general understanding of the crucial role of multi-disciplinary approach in ethnoarchaeology. Indeed, reliance on disciplines such as cultural anthropology, sociology and history of art by some authors contributed to suggestions concerning the likely social, cultural, spiritual and economic significance of material culture remains including art forms from the distant past. With this understanding in mind the papers presented deal with a variety of topics of interest touching on the socio-political and socio-economic considerations in settlement planning, continuity of architectural concepts, the use of space, food production strategies, storage and consumption modes, continuity in traditional local and regional technologies often using ethnographic analogies.

Some of the articles relying on ethnographic guidance demonstrate that in Anatolia and adjacent territories economically encapsulated societies often opted for communal production, which naturally required their being socially organized in a communal mode. In this system, although the means of subsistence production are held by the commune as a whole, status based on gender, rank, age group and kin connections defines the rights and duties of members taking part in the production activities and consumption, and often creates wealth differentiation. Within the communal mode of production, various forms of social orders may have existed ranging from egalitarian communities, more likely briefly and at the onset, to socio-economically stratified communities leading to ranked chiefdoms. The preservation of these socio-economic frameworks must have been crucial, at least to some extent, for communities in the process of being incorporated into state societies.

Finally, this publication strengthens the existing impression that some of the ethnographic case studies involving the preservation of deep-rooted regional rural architectural traditions or various artistic renderings of social norms or spiritual themes recovered or unveiled in Anatolia could be applicable also to neighboring territories beyond its geo-cultural borders.

Jak Yakar

Professor Emeritus

Sonia & Marco Nadler Institute of Archaeology

Tel Aviv University

Kısaltmalar / Abbreviations

AJA	: American Journal of Archaeology.
ANMED	: Anadolu Akdenizi Arkeoloji Haberleri Bülteni.
AM	: Mitteilungen des Deutschen Archeologischer Instituts, Athenische Abteilung.
AnSt	: Anatolian Studies.
AST	: Araştırma Sonuçları Toplantısı.
BASOR	: Bulletin of the American Schools of Oriental Research.
BCH	: Bulletin de Correspondance Hellénique
BIFAO	: Bulletin de l'Institut Francais d'Archeologie Orientale
bkz.	: Bakınız.
BSA	: Annual of the British School at Athens.
Çev.	: Çeviri.
dn.	: Dipnot.
Ed.	: Editör.
Eds.	: Editörler.
et al.	: ve diğerleri.
Fig.	: Figür/Figure.
JRA	: Journal of Roman Archaeology.
Kat. No.	: Katalog Numarası.
KST	: Kazı Sonuçları Toplantısı.
Lev.	: Levha.
MÖ	: Milattan Önce.
MS	: Milattan Sonra.
No.	: Numara.
Pl.	: Plate.
s.	: Sayfa.
TAD	: Türk Arkeoloji Dergisi.
Taf.	: Tafel.
vd.	: ve diğerleri.

A View from Çukuriçi: Multiple, Co-Existing Models of Socio-Political Organisation in Early Bronze Age Western Anatolia

Çukuriçinden Bir Görünüm: Batı Anadolu Erken Tunç Çağı'nda Çoklu, Birlikte Görülen Sosyo-Politik Örgütlenme Modelleri

Sabina CVEČEK* & Barbara HOREJS**

Abstract

This contribution discusses insights from social anthropology into the Early Bronze Age period (third millennium BCE) in western Anatolia from a comparative perspective. Based on controlled comparison with corresponding ethnographic accounts within and beyond Anatolia, the paper addresses socio-political organisation at Early Bronze Age Çukuriçi Höyük in western Anatolia. We provide a summary of evidence regarding sharing and competition between households at Çukuriçi Höyük, analysed through household and interdisciplinary archaeology. These results are then contextualised through suitable ethnographic examples that underpin the bottom-up approach to interpreting solid archaeological data. The paper concludes with a dialectical correspondence between heterarchical social organisation and a 'great man' society model of social

* Dr., Austrian Archaeological Institute (OeAI), Austrian Academy of Sciences (OeAW), Department of Prehistory & West Asian/Northeast African Archaeology, Hollandstraße 11–13, 1020 Vienna/Austria. E-mail: sabina.cvecek@oeaw.ac.at / Orcid No: 0000-0003-0642-2397.

** Prof. Dr., Austrian Archaeological Institute (OeAI), Austrian Academy of Sciences (OeAW), Department of Prehistory & West Asian/Northeast African Archaeology, Hollandstraße 11–13, 1020 Vienna/Austria. E-mail: barbara.horejs@oeaw.ac.at / Orcid No: 0000-0002-4818-6268.

organisation, applicable to Çukuriçi Höyük in the third millennium BCE. With a focus on site-specific regional trajectories, our heterarchical or ‘great man’ society model for Çukuriçi Höyük provides only one example of how various forms of socio-political organisation and social inequality may have mutually coexisted at the dawn of the Bronze Age in western Anatolia.

Keywords: Early Bronze Age, Socio-Political Organisation, Western Anatolia, Heterarchy, ‘Great Man’ Society, Controlled Comparison, Direct Historical Analogy.

Öz

Bu katkı, Batı Anadolu’daki Erken Tunç Çağı Dönemi’ne (MÖ üçüncü binyıl) ilişkin içgörülerini Sosyal Antropoloji’nin gözünden karşılaştırmalı bir bakış açısıyla tartışmaktadır. Makale, Anadolu içindeki ve dışındaki birbiriyle ilişkili etnografik kayıtların kontrollü karşılaştırmasına dayanarak, Batı Anadolu’daki Erken Tunç Çağı Çukuriçi Höyük’teki sosyo-politik örgütlenmeyi ele almıştır. Çukuriçi Höyük’teki haneler arasındaki paylaşım ve rekabete ilişkin kanıtların bir özetini sunarak, bunları hane halkı arkeolojisi ve disiplinler arası arkeoloji yoluyla analiz ettik. Elde edilen bulgular, daha sonra güvenilir arkeolojik verileri yorumlamaya yönelik tümevarım yaklaşımını destekleyen uygun etnografik örnekler aracılığıyla bağlamsallaştırılır. Makale, heterarşik sosyal organizasyon ile MÖ üçüncü binyılda Çukuriçi Höyük için geçerli olan “büyük adam” toplumu sosyal organizasyon modeli arasındaki diyalektik bir karşılaştırma ile sona ermektedir. Yerleşime özgü bölgesel yörüngelere odaklanmasına rağmen, bizim heterarşik veya ‘büyük adam’ toplum modelimiz, Çukuriçi Höyük için çeşitli sosyo-politik örgütlenme ve sosyal eşitsizlik biçimlerinin Batı Anadolu Tunç Çağı’nın şafağında karşılıklı olarak nasıl bir arada var olabileceğine dair yalnızca bir örnek sağlar.

Anahtar Sözcükler: Erken Tunç Çağı, Sosyo-Politik Örgütlenme, Batı Anadolu, Heterarşi, ‘Büyük Adam’ Toplumu, Kontrollü Karşılaştırma, Doğrudan Tarihsel Analoji.

Introduction

Ethnoarchaeological insights may provide evidence of alternative modes of dwelling, different from those of archaeologists who study past communities. Considering ethnographies and historical accounts of carefully chosen communities in many parts of Anatolia, the Mediterranean, and beyond, models of socio-political organisation can be understood through their diversity, co-existence, and transformations, rather than as an eternal reality. One such ‘eternal’, rarely challenged the model of social organisation is the gradual emergence of chiefdoms during the Early Bronze Age in western Anatolia. By considering regional variability as much as cultural homogeneity – the latter being visible in pottery and architectural styles – a new perspective may be gained concerning the socio-political organisation of western Anatolian communities in the Early Bronze Age (EBA).

This period marks a crucial step in the gradual formation of proto-urban societies during the third millennium BC, strongly related to a dynamic and complex socio-cultural process. The social impact of these dynamic developments has long been known and is a much-discussed phenomenon in the Aegean and Anatolian Early Bronze Age. The establishment of a few large centres with massive fortifications and a new dominant role in exchange systems is probably closely linked to the culmination of political and social power, as manifested in Troy II or Liman Tepe V, dating from 2700 BC. The much smaller site of Çukuriçi Höyük did not play a major role in this large-scale development in terms of supra-regional political influence. Rather, our case study offers another perspective with new archaeological data of a household community analysed in detail and standing in contrast with the established model of chiefdoms.

As a model of socio-political organisation, chiefdoms have been widely attested for the Aegean and western Anatolia during the EBA 2 period (Kouka, 2002: 2016a; Pullen, 1985, 2011a, 2011b; Renfrew, [1972] 2011; Şahoğlu, 2005). By comparison, EBA 1 sites have not been excavated in as many or as thoroughly studied as EBA 2 sites. Therefore, the socio-political organisation of EBA 1 sites in western Anatolia remains enigmatic.

There are two major trends for discussing socio-political organisation during the EBA 1 period in western Anatolia. The first trend initially observed

at mainland Aegean sites (Peperaki, 2007: 7) and now also detected in western Anatolia is that the quality and quantity of EBA 2 material dominates perceptions of the entire EBA period. For example, chiefdom social organisation, initially inferred for the EBA 2 period in the Aegean (Renfrew, [1972] 2011), can now be widely attested for EBA 1 metalworker-trader workshops in western Anatolia (Kouka, 2002: 2016a). The second trend stands in stark contrast to the first: rather than supporting the chiefdom model of socio-political organisation, scholars deny any form of on-site social inequality at EBA 1 western Anatolian sites. For example, based on household archaeology, the existence of an ‘egalitarian’ society has been proposed for the EBA 1 layers at Troy I and subsequently for the entire region of western Anatolia during the EBA 1 period (Ivanova, 2013: 2016).

As we will show below, the evidence from the EBA 1 settlement of Çukuriçi Höyük in western Anatolia supports neither a chiefdom nor an egalitarian socio-political organisation. Instead, the evidence suggests a heterarchical setting (Crumley, 1995; 2016) between households at the site, in which households were unranked or possessed “the potential for being ranked in a number of different ways” (Crumley, 1995: 3). From a socio-cultural anthropological perspective, the heterarchical setting of socio-political organisation at EBA 1 Çukuriçi Höyük that has initially been proposed (Horejs, 2016) and then elaborated (Cveček, in press), corresponds to a great man society model (Godelier, 1986; Godelier and Strathern, 1991) of non-state socio-political organisation.¹

The great man society model of socio-political organisation complements the understanding of social organisation during the EBA 1 period in western Anatolia. Great man societies such as Çukuriçi were not self-sufficient but were embedded and entrenched in *vital* regional interrelations – social and economic – with others through the mixed regional economy (Cveček, in press; Gingrich, 2017; Gingrich and Schweitzer, 2014). A mixed regional economy enabled the co-existence of a great man society at Çukuriçi with other societies in the region. These included the supposedly ‘egalitarian’ society at Troy I and the chiefdom at Poliochni. Therefore, on a regional level, heterarchy as a structure and a condition may be used to describe the setting in which different models of socio-political organisation co-existed at the dawn of the EBA in western Anatolia: the

¹ Beyond the EBA in western Anatolia, a heterarchical social organisation has been recently proposed for EBA Aegean communities, if we do not consider metallurgy through the prism of technological determinism but as a social practice instead: see Mina, 2018.

EBA 1 chiefdom at Poliochni, the ‘egalitarian’ society at Troy I, and a heterarchical, great-man society at Çukuriçi (see Fig. 1 for the location of EBA 1 settlement sites mentioned in this contribution).



Fig. 1: Location of the EBA 1 western Anatolian sites referred to in this contribution (OeaW-OeAI/M. Börner, Ch. Schwall).

Ethnoarchaeology in Anatolia: a direct historical analogy

Ethnographic evidence collected in the past century from rural Anatolia has already meaningfully informed archaeologists about material culture and subsistence practices. These include the organisation of domestic spaces and subsistence practices in village communities (Aslan and Blum, 2004; Dostal, 1971; Stirling, 1965; Weinstein, 1973; Yakar, 2000; Yakar, 1998; Çevik, 1995), the role of kinship (Heady and Yalçın-Heckmann, 2020; Yalçın-Heckmann, 1991), and gender roles (Mutlu, 2021). In his seminal work *Ethnoarchaeology of Anatolia*, Yak Yakar (2000) combined ethnographic accounts of rural areas in Anatolia

(1993–1997) with ancient texts and archaeological data for the contextualisation of subsistence practices and material culture to reconstruct socio-political structures in Hittite periods in central Anatolia. The main argument of Yakar’s (2000) contribution was to show that knowledge of the modern ethnographic records in Anatolia can help us to interpret ancient Anatolian communities. By linking historical texts, ethnographic data, and archaeological records, Yakar (2000) has found a “soft way” to link ethnography with archaeology (Yalman, 2013: 35) to address continuous relations between material culture and diverse subsistence economies in Anatolia.

However, the modern ethnographic record from Anatolia is less suitable for the reconstruction of socio-political models (Rainville, 2003; Wilkinson, 2001; Yalman, 2013). The suitability of the method of direct historical analogy, which uses ethnographic and historical accounts of modern rural societies to reconstruct models of socio-political organisation in the same area centuries or millennia ago, has already been challenged for Anatolia (Yalman, 2013). This is because direct historical analogy (Peregrine, 1996) can be used for interpretation only when the continuity between (pre)historic periods and modern societies, residing in the same area, is established.² Thus, using the descendent communities’ practices to interpret those of prehistoric communities assumes no change. This assumption can be understood from a theoretical predisposition regarding the Anatolian case study that “the socio-economic organization of rural communities in state societies must have been basically the same in the past as that of traditional societies of today” (Yakar, 2000: 3). The drawback of this theoretical predisposition, however, is the assumption of continuity between the ethnographic present and the archaeological past (Rainville, 2003; Wilkinson, 2001). To avoid any misunderstanding, as much as there is no reason to assume ethnic continuity between Anatolia of the third millennium BC and the modern period, there is no reason to assume the same socio-political models existing in prehistory are the same as those documented today.

In the Anatolian case, a direct historical analogy may be suitable for the interpretation of material culture, subsistence practices, and certain technologies, but less so for addressing EBA 1 socio-political organization, which is the main focus of this contribution. If we are to rely exclusively on modern ethnographic

² Among the exceptional cases in which a continuity between the late prehistory and the ethnographic periods has already been established and explained are the Native American Puebloan societies, such as the Hopi and Zuni, see Whiteley, 2018.

and ethnohistoric accounts of societies within Anatolia and the wider Mediterranean region to infer the EBA socio-political organisation, we would assume that the Anatolians today are the same as 5, 000 years ago. If we agree that this is not the case, then we should include non-Anatolian ethnographic evidence, including non-Anatolian socio-political models, to provide a broader theoretical framework for the interpretation of the archaeological data (Rainville, 2003).

Controlled comparison with ethnographic cases beyond Anatolia

Our contribution to ‘ethnoarchaeology in Anatolia’ follows the latter call. It complements Yakar’s (2000) work by drawing our attention to non-Anatolian ethnographic insights to reconstruct socio-political organisation at the dawn of the EBA 1 in western Anatolia.³ Based on the controlled comparison (Gingrich, 2012), with loosely defined boundaries of cases that could be compared, this approach differs from ethnographic analogy⁴ or the direct historical approach. We base our presumption on the understanding that societies in Anatolia have undergone multiple socio-political changes from prehistory to the modern-day. For this reason, the interpretation of socio-political organisation in Anatolian prehistory may be more fruitfully explored through comparison with non-Anatolian, non-state, non-literate societies, residing outside state societies rather than within them as such loosely defined criteria necessary for controlled comparison (Gingrich, 2012). Whereas Anatolian case studies remain relevant for the interpretation of architecture, technologies, and material culture more widely, we must consider more than Anatolian non-state socio-political models for the interpretation of prehistoric social organisation if we are to avoid direct historical analogy.

A controlled comparison with non-Anatolian case studies allows alternative modes of dwelling to enter our analyses and interpretations of the prehistoric archaeological evidence. These non-Anatolian, non-state ethnographic examples are not treated here as ‘living fossils’ representing earlier stages of social

3 For the successful utilisation of non-Anatolian ethnographic examples for the interpretation of socio-political organisation in Anatolian prehistory see Wengrow & Graeber, 2015.

4 Ethnographic analogy has been critiqued on the basis that one cannot know how well the ethnographic analogy selected is representative of prehistory, but it may be usefully complemented by cross-cultural research, which uses world-wide ethnographies to test for associations between phenomena: see Peregrine 1996. An example of one such confirmed cross-cultural study is a confirmed association between a large floor area and a matrilineal residence: see Dıvalı, 1977; Ember, 1973; Hrnčıř et al., 2020; Porčıć, 2010.

evolution (Gosselain, 2016). Instead, these communities interact(ed) with the contemporary world based on different historical, cultural, and technological practices that are distinct from those of most archaeologists (Cunningham and MacEachern, 2016; Fewster, 2013; Lyons and David, 2019).⁵

In this contribution, we compare the evidence from EBA 1 Çukuriçi with the Baruya, a great man society ethnographically documented in the 1980s in Papua New Guinea's highland fringe. The correspondence between the great man society and the heterarchical social organisation proposed for EBA Çukuriçi complements the understanding of EBA western Anatolia in several important ways. First, it contrasts the 'egalitarian' social organisation as inferred from the archaeological evidence at Troy I (Ivanova, 2013: 2016) and the chiefdom social organisation as inferred from Poliochni Blue (Kouka, 2002: 2016a; 2016b) with the heterarchical socio-political organisation at EBA 1 Çukuriçi. Second, it proposes a regional heterarchical setting based on a mixed regional economy. In this setting, the EBA 1 sites in western Anatolia were socially and economically interlinked but differed in the socio-political organisation. As we show below, if we think of relations between the EBA 1 sites as heterarchical, we see that Troy I, EBA 1 Çukuriçi, and Poliochni Blue were sites that could be ranked in several different ways in relation to one another. In this case, Troy I occupied an important, strategic location, Poliochni Blue hosted a chiefly household of metalworkers-traders, and the EBA 1 inhabitants at Çukuriçi drew their regional importance from arsenical-copper production. Third, our contribution to *Ethnoarchaeology Studies in Anatolia* shows that suitable non-Anatolian ethnographic material may help us understand non-state socio-political organisation in Anatolian prehistory. The great man society model, as a conceptual tool rather than a static model of social organisation provides such an example.

Chiefdom: an example of an 'eternal model' of social organisation

The prehistory of the Aegean and Anatolia has been characterised by five decades of borrowing and translating models of the socio-political organisation from socio-cultural anthropology to archaeology. Among the most widely utilised examples of the socio-political organisation during the EBA in the Aegean

⁵ Insights from socio-cultural anthropology have already proven useful in developing a better understanding of prehistoric economies in Anatolia. See: Gingrich and Schweitzer, 2014.

is the chiefdom model of social organisation. In his seminal work *The Emergence of Civilization*, Colin Renfrew ([1972] 2011) argued that the emergence of the first chiefdoms dates to the EBA 2 (2,700-2,400 BC) in the Aegean. He argues that during this period, major transformations can be seen in a subsistence economy. Whereas the Neolithic and the EBA 1 villages were self-sufficient units, the EBA 2 villages and proto-urban settlements relied on a redistributive economy of wheat, grapes, and wine: the so-called *Mediterranean Polyculture*. This crucial economic shift allowed EBA metalworkers in the Aegean to establish themselves as full-time specialists, a theory initially proposed by Gordon Childe (1930; 1950).

Colin Renfrew built his interpretation based on the neo-evolutionary model of the socio-political organisation developed by Elman Service (Service, 1962; Service, 1971), Marshall Sahlins (1960; 1968), and Morton Fried (1967). Along the neo-evolutionary scale of *band-tribe-chiefdom-state*, chiefdoms were considered to be ranked and socio-politically centralised societies based on the redistribution of staple goods by chiefs. The emergence of chiefdoms was necessarily linked to an increase in population, greater productivity, and the emergence of important economic and/or religious centres, among other factors. These ethnographically observed traits, at the time believed to define chiefdoms, have been individually translated to the prehistoric archaeological material in terms of lists (see twenty-item list in Renfrew et al., 1974). However, since the emergence of chiefdoms was not associated with a particular technological innovation, socio-cultural anthropologists expressed concern over inferring chiefdoms from the archaeological record (Service, 1962: 114). In recent decades, socio-cultural anthropologists and archaeologists have advanced the understanding of chiefdoms. Today, it is known that chiefdoms may emerge in several ways: through a redistributive economy (Sahlins, 1963; Service, 1962) irrigation that requires central control (Steward, 1955; Wittfogel, 1976), the exchange of prestige goods (Friedman and Rowlands, 1977), the establishment of bottlenecks in the resource flow (Earle et al., 2015; Earle, 2002), or different types of circumscription (Carneiro, 1988; 2012).

Metalworking chiefdoms in EBA 1 western Anatolia and eastern Aegean islands

In western Anatolia, the most predominant explanation for the emergence of chiefdoms during the EBA 1 period is linked to technological changes, namely metalworking and the exchange of prestige goods. For example, at the settlement of Poliochni, an eastern Aegean island site, two metalworking workshops have been distinguished from other domestic structures. Based on the *exotica* (the imported Aegean objects) found within these two workshops, the higher status of metalworking families has been inferred (Kouka, 2002). At Poliochni, and elsewhere in western Anatolia, these metalworking workshops containing *exotica* have subsequently been interpreted as the seats of chiefs (Kouka, 2016a). At these sites, households involved in metalworking were restricted to a single or a few households per site, fixed at the same location over several using horizons. The foreign objects found in these workshops (such as large amounts of Melian obsidian and imported pottery pieces including Cycladic frying pans) indicate a fixed spatial position and distinct social status of the metalworkers-traders, who were possibly chiefs (see Fig. 2 for the model of the socio-political organization as inferred from Poliochni Blue).

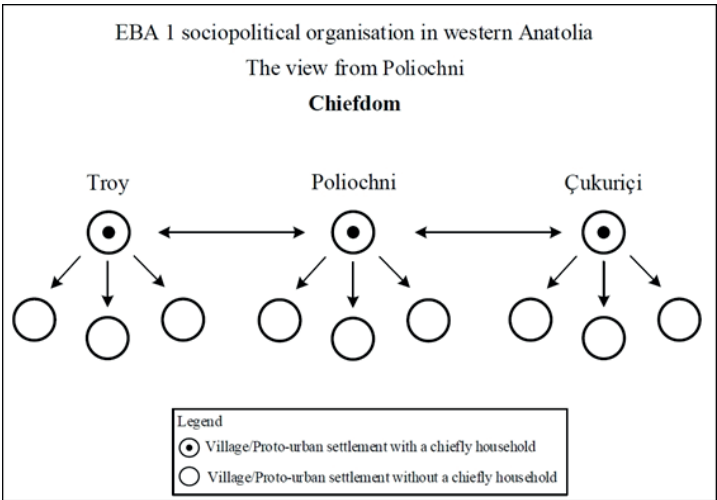


Fig. 2: EBA 1 chiefdoms in western Anatolia, based on the evidence from metalworker-trader chiefly households; the model of Poliochni Blue as described by O. Kouka (2000: 2016a).

Egalitarian societies in EBA 1 western Anatolia

The existence of chiefdoms as an ‘eternal’ model for explaining socio-political organisation in EBA 1 western Anatolia has recently been challenged, based on the interpretation of evidence found at Troy I. The settlement of Troy II, with a clear enclosure wall and a freestanding structure – the so-called Megara (Room 102), as a possible chiefly dwelling – has been interpreted as an example of a fully developed chiefdom (Eslick, 1988). Rather than projecting the same chiefdom socio-political organisation onto the earlier EBA 1 period, a recent study, based on household archaeology of EBA 1 settlement layers at Troy I (Ivanova, 2013: 2016), proposed an EBA 1 egalitarian spirit that predated the EBA 2 chiefdom at Troy. This egalitarian social organisation was not only proposed for Troy I, but for the whole of EBA 1 western Anatolia: “vernacular pattern at Troy I and other contemporary sites in western Anatolia implies homogeneous communities of economically uniform households with low privacy requirements and an egalitarian ethos” (Ivanova, 2013: 31): see Fig. 3 for the model of the socio-political organization as inferred from Troy I.

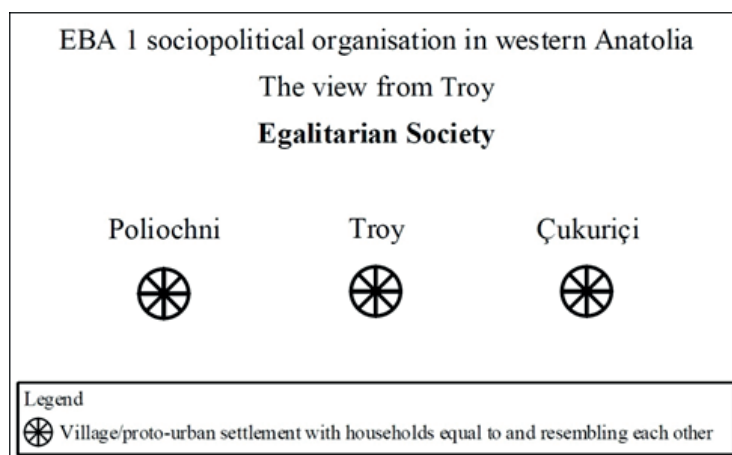


Fig. 3: EBA 1 egalitarian societies in western Anatolia based on the evidence of identical residential units; the model of Troy I as described by M. Ivanova (2016).

The inference of an ‘egalitarian ethos’ at Troy, however, has been made without any specification of what the uniform households at Troy were egalitarian in relation to, apart from the claim that the “residential units...were equal in their position, and therefore produced dwellings with nearly identical form, size, and internal arrangement” (Ivanova, 2016: 46). If we are to explain either inequality or equality – the latter being more problematic, as it assumes a ‘natural’ basis for the division of labour – it is necessary to specify what we mean by (in)equality in each specific case (Collier and Yanagisako, 1987). In our view, people-centred questions, beyond those of residential units, would question whether the egalitarian relations at Troy I existed between households, between generations, or between different genders that belong to these residential units. Due to the lack of availability and preservation of data, these questions could not be addressed in the case of Troy I. However, the study at Troy I has inspired us to address these questions through interdisciplinary evidence in the case of EBA 1 Çukuriçi.

Metals as precious objects at EBA 1 Çukuriçi Höyük

Çukuriçi Höyük is an EBA 1 site in western Anatolia (Turkey), located close to the ancient city of Ephesus and 6 km from the Aegean Sea. In prehistoric times, Çukuriçi was a coastal site, situated approximately 1.5 to 2 km from the shore (Stock et al., 2015). Between 2009 and 2014, the excavation of the tell site confirmed approximately 8m of anthropogenic material dating to the Early and Late Neolithic, the Late Chalcolithic, and the EBA 1 periods (Horejs, 2017: see Fig. 1: 6). The EBA 1 layers, found on top of the Late Chalcolithic settlement, are divided into three phases: ÇuHö Va (3,050-2,950 cal BCE), ÇuHö IV (2,950/2,900-2,850 calBCE), and ÇuHö III (2,850-2,800/2,750 calBCE) (Horejs, 2017), of which the latter two phases are the focus of this contribution (see Fig. 4 for the photo of the excavation at Çukuriçi).



Fig. 4: Photo of the EBA excavation trenches at Çukuriçi Höyük (OeaW-OeAI/N. Gail).

The EBA 1 layers at Çukuriçi Höyük have already been investigated as part of several interdisciplinary research projects. These include radiocarbon dating (Horejs, 2017), macroscopic pottery analysis (Röcklinger, 2015), petrography (Peloschek, 2017), archaeometallurgy (Mehofer, 2015), textile technologies (Britsch, 2018), zooarchaeology (Cveček and Emra, in press; Emra et al., 2020), archaeobotany (Horejs et al., 2011), lithics (Schwall et al., 2020), architecture (Grasböck et al., forthcoming), and socio-cultural anthropological contextualisation of archaeological insights (Cveček, 2020: in press). These studies provide some important results, which we will briefly summarise and then utilise for a discussion of a heterarchical, great man society, inferred for the EBA 1 layers at the site (for more than fifty open access publications about Çukuriçi, see the online repository <https://epub.oew.ac.at/erc-prehistoric-anatolia>).

The EBA 1 settlement at Çukuriçi was established on top of the burnt Late Chalcolithic settlement. The earliest EBA 1 houses at the site were rectangular, freestanding structures, a pattern that lasted only for approximately one generation or about 25 years. Gradually, in four building phases, the inhabitants at the site built new houses by attaching them to the pre-existing ones. Within

approximately 100 years, the settlement pattern became agglutinated into the so-called row-houses or *insulae*, typical for EBA 1 western Anatolian coastal sites including Troy I and Poliochni (Ivanova, 2013; Kouka, 2002; 2016a). Row-houses or *insulae* bear a close similarity to what are known as *mahalle* in Anatolian ethnography. *Mahalle* refers to the wards or quarters that make up a large traditional Anatolian village (*Köy*) (Yakar, 2000: 119): see Fig. 5 for the visual reconstruction of EBA 1 settlement at Çukuriçi.



Fig. 5: Reconstruction of the EBA 1 settlement at Çukuriçi (7Reasons).

If we draw an ethnoarchaeological parallel to the development of a settlement pattern at EBA 1 Çukuriçi, it fits well with the settlements ethnoarchaeologically documented in Khar o Tauran in Northwestern Iran (Horne, 1994). In these villages, newly established houses were attached to the preexisting ones, and the building of a new house was inherently related to marriage. Khar o Tauran villages followed a patrilocal post-marital residence pattern, which refers to the residence of a couple at the husband's natal home or village (Parkin, [1997] 2003: 31). Cross-culturally, large dwellings (larger than 80 m²) are only associated with matrilocal residences (Divale and Witkowski, 1996; Ember, 1973) and therefore, based on the total floor area size, we can exclude a matrilocal residence pattern at Çukuriçi. An ethnographic analogy with the Khar o Tauran villages and a similar pattern documented in southeast Asia (Verderya et al., 2012) supports a pattern of patrilocal residence at EBA 1 Çukuriçi. Moreover, distinct

patrilocal and patrilineal households also constituted a typical Anatolian village community (Yakar, 2000: 128).

For subsistence, the EBA 1 inhabitants at Çukuriçi relied on animal herding (mostly sheep and goats) but also hunted wild animals (Emra et al., 2020). They cultivated domestic plants, such as pulses and cereals, as well as gathering wild plants (Horejs et al., 2011). They utilised tools made of local chert and Melian obsidian (Schwall et al., 2020), while the site was an important EBA 1 gateway community for Melian obsidian exchange (Knitter et al., 2013). Concerning crafts, inhabitants at Çukuriçi produced textiles (Britsch, 2018), made pottery using locally available clay sources (Peloschek, 2017), and it produced arsenical copper (Horejs and Mehofer, 2015). Overall, the assemblage at Çukuriçi Höyük fits the anthropological model of regional mixed economies (Cveček, in press). Simple rain-fed cultivation, alongside animal husbandry, non-specialised craft expertise hunting small and large animals, gathering plants and other goods, and the exchange of gifts and goods for everyday purposes are the five elements that embed a local society into mixed regional economies, which can shift between more or less centralised constellations.

Çukuriçi was an important arsenical-copper production site during the EBA 1 period in western Anatolia (Horejs and Mehofer, 2015; Horejs et al., 2010; Mehofer and Horejs, 2011). A total of 173 pieces of metal objects, metal prills (waste from the casting process), and metallurgical ceramics such as crucibles, blowpipes, and ovens were excavated from Çukuriçi, and these allow for the reconstruction of a complete metallurgical *chaîne opératoire* at the mound. Unlike at Poliochni, where the two metalworking workshops overlapped with *exotica* and were restricted to two rooms within the settlement (Kouka, 2002), metalworking at Çukuriçi was a household activity of which different production steps were found across the settlement (Cveček, in press). This evidence implies that metalworking, rather than being a full-time activity, was a part-time, possibly seasonal activity, integrated into the domestic mode of production (Cveček, in press). Members of different houses at the site cooperated, shared metalworking knowledge but also competed with each other to acquire foreign goods and establish regional alliances.

Arsenical copper and other metal objects at Çukuriçi cannot be treated as objects of prestige. No metalworking workshop has been identified with an

excessive amount of *exotica*, which would point towards a higher status of the specialist-metalworker-trader workshop. Instead, we interpret metal objects at Çukuriçi as precious objects. Precious, because they were good to have, yet difficult to produce and, therefore, scarce and essential. Precious objects, because metal objects could not be produced without specialist knowledge (Mehofer, 2014). Finally, precious objects, because through the exchange of arsenical copper objects Çukuriçi inhabitants could procure all that they lacked in their territory but was necessary for everyday life (e.g., obsidian, etc.). With the production of metal objects at Çukuriçi, inhabitants could overcome the limits of their locally available resources that were imposed on them by local ecology and economy.

Before we further contextualise the finds from Çukuriçi, let us consider a few ethnographic insights concerning metalworking. First, it has already been shown that metalworking can be associated with any type of social organisation. Smiths and metalworkers may exist in both decentralised and centralised socio-political settings (Rowlands, 1971). Therefore, since the emergence of centralised chiefdoms is not associated with any particular technological innovation (Service, 1962: 114), we must not immediately associate metalworking societies with centralised/chiefdom social organisations. Second, as a whole, smiths and metalworkers at Çukuriçi may not necessarily be associated with a superior social status, as inferred from EBA 1 Poliochni. For example, in the tribal contexts of western and south Asian ethnographic accounts, smiths were commonly associated with a marginal and/or inferior status (Dostal, 1983: 50). Third, metalworking centres are not only associated with a centralised socio-political organisation and full-time metalworking expertise. Metalworking centres, or what has been described as *handwerk center* in the province of 'Asīr (Dostal, 1983) in South Arabia, may exist in decentralised socio-political contexts in which metalworkers residing within such *handwerk center(s)* are part-time specialists. A type of craft integration, in which most of the local households participate and produce for both local consumption and regional exchange, has recently been addressed as a 'generalized craft integration' (Cveček, in press).

Following these insights, a comparable setting to EBA 1 Çukuriçi, where regional centres specialise in the production of objects for both local consumption and regional exchange, has been documented in the Papua New Guinean highland fringe. There, Baruya, a great man society, represents a model of

socio-political organisation that we consider to be a version of non-state, heterarchical society that may complement our understanding of the socio-political organisation during the EBA 1 period at Çukuriçi. Based on the example of Çukuriçi, we argue that multiple modes of socio-political organisation co-existed at the dawn of the Bronze Age in western Anatolia.

A dialectical correspondence between a great man society and heterarchy

To establish a dialectical correspondence between a great man society model of social organisation and heterarchy, we must translate and find the connection between two foreign scientific concepts. In establishing the relationship between the two, we will first consider heterarchy, then great man society, and, finally, highlight the trait of temporarily hierarchical relations between units that cross-cut these two concepts.

Etymologically speaking, heterarchy comes from the Greek words *heteros*, the other, and *archein*, to rule (Beekes, 2010: 261). The earliest academic use of ‘heterarchy’ as a scientific concept was in cybernetics, to describe a non-hierarchical relationship or differently hierarchical relationship between the left and right sides of the brain (McCulloch, 1945).⁶ Later, the concept was successfully borrowed into social sciences to describe systems of human relations, in which heterarchy is not an antithesis to hierarchy. Instead, heterarchy is “in a dialectical relationship with hierarchy (where elements are ranked)’ and can be ‘useful as an abstract model or in a narrative...of self-organization in complex systems” (Crumley, 2015: 1-2). Concerning human societies, Crumley (2015) uses the term ‘complex systems’ to refer to the so-called ‘complex’ societies, such as chiefdoms and states that are conventionally perceived to be “ranked or hierarchical, despite archaeological and ethnographic evidence that economic, political, and social power takes many complex forms that are not entirely hierarchical, even in nation-states” (Crumley, 2015: 4).

Specifically for socio-cultural anthropologists and archaeologists, Carole L. Crumley developed a more general definition in which heterarchy is defined as “the relation of elements to one another when they are unranked, or when they possess the potential for being ranked in a number of different ways, depending

6 For a detailed discussion of the original use of ‘heterarchy’ by Warren S. McCulloch, see von Goldammer, Paul and Newbury, 2003.

on systemic requirements” (Crumley, 1979: 144 cited in Crumley, 2015: 2). This conception allows for the more general usage of the term, beyond chiefdoms and states.⁷

The concept of heterarchy and heterarchical relations may correspond dialectically to the socio-political model of a great man society (Godelier, 1986; Godelier and Strathern, 1991).⁸ In socio-cultural anthropology, a ‘great man society’ refers to a socio-political model of non-state social organisation that lacks a formalised government, different from chiefdoms or big man societies (Godelier and Strathern, 1991). The model of great man society was initially inferred from the Baruya, residing in the Papua New Guinean highland fringe (Godelier, 1986). Among the Baruya, the accumulation of wealth did not determine their reproduction (Godelier, 1986), which was the case for their neighbours, Mae-Enga, Kayka Melpa, and Mendi, who were so-called big-man societies (Sahlins, 1963). Crucial for local reproduction and everyday life among the Baruya was the achieved status and the accumulation of personal prestige based on their skills. Becoming a great warrior, a great hunter, or a great crafts-person (such as a salt maker) were prestigious roles in the local community that could be achieved by every Baruya man. These roles and skills were not accumulated within one person or household, but were acquired and held by different persons in the community.

Within a great man society, persons with distinct skills and roles in the local community were not conspicuous persons in everyday life. For example, among the Baruya, the great salt maker, locally known as *tsaimaye*, needed to hunt and farm like everyone else. For the *tsaimaye* separated himself from ‘everyday life’ only during the five days and five nights each year when he needed to watch the fire in the oven to produce salt from the salt plants growing in Baruya territory (Godelier, 1986: 132). The special skills *tsaimaye* possessed did not entitle a *tsaimaye* and his family to acquire more salt than others or to gain any decision-making powers that could affect the local community. What *tsaimaye* gained was a personal prestige that was enduring, but could not be translated into either material wealth or decision-making powers. Among the Baruya, however,

7 Heterarchy has been already extended to refer to the decentralised, household-based, anarchic form of resistance to centralisation within the archaeological and ethnographic accounts of Pacific Northwest Coast societies. See: Angelbeck & Grier 2012.

8 In this model, ‘great women’ – not mentioned in the name of the model – do not passively and fully comply with male domination, but also resist and negotiate their way regarding gender inequality.

temporarily ranked social positions, such as *tsaimaye*, co-existed with the underlying, more permanent hierarchies between genders and age groups, while the society lacked any permanent, centralised decision-making power.

Now, let us consider a dialectical correspondence between great man society and heterarchy. If heterarchy refers to systems where elements “possess the potential for being ranked in a number of different ways, depending on systemic requirements” (Crumley, 1979: 144) cited in Crumley, 2015: 2), then the example of the *tsaimaye* among the Baruya perfectly corresponds to this description. If we break it down to temporal and socio-political spheres of life, then a *tsaimaye* was a ‘common man’ in everyday life. Like other men in the community, he was a hunter and a farmer, not fully relying on his salt-making skills for his reproduction. A *tsaimaye* was not a full-time specialist. The systemic requirement of Baruya society, however, was for *tsaimaye* to watch over the fire and to oversee the production of salt bars for five days each year, since the Baruya relied on the exchange of salt bars to acquire necessary goods from outside their territory (Godelier, 1986). This has given *tsaimaye* personal prestige and a special, temporary rank that does not translate into other spheres of social, political, or material life.

The flexibility of Baruya social organisation bears similarities with the heterarchy in that it allowed the elements – in this case, persons with special skills – to be unranked or ranked in several different ways, depending on the season and the requirement for special tasks. Through these cycles of ranked, unranked, and re-ranked positions, the Baruya organised themselves on the principles of heterarchy as an underlying principle of self-organisation in great man societies between members of the same gender. Heterarchy among the Baruya, however, co-existed with permanent hierarchies between men and women and the permanently ranked domination of men over women.

If we are to translate this model to the archaeological data, then at a local scale – a settlement-wide setting – a society corresponding to a great man society or heterarchical society may be comprised of minimal differences between houses in terms of household activities and material goods. Such a setting can be inferred from the EBA 1 settlement of Çukuriçi. The archaeological record at Çukuriçi points towards the generalised sharing of goods including meat, metalworking knowledge, and resources between houses and households. This,

however, does not exclude competition between them. At Çukuriçi, differences between households may be visible in the amount rather than the kind of goods,⁹ although sharing between households may not have implied equal sharing and equal status of persons within a household.

On a regional scale, the heterarchical social organisation may include centres of specialisation. For example, the Baruya were known for the production of salt bars that were produced from ‘salt plants’ growing on their territory. Baruya exchanged the salt bars for stone axes that were necessary for everyday life, yet were not available on their territory. In the case of Çukuriçi, known for its arsenical-copper production, inhabitants were not self-sufficient but needed to procure the obsidian, tin, and other non-locally available goods and materials necessary for everyday life.

On a regional scale, as these ‘centres of specialisation’ are co-dependent on each other, and do not imply a centralised socio-political organisation and a permanent ranked position of such ‘centres of specialisation’. For example, Baruya’s neighbours included both ‘big man societies’ to the south and chiefdoms to the east. Despite their different socio-political organisation, these societies relied on each other for access to tools and objects that were necessary for their everyday and ritual life but were not available on their local territories.

Such ‘centres of specialisation’ may be unranked or ranked in several different ways. For example, within the same region, three settlements may be of the same size, but draw their importance from different realms: one is known for the production of salt bars, the second one for the production of stone axes, and the third one is home to birds whose feathers are necessary for ritual contexts. In the case of EBA 1 western Anatolia, Poliochni Blue, Troy I, and Çukuriçi IV–III represent such ‘centres of specialisation’ and were co-dependent and ranked in several different ways. Despite their shared architectural and pottery styles, as well as the size of the settlement, the chiefly village of Poliochni Blue hosted an important hub for metal trade and had a chief, Troy I with its egalitarian ethos occupied an important, strategic position, and the EBA 1 site of Çukuriçi IV–III, as a great man society, was the principal arsenical-copper production site in western Anatolia (see Fig. 6 for the model of the socio-political organization as

⁹ A ‘great man society’ settlement may also contain a ritual house that may differ from other houses in their household activities, material goods, and/or architectural setting. For example, the Baruya ritual house was larger in size than other houses and contained sacred objects, such as flutes, that were not found in other households. See: Godelier, 1986.

inferred from Çukuriçi).

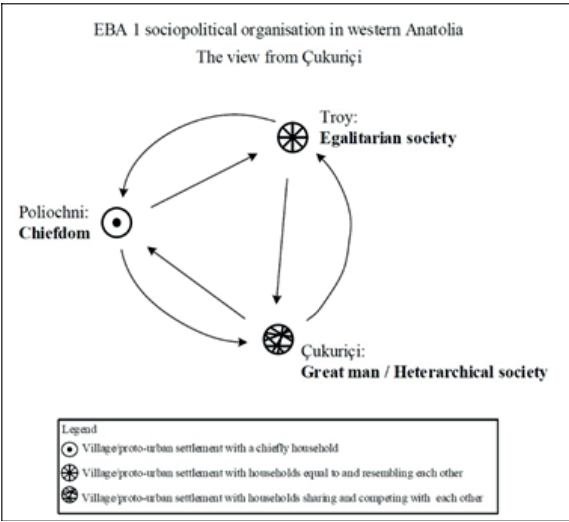


Fig. 6: EBA 1 heterarchical social organisation in western Anatolia in which different types of socio-political organisation co-exist and co-depend on each other; the model of Çukuriçi Höyük developed by the authors.

The evidence from Çukuriçi indicates that coastal western Anatolia was ‘one socio-economic region’ during the EBA 1 period. The shared material culture (shared pottery and architectural styles, stone tools, etc.) and economic interactions (obsidian, metal exchange) between these sites have already been interpreted as forming the so-called EBA 1 eastern Aegean and western Anatolian cultural koine (Kouka, 2002: 2016a). This ‘one’ socio-economic region or cultural koine, however, included societies with the different socio-political organisation: decentralised forms resembling a ‘great man society’ (at Çukuriçi), a supposedly ‘egalitarian society’ (at Troy I), as well as a centralised chiefdom (at Poliochni Blue). In sum, a version of the chiefdom, as such an ‘eternal model’, could have co-existed with other, decentralised models of socio-political organisation at the dawn of the Bronze Age in western Anatolia (e. g., a great man society). Interestingly, among the three EBA 1 western Anatolian/eastern Aegean sites compared here, the chiefly site of Poliochni, unlike the two others, is an island site. This evidence hints towards a possibility that either environmental or social circumscription (Carneiro, 1988; 2012) might have played a role in

the emergence of chiefdoms on the Aegean islands, a topic that could be further explored.

Conclusion

Based on the controlled comparison with a non-Anatolian case study to interpret the EBA 1 layers at Çukuriçi, we have shown that a ‘great man society’ or a ‘heterarchical’ social organisation can be inferred for this site. Households at Çukuriçi shared their knowledge and goods, but metalworkers could occupy different ranks in terms of skills and expertise as shown through an ethnographic account of the Baruya. The view from Çukuriçi complements the understanding of the socio-political organisation at the dawn of the Bronze Age in western Anatolia. The record at Çukuriçi does not fit either the ‘eternal model’ of chiefdom that has been supported for EBA 1 Poliochni Blue or the ‘egalitarian’ society as inferred for Troy I. EBA 1 Poliochni Blue, Troy I, and Çukuriçi provide evidence for regional homogeneity that can be inferred from shared material culture, technologies, and settlement organisation. At the same time, house-based assemblages and household activities support different socio-political organisations at each site: chiefdom at Poliochni, a hypothetically ‘egalitarian society’ at Troy I, and ‘great man society’ or a ‘heterarchical’ social organisation at Çukuriçi.

Regional variability in terms of the socio-political arrangements at these sites supports a regional heterarchical organisation, in which the three EBA 1 sites (among others) could be ranked in several different ways: whereas Poliochni Blue hosted an important hub for metal trade and a chief, Troy I with its hypothetically egalitarian ethos occupied an important, strategic position, and Çukuriçi IV–III was an important arsenical-copper production site in western Anatolia. Heterarchy is not a socio-political model to be extended from Çukuriçi to the wider region: it was a structure and a condition under which different models of socio-political organisation co-existed – through the mixed regional economy – at the dawn of the Bronze Age in western Anatolia.

As our contribution has shown, based on the controlled comparison, modern, non-Anatolian ethnographic examples can help us to shed new light on the socio-political organisation of prehistoric Anatolian communities. A direct

historical analogy between the archaeological and ethnographic records in Anatolia remains useful for the contextualisation of prehistoric subsistence practices and certain aspects of material culture. Simultaneously, non-Anatolian case studies may help us to better understand prehistoric socio-political organisations in Bronze Age Anatolia that cannot be understood through Anatolian ethnographic and historical accounts alone.

Acknowledgements

This contribution is based on research funded by DOC-team (70291), Post-DocTrack (85076), and the ATHENS fellowship of the Austrian Academy Sciences (OeAW), Vienna, Austria (Sabina Cveček). The excavation at Çukuriçi Höyük was funded by the Austrian Science Fund FWF (FWF P-19856; P-25199; Y-528) and the European Research Council (ERC grant no. 263339) project ‘From Sedentism to Proto-Urban Societies in Western Anatolia’ (Barbara Horejs). The authors would like to thank Andre Gingrich for helpful feedback on the earlier draft of this article, Sinead O’Sullivan for language editing, Christoph Schwall for creating Fig. 1, and Aneeq Mahmood for digitalizing Fig. 2, 3, and 6. Last but not least, we are very thankful to the editors for their kind invitation to contribute to this edited volume.

References

- Angelbeck, B., & Grier, C. (2012). Anarchism and the Archaeology of Anarchic Societies: Resistance to Centralization in the Coast Salish Region of the Pacific Northwest Coast. *Current anthropology*, 53 (5), 547-587.
- Aslan, R., & Blum, S. (2004). Darı Köy: Ethnoarchaeological investigation into emergence of archaeological variability. In T. Takaoğlu (Ed.), *Ethnoarchaeological investigations in rural Anatolia* (pp. 127-144). Ege Yayınları.
- Beekes, R. (2010). *Etymological Dictionary of Greek*. Brill.
- Britsch, C. (2018). „Early Textile Technologies in the Anatolian-Aegean World“: *From Neolithic to Early Bronze Age*. University of Vienna. PhD dissertation.
- Carneiro, R. (1988). The Circumscription Theory: Challenge and Response. *The American Behavioral Scientist*, 31 (4), 497-511.
- Carneiro, R. (2012). The Circumscription Theory: A Clarification, Amplification, and Reformulation. *Social Evolution & History*, 11 (2), 5-30.
- Çevik, A. (1995). Social meanings of household spaces. *Archaeological Dialogues*, 2, 39-50.
- Childe, G. (1930). *The Bronze Age*. Cambridge University Press.
- Childe, V. G. (1950). The Urban Revolution. *The Town Planning Review*, 21 (1), 3-17.
- Collier, J. F., & Yanagisako, S. J. (1987). Introduction. In J. F. Collier & S. J. Yanagisako (Eds.), *Gender and Kinship: Essays Toward a Unified Analysis*. (pp. 1-13) Stanford University Press.
- Crumley, C. L. (1995). Heterarchy and the Analysis of Complex Societies. In R. M. Ehrenreich, C. L. Crumley, & R. J. Levy (Eds.), *Heterarchy and the Analysis of Complex Societies* (pp. 1-5). Archaeological Papers of the American Anthropological Association 6.
- Crumley, C. L. (2015). Heterarchy. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging Trends in the Social and Behavioral Sciences* (pp. 1-14). John Wiley & Sons Inc. <https://doi.org/10.1002/9781118900772.etrds0158>
- Crumley, C. L. (2016). Remember How to Organize: Heterarchy Across Disciplines. In C. S. Beekman & W. W. Baden (Eds.), *Nonlinear Models*

- for *Archaeology and Anthropology: Continuing the Revolution* (pp. 35-51). Routledge.
- Cunningham, J. J., & MacEachern, S. (2016). Ethnoarchaeology as slow science. *World archaeology*, 48 (5), 628-641.
- Cveček, S. (2020). Throwing their weights around? Anthropological perspectives on commodity and gift exchange at the dawn of the early bronze age in western Anatolia. *Ägypten und Levante*, 30, 283-300.
- Cveček, S. (in press). Çukuriçi Höyük 4: Household economics in Early Bronze Age Aegean. OREA, Austrian Academy of Sciences Press.
- Cveček, S., & Emra, S. (in press). Rhythms of seasonal taskscape at Early Bronze Age Çukuriçi Höyük. *Tijdschrift voor Mediterrane Archeologie*.
- Divale, W. (1977). *Living Floor Area and Marital Residence: A Replication* (Vol. 12). <https://doi.org/10.1177/106939717701200202>
- Divale, W., & Witkowski, S. R. (1996). Kin Groups, Residence, and Descent. In D. Levinson & M. Ember (Eds.), *Encyclopedia of Cultural Anthropology* (pp. 673-679). Henry Holt and Company.
- Dostal, W. (1971). *Alacahöyük: ethnographische Skizzen eines anatolischen Dorfes; Ergebnisse einer Feldübung des Seminars für Ethnologie der Universität Bern*. Bernisches Historische Museum.
- Dostal, W. (1983). Carpenters and Blacksmiths. In W. Dostal (Ed.), *Ethnographic Atlas of 'Asir: Preliminary Report* (pp. 49-61). Austrian Academy of Sciences Press.
- Earle, T., Ling, J., Uhnér, C., Stos-Gale, Z., & Melheim, L. (2015). The Political Economy and Metal Trade in Bronze Age Europe: Understanding Regional Variability in Terms of Comparative Advantages and Articulations. *European Journal of Archaeology*, 18 (4), 633-657.
- Earle, T. K. (2002). *Bronze Age Economics: The Beginnings of Political Economies*. Westview Press.
- Ember, M. (1973). An Archaeological Indicator of Matrilocal versus Patrilocal Residence. *American Antiquity*, 38 (2), 177-182.
- Emra, S., Galik, A., & Forstenpointner, G. (2020). On the culling room floor: Butchery waste from the Early Bronze Age site of Çukuriçi Höyük. *Journal of Archaeological Science: Reports*, 30, 102253.
- Eslick, C. (1988). Hacilar to Karataş: Social Organization in South-western

- Anatolia. *Mediterranean Archaeology*, 1, 1-40.
- Fewster, K. (2013). The Relationship between Ethnoarchaeology and Archaeologies of the Contemporary Past: A Historical Investigation. In P. Graves-Brown, R. Graves-Brown, & A. Piccini (Eds.), *The Oxford Handbook of the Archaeology of the Contemporary World* (pp. 27-39). Oxford University Press.
- Fried, M. H. (1967). *The evolution of political society: An essay in political anthropology*. Random House.
- Friedman, J., & Rowlands, M. J. (1977). Notes towards Epigenetic Model of the Evolution of "Civilization". In J. Friedman (Ed.), *The Evolution of Social Systems* (pp. 201-276). Duckworth.
- Gingrich, A. (2012). Comparative Methods in Socio-cultural Anthropology Today. In R. Fardon, O. Harris, T. H. J. Marchand, M. Nutall, C. Shore, Strang, Veronica, & R. A. Wilson (Eds.), *The SAGE Handbook of Social Anthropology* (Vol. 2, pp. 201-214).
- Gingrich, A. (2017). Rock art from west and South West Arabia: Socio-cultural anthropology's insights for the region's eastern transition zones. *Mediterranean Archaeology and Archaeometry*, 17 (4), 61-73.
- Gingrich, A., & Schweitzer, P. (2014). Barter and subsistence: Insights from social anthropology for Anatolia's prehistory. In C. Wawruschka (Ed.), *Prehistoric Economics of Anatolia; Subsistence Practices and Exchange (Proceedings of a Workshop held at the Austrian Academy of Sciences in Vienna, November 13-14 2009)* (pp. 27-31). Marie Leidorf Verlag.
- Godelier, M. (1986). *The Making of Great Men: Male Domination and Power Among the New Guinea Baruya*. Cambridge University Press.
- Godelier, M., & Strathern, M. (Eds.). (1991). *Big men and great men: personifications of power in Melanesia*. Cambridge University Press.
- Gosselain, O. P. (2016). To hell with ethnoarchaeology. *Archaeological dialogues*, 23 (2), 215-228.
- Grasböck, S., Bratschi, T., Horejs, B., & Schwall, C. (Eds.). (forthcoming). Çukuriçi Höyük. Stratigraphie und Architektur der frühbronzezeitlichen Siedlungsphasen ÇuHö IV und III. OREA, Austrian Academy of Sciences Press.

- Heady, P., & Yalçın-Heckmann, L. (2020). Implications of Endogamy in the Southwest Eurasian Highlands: Another look at Jack Goody's theory of production, property and kinship. *History and Anthropology*, 31 (2), 257-281.
- Horejs, B. (2016). Neue Gewichtssysteme und metallurgischer Aufschwung im frühen 3. Jahrtausend – ein Zufall? In M. Bartelheim, B. Horejs, R. Krauß, & E. Pernicka (Eds.), *Von Baden bis Troia: Ressourcennutzung, Metallurgie und Wissenstransfer: eine Jubiläumsschrift für Ernst Pernicka* (pp. 251-272). Verlag Marie Leidorf GmbH.
- Horejs, B. (2017). The Çukuriçi Höyük Research Project. In B. Horejs (Ed.), *Çukuriçi Höyük 1: Aegean-Anatolian Studies from 7th to 3rd millennium BC. OREA 5* (pp. 11-26).
- Horejs, B., Galik, A., Thanheiser, U., & Wiesinger, S. (2011). Aktivitäten und Subsistenz in den Siedlungen des Çukuriçi Höyük: Der Forschungsstand nach den Ausgrabungen 2006-2009. *Praehistorische Zeitschrift*, 86 (1), 31-66.
- Horejs, B., & Mehofer, M. (2015). Early Bronze Age metal workshops at Çukuriçi Höyük: Production of arsenical copper at the beginning of the 3rd millennium BC. In A. Hauptmann & D. Modarressi-Tehrani (Eds.), *Archaeometallurgy in Europe III: Proceedings of the 3rd International Conference Deutsches Bergbau-Museum Bochum* (pp. 165-176). Vereinigung der Freunde von Kunst und Kultur im Bergbau e. V.
- Horejs, B., Mehofer, M., & Pernicka, E. (2010). Metallhandwerker im frühen 3. Jt. v. Chr.-Neue Ergebnisse vom Çukuriçi Höyük/Westtürkei. *Is-tanbuler Mitteilungen*, 60 (2010), 7-37.
- Horne, L. (1994). *Village Spaces: Settlement and society in Northeastern Iran*. Smithsonian Institution Press.
- Hrnčič, V., Duda, P., Šaffa, G., Května, P., & Zrzavy, J. (2020). Identifying post-marital residence patterns in prehistory: A phylogenetic comparative analysis of dwelling size. *PLoS ONE*, 15, e0229363. <https://doi.org/10.1371/journal.pone.0229363>
- Ivanova, M. (2013). Domestic architecture in the Early Bronze Age of western Anatolia: the row-houses of Troy I. *Anatolian Studies*, 63, 17-33.
- Ivanova, M. (2016). Stratigraphy and Architecture of Troy I: the Excavations in

- »Schliemann's Trench. In E. Pernicka, S. Ünlüsoy & S. W. Blum (Eds.), *Early Bronze Age Troy: Chronology, Cultural Development and Interregional Contacts* (pp. 39-48). Dr. Rudolph Habelt Verlag.
- Knitter, D., Blum, H., Horejs, B., Nakoinz, O., Schütt, B., & Meyer, M. (2013). Integrated centrality analysis: A diachronic comparison of selected Western Anatolian locations. *Quaternary International*, 312, 1-12.
- Kouka, O. (2002). *Siedlungsorganisation in der Nord-und Ostägäis während der Frühbronzezeit (3. Jt. v. Chr.)*. Verlag Marie Leidorf GmbH.
- Kouka, O. (2016a). The Built Environment and Cultural Connectivity in the Aegean. In B. P. C. Molloy (Ed.), *Of Odysseys and Oddities: Scales and modes of interaction between prehistoric Aegean societies and their neighbours* (Vol. 203-224). Oxbow Books.
- Kouka, O. (2016b). The Embodiment of Land Ownership in the Aegean Early Bronze Age. In M. Mina, S. Triantaphyllou, & G. Papadatos (Eds.), *Embodied Identities in the Prehistoric Eastern Mediterranean: Convergence of Theory and Practice* (pp. 129-135). Oxbow Books.
- Lyons, D., & David, N. (2019). To Hell with Ethnoarchaeology. . . and Back. *Ethnoarchaeology*, 11 (2), 99-133.
- McCulloch, W. S. (1945). A heterarchy of values determined by the topology of nervous nets. *The Bulletin of Mathematical Biophysics*, 7 (2), 89-93.
- Mehofer, M. (2014). Metallurgy during the Chalcolithic and the Beginning of the Early Bronze Age in Western Anatolia. In Mehofer & Horejs (Eds.), *Western Anatolia before Troy – Proto-Urbanisation in the 4th millennium BC* (pp. 463–490). OREA 1. Austrian Academy of Sciences Press.
- Mehofer, M. (2015). *Metallverarbeitung im 4. und 3. Jt. v. Chr. in Westanatolien, Späthalkolithische und frühbronzezeitliche Metallurgie auf dem Çukuriçi Höyük*. University of Tübingen. PhD dissertation.
- Mehofer, M., & Horejs, B. (2011). Early Bronze Age Metal Workshops at Çukuriçi Höyük – Production of arsenical copper at the beginning of the 3rd millenium BC. In A. Hauptmann & D. Modarressi-Tehrani (Eds.), *Archaeometallurgy in Europe III, Proceedings of the 3rd International Conference, Deutsches Bergbau-Museum Bochum, 29th of June – 1st of July 2011* (pp. 165–176). Der Anschnitt Beih. 26.

- Mina, M. (2018). Casting doubts on metallurgy and the transition to social complexity: The evidence from the Aegean. In S. Dietz, F. Mavridis, Ž. Tankosić , & T. Takaoğlu (Eds.), *Communities in Transition. The Circum-Aegean Area During the 5th and 4th Millennia BC* (pp. 67-74). Oxbow books.
- Mutlu, S. (2021). Bozköy’de Kadın ve Erkeğin Mekân Kullanımında Toplumsal Cinsiyet Rollerini: Etnoarkeolojik Bir Yaklaşım. *TroyAcademy*, 6, 90-136.
- Parkin, R. ([1997] 2003). *Kinship: an introduction to basic concepts*. Blackwell Publishing.
- Peloschek, L. (2017). Social Dynamics and the Development of New Pottery Signatures at Çukuriçi Höyük, 7th to 3rd Millennium BC. In B. Horejs (Ed.), *Çukuriçi Höyük 1: Anatolia and the Aegean from the 7th to the 3rd Millennium BC* (Vol. 5, pp. 125-137). Austrian Academy of Sciences.
- Peperaki, O. (2007). *Complexity, power and “associations that matter”: rethinking social organisation in the Early Bronze Age 2 mainland Greece*. University of Sheffield. PhD dissertation.
- Peregrine, P. N. (1996). Ethnology Versus Ethnographic Analogy: A Common Confusion in Archaeological Interpretation. *Cross-Cultural Research*, 30 (4), 316-329.
- Peregrine, P. N. (2001). Cross-cultural comparative approaches in archaeology. *Annual Review of Anthropology*, 30, 1-18.
- Porčić, M. (2010). House Floor Area as a Correlate of Marital Residence Pattern: A Logistic Regression Approach. *Cross-cultural research*, 44 (4), 405-424.
- Pullen, D. J. (1985). *Social organization in early Bronze Age Greece: a multi-dimensional approach*, Indiana University. PhD dissertation.
- Pullen, D. J. (2011a). Measuring levels of integration and social change in Neolithic and Bronze Age Aegean societies: from chiefdoms to proto-states. In N. Terrenato & D. C. Haggis (Eds.), *State Formation in Italy and Greece: Questioning the Neoevolutionist Paradigm* (pp. 75-118). Oxbow Books.
- Pullen, D. J. (2011b). Redistribution in Aegean Palatial Societies. Before the

- Palaces: Redistribution and Chiefdoms in Mainland Greece. *American Journal of Archaeology*, 115 (2), 185-195.
- Rainville, L. (2003). Review of *Ethnoarchaeology of Anatolia: Rural Socio-Economy in the Bronze and Iron Ages*, by J. Yakar. 46 (2), 237-239.
- Renfrew, C. ([1972] 2011). *The emergence of civilisation. The Cyclades and the Aegean in the third millennium BC*. Oxbow Books.
- Renfrew, C., Todd, I., & Tringham, R. (1974). Beyond a Subsistence Economy: The Evolution of Social Organization in Prehistoric Europe. *Bulletin of the American Schools of Oriental Research. Supplementary Studies* (20), 69-95.
- Rowlands, M. J. (1971). The archaeological interpretation of prehistoric metal-working. *World Archaeology*, 3 (2), 210-224.
- Röcklinger, M. (2015). *Die frühbronzezeitliche Keramik vom Çukuriçi Höyük. Kontextuelle Analysen zur Gefäßkeramik der Phase ÇuHö III* [University of Vienna]. Unpublished MA Thesis.
- Sahlins, M. D. (1960). Evolution: Specific and General. In M. Sahlins & E. R. Service (Eds.), *Evolution and Culture*. The University of Michigan Press.
- Sahlins, M. D. (1963). Poor Man, Rich Man, Big-man, Chief: Political Types in Melanesia and Polynesia. *Comparative Studies in Society and History*, 5 (3), 285-303.
- Sahlins, M. D. (1968). *Tribesmen*. Prentice-Hall.
- Şahoğlu, V. (2005). The Anatolian Trade Network and the Izmir Region During the Early Bronze Age. *Oxford Journal of Archaeology*, 24 (4), 339-361.
- Schwall, C., Brandl, M., Gluhak, T. M., Milić, B., Betina, L., Sørensen, L., . . . Horejs, B. (2020). From near and far: Stone procurement and exchange at Çukuriçi Höyük in Western Anatolia. *Journal of Lithic Studies*, 7 (3), 25p. <https://doi.org/10.2218/jls.3093>
- Service, E. R. (1962). *Primitive social organization: An evolutionary perspective*. Random House.
- Service, E. R. (1971). *Cultural evolutionism: theory in practice*. Holt, Rinehart & Winston.
- Steward, J. H. (1955). *Theory of culture change: The methodology of multilinear evolution*. University of Illinois Press.

- Stirling, P. (1965). *Turkish village*. Wiedenfield and Nicolson.
- Stock, F., Ehlers, L., Horejs, B., Knipping, M., Ladstätter, S., Seren, S., & Brückner, H. (2015). Neolithic settlement sites in Western Turkey — palaeogeographic studies at Çukuriçi Höyük and Arvalya Höyük. *Journal of Archaeological Science: Reports*, 4 (Supplement C), 565-577.
- Verderya, A. M., Entwislea, B., Faustb, K., & Rindfussc, R. R. (2012). Social and spatial networks: Kinship distance and dwelling unit proximity in rural Thailand. *Social Networks*, 34, 112-127.
- von Goldammer, E., Paul, J., & Newbury, J. (2003). *Heterarchy-Hierarchy: Two complementary categories of description*. http://www.vordenker.de/heterarchy/a_heterarchy-e.pdf.
- Weinstein, M. (1973). Household Structures and Activities. *Anatolian Studies* 23, 271-276.
- Wengrow, D., & Graeber, D. (2015). Farewell to the ‘childhood of man’: ritual, seasonality, and the origins of inequality. *Journal of the Royal Anthropological Institute*, 21 (3), 597-619.
- Whiteley, P. M. (2018). *Puebloan societies: homology and heterogeneity in time and space*. School for Advanced Research Press; University of New Mexico Press.
- Wilkinson, T. J. (2001). Review of *Ethnoarchaeology of Anatolia: Rural Socio-Economy in the Bronze and Iron Ages*, by J. Yakar. *Bulletin of the American Schools of Oriental Research*, 322, 85.
- Wittfogel, K. A. (1976). *Oriental Despotism: A Comparative Study of Total Power*. Yale University Press.
- Yakar, J. (2000). *Ethnoarchaeology of Anatolia: rural socio-economy in the Bronze and Iron Ages*. Emery and Claire Yass Publications in Archaeology.
- Yakar, Y. (1998). Were the EBA inhabitants of Karataş/Semayük semi-sedentary?—an ethnoarchaeological view In G. Arsebük, M. J. Mellink, & W. Schirmer (Eds.), *Light on top of the black hill: Studies presented to Halet Çambel* (pp. 811-822). Ege Yayınları.
- Yalman, N. (2013). Evaluating and Establishing Ethnoarchaeological Theory for Anatolia. In A. Marciniak & N. Yalman (Eds.), *Contesting Ethnoarchaeologies: Traditions, Theories, Prospects* (pp. 125-143). Springer New York.
- Yalçın-Heckmann, L. (1991). *Tribe and kinship among the Kurds*. Lang.