

At the North-Eastern Anatolian frontier: a project gallery

Giulio Palumbi

▶ To cite this version:

Giulio Palumbi. At the North-Eastern Anatolian frontier: a project gallery. Context and Connection. Essays on the Archaeology of the Ancient Near East in Honour of Antonio Sagona, Peeters, 2018. hal-03475579

HAL Id: hal-03475579 https://hal.science/hal-03475579

Submitted on 11 Dec 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés. This pdf is a digital offprint of your contribution in A. Batmaz, G. Bedianashvili, A. Michalewicz & A. Robinson (eds), *Context and Connection: Essays on the Archaeology of the Ancient Near East in Honour of Antonio Sagona*, ISBN 978-90-429-3403-0.

The copyright on this publication belongs to Peeters Publishers.

As author you are licensed to make printed copies of the pdf or to send the unaltered pdf file to up to 50 relations. You may not publish this pdf on the World Wide Web – including websites such as academia.edu and open-access repositories – until three years after publication. Please ensure that anyone receiving an offprint from you observes these rules as well.

If you wish to publish your article immediately on openaccess sites, please contact the publisher with regard to the payment of the article processing fee.

For queries about offprints, copyright and republication of your article, please contact the publisher via peeters@peeters-leuven.be ORIENTALIA LOVANIENSIA ANALECTA _____ 268 _____

CONTEXT AND CONNECTION

Studies on the Archaeology of the Ancient Near East in Honour of Antonio Sagona

edited by

ATILLA BATMAZ, GIORGI BEDIANASHVILI, ALEKSANDRA MICHALEWICZ and ABBY ROBINSON



PEETERS LEUVEN – PARIS – BRISTOL, CT 2018

PREFACE	XI
Acknowledgements	XV
AUTHOR BIOGRAPHIES	XVII

REFLECTIONS

Medea Menabde	3
Altan Çilingiroğlu	5
Christopher MACKIE	7
Charles Burney	9

CULTURAL CONNECTIONS

Mehmet ÖZDOĞAN Some considerations on the emergence of Neolithic way of life in the Caucasus	15
Catherine MARRO and Yasemin YILMAZ The infant jar-burials from the Late Chalcolithic village of Ovçular Tepesi (Nakhchivan, Azerbaijan): A Mesopotamian tradition?	29
Tufan AKHUNDOV The South Caucasus on the threshold of the metal age	49
Giorgi Leon KAVTARADZE Some problems concerning the chronology of Late Neolithic–Early Metal Age cultures of Caucasia	77
Evgenij N. CHERNYKH The Caucasus in the system of the circumpontic metallurgical province: The bridge between the south and north	93
Marilyn KELLY-BUCCELLATI Urkesh insights into Kura-Araxes social interaction	107
Mitchell S ROTHMAN Modelling the Kura-Araxes cultural tradition	125
Louise A. HITCHCOCK and Aren M. MAEIR Fifteen men on a dead Seren's chest: Yo ho ho and a krater of wine	147

Aynur ÖZFIRAT Nairi Ware: A Late Bronze to Early Iron Age pottery tradition in the Lake Van Basin	161
Roderick WHITE Power vacuums, adaptation and settlement: A computer model of Early Iron Age settlement patterns in northern Syria	175
Kemalettin Köročlu Iron Age chronology in the Upper Tigris region and archaeological traces of	
the crisis in the Neo-Assyrian period Şevket Dönmez Early Zoroastrianism at Oluz Höyük, north-central Anatolia	

LANDSCAPE STUDIES

Bastien VAROUTSIKOS, Ana MGELADZE, Jwana CHAHOUD, Manana GABUNIA, Tamar AGAPISHVILI, Lucie MARTIN and Christine CHATAIGNER	
From the Mesolithic to the Chalcolithic in the South Caucasus: New data from the Bavra Ablari rock shelter	233
Arsen BOBOKHYAN, Alessandra GILIBERT and Pavol HNILA Karmir Sar: New evidence on dragon stones and ritual landscapes on Mount Aragats, Armenia	255
Eleonora CARMINATI Landscape management during the Early Kurgan period: The Bedeni plateau case study	271
Stephan KROLL Bastam in the Bronze Age	277
Jessie BIRKETT-REES Persistent places in the South Caucasus landscape	285
Giorgi KHABURZANIA and Abby ROBINSON Nature and local knowledge combine in powerful strongholds: Preliminary findings of the Archaeological Survey in Samtskhe-Javakheti project	303
Atilla BATMAZ Experiences of the Urartian kingdom with seismic activities: An attempt to reconstruct the earthquakes' effects	325
Lynn E. ROLLER Rock-cut monuments in the Rhodope Mountains: Gluhite Kamani and its neighbours	345
William ANDERSON The medieval afterlife of ancient mounds	359

VI

Michelle NEGUS CLEARY, Nikoloz TSKVITINIDZE, William ANDERSON, Damjan	
KRSMANOVIC and Jessie BIRKETT-REES	
Mapping the Vilayet of Gurjistan: The southern Caucasus highlands in the Late	
Medieval–Early Ottoman periods	381

ARTEFACTS AND ARCHITECTURE

Zurab MAKHARADZE Rich kurgans of the Early Bronze Age from eastern Georgia	409
Jarrad William PAUL Investigating the prehistoric worked bone and antler assemblage at Uğurlu, Gökçeada	449
Eşref A _{BAY} Some decorated bone objects from Beycesultan, Turkey	453
Andrew JAMIESON Long-stemmed vessels in the Euphrates River valley and evidence from an Early Bronze Age burial at Tell Qumluq, north Syria	465
Karen S. RUBINSON An inquiry into the Middle Bronze/Late Bronze transition in the South Caucasus: What does ceramic evidence say?	487
Mehmet Işıklı and Jan BAILEY The inanity of political borders in archaeology in light of a striking group of artefacts from the Turkish/Armenian borderland	499
Iulon GAGOSHIDZE and Elena ROVA New investigations at Aradetis Orgora, a multi-period centre in the Shida Kartli region in Georgia	521
Bertille LYONNET Rethinking the 'Sioni cultural complex' in the South Caucasus (Chalcolithic period): New data from Mentesh Tepe (Azerbaijan)	547
Giorgi BEDIANASHVILI Pottery from the Koban cemetery: Ernest Chantre's Late Bronze–Early Iron Age Caucasian collection	569
Geoffrey D. SUMMERS Burials of the Late Bronze Age and Iron Age at Yanik Tepe, northwestern Iran, excavated by Charles Burney	589
Paul ZIMANSKY The free-standing Urartian house	617

Özlem ÇEVIK The development of urbanism in Western Anatolia and the Aegean prior to the Late Bronze Age	620
	029
Altan ÇILINGIROĞLU A scale, a stele and a boiling cauldron on an Urartian sherd	645
Heather JACKSON An Egyptian at Hellenistic Jebel Khalid? A rare faience amulet	651
Giorgi MANJGALADZE Roman-period glazed ceramics in Georgia	661
Aleksandra MICHALEWICZ and Claudia SAGONA An example of the so-called 'Dancing Man' figures from the Samtavro burial ground in Georgia	671
SCIENTIFIC PARTNERSHIPS	
Simon CONNOR, Catherine LONGFORD and Ian THOMAS Prehistoric plant use and highland vegetation change in the Pasinler Valley, Eastern Anatolia	687
Peter Ian KUNIHOLM Dendrochronological investigations at Sos Höyük	711
Kakha KAKHIANI, Eliso KVAVAZE, Inga MARTKOPLISHVILI and Nino PATARIDZE Archaeological and palynological investigation of the Paravani kurgan, Georgia	721
Eliso KVAVADZE and Inga MARTKOPLISHVILI The significance of pollen and non-pollen palynomorphs in archaeological mate- rial for human paleodiet reconstruction	749
Marine CHKADUA Samtavro cemetery and the history of physical anthropology in Georgia	769
Natalie Langowski Dual subsistence strategies in first to sixth century AD Greater Mtskheta, Georgia	775
Peter MAYALL Intentionally modified crania at Samtavro	779
Luka PAPAC, Bastien LLAMAS, Alan COOPER, Varsha PILBROW and Wolfgang HAAK Preliminary ancient DNA screening results from first to eighth century AD sites in Samtavro and Tchkantiskedi, Georgia	783

Varsh	na Pilbrow										
	Establishing	the	global	affinities	of	the	Samtavro	population	through	dental	
	traits	•••									787

VIII

RETROSPECTIVES AND OVERVIEWS

Giulio PALUMBI At the northeastern Anatolian frontier: A project gallery	801
Veli SEVIN A new fortress on the western frontiers of the Urartian kingdom	819
M. Taner TARHAN The mysteries of the Urartian capital city Tušpa	827
Jan-Krzysztof BERTRAM and Gülçin Ilgezdi BERTRAM The later prehistory of the Ankara region	847
Vakhtang NIKOLAISHVILI Greater Mtskheta	867
Gela GIUNASHVILI The history of investigation of the Samtavro valley and its importance to the archaeology of the Caucasus	891
Holly JONES-AMIN Archaeological ceramics conservation	911
Oscar WHITE MUSCARELLA Chasing museums	927
Andrea Argirides The protection of archaeological and cultural heritage in conflict zones: The case for Iraq	939
Ronald T. RIDLEY Where archaeology meets history: The enigma of Nefertiti	945
Cliff OGLEBY The aerial perspective: The evolution of mapping archaeology from low altitude aerial photographs	
Rüstem ASLAN The Turks and Troy: The 'Treasure of Priam' according to Ottoman documents	967
Christopher MACKIE Gallipoli, the beautiful city	977
TURKISH ABSTRACTS	987
GEORGIAN ABSTRACTS.	1009
INDEX	1035

IX

AT THE NORTHEASTERN ANATOLIAN FRONTIER: A PROJECT GALLERY

Giulio PALUMBI

Abstract

The aim of this paper is to summarise the activities and results of the University of Melbourne's Northeastern Anatolia project. The project was directed by Antonio Sagona, who worked in this location for almost 15 years. Field surveys in the region of Bayburt and the plain of Pasinler identified more than 150 sites, dating from the Chalcolithic to the Medieval periods, and enabled detection of diachronic transformations in settlement patterns and different territorial strategies in the region. The excavations at Büyüktepe Höyük and Sos Höyük revealed the long history of this region, where geographic, cultural, political and military frontiers overlapped and interacted for millennia. Phenomena of cultural hybridisation, resiliency and innovation emerged—from the earliest developments of the Kura-Araxes culture in the Chalcolithic period, through the appearance of new funerary practices and mobile societies in the Middle-Late Bronze Age, to the spheres of influence exerted by Urartians and Achaemenids during the Iron Age and the era of military expansion by the Roman empire.

* * *

I first met Antonio (Tony) Sagona in the hot summer of 1999, when I was a first-year PhD student and had the honour of visiting the University of Melbourne's Northeastern Anatolia project while working at Sos Höyük. I have lovely memories of those days, Tony's kindness, his and his team's warm welcome; Tony held my hand as I was taking my first steps into Eastern Anatolian archaeology in my search for the Kura-Araxes culture. I spent two further study seasons working on the Kura-Araxes ceramics at Sos and Tony closely followed all the developments of my research—providing scientific feedback, unconditional support, precious opinions and moral encouragement—all of which proved to be of invaluable importance for my work and my later career. For these reasons, I would like to take this opportunity to warmly thank Tony.

It is unanimously held and indisputable that Antonio Sagona's name is inextricably linked to the ancient cultures of the Northeastern Anatolian highlands and, in particular, to that of the Kura-Araxes culture. His career was anchored in his PhD research, published in a three-volume, seminal work on the Kura-Araxes (Early Transcaucasian) culture.¹ It represented the first of a 'new generation' of works that succeeded in bridging the boundaries between Near Eastern and Caucasian Archaeology as well as 'Western' and Soviet scholarship, creating a unitary overview that, 30 years later, is still a cornerstone for all works focusing on the Kura-Araxes.

¹ A. Sagona 1984.

G. PALUMBI

In spite of its strategic geographical location and its rich cultural history, our knowledge of the archaeology of Northeastern Anatolia prior to the inception of the University of Melbourne's Northeastern Anatolia project merely scratched the surface. Before Tony, this region had been visited by K. Kökten in the 1940s,² only peripherally touched upon by Charles Burney—on his legendary bicycle—in the 1950s,³ and investigated by the pioneer H. Z. Koşay during his excavations in the Erzurum plain, at Karaz (in 1942 and 1944), Pulur (in 1960) and Güzelova (in 1961).⁴ After Koşay's excavations, our somewhat sketchy picture of the archaeology of this region of Anatolia remained unchanged for almost 40 years, until the archaeological investigations of the University of Melbourne—directed by Antonio Sagona—began in 1988.

Tony's fieldwork project (**Fig. 1**), which lasted for almost 15 years, was organised along four main axes of tightly interrelated activities:

- Survey of the region of Bayburt (1988, 1990–1993);
- Excavations at Büyüktepe Höyük (1990–1992);
- Excavations at Sos Höyük (1994–2002);
- Survey in the plain of Pasinler (1999).

The aim of this paper is to summarise and valorise the results of these activities, which have been widely published in the form of preliminary reports, final publications, articles and books. Despite all my best efforts, the present paper cannot do full justice to the abundance of results produced by Tony and Claudia Sagona and a long list of collaborators and members of the University of Melbourne's Northeastern Anatolia project team over many years.

SURVEYS IN THE REGIONS OF BAYBURT AND PASINLER

Bayburt and Pasinler, contiguous but geographically and ecologically different regions of Northeastern Anatolia, were investigated in two different phases of the University of Melbourne's Northeastern Anatolia project. Given that one of the aims of the project was to investigate frontiers in the broadest sense of the term—not as simple lines on a map, but rather as zones of transition, contact and interaction, where different geographic, ecologic, cultural and ethnic boundaries overlap⁵—there is no doubt that both these regions were highly appropriate focuses for the research.

The region of Bayburt, at an average elevation of 1550 m a.s.l., with mountain peaks reaching as high as 2400 m, is bordered to the north by the rainy and densely wooded Pontic Ranges and functions as a natural east–west corridor across the Anatolian highlands.⁶ As this region contains the watersheds of the Çoruh River, it is also naturally connected to the Black Sea. Located at an even higher altitude (between 1600 and 1700 m a.s.l.), the region of Pasinler is composed of an alluvial plain of the Araxes River and is bordered to both the south and the north by imposing mountain ridges reaching as high as 3000 m. The Pasinler plain is an ideal east–west route linking the valley of the Araxes to the Ezurum

802

² Kökten 1944.

³ Burney 1958.

⁴ Koşay and Turfan 1959; Koşay and Vary 1964, 1967; A. Sagona 2000, p. 329.

⁵ Rodseth and Parker 2005, pp. 12–13.

⁶ Newton 2004, p. 99.

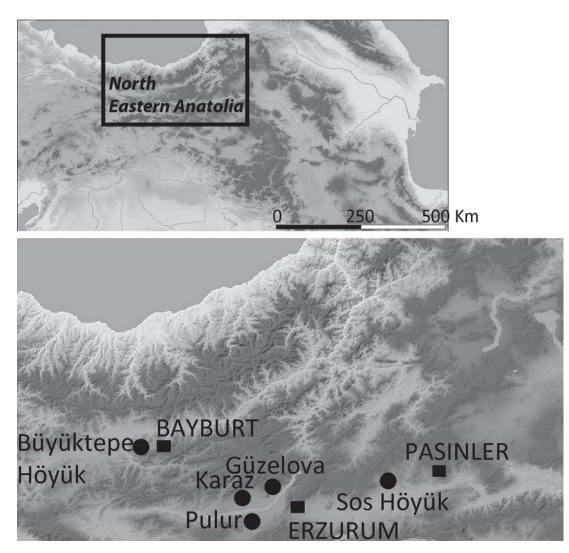


Fig. 1. Northeastern Anatolia and the main sites mentioned in the text.

plain and the sources of the Kara Su (Euphrates) River, bridging the Caucasian and inland Anatolian highlands.

Investigations in the region of Bayburt were carried out over an area of approximately 3500 sq. km. The team identified 102 sites, thus shedding light on the history of a so-far unexplored region of Anatolia.⁷ The survey in the plain of Pasinler was carried out in 1999 under the supervision of Claudia Sagona, and the precious data produced complemented what had been obtained in the region of Bayburt.⁸ During the survey, 57 sites were identified, including settlement mounds, flat sites, cemeteries and the extraordinary remains of an ancient paved 'high-road', possibly the Median Road linking Ecbatana to Kerkenes Dağ and the Royal Road of the Persian Empire mentioned by Herodotus and taken by Xenophon during his Anabasis.9

⁷ Sagona and Sagona 2004, pp. 111–233.

⁸ C. Sagona 1999.
⁹ C. Sagona 2004b, pp. 77–89; 2004c.

G. PALUMBI

The comparison of the results from the two surveys allows us to detect fluctuations and transformations in settlement patterns that could correspond to changes in the social organisation of the local communities and the economic exploitation of the diverse territories composing these two regions.¹⁰ Although both regions were only intermittently occupied during the Palaeolithic and Neolithic periods, they were home to permanent Chalcolithic settlements; these were apparently more numerous (or just more visible) in the plain of Pasinler than in Bayburt. In both regions, a peak of occupation was recorded during the third millennium BC, with an increasing number of Kura-Araxes sites attesting to the fact that Northeastern Anatolia had become part of a larger cultural community, stretching from the Bayburt region to the Southern Caucasus and as far as Northern Iran. New occupations are recorded in the Bayburt region from the second half of the third millennium onwards and show marked breaks with former Kura-Araxes settlement patterns. During the second millennium BC, radical changes are recorded in both regions, marking a general shift towards more mobile lifestyles for the populations of Northeastern Anatolia. Changes are visible again at the turn of the first millennium BC, with a more intense and diversified settlement pattern, consisting of mounds, flat settlements and citadels built on rocky outcrops, possibly defensive in function.

In both regions, archaeological data collected in the field was integrated with a meticulous and comprehensive analysis of written texts (Hittite, Assyrian, Urartian, Persian, Greek and Latin) undertaken by Claudia Sagona. The exemplary dialectic she achieved between archaeological, geographic and historical sources permitted the reconstruction of the historical geography of the Bayburt and Pasinler regions that allowed us to identify ancient toponyms of rivers, cities, roads and fortresses.¹¹ Claudia takes us on a *long-durée* journey that transforms the region of Bayburt and the plain of Pasinler into a historical landscape that hosted the interaction between geographic, cultural, political, linguistic, religious and ethnic frontiers for millennia.

Thus we learned that Northeastern Anatolia (Azzi-Hayasa) was a region on the frontier of the Hittite kingdom. Identifiable as the historical Daiaeni, this part of Anatolia was later fought over by Assyrian and Urartian expeditions aimed at taking control of natural routes of communication (the Aras and Kara Su River valleys) and the precious silver and copper ores in the Bayburt and Gümüşhane regions. Home of the Diauehi, a population with Iranian origins and speaking an Iranian language, after the collapse of the Urartian kingdom this region (by then known as Mati) became a part of the Median territory that was later split into the ninth and tenth satrapies of the Persian Empire. In Roman times, this part of Eastern Anatolia was the scene of the escape of Mithradates Eupator from Sinop to Sinora (see below). Finally, it was conquered by Pompey to become the northeastern military frontier of the Roman Empire, protected by the Roman fort at Satala.¹²

EXCAVATIONS AT BÜYÜKTEPE HÖYÜK

It was precisely this history—of the expanding frontiers of the Roman Empire in Northeastern Anatolia—that was concealed under the surface of Büyüktepe Höyük/Ikiztepe in the Bayburt plain. Büyüktepe Höyük was chosen as the reference site for constructing a

¹⁰ A. Sagona 2004a.

¹¹ C. Sagona 2004a.

¹² C. Sagona 2004b.

diachronic cultural sequence that could contextualise the results of the survey carried out in the region of Bayburt. Excavations started in 1990 and continued until 1992, and several trenches were opened in different areas of the site.¹³

The most significant architectural remains were discovered on the top of the main mound and comprised a large (17 m) circular structure, probably a tower equipped with bastions.¹⁴ This structure was later identified as Sinora, one of the 75 regional treasuries built by Mithradates Eupator, king of Pontus.¹⁵ According to the ancient texts, it is to Sinora/Büyüktepe Höyük that Mithradates fled around 67–66 BC when Pompey invaded his kingdom and it is at Sinora that Drypetina, daughter of Mithradates, was killed by her protector Menophilius during the final siege of the site.¹⁶

However, excavations at Büyüktepe Höyük also revealed occupations dating from the second half of the second millennium BC to the early third millennium BC.¹⁷ As to the earliest levels, the remains of circular stone foundations and floors nested in the bedrock and equipped with hearths are probably the remains of temporary dwellings, possibly tents, suggesting that the settlement was used as a campsite during the third millennium.¹⁸ The Early Bronze Age ceramics from Büyüktepe Höyük show a mixture of technical and morphological traditions originating from different regions of the highlands. These ceramics were fired using techniques that produced an alternating red-black colour effect, where the colour black shifts from the exterior surfaces of the jars to the interior surfaces of the bowls.¹⁹ An analogous effect typified the red-black ceramics of the Upper Euphrates and the Anatolian plateau in this period.²⁰ Yet the morphological repertoires of the ceramics from Büyüktepe Höyük are highly comparable to the contemporary Kura-Araxes traditions of Eastern Anatolia and the South Caucasus. This data suggests that as early as the early third millennium BC there was significant interaction between different traditions and cultural frontiers in Bayburt. The evidence from Büyüktepe Höyük highlights the role of mobile and transhumant groups who, by crossing these frontiers, were central protagonists in the interactions between Anatolian and South Caucasian cultural and technological spheres.

EXCAVATIONS AT SOS HÖYÜK

Surveys and excavations in the region of Bayburt ended in 1992, but in spite of the important results obtained, the range of questions that were raised could not be answered using the interpretation of Büyüktepe Höyük alone; they needed to be extended into contiguous regions. Sos Höyük (**Fig. 2**), in the plain of Pasinler, was chosen as the new 'laboratory' for the archaeological activities of the University of Melbourne's Northeastern Anatolia project, with the aim of complementing the data from Bayburt and enlarging the archaeological and historical picture of this part of Anatolia. This picture turned out to be much richer and more complex than even Tony himself could have hoped for and expected. Excavations at

¹³ Sagona *et al.* 1991.

¹⁴ Sagona et al. 1992, pp. 30–35; Sagona et al. 1993, pp. 74–78.

¹⁵ C. Sagona 2004b, p. 90.

¹⁶ Strabo, *Geography*, 12.3.28 (trans. Falconer), Henry Bohn London 1956; Ammianus Marcellinus, *The Roman History*, 16.7.9–10 (trans. Rolfe), Loeb Classical Library 1950; Appian, *Mithridatic Wars*, 12.101 (trans. White), Harvard University Press 1962; C. Sagona 2004b, pp. 90–91.

¹⁷ Sagona et al. 1992, pp. 29–30; Sagona et al. 1993, p. 74.

¹⁸ Sagona *et al.* 1993, pp. 70–71.

¹⁹ Sagona *et al.* 1991, p. 156.

²⁰ Palumbi 2008a, p. 296.



Fig. 2. A view of Sos Höyük.

Sos Höyük started in 1994²¹ and ended in 2000, revealing an almost uninterrupted sequence stretching from the Chalcolithic to the medieval period. This long sequence has made Sos the main and longest stratified archaeological reference for Northeastern Anatolia. It sheds light on the cultural and social developments in this region between the fourth millennium BC and the first millennium AD.²²

Among the many factors that contribute to making Sos Höyük a key site in the prehistoric archaeology of Northeastern Anatolia is the fact that its sequence provides a rare long-term perspective on the history of Kura-Araxes culture, from its formation to its later developments. Sos Höyük sheds light on this phenomenon from the earliest occupation, dating to the second half of the fourth millennium BC (Sos Höyük VA, Late Chalcolithic, 3500–3000 BC). The imposing remains of a 2.5 m-wide stone wall were recorded, probably the foundations of a large circular building.²³ There are no parallels for this kind of structure in nearby regions in this period. This building could have marked a boundary (spatial, functional or both) within the settlement;²⁴ certainly its existence supports the hypothesis that forms of coordinated and collective labour were in use during the fourth millennium BC. It is a rare piece of evidence indeed for this period in this part of Anatolia and the nearby South Caucasus.

After the first collapse of this building, circular architecture is again documented, this time in the form of a free-standing mud-brick house (round house) equipped with both fixed and mobile fire installations (hearth and andirons).²⁵ It recalls the analogous plan and spatial organisation (ubiquity of fire installations and centrality of the fireplaces) of the Kura-Araxes dwellings dating to this same period in the South Caucasus; for example, at Berikledeebi

²¹ Sagona *et al.* 1995.

²² A. Sagona 2000, fig. 3.

²³ Sagona and Sagona 2000, pp. 58–59.

²⁴ Kiguradze and Sagona 2003, p. 47.

²⁵ Sagona and Sagona 2000, p. 61; Kiguradze and Sagona 2003, p. 47.

and at Khizanaant Gora.²⁶ Furthermore, potting traditions from phase VA feature a set of distinctive Kura-Araxes traits visible in the morphologies of vessels (large shallow bowls with S-shaped profile, cylindrical or truncated-conical necked jars and flat lids) (**Fig. 3:1–3**), and the constant presence of handles, as well as decorative repertoires (such as the double spirals) (**Fig. 3:8** and **9**).²⁷ However, several elements seem to suggest that the ceramic repertoire from Sos Höyük differs from that of the contemporary Kura-Araxes settlements of the South Caucasus. Those elements include, firstly, the presence since the mid-fourth millennium BC of bichrome Red-Black ceramics which can be better compared, in terms of their chromatics, with the potting traditions from Central Anatolia and the Upper Euphrates valley,²⁸ and secondly, the presence of another component that, according to Tony, was possibly derived from an earlier Chalcolithic substratum.²⁹

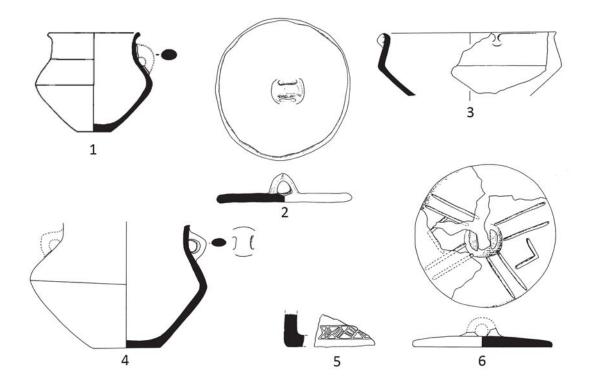
Having also worked on these ceramics myself, I still feel that the connections between what has been labelled at Sos 'Sioni-like'³⁰ pottery and what is commonly considered 'Sioni Ware'³¹ in the South Caucasus needs a clearer assessment, especially in light of new results from excavations carried out in several Chalcolithic and Early Kura-Araxes sites in the latter region (such as, for instance, Mentesh Tepe, Ovchular Tepesi and Chobareti).³² At the same time, the large set of Kura-Araxes traits at Sos, recorded since the middle of the fourth millennium, points to the fact that this community was actively involved in and directly contributing to the reproduction and transmission of this culture since its earliest formative phases. In light of these discussions, the importance of Sos rests on the fact that its evidence expands the geographic perspective on the formational dynamics of the Kura-Araxes phenomenon to regions outside the South Caucasus. Furthermore, the red-black ceramics recorded from the earliest levels of the site onwards recall a tradition shared with the Anatolian and/or Pontic technical horizons,³³ thus not only adding an element of originality to the local potting traditions, but also stressing the possible bridging role played by Northeastern Anatolia in the introduction of new technical knowledge into the South Caucasian Kura-Araxes 'ceramic package'.

The picture from the early third millennium BC levels (Sos Höyük phase VB, Early Bronze Age I, 3000–2800 BC) depicts a Kura-Araxes material culture that is all pervasive. This phenomenon is clearly visible in the ceramics featuring morphological and decorative repertoires that recall the contemporary Kura-Araxes cultures of Armenia and Southern Georgia:³⁴ tall-necked handled jars (**Fig. 3:4**), S-shaped bowls and flat handled lids (**Fig. 3:6**), with dimples, pre-firing incisions and grooved decorations (**Fig. 3:5**, **6**). The striking analogies between ceramic decorations and decorations found incised on a circular fireplace dating to this period³⁵ represent a meaningful link between ceramics and the domestic sphere of production. They also emphasise the symbolic centrality of fireplaces in the domestic space that was a structural trait of the Kura-Araxes socio-cultural model.³⁶ The close correspondence between local and trans-regional developments at Sos continues until the mid-third millennium BC and underlines the fact that Eastern Anatolia was an important

- ²⁶ Javakhishvili 1998; Kikvidze 1972.
- ²⁷ Sagona and Sagona 2000, figs 6–9, p. 113.
- ²⁸ Palumbi 2003.
- ²⁹ Sagona and Sagona 2000, p. 62, fig. 12.
- ³⁰ Palumbi 2003, p. 91; Sagona and Zimansky, p. 164.
- ³¹ Sagona 2014, p. 30.
- ³² Sagona 2014; Lyonnet et al. 2012; Marro et al. 2011; Kakhiani et al. 2013.

- ³⁴ Sagona 2000, figs 8, 9; Sagona and Sagona 2000, fig. 14; Badalyan 2014, fig. 2.
- ³⁵ Sagona and Sagona 2000, p. 63, figs 40, 41.
- ³⁶ Sagona 1998.

³³ Palumbi 2008b.



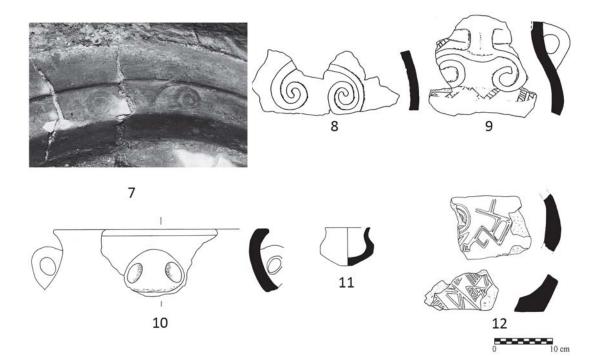


Fig. 3. Kura-Araxes ceramics from period VA (1–3), VB (4–6) and VC (10–12). 1–3, 7–9 (Sagona and Sagona 2000); 4–6, 10–12 (Sagona 2000).

piece in the wider Kura-Araxes mosaic. The relief double-spirals embellishing another circular fireplace (**Fig. 3:7**), equipped with three projections, which was built on the main axis of a rectangular mud-brick house dating to phase VC (Early Bronze Age II, 2800–2500 BC) is a prime example of the entanglement of Kura-Araxes symbolism in the daily life of households.³⁷ Ceramic production mirrors this same trend. The typical tall-necked jars with Nakhchivan handles (**Fig. 3:10**) are indistinguishable from those commonly found in the South Caucasus, while more local shapes (small cups with tripartite profile [**Fig. 3:11**] and trays [**Fig. 3:12**] with intricate relief decorations)³⁸ underline that the dialectic between regional unity and local diversity was a structural trait of the Kura-Araxes phenomenon. For almost a millennium, the Kura-Araxes cultural developments at Sos were closely linked to those of the South Caucasus.

From the second half of the third millennium BC, however, the influence of the Kura-Araxes culture in the Southern Caucasus gives way to the systematic and large-scale appearance of monumental and wealthy burial mounds (*kurgans*) that were the expression of new societies and cultures (the Martkopi and Trialeti horizons).³⁹ At Sos Höyük in this period the cultural trajectory splits from that of the South Caucasus. The process starts in the second half of the third millennium BC when, during period VD (Early Bronze Age III, 2500– 2200 BC), substantial and 'permanent' architecture disappears and is replaced by ephemeral, possibly temporary, occupations and two burials.⁴⁰ It is in connection with these changes that we perceive the existence of a complex socio-cultural situation that may have characterised Northeastern Anatolia at the end of the third millennium BC. This complexity is clearly expressed in two burials dating to this phase. Burial 3 (Trench M16) (**Fig. 4:1**) was a simple pit grave, containing the remains of a young individual in flexed position accompanied by a black-burnished bowl with a lustrous silvery sheen (**Fig. 4:2**).⁴¹ Burial 1 (Trench M15d) was a 2 m-deep shaft, containing the disarticulated remains of an adult male individual (**Fig. 4:3**) accompanied by a black jar with incised triangles filled with white paste (**Fig. 4:4**).⁴²

The two burials expressed divergent funerary customs and contained ceramics belonging to two different traditions. While the black-burnished bowl from Burial 3 can be assimilated to the Martkopi ceramic horizon, the triangular decorations on the jar from Burial 1 foreshadow a diagnostic trait of the ceramics associated with the kurgans of Trialeti. Traditionally considered non-contemporary ceramic horizons (Martkopi supposedly being earlier than Trialeti), the funerary evidence from Sos makes it possible to rethink these two horizons as parallel and simultaneous developments. But the evidence from Sos Höyük takes this line of reasoning even further, because non-funerary contexts dating to the end of the third millennium BC continued to show the presence of ceramics clearly belonging to the Kura-Araxes traditions and in striking continuity with those of the early third millennium (**Fig. 4:5** and **6**).⁴³ The persistence of Kura-Araxes traditions at Sos in the second half of the third millennium may indicate that this phenomenon persisted for longer in Northeastern Anatolia than in other regions. As Tony Sagona pointed out,⁴⁴ data on the late third millennium levels at Sos Höyük challenges the traditional uni-linear diachronic perspective

- ⁴¹ Sagona et al. 1998, p. 33, pl. 2, 3; Sagona 2000, p. 335; Parr et al. 1999, p. 154.
- ⁴² Sagona et al. 1998, p. 34, pl. 4; Parr et al. 1999, p. 154; A. Sagona 2000, p. 335, fig. 12.

³⁷ Sagona and Sagona 2000, fig. 47.

³⁸ Sagona 2000, p. 334, figs 10, 11.

³⁹ Edens 1995.

⁴⁰ A. Sagona 2000, p. 335; Sagona and Sagona 2000, p. 64.

⁴³ A. Sagona 2000, p. 336, fig. 13.

⁴⁴ A. Sagona 2004b, p. 479.

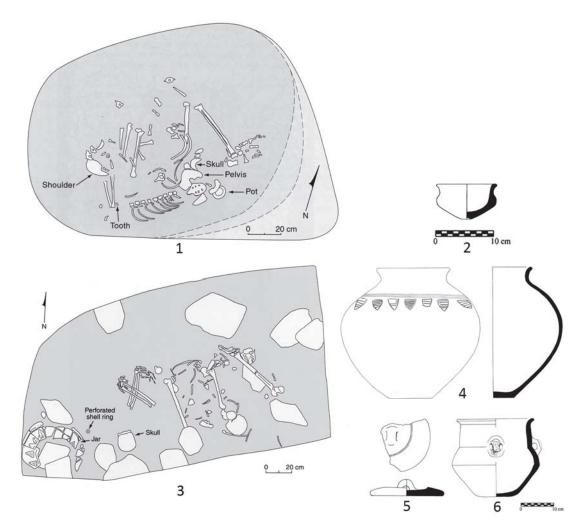


Fig. 4. Coexistence of Martkopi, Trialeti and Kura-Araxes traditions at Sos Höyük period VD. 1, 3 (Sagona 2004); 2 (Sagona *et al.* 1997); 4–6 (Sagona 2000).

of development—from Kura-Araxes to Martkopi and from Martkopi to Trialeti—by suggesting a multi-linear trajectory made up of different, sometimes coexistent cultural traditions. Apparently, this multi-linear trajectory is not documented in the South Caucasus where, during the second half of the third millennium BC, the Kura-Araxes culture gave way at first to Martkopi and then to Bedeni and early Trialeti ceramic horizons.⁴⁵

According to the data from Sos, Eastern Anatolia, after a long history of parallel developments with the South Caucasus, emerged as a theatre of complex dynamics between elements of cultural resiliency and emerging new traditions. The co-existence of old (Kura-Araxes) and new (Martkopi and Trialeti) traditions seems to have continued until the end of the third millennium BC. Period IVA (Middle Bronze Age I, 2200–2000 BC) shows that these different traditions also corresponded to different ways of occupying, using and developing the same settlement during the same period. Burial 1 (Trench M16), a stone-lined pit covered by a large capping stone (**Fig. 5:1**), contained the remains of an adult male,⁴⁶ and

⁴⁵ Rova 2014.

⁴⁶ Parr et al. 1999, pp. 158–159; Sagona et al. 1997, p. 185.

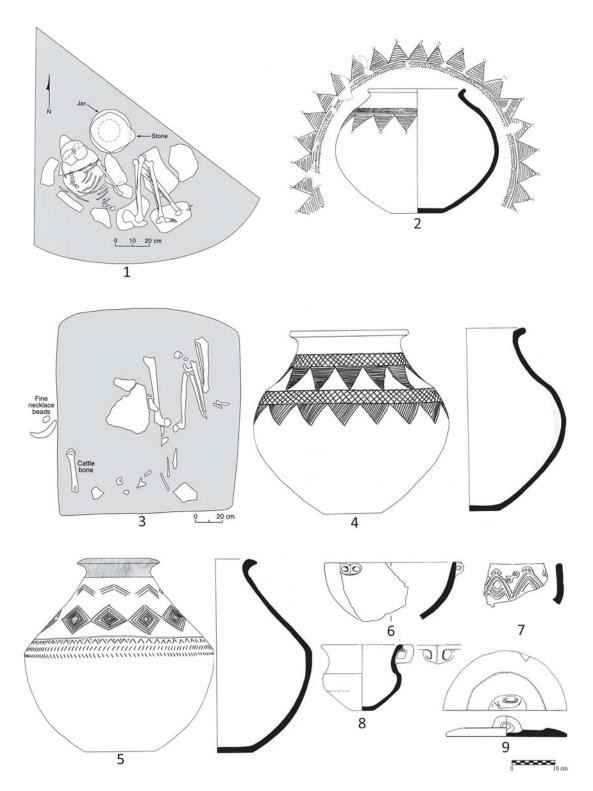


Fig. 5. Coexistence of Martkopi, Trialeti and Kura-Araxes traditions at Sos Höyük period IVA. 1, 3 (Sagona 2004); 2, 4, 5, 6 (Sagona 2000); 7, 8, 9 (Sagona and Sagona 2000).

Burial 2 (Trench M16), a deep shaft-grave capped with a stone and filled with stone rubble (**Fig. 5:3**), hosted the disarticulated skeleton of an adult female.⁴⁷ Each burial contained a jar decorated with incised triangles (**Fig. 5:2** and **4**), recalling—like the jar in Burial 1 in Trench M15d—aspects of the Trialeti ceramic horizon. A pit, later interpreted as a burial, dates to this same period. It contained two clearly diagnostic vessels. The first was a small wheel-made Syrian bottle, an import from the regions south of the Taurus Mountains; the second was a black-burnished jar with carinated profile, decorated with concentric lozenges (**Fig. 5:5**), recalling profiles and decorations of the ceramics from the Martkopi kurgans in Georgia.⁴⁸ In Trench M16, different funerary episodes dating to the same phase corresponded to different ceramic horizons (Trialeti and Martkopi) and also, to a certain degree, different burial traditions.

The levels unearthed in trench L16 record a completely different picture. In this trench a residential unit built on solid stone foundations was found, composed of two rooms each containing a circular fireplace; both are reminiscent of the 'classic' Kura-Araxes domestic space and features.⁴⁹ Interestingly, the ceramics retrieved in the residential building, consisting of black-burnished cups, small jars with tripartite profiles, circular-handled lids and trays with relief decorations (**Fig. 5:6–9**), are also indistinguishable in terms of morphologies and decorations from the Kura-Araxes ceramics of the early third millennium. The only clear difference from the earlier Kura-Araxes ceramic tradition lies in the composition of the paste, which in the later version (Late Gritty Kura-Araxes) is consistently characterised by white grit inclusions.⁵⁰

Data from period IVA show that the duality between residential architecture and shortterm occupational events (pits and burials) can be unequivocally located in two different cultural horizons. The Kura-Araxes horizon seems to be related to a residential and possibly more sedentary community, while pits and burials containing Trialeti and Martkopi ceramics might be the traces left by mobile groups moving, hypothetically, between the South Caucasus and Eastern Anatolia. These data suggest that at Sos, and possibly throughout the whole of Northeastern Anatolia, different lifestyles and approaches to territory (sedentary vs mobile) chosen by co-existing communities also found their expression in different cultural traditions. As regards the mobile communities, the presence of carts in the Martkopi and Trialeti kurgans⁵¹ suggest, along with the display of metals, that mobility and metallurgical activities were structural traits of the economy and the way of life of these communities. Conversely, the residential community, which could have been focused on a small-scale, village-based agro-pastoral economy,52 seems to have been clearly associated with the Kura-Araxes cultural legacy. If this reasoning is correct, the preservation of previous identities and the construction of new ones could have been linked to the different social organisation, territorial practices and strategies of subsistence of two different types of communities.

Data from the following period, IVB (Middle Bronze Age II, 2000–1500 BC), provides further evidence in favour of this hypothesis. The abandonment of the Late Kura-Araxes residential complex of period IVA gave way to a new horizon of pits, followed, in turn, by a new multi-room complex built with mud bricks. Both the circular fireplaces with their three projections and the late gritty ceramic assemblage found in this residential complex

⁴⁸ A. Sagona 2000, p. 337; Sagona and Zimansky 2009, p. 190.

⁴⁷ Parr et al. 1999, p. 160; Sagona et al. 1997, p. 185.

⁴⁹ Sagona and Sagona 2000, pp. 64–65.

⁵⁰ Kibaroğlu *et al.* 2011, pp. 3074–3075.

⁵¹ A. Sagona 2013, pp. 279–281.

⁵² Sagona and Zimansky 2009, p. 191.

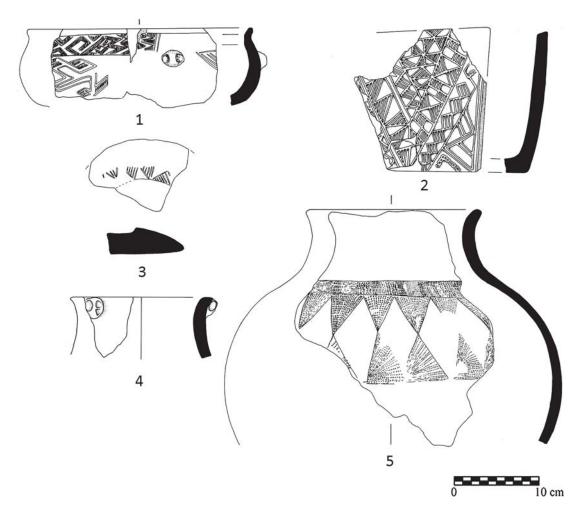


Fig. 6. Coexistence of Trialeti and Kura-Araxes traditions at Sos Höyük period IVB. 1–5 (Sagona 2000).

appear to perpetuate aspects of the Kura-Araxes traditions (**Fig. 6:1–4**). Yet, once again, the abandonment of this complex was followed by a series of short-term episodic occupations characterised by a horizon of pits, some of which contained Trialeti ceramics (**Fig. 6:5**).

This long and continuous succession of different events could be framed as an ongoing dialectic between sedentary (Kura-Araxes-related) and mobile (Martkopi and Trialeti-related) social components that coexisted, or conflicted,⁵³ in or around Sos Höyük from the second half of the third through the first half of the second millennium BC. One explanation that cannot be excluded is the possibility that the long-term enactment of this dialectic between different but complementary social components was the result of their mutual integration into the same regional economic system. The protracted life of this system, where each component might have been dependent on the other for the exchange and acquisition of different products and materials, could also explain what has often been considered the Kura-Araxes chronological 'anomaly' at Sos; namely, the persistence in the local sedentary community of some of the most typical traits of the Kura-Araxes identity well beyond the chronological limits seen in the rest of the regions involved in this same phenomenon.

⁵³ A. Sagona 2004a.

G. PALUMBI

The persistence of these Kura-Araxes traits into the second millennium at Sos has often been taken as a prime example of the conservatism of the Kura-Araxes culture in what was a geographically isolated region of Anatolia. The importance of the contribution of evidence from Sos Höyük lies in the fact that it opens up a completely different perspective. This view holds that the persistence of a Kura-Araxes legacy was not the result of conservatism or isolation; rather, it was the opposite—the result of constant interaction with different communities—if, as F. Barth put it,⁵⁴ the construction of cultural and social identities depends on situational economic, historical and political contingencies and is the result of the relations occurring at the boundaries defining the groups. Sos Höyük may have been the territorial and symbolic boundary where the maintenance of the Kura-Araxes identity resulted from the continuous dynamics of interaction and negotiation between different communities and societies sharing the same settlement, territory and possibly region.

In the following paragraphs, I will provide a brief summary of the later phases of occupation at Sos Höyük, which have been more extensively dealt with in previous works.⁵⁵ Data from the Late Bronze Age (Sos Höyük Period III, 1500–1100 BC) show that permanent structures disappeared from the site, leaving only temporary and flimsy traces of occupation and a working area for pottery firing and limestone baking.⁵⁶ More substantial architecture reappeared at the beginning of the first millennium BC, where the levels of Period IIA (1100–855 BC), dating to the Early Iron Age, paint a lively picture of an Iron Age Anatolian house, preserving the extraordinary remains of carbonised oil seeds, mats, woven baskets, fragments of twine and even a woven sandal.⁵⁷

The remains of Period IIB (Late Iron Age, 750–300 BC)⁵⁸ comprise a building with stone foundations that was the direct antecedent of a large building dating to period IIC (Post-Achaemenid, 300–200 BC). As well as its sturdy foundations, this building had carefully plastered mud-brick walls and a superstructure of wooden columns and capitals (one of which was found in the fill).⁵⁹ A mud-plastered niche built on a platform may have been an altar, suggesting a cult function.⁶⁰ Hellenistic pottery from these levels indicates that the building dated to the late first millennium BC (300–200 BC). One burial, located northwest of the mound and containing the remains of two individuals, also dates to this period. Two silver drachms, inscribed with the effigy of Alexander the Great and found under the hips of the deceased,⁶¹ could have represented the toll to be paid to Charon for passage across the Acheron River to the underworld. Given that the Pasinler plain was not at the political and cultural centre of the Hellenistic world,⁶² these coins underline that the community of Sos and Northeastern Anatolia shared not only economic and monetary networks, but also symbolic and ritual systems with the eastern Hellenistic *oikoumene*.

An interval separates the destruction of the post-Achaemenid/Hellenistic building from the latest phase of occupation, dating to the medieval period. The occupation of Phase I consisted of two, possibly three, building levels with the remains of stone-based rectangular rooms fitted with hearths and ovens dating to the eleventh–thirteenth centuries AD.⁶³

⁵⁴ Barth 1969, pp. 15-16; A. Sagona 2004a, p. 495.

⁵⁵ Sagona *et al.* 1996; Sagona *et al.* 1997.

⁵⁶ Sagona et al. 1997, p. 183; Sagona 2012, p. 256.

⁵⁷ Sagona et al. 1996, p. 32; A. Sagona 2010, p. 45.

⁵⁸ Sagona *et al.* 1997, p. 183.

⁵⁹ Sagona et al. 1997, p. 182; Sagona and Sagona 2003, pp. 104–105.

⁶⁰ Sagona et al. 1996, p. 29; Sagona and Sagona 2003, p. 105.

⁶¹ Sagona et al. 1996, p. 31.

⁶² Sagona and Sagona 2003, p. 105.

⁶³ Sagona et al. 1995, pp. 199–202; Sagona et al. 1996, pp. 28–29; Sagona and Sagona 2003, p. 102.

All artificial mounds and archaeological sites in general, regardless of their sequence, height or size, are important in terms of their enormous potential in shedding light on past societies and history. However, I have always thought that the so-called value of a site derives from the interaction between its archaeological potential and the skills, abilities and sensitivity of the archaeologists excavating it, along with their ability to actualise this potential by speaking for the site, interpreting and bringing forth its archaeological and historical significance. The archaeological investigations at Büyüktepe Höyük and Sos Höyük did more than produce new chronological and cultural sequences based on ceramic and architectural data and an impressive number of absolute datings. In fact, their value was further enhanced by a number of different and variegated studies, carried out on both sites and covering an extraordinary variety of disciplines-from ethnoarchaeology, archaeozoology, palaeobotany, anthropology, and lithic and metallurgical studies, to archaeometry applied to ceramics⁶⁴—that have all contributed to building a comprehensive picture of the ancient societies of this region of Anatolia. It is good fortune for us all that Büyüktepe Höyük and Sos Höyük were encountered by Tony Sagona, who transformed these two small mounds into two of the most important and valuable sites in Eastern Anatolia.

BIBLIOGRAPHY

BADALYAN, R.	
2014	"'Kura-Araxes' complex: On the status of the cultural phenomenon (new data and former issues of periodization and chronology of Early Bronze Age materials in
	Armenia)," Paléorient 40(2): 71–92.
Barth, F.	
1969	"Introduction," in Ethnic Groups and Boundaries, edited by F. Barth, pp. 9-38.
	Boston: Little Brown.
BATIUK, S.	
2000	"Petrographic analyses of Early Transcaucasian ceramics from the Bayburt region, North Eastern Anatolia: An exploratory study," <i>Ancient Near Eastern Studies</i> 37: 153–163.
BURNEY, C.	
1958	"Eastern Anatolia in the Chalcolithic and Early Bronze Age," <i>Anatolian Studies</i> 8: 157–209.
Edens, C.	
1995	"Transcaucasia at the end of the Early Bronze Age," <i>Bulletin of the American Schools of Oriental Research</i> 299/300: 53–64.
HOPKINS, L.	
2003	Archaeology at the North-East Anatolian Frontier, VI. An Ethnoarchaeological Study of Sos Höyük and Yığıttası Village. Leuven: Peeters.
HOWELL-MEU	
2001	<i>Early Bronze and Iron Age Animal Exploitation in Northeastern Anatolia</i> (British Archaeological Reports International Series 945). Oxford: Archaeopress.
JAVAKHISHVILI	
1998	"Ausgrabungen in Berikldeebi (Šida Kartli)," Georgica 21: 7–20.

⁶⁴ Hopkins 2003 (ethnoarchaeology); Howell-Meurs 2001, Piro 2009 (archaeozoology); Longford *et al.* 2009 (palaeobotany); Parr *et al.* 1999 (anthropology); Mc Niven in Sagona *et al.* 1998, Kobayashi 2007, McConchie 2004 (lithic and metallurgical studies); Batiuk 2000; Kibaroğlu *et al.* 2011 (archaeometry applied to ceramics).

G. PALUMBI

- KAKHIANI, K., SAGONA, A., SAGONA, C., KVAVADZE, E., BEDIANASHVILI, G., MESSAGER, E., MARTIN, L., HERRSCHER, E., BIRKETT-REES, J., LONGFORD, C., OGELBY, C. and NARSILIO, G.
 - 2013 "Archaeological investigations at Chobareti in Southwest Georgia, the Caucasus," *Ancient Near Eastern Studies* 50: 1–138.
- KIBAROĞLU, M., SAGONA, A. and SATIR, M.
 - 2011 "Petrographic and geochemical investigations of the late prehistoric ceramics from Sos Höyük, Erzurum (Eastern Anatolia)," *Journal of Archaeological Science* 38: 3072–3084.
- KIGURADZE, T. and SAGONA, A.
 - 2003 "On the origins of the Kura-Araks cultural complex," in *Archaeology in the Borderlands: Investigations in Caucasia and Beyond,* edited by A. Smith and K. Rubinson, pp. 38–94. Los Angeles: The Cotsen Institute of Archaeology.

Kikvidze, I.

1972 Poselelenie Epoki Rannei Bronzi Khizanaant Gora. Tbil
--

Kobayashi, K.

2007 "An obsidian refitting from Sos Höyük, Eastern Turkey," Ancient Near Eastern Studies 44: 141–154.

Kökten, K.

- 1944 "Orta, Doğu ve Kuzey Anadolu"da Yapılan Tarih Öncesi Araştırmaları," *Belleten* 8: 659–681.
- KOŞAY, H. Z. and TURFAN, K.
 - 1959 "Erzurum-Karaz kazısı raporu," *Belleten* 23: 349–413.
- KOŞAY, H. Z. and VARY, H.
 - 1964 *Pulur Kazısı, 1960 Mevsimi Çalışmaları Raporu* (Atatürk Üniversitesi Yayınları 24). Ankara: Türk Tarih Kurumu Basımevi.
 - 1967 *Güzelova (Turfanç) Erzurum Kazısı, 1961* (Atatürk Üniversitesi Yayınları 46). Ankara: Türk Tarih Kurumu Basımevi.
- LYONNET, B., GULIYEV, F., HELWING, B., ALIYEV, T., HANSEN, S. and MIRTSKHULAVA, G.
 - 2012 "Ancient Kura 2010–2011: The first two seasons of joint field work in the southern Caucasus," *Archäologische Mitteilungen aus Iran und Turan* 44: 1–189.
- LONGFORD, C., DRINNAN, A. and SAGONA, A.
- 2009 "The archaeobotany of Sos Hoyuk, Turkey," in *New Directions in Archaeological Science*, edited by A. Fairbairn, S. O'Connor and B. Marwick, pp. 121–136. Canberra: ANU EPress.

MCCONCHIE, M.

- 2004 Archaeology at the North-East Anatolian Frontier, V. Iron Technology and Ironmaking Communities of the First Millennium BC. Leuven: Peeters.
- MARRO, C., BAKHSHALIYEV, V. and ASHUROV, S.
 - 2011 "Excavations at Ovçular Tepesi (Nakhchivan, Azerbaijan). Second preliminary report: The 2009–2010 seasons," *Anatolia Antiqua* 19: 53–100.

NEWTON, J.

2004 "The environmental setting," in *Archaeology at the North-East Anatolian Frontier I*, edited by A. Sagona and C. Sagona, pp. 99–110. Leuven: Peeters.

PALUMBI, G.

- 2003 "Red-Black pottery: Eastern Anatolian and Transcaucasian relationships around the mid-fourth millennium BC," *Ancient Near Eastern Studies* 40: 80–134.
- 2008a The Red and Black. Social and Cultural Interaction Between the Upper Euphrates and Southern Caucasus Communities in the Fourth and Third Millennium BC. Roma: Sapienza.
- 2008b "Mid-fourth millennium Red-Black burnished wares from Anatolia: a cross-comparison," in *Ceramics in Transitions: Chalcolithic Through Iron Age in the Highlands of the Southern Caucasus and Anatolia*, edited by K. Rubinson and A. Sagona, pp. 39–58. Leuven: Peeters.

PARR, E., BRIGGS, C. and SAGONA, A.

1999 "Physical anthropological analysis of skeletons from Sos Höyük," Ancient Near Eastern Studies 36: 150–168.

Piro, J.

2009	Pastoralism	in	the	Early	Transcaucasian	Culture:	The	Faunal	Remains	from
	Sos Höyük. Unpublished Ph.D. diss. New York University.									

RODSETH, L. and PARKER, B.

2005 "Introduction," in *Untaming the Frontier in Anthropology, Archaeology, and History*, edited by B. Parker and L. Rodseth, pp. 3–21. Tucson: The University of Arizona Press.

Rova, E.

2014 "The Kura-Araxes culture in the Shida Kartli region of Georgia: An overview," *Paléorient* 40(2): 47–69.

SAGONA, A.

- 1984 *The Caucasian Region in the Early Bronze Age* (British Archaeological Reports International Series 214). Oxford: British Archaeological Reports.
- 1998 "Social identity and religious ritual in the Kura-Araxes cultural complex: Some observations from Sos Höyük," *Mediterranean Archaeology* 11: 13–25.
- 2000 "Sos Höyük and the Erzurum region in late prehistory: A provisional chronology for Northeast Anatolia," in *Chronologies des Pays du Caucase et de l'Euphrate aux IVe-IIIe Millénaires*, edited by C. Marro and H. Hauptmann, pp. 329–374. Paris: De Boccard.
- 2004a "Settlement patterns," in *Archaeology at the North-East Anatolian Frontier I*, edited by A. Sagona and C. Sagona, pp. 236–243. Leuven: Peeters.
- 2004b "Social boundaries and ritual landscapes in late prehistoric Trans-Caucasus and highland Anatolia," in *A View from the Highlands: Archaeological Studies in Honour of Charles Burney*, edited by A. Sagona, pp. 475–538. Leuven: Peeters.
- 2010 "Sos Höyük an ancient settlement near Erzurum," in Geçmişten Geleceğe Armağan, edited by M. Işikli, E. Mutlugün and M. Artu, pp. 42–49. Erzurum: Atatürk Üniversitesi Yayınları.
- 2012 "Remarks on the East Anatolian Iron Age," in *Anatolian Iron Ages 7: the Proceedings of the Seventh Anatolian Iron Age Colloquium*, edited by A. Çilingiroğlu and A. Sagona, pp. 253–267. Leuven: Peeters.
- 2013 "Wagons and carts of the Trans-Caucasus," in *Essays in Honour of M. Taner Tarhan*, edited by O. Tekin, M. H. Sayar and E. Konyar, pp. 277–298. Istanbul: Ege Yayınları.
- 2014 "Rethinking the Kura-Araxes genesis," *Paléorient* 40(2): 23–46.
- SAGONA, A., PEMBERTON, E. and MCPHEE, I.
 - 1991 "Excavations at Büyüktepe Höyük, 1990: First preliminary report," *Anatolian Studies* 41: 145–158.
 - 1992 "Excavations at Büyüktepe Höyük, 1991: Second preliminary report," *Anatolian Studies* 42: 29–46.
 - 1993 "Excavations at Büyüktepe Höyük, 1992: Third preliminary report," *Anatolian Studies* 43: 69–84.
- SAGONA, A., SAGONA, C. and OZKORUCUKLU, H.
 - 1995 "Excavations at Sos Höyük 1994: First preliminary report," Anatolian Studies 45: 193–218.
- SAGONA, A., ERKMEN, M., SAGONA, C. and THOMAS, I.
 - 1996 "Excavations at Sos Höyük 1995: Second preliminary report," *Anatolian Studies* 46: 27–52.
- SAGONA, A., ERKMEN, M., SAGONA, C. and HOWELLS, S.
- 1997 "Excavations at Sos Höyük 1996: Third preliminary report," *Anatolica* 23: 181–226. SAGONA, A., ERKMEN, M., SAGONA, C., MC NIVEN, I. and HOWELLS, S.
- 1998 "Excavations at Sos Höyük, 1997: Fourth preliminary Report," *Anatolica* 24: 31–64. SAGONA, A. and SAGONA, C.
 - 2000 "Excavations at Sos Höyük, 1998 to 2000: Fifth Preliminary Report," *Ancient Near Eastern Studies* 37: 56–127.
 - 2003 "The upper levels at Sos Höyük, Erzurum: A reinterpretation of the 1987 campaign," *Anatolia Antiqua* 11: 101–109.
 - 2004 "An archaeological survey of the Bayburt province," in *Archaeology at the North-East Anatolian Frontier I*, edited by A. Sagona and C. Sagona, pp. 111–233. Leuven: Peeters.

SAGONA, A. and ZIMANSKY, P.

2009 Ancient Turkey. London: Routledge.

SAGONA, C.

- 1999 "An archaeological survey of the Erzurum province, 1999: The region of Pasinler," *Ancient Near Eastern Studies* 36: 108–131.
- 2004a "Literary tradition and topographic commentary," in *Archaeology at the North-East Anatolian Frontier I*, edited by A. Sagona and C. Sagona, pp. 25–71. Leuven: Peeters.
- 2004b "Cultural and historical implications of the literary traditions and topographic commentary," in *Archaeology at the North-East Anatolian Frontier I*, edited by A. Sagona and C. Sagona, pp. 73–96. Leuven: Peeters.
- 2004c "Did Xenophon take the Aras high road? Observations on the historical geography of North-East Anatolia," in *A View from the Highlands: Archaeological Studies in Honour of Charles Burney*, edited by A. Sagona, pp. 299–333. Leuven: Peeters.

Giulio PALUMBI

Laboratoire Archéorient at the Centre Nationale de la Recherche Scientifique, France Email: giuliopalumbi@hotmail.com

818