Ancient Quarries and Stonemasonry in Northern Choria Considiana

Güney, Hale

Source / Izvornik: ASMOSIA XI, Interdisciplinary Studies on Ancient Stone, Proceedings of the XI International Conference of ASMOSIA, 2018, 621 - 631

Conference paper / Rad u zborniku

Publication status / Verzija rada: Published version / Objavljena verzija rada (izdavačev PDF)

https://doi.org/10.31534/XI.asmosia.2015/05.02

Permanent link / Trajna poveznica: https://urn.nsk.hr/urn:nbn:hr:123:272357

Rights / Prava: In copyright/Zaštićeno autorskim pravom.

Download date / Datum preuzimanja: 2024-11-23



Repository / Repozitorij:

FCEAG Repository - Repository of the Faculty of Civil Engineering, Architecture and Geodesy, University of Split







ASMOSIA XI

Interdisciplinary Studies on Ancient Stone

PROCEEDINGS

of the XI ASMOSIA Conference, Split 2015

Edited by Daniela Matetić Poljak and Katja Marasović







Interdisciplinary Studies on Ancient Stone Proceedings of the XI ASMOSIA Conference (Split 2015)

Publishers:

ARTS ACADEMY IN SPLIT UNIVERSITY OF SPLIT

and

UNIVERSITY OF SPLIT FACULTY OF CIVIL ENGINEERING, ARCHITECTURE AND GEODESY

Technical editor: Kate Bošković

English language editor: Graham McMaster

Computer pre-press: Nikola Križanac

> Cover design: Mladen Čulić

Cover page:

Sigma shaped mensa of pavonazzetto marble from Diocletian's palace in Split

ISBN 978-953-6617-49-4 (Arts Academy in Split)
ISBN 978-953-6116-75-1 (Faculty of Civil Engineering, Architecture and Geodesy)

e-ISBN 978-953-6617-51-7 (Arts Academy in Split) e-ISBN 978-953-6116-79-9 (Faculty of Civil Engineering, Architecture and Geodesy)

CIP available at the digital catalogue of the University Library in Split, no 170529005

ASMOSIA XI

Interdisciplinary Studies of Ancient Stone

Proceedings of the Eleventh International Conference of ASMOSIA, Split, 18–22 May 2015

> Edited by Daniela Matetić Poljak Katja Marasović









CONTENT

	PRESENTATION	15
	NECROLOGY: NORMAN HERZ (1923-2013) by Susan Kane	17
1.	APPLICATIONS TO SPECIFIC ARCHEOLOGICAL QUESTIONS – USE OF MARBLE	
	Hermaphrodites and Sleeping or Reclining Maenads: Production Centres and Quarry Marks Patrizio Pensabene	25
	First Remarks about the Pavement of the Newly Discovered Mithraeum of the Colored Marbles at Ostia and New Investigations on Roman and Late Roman White and Colored Marbles from Insula IV, IX Massimiliano David, Stefano Succi and Marcello Turci	22
	Alabaster. Quarrying and Trade in the Roman World: Evidence from Pompeii and Herculaneum	
	Simon J. Barker and Simona Perna	45
	Recent Work on the Stone at the Villa Arianna and the Villa San Marco (Castellammare di Stabia) and Their Context within the Vesuvian Area Simon J. Barker and J. Clayton Fant	65
	Marble Wall Decorations from the Imperial Mausoleum (4 th C.) and the Basilica of San Lorenzo (5 th C.) in Milan: an Update on Colored Marbles in Late Antique Milan <i>Elisabetta Neri, Roberto Bugini and Silvia Gazzoli</i>	79
	Sarcophagus Lids Sawn from their Chests Dorothy H. Abramitis and John J. Herrmann	89
	The Re-Use of Monolithic Columns in the Invention and Persistence of Roman Architecture Peter D. De Staebler	95
	The Trade in Small-Size Statues in the Roman Mediterranean: a Case Study from Alexandria Patrizio Pensabene and Eleonora Gasparini	101
	•	101
	The Marble Dedication of Komon, Son of Asklepiades, from Egypt: Material, Provenance, and Reinforcement of Meaning Patricia A. Butz	109
	Multiple Reuse of Imported Marble Pedestals at Caesarea Maritima in Israel Barbara Burrell	117
	Iasos and Iasian Marble between the Late Antique and Early Byzantine Eras	123

	Thassos, Known Inscriptions with New Data Tony Kozelj and Manuela Wurch-Kozelj	131
	The Value of Marble in Roman <i>Hispalis</i> : Contextual, Typological	
	and Lithological Analysis of an Assemblage of Large Architectural	
	Elements Recovered at N° 17 Goyeneta Street (Seville, Spain)	
	· · · · · · · · · · · · · · · · · · ·	
	Ruth Taylor, Oliva Rodríguez, Esther Ontiveros, María Luisa Loza,	1.42
	José Beltrán and Araceli Rodríguez	143
	Giallo Antico in Context. Distribution, Use and Commercial Actors According	
	to New Stratigraphic Data from the Western Mediterranean (2 nd C. Bc – Late 1 st C. Ad)	
	Stefan Ardeleanu	155
	Augsthustus, Amaient Duopouties and Isomographic Colostion	
	Amethystus: Ancient Properties and Iconographic Selection Luigi Pedroni	167
	278,7 200,000	
2.	PROVENANCE IDENTIFICATION I: (MARBLE)	
	Unraveling the Carrara – Göktepe Entanglement	
	Walter Prochaska, Donato Attanasio and Matthias Bruno	175
	Transfer Trochasta, Donato Ittanasio ana Fiannas Drano	173
	The Marble of Roman Imperial Portraits	
	Donato Attanasio, Matthias Bruno, Walter Prochaska and Ali Bahadir Yavuz	185
	Tracing Alabaster (Gypsum or Anhydrite) Artwork Using Trace Element Analysis	
	and a Multi-Isotope Approach (Sr, S, O)	
	Lise Leroux, Wolfram Kloppmann, Philippe Bromblet, Catherine Guerrot,	
	Anthony H. Cooper, Pierre-Yves Le Pogam, Dominique Vingtain and Noel Worley	195
	Thintony 11. Cooper, There Ives De Logani, Dominique vingiain and Ivel Worldy	173
	Roman Monolithic Fountains and Thasian Marble	
	Annewies van den Hoek, Donato Attanasio and John J. Herrmann	207
	Archaeometric Analysis of the Alabaster Thresholds of Villa A, Oplontis	
	(Torre Annunziata, Italy) and New Sr and Pb Isotopic Data for	
	Alabastro Ghiaccione del Circeo	
	Simon J. Barker, Simona Perna, J. Clayton Fant, Lorenzo Lazzarini and Igor M. Villa	215
	Roman Villas of Lake Garda and the Occurrence of Coloured Marbles	
	in the Western Part of "Regio X Venetia et Histria" (Northern Italy)	
	Roberto Bugini, Luisa Folli and Elisabetta Roffia	231
	Roberto Dugini, Luisu Fotti una Lusubetta Rojjia	231
	Calcitic Marble from Thasos in the North Adriatic Basin:	
	Ravenna, Aquileia, and Milan	
	John J. Herrmann, Robert H. Tykot and Annewies van den Hoek	239
	Characterisation of White Mouble Objects from the Towns Lot A will	
	Characterisation of White Marble Objects from the Temple of Apollo	
	and the House of Augustus (Palatine Hill, Rome)	2.45
	Francesca Giustini, Mauro Brilli, Enrico Gallocchio and Patrizio Pensabene	247
	Study and Archeometric Analysis of the Marble Elements Found	
	in the Roman Theater at Aeclanum (Mirabella Eclano, Avellino - Italy)	
	Antonio Mesisca, Lorenzo Lazzarini, Stefano Cancelliere and Monica Salvadori	255

CONTENT

Two Imperial Monuments in Puteoli:	
Use of Proconnesian Marble in the Domitianic and Trajanic Periods in Campania	
Irene Bald Romano, Hans Rupprecht Goette, Donato Attanasio and Walter Prochaska	267
Coloured Marbles in the Neapolitan Pavements (16th And 17th Centuries):	
the Church of Santi Severino e Sossio	
Roberto Bugini, Luisa Folli and Martino Solito	275
Roman and Early Byzantine Sarcophagi of Calcitic Marble from Thasos in Italy:	
Ostia and Siracusa	
Donato Attanasio, John J. Herrmann, Robert H. Tykot and Annewies van den Hoek	281
Revisiting the Origin and Destination of the Late Antique Marzamemi	
'Church Wreck' Cargo	
Justin Leidwanger, Scott H. Pike and Andrew Donnelly	291
The Marbles of the Sculptures of Felix Romuliana in Serbia	
Walter Prochaska and Maja Živić	301
Calcitic Marble from Thasos and Proconnesos in Nea Anchialos (Thessaly)	
and Thessaloniki (Macedonia)	
Vincent Barbin, John J. Herrmann, Aristotle Mentzos and Annewies van den Hoek	311
Architectural Decoration of the Imperial Agora's Porticoes at Iasos	
Fulvia Bianchi, Donato Attanasio and Walter Prochaska	321
Tavia Banen, Donato Ittanasio ana mater Froctassia	321
The Winged Victory of Samothrace - New Data on the Different Marbles	
Used for the Monument from the Sanctuary of the Great Gods	
Annie Blanc, Philippe Blanc and Ludovic Laugier	331
Polychrome Marbles from the Theatre of the Sanctuary of Apollo Pythios	
in Gortyna (Crete)	
Jacopo Bonetto, Nicolò Mareso and Michele Bueno	337
Paul the Silentiary, Hagia Sophia, Onyx, Lydia, and Breccia Corallina	
John J. Herrmann and Annewies van den Hoek	345
,····,·	
Incrustations from Colonia Ulpia Traiana (Near Modern Xanten, Germany)	
Vilma Ruppienė and Ulrich Schüssler	351
Stone Objects from Vindobona (Austria) – Petrological Characterization	
and Provenance of Local Stone in a Historico-Economical Setting	
Andreas Rohatsch, Michaela Kronberger, Sophie Insulander,	
Martin Mosser and Barbara Hodits	363
Marbles Discovered on the Site of the Forum of Vaison-la-Romaine (Vaucluse, France):	
Preliminary Results	
Elsa Roux, Jean-Marc Mignon, Philippe Blanc and Annie Blanc	373
Updated Characterisation of White Saint-Béat Marble. Discrimination Parameters	
from Classical Marbles	
Hernando Royo Plumed, Pilar Lapeunte, José Antonio Cuchí,	
Mauro Brilli and Marie-Claire Savin	379

Grey and Greyish Banded Marbles from the Estremoz Anticline in Lusitania Pilar Lapuente, Trinidad Nogales-Basarrate, Hernando Royo Plumed, Mauro Brilli and Marie-Claire Savin	391
New Data on Spanish Marbles: the Case of Gallaecia (NW Spain) Anna Gutiérrez Garcia-M., Hernando Royo Plumed and Silvia González Soutelo	401
A New Roman Imperial Relief Said to Be from Southern Spain: Problems of Style, Iconography, and Marble Type in Determining Provenance John Pollini, Pilar Lapuente, Trinidad Nogales-Basarrate and Jerry Podany	413
Reuse of the <i>Marmora</i> from the Late Roman Palatial Building at Carranque (Toledo, Spain) in the Visigothic Necropolis	
Virginia García-Entero, Anna Gutiérrez Garcia-M. and Sergio Vidal Álvarez Imperial Porphyry in Roman Britain	427
David F. Williams	435
Recycling of Marble: Apollonia/Sozousa/Arsuf (Israel) as a Case Study Moshe Fischer, Dimitris Tambakopoulos and Yannis Maniatis	443
Thasian Connections Overseas: Sculpture in the Cyrene Museum (Libya) Made of Dolomitic Marble from Thasos <i>John J. Herrmann and Donato Attanasio</i>	457
Marble on Rome's Southwestern Frontier: Thamugadi and Lambaesis Robert H. Tykot, Ouahiba Bouzidi, John J. Herrmann and Annewies van den Hoek	467
Marble and Sculpture at Lepcis Magna (Tripolitania, Libya): a Preliminary Study Concerning Origin and Workshops Luisa Musso, Laura Buccino, Matthias Bruno, Donato Attanasio and Walter Prochaska	481
The Pentelic Marble in the Carnegie Museum of Art Hall of Sculpture, Pittsburgh, Pennsylvania	401
Analysis of Classical Marble Sculptures in the Michael C. Carlos Museum, Emory University, Atlanta	491
Robert H. Tykot, John J. Herrmann, Renée Stein, Jasper Gaunt, Susan Blevins and Anne R. Skinner	501
PROVENANCE IDENTIFICATION II: (OTHER STONES)	
Aphrodisias and the Regional Marble Trade. The <i>Scaenae Frons</i> of the Theatre at Nysa <i>Natalia Toma</i>	513
The Stones of Felix Romuliana (Gamzigrad, Serbia) Bojan Djurić, Divna Jovanović, Stefan Pop Lazić and Walter Prochaska	523
Aspects of Characterisation of Stone Monuments from Southern Pannonia Branka Migotti	

3.

CONTENT

	The Budakalász Travertine Production Bojan Djurić, Sándor Kele and Igor Rižnar	545
	Stone Monuments from Carnuntum and Surrounding Areas (Austria) – Petrological Characterization and Quarry Location in a Historical Context	
	Gabrielle Kremer, Isabella Kitz, Beatrix Moshammer, Maria Heinrich and Erich Draganits	557
	Espejón Limestone and Conglomerate (Soria, Spain):	
	Archaeometric Characterization, Quarrying and Use in Roman Times	
	Virginia García-Entero, Anna Gutiérrez Garcia-M, Sergio Vidal Álvarez,	
	María J. Peréx Agorreta and Eva Zarco Martínez	567
	The Use of Alcover Stone in Roman Times (<i>Tarraco, Hispania Citeri</i> or).	
	Contributions to the Officina Lapidaria Tarraconensis	
	Diana Gorostidi Pi, Jordi López Vilar and Anna Gutiérrez Garcia-M.	577
4.	ADVANCES IN PROVENANCE TECHNIQUES,	
	METHODOLOGIES AND DATABASES	
	Grainautline – a Supervised Grain Boundary Extraction Tool	
	Supported by Image Processing and Pattern Recognition	
	Kristóf Csorba, Lilla Barancsuk, Balázs Székely and Judit Zöldföldi	587
	A Database and GIS Project about Quarrying, Circulation and Use of Stone	
	During the Roman Age in Regio X - Venetia et Histria.	
	The Case Study of the Euganean Trachyte	
	Caterine Previato and Arturo Zara	597
5.	QUARRIES AND GEOLOGY	
	The Distribution of Troad Granite Columns as Evidence for Reconstructing	
	the Management of Their Production	
	Patrizio Pensabene, Javier Á. Domingo and Isabel Rodà	613
	Ancient Quarries and Stonemasonry in Northern Choria Considiana	
	Hale Güney	621
	Polychromy in Larisaean Quarries and its Relation to Architectural Conception	
	Gizem Mater and Ertunç Denktaş	633
	Euromos of Caria: the Origin of an Hitherto Unknown Grey Veined Stepped Marble	
	of Roman Antiquity	
	Matthias Bruno, Donato Attanasio, Walter Prochaska and Ali Bahadir Yavuz	639
	Unknown Painted Quarry Inscriptions from Bacakale at <i>Docimium</i> (Turkey)	
	Matthias Bruno	651
	The Green Schist Marble Stone of Jebel El Hairech (North West of Tunisia):	
	a Multi-Analytical Approach and its Uses in Antiquity	
	Ameur Younes, Mohamed Gaied and Wissem Gallala	659
	Building Materials and the Ancient Quarries at <i>Thamugadi</i> (East of Algeria),	
	Case Study: Sandstone and Limestone	
	Younès Rezkallah and Ramdane Marmi	673

	The Local Quarries of the Ancient Roman City of Valeria (Cuenca, Spain) Javier Atienza Fuente	683
	The Stone and Ancient Quarries of Montjuïc Mountain (Barcelona, Spain) Aureli Álvarez	693
	Notae Lapicidinarum: Preliminary Considerations about the Quarry Marks from the Provincial Forum of <i>Tarraco</i> Maria Serena Vinci	699
	The Different Steps of the Rough-Hewing on a Monumental Sculpture at the Greek Archaic Period: the Unfinished Kouros of Thasos Danièle Braunstein	711
	A Review of Copying Techniques in Greco-Roman Sculpture Séverine Moureaud	717
	Labour Forces at Imperial Quarries Ben Russell	733
	Social Position of Craftsmen inside the Stone and Marble Processing Trades in the Light of Diocletian's Edict on Prices Krešimir Bosnić and Branko Matulić	741
6.	STONE PROPERTIES, WEATHERING EFFECTS AND RESTORATION, AS RELATED TO DIAGNOSIS PROBLEMS, MATCHING OF STONE FRAGMENTS AND AUTHENTICITY	
	Methods of Consolidation and Protection of Pentelic Marble Maria Apostolopoulou, Elissavet Drakopoulou, Maria Karoglou and Asterios Bakolas	749
7.	PIGMENTS AND PAINTINGS ON MARBLE	
	Painting and Sculpture Conservation in Two Gallo-Roman Temples in Picardy (France): Champlieu and Pont-Sainte-Maxence Véronique Brunet-Gaston and Christophe Gaston	763
	The Use of Colour on Roman Marble Sarcophagi Eliana Siotto	
	New Evidence for Ancient Gilding and Historic Restorations on a Portrait of Antinous in the San Antonio Museum of Art Jessica Powers, Mark Abbe, Michelle Bushey and Scott H. Pike	783
	Schists and Pigments from Ancient Swat (Khyber Pukhtunkhwa, Pakistan) Francesco Mariottini, Gianluca Vignaroli, Maurizio Mariottini and Mauro Roma	
8.	SPECIAL THEME SESSION: "THE USE OF MARBLE AND LIMESTONE IN THE ADRIATIC BASIN IN ANTIQUITY"	
	Marble Sarcophagi of Roman Dalmatia Material – Provenance – Workmanship Guntram Koch	809

CONTENT

Funerary Monuments and Quarry Management in Middle Dalmatia Nenad Cambi	827
Marble Revetments of Diocletian's Palace Katja Marasović and Vinka Marinković	839
The Use of Limestones as Construction Materials for the Mosaics of Diocletian's Palace Branko Matulić, Domagoj Mudronja and Krešimir Bosnić	855
Restoration of the Peristyle of Diocletian's Palace in Split Goran Nikšić	863
Marble Slabs Used at the Archaeological Site of Sorna near Poreč Istria – Croatia Deni Gobić-Bravar	871
Ancient Marbles from the Villa in Verige Bay, Brijuni Island, Croatia Mira Pavletić and Đeni Gobić-Bravar	879
Notes on Early Christian Ambos and Altars in the Light of some Fragments from the Islands of Pag and Rab Mirja Jarak	887
The Marbles in the Chapel of the Blessed John of Trogir in the Cathedral of St. Lawrence at Trogir Đeni Gobić-Bravar and Daniela Matetić Poljak	899
The Use of Limestone in the Roman Province of Dalmatia Edisa Lozić and Igor Rižnar	915
The Extraction and Use of Limestone in Istria in Antiquity Klara Buršić-Matijašić and Robert Matijašić	925
Aurisina Limestone in the Roman Age: from Karst Quarries to the Cities of the Adriatic Basin Caterina Previato	933
The Remains of Infrastructural Facilities of the Ancient Quarries on Zadar Islands (Croatia) Mate Parica	941
The Impact of Local Geomorphological and Geological Features of the Area for the Construction of the Burnum Amphitheatre Miroslav Glavičić and Uroš Stepišnik	951
Roman Quarry Klis Kosa near Salona Ivan Alduk	957
Marmore Lavdata Brattia Miona Miliša and Vinka Marinković	963
Quarries of the Lumbarda Archipelago Ivka Lipanović and Vinka Marinković	979

ASMOSIA XI, INTERDISCIPLINARY STUDIES OF ANCIENT STONE, SPLIT 2018

Island of Korčula – Importer and Exporter of Stone in Antiquity	
Mate Parica and Igor Borzić	. 985
Faux Marbling Motifs in Early Christian Frescoes	
in Central and South Dalmatia: Preliminary Report	
Tonči Borovac, Antonija Gluhan and Nikola Radošević	. 995
INDEX OF AUTHORS	1009

ANCIENT QUARRIES AND STONEMASONRY IN NORTHERN CHORIA CONSIDIANA

Hale Güney

University of Cologne, Institute of Historical Studies – Ancient History, Cologne, Germany (hgueney1@uni-koeln.de)

Abstract

This paper presents the preliminary results of an epigraphic survey of a Roman imperial estate carried out in 2014-2015 in northern Choria Considiana, today encompassing Mihalıççık County in Eskişehir located between the Sakarya (Sangarios) river to the north and the Porsuk (Tembris) river to the south. The paper concentrates on two new funerary inscriptions found *in situ* in the Çalçak Roman necropolis, 4 km distant from Dinek village in Mihalıççık, on the northern edge of Choria Considiana as well as stone quarries and stonemasonry in the region. It begins by laying out the geographic, geological and historical backgrounds of the region and then evaluates new inscriptions including their interpretation. It ends with a conclusion.

Keywords Choria Considiana, Phrygia, Galatia, Mihalıççık

Until the recent discovery of fifty inscriptions during the surveys carried out since 2014 (see the 'Acknowledgements' section, below, for details of the project), very little was known about Choria Considiana, an extensive imperial estate in Central Anatolia. An epigraphic survey being conducted in one area of this estate has revealed fifty new inscriptions, which are mostly dateable to the second century AD. These inscriptions provide some new information about the social and economic status of the inhabitants of this region.

Including the majority of Mihalıççık and Beylikova Counties, Choria Considiana was located to the south of Sarıyar Dam including all the villages surveyed in 2014-2015 to the east of Alpu, and the north of Sivrihisar and the northeast of Mahmudiye Counties in Eskişehir province. Located in the northwestern part of the province of Galatia, this estate was situated to the east of the

ancient cities of Dorylaion (modern Eskişehir), Midaion and Akkilaion (perhaps located near Alpu) which were

apparently part of the province of Asia neighbouring on

An inscription previously found in Yukarı Iğde Ağaç in Beylikova County, to the south of Mihalıççık County, mentions the Choria Considiana, an estate originally owned by a family of Italian origin which passed into imperial hands. Another inscription also found in Yukarı İğde Ağaç was carved on a votive altar to Zeus by priests and priestesses on behalf of seven villages that worshipped Zeus as their chief deity. Finally, another inscription found in Yukarı İğde Ağaç records the erection of a temple (naos) and statues dedicated by Eutyches, *oikonomos* of the estate under Marcus Aurelius and Commodus between AD 177-180. The estate under consideration in this study therefore encompassed the territory of at least seven villages (Heptakomia), and was run by an imperial slave *oikonomos*.

Bithynia and Galatia.² The Sangarius River separated the estate from Bithynia. The closest city was Juliopolis on the Bithynian-Galatian border. Babadat, Mülk and Nasreddin Hoca villages, which are northeast of modern Sivrihisar, formed the northwestern part of the territory of Colonia Germa which was located in the province of Galatia.³ The ancient villages of Akreina (İkizafer/İkikilise)⁴ and Phyle (Beyköy), to the east of Choria Considiana were apparently part of another estate, belonging to the Roman senatorial family of the Plancii.⁵ Both estates had as neighbours the small cities of Akkilaion, and Colonia Germa, as well as Juliopolis.⁶

An inscription previously found in Yukarı İğde

TALBERT 2000, Phrygia, Map 62. https://pleiades.stoa.org/places/609442 (access date: 26/09/2018).

² RAMSAY 1890, 225-236; AULOCK 1980, 42-44.

³ MITCHELL 1974, 30-31; NIEWÖHNER *et al.* 2013, 104.

⁴ BELKE 1984, 120; 175-6; 215.

⁵ MITCHELL 1974, 27-39.

⁶ GÜNEY 2016, 129.

⁷ RECAM II, 34, 36, 37; SEG 1982, 1263.

⁸ RECAM II, 37; MITCHELL 1993, 23-24.

⁹ RECAM II, 34, 36.

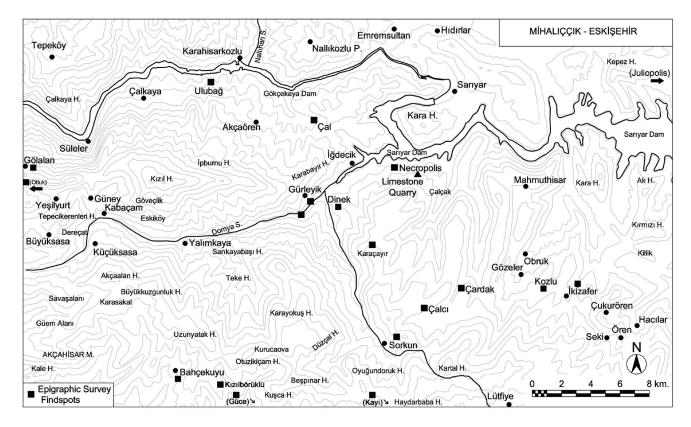


Fig. 1. Epigraphic findspots in the survey region (Mihalıççık, Eskişehir, Turkey), in 2014-2015 (map: E. Denktaş)

The area of these discoveries seems to have been the part of the Choria Considiana, which lay in fertile country in the Phrygian region in Central Anatolia. The main form of settlement in this region was the village. The villages belonged either to city territories or to private and imperial estates.¹⁰ Cereal agriculture, along with sheep-rearing and the cultivation of the vine, provided the local economic basis in this region.¹¹ Epigraphic evidence from the Phrygia region in general confirms that the inhabitants of this region were farmers who were basically involved in arable farming, viticulture and animal husbandry. This can be clearly seen on funerary and votive inscriptions which frequently bear depictions of pruning and reaping hooks and grapes.¹² Also, the cult of Zeus, with very many different epithets, was very strong in the region and the inhabitants made vows to Zeus in order to protect their oxen and to give them an abundant harvest. 13 Besides these, the existence of quarries and therefore the development of stonemasonry were another source of income for

the inhabitants, as may be seen e.g. at Docimeium and its subsidiary quarries. 14 The Docimeium marble quarry was about 170 km away from our survey area.

Also, research conducted in the local quarries in Germia in the southwest of Galatia and 120 km away from our survey area indicates the importance of local quarries and stonemasonry in this region.¹⁵

When it comes to our survey area, funerary and votive inscriptions also confirm the same case as in Phrygia. Four different geological units can be observed on the geological map of our survey area as follows¹⁶:

- Lower-Middle Miocene including lacustrine limestone, marl and shale.
- Middle Triassic-Jurassic period including marble and recrystallized limestone.
- Permian period including marble.
- Precambrian-Palaeozoic period including unweathered gneiss, schist and marble.

¹⁰ MITCHELL 1993, 149-162.

¹¹ MITCHELL 1974, 33; MITCHELL 1993, 143-147.

¹² DREW-BEAR, THOMAS, YILDIZTURAN 1999; WAELKENS 1977, 277-315; MASSÉGLIA 2013, 122-123.

¹³ AKYÜREK ŞAHİN 2006.

¹⁴ See FANT 1989.

¹⁵ NIEWÖHNER et al. 2013, 103-104.

¹⁶ Regional Geological Map of 1/500.000 produced by General Directorate of Mineral Research and Exploration. http://www.mta.gov.tr/v3.0/sayfalar/hizmetler/doc/ANKARA.rs150pdf.pdf (access date 26/09/2018). http://www.mta.gov.tr/v3.0/sayfalar/hizmetler/doc/ZONGULDAK.pdf (access date: 26/09/2018).

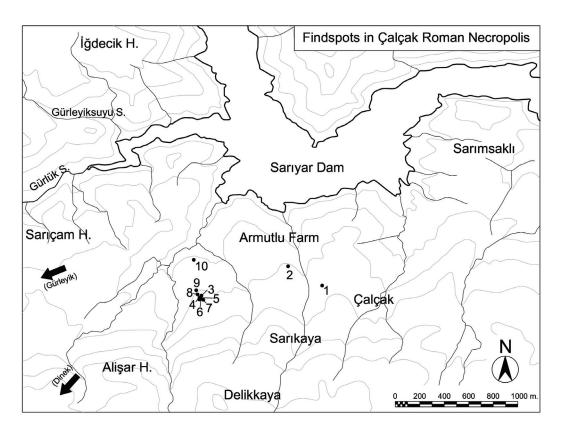


Fig. 2.
Epigraphic findspots in the Çalçak
Roman necropolis, near Dinek village in
Mihalıççık County
(Eskişehir, Turkey)
(map: E. Denktaş)



Fig. 3. The landscape at Çalçak (Mihalıççık, Eskişehir) (photo: H. Güney)

The area surveyed in 2014-2015 covered almost all the villages in the Mihalıççık district including Gürleyik, Akçaören, Çalçı, Çardak, Dinek, Sorkun, Kayı, Güce, Kozlu, İkizafer, Yalımkaya, Kızılbörüklü and Otluk and their territories (w. 1). Ten of the fifty inscriptions found in this survey came from a necropolis situated close to a limestone quarry at Çalçak, a site 4 km distant from Dinek village in Mihalıççık (Figs. 2-3). The Çalçak Roman necropolis is located south of Armutlu Farm (350 m), north-east of Dinek village (3600 m) and north-east of Gürleyik village (4230 m) and was detected during an illegal excavation and registered as Roman settlement



Fig. 4. Unfinished cut stone in the Çalçak Roman necropolis (Mihalıççık, Eskişehir) (photo: H. Güney)

and necropolis in 2008.¹⁷ There are also many unfinished cut stones observed in and around the necropolis (Fig. 4). Apparently, most of the stone used was extracted from the geological units which supply different kinds of marble and limestone frequently observed in the region. One of the geological units located in close proximity to the Çalçak necropolis (400-500 m) provides limestone, and possible extraction areas were observed during the 2015 survey

⁷ http://www.eskisehirkulturenvanteri.gov.tr/sitdetay.as-px?ID=155, (access date: 26/09/2018).



Fig. 5.
Possible extraction
area in Çalçak quarry
(Mihalıççık, Eskişehir)
(photo: E. Yanık)



Fig. 6.
Possible extraction
area in Çalçak quarry
(Mihalıççık, Eskişehir)
(photo: M. Dirican)

(Figs. 5-6). The Çalçak quarry material seems to be dated to the lower-middle Miocene epoch, including lacustrine limestone, marl and shale. One of inscriptions which will be discussed in this study and a few architectural elements found in the necropolis area seem to be made of limestone. Unfinished cut stones support the conclusion that the stone was extracted from that quarry, shaped and finally used in a burial context. As the quarry was on the hill, it was easy to transport the stone down to the necropolis.

During the 2015 survey, samples both from the inscriptions and geological units in Çalçak were collected for further archaeometric analysis. Our team discovered a marble quarry, approximately 30 km away from Çalçak, in Otluk village where traces of extraction can be seen clearly (Figs. 7-9). There is an archaeological site including a Byzantine church registered in Kayapınar in Otluk village. Here stelae bearing inscriptions and also stelae only with depictions have been found. The remains

19

18



Fig. 7. Extraction traces in a marble quarry in Kayapınar, near Otluk village (Mihalıççık, Eskişehir) (photo: M. Dirican)



Fig. 8. Extraction traces in a marble quarry in Kayapınar, near Otluk village, (Mihalıççık, Eskişehir) (photo: M. Dirican)



Fig. 9. Extraction traces in a marble quarry in Kayapınar, near Otluk village, (Mihalıççık, Eskişehir) (photo: M. Dirican)

of a church and some marble blocks are still visible. The marble used in Kayapınar had presumably been extracted from the quarry in close proximity to the site.

As mentioned above, the presence of the temple on the estate, funerary inscriptions within the burial complex and stone quarries lead us to assume the existence of a local stonemasonry tradition that developed to serve the local taste as well as of professions related to quarries. Although no direct reference to any profession or attribution related to stonemasonry has been discovered, two inscriptions presumably dated to the second century AD and found in Çalçak necropolis bear depictions of a hammer or pick, perhaps a *malleus* or a *dolabra*.

The first inscription, engraved on a rectangular grey marble stela with plain mouldings at top and bottom, broken at the top right and lower edges, was erected for Loukios by Mania and Pasion and shows a *malleus*, a kind of hammer, incised below the inscription (Figs. 10-12).²⁰

The poor orthography is an indication of freehand cutting which is not the case in general. In other cases the stonemasons ruled the stone with guidelines before engraving the text in order to prevent uneven lines. Loukios' epitaph seems not to have followed guidelines. The commemorators of Loukios, either his parents or his children, possibly engraved the stone by themselves. Indeed there were people physically cutting an inscription and people composing a draft to be engraved or helping the engraver to compose it dictating the text.21 A verse epitaph of the fourth century AD found in Phrygian Eumeneia shows that the owner of the tomb carved the stone and wrote the epitaph himself with his wife Nonna.22 The text makes clear that the verses were composed by the dedicator of the stone and it has been suggested that some epitaphs in Asia Minor were composed by the peasant families themselves and they relied on a repetitive repertoire of poetic expressions.²³ There are repetitive expressions in epigrams found in Çalçak necropolis and it may well be considered within same phenomena.²⁴

In other cases, however, for example, in Axylon region, the East Phrygian steppe to the west of Lake Tatta in the Roman province of Galatia, we certainly are dealing with 'local poets' – perhaps village school-teachers and suchlike – who were asked to compose verse epitaphs by other members of their communities. The quality of their compositions is very varied.²⁵

²⁰ GÜNEY 2016, 131, no. 2.

²¹ McLEAN 2002, 9-10.

²² IPhrygChr 70, no. 27; McLEAN 2002, 10.

²³ MITCHELL 1993 2, 105.

²⁴ GÜNEY 2016, nos. 3-4, 9.

²⁵ THONEMANN 2014, 191-225.



Fig. 10. Epitaph of Loukios (photo: H. Güney)

As there is no further analysis on epigrams from Çalçak and no further evidence, it is difficult to say whether the engraver from stonemason community or local poets composed those epigrams.

The second inscription was carved on another stela erected by Narkissos, Sosias, Soteris, Fronto and Hippomedon for their parents, Korinthos and Eutykhia. This is a rectangular grey limestone stele, broken in two, with a four-petalled rosette in a triangular pediment with ornaments on the right and left and apparently with a *dolabra*, a kind of pick, depicted below the inscription (Figs. 13-15). ²⁶ The stone used for the epitaph seems to be limestone, which was possibly provided from limestone quarry here. However, provenance analysis is needed for certainty.

Starting with an examination of the stonemasons' tools, the malleus on the first stela was an essential tool for stone dressing. The malleus therefore can be understood literally and it was the main tool used by Loukios for his trade as a quarryman. When it comes to the dolabra on the second stela it was used for squaring the stone. The dolabra also must be the main tool used by the four brothers for their trade as quarrymen. Perhaps their father,





Fig. 11-12. A detail from the stela with a hammer (malleus) depicted below the inscription. Çalçak Roman necropolis (Mihalıççık, Eskişehir) (photo: H. Güney)

Korinthos, was also a quarryman. These two inscriptions may indicate a stonemasonry tradition in the region.

Indeed, Gerhard Zimmer's investigation of the pictorial representations shows that work with hammer and chisel was an essential attribute of stonemasonry. However, one can only speak of a professional symbol if the statement of the device is clearly defined by the inscription or by the tool context. It is not possible to determine the exact profession of the deceased due to the combination of devices. In some cases, it is not even possible to gain any certainty about the affiliation to the craft of stonemasonry. Measuring instruments were also indispensable in the construction business.²⁷ Zimmer counts inscriptions with stone carvers' tools including hammer, mason's level, chisel compass, square and straightedge from Italy. Among them one stela from Reggio d'Emilia bears an inscription indicating both the profession of a marble worker and his tools including hammer, chisel and ruler (no. 91). The other examples found in Rome, Aquileia and Bari do not name the profession on the inscriptions but depict measuring tools, hammer, chisel and so on (Nos. 92, 93, 95, 96). He concludes that

ZIMMER 1982, 161.

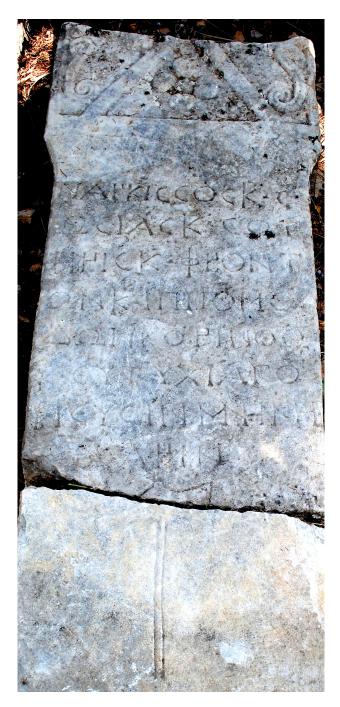


Fig. 13. Epitaph of Korinthos and Eutykhia (photo: E. Yanık)

these monuments only make a general reference to the building and construction business. It is unclear whether the person commemorated was a marble worker, an architect, a construction manager or an engineer.²⁸ Among those inscriptions however there is one inscription (no. 92) which bears a very famous family name, Cossutius, although it does not mention their profession. The Cossutii were in fact a very wealthy family that appears to have been involved in building, stone supply and



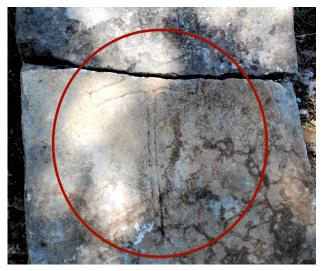


Fig. 14-15. A detail from the stela with a pick (dolabra) described below the inscription. Çalçak Roman necropolis (Mihalıççık, Eskişehir) (photo: E. Yanık)

carving over an extended period of almost four hundred years. 29 Çalçak, on the other hand, was a traditional village

RUSSELL 2013, 205. The first member of this family known to us was Decimus Cossutius who was the architect lived in the second century BC. Members of this family are attested in Erythrae, Ios, Paros, Kos and Eretria and mostly they were involved in building and stone supply. Later period, freedmen of the Cossutii are known from signatures on three inscriptions from Italy in the first century BC. An M. Cossutius is recorded as *marmorarius* on a first century A.D. inscription from Pisa.

community close to a quarry and it would not be suprising if members of a family or several families were active in the quarry over two or three generations. Although there is a big difference between the contexts of Çalçak people and the Cossutii, it is visible that stone-carvers' tools are depicted on the funerary inscription from Rome set up by Cn. Cossutius Agathangelus for his wife Cossutia Arescusa and his brother Cn. Cossutius Cladus in the second century A.D. ³⁰

To our knowledge in the region under consideration, there are two stonemasons attested in Inönü County to the west of modern Eskişehir, which is approximately 160 km away from Çalçak necropolis.31 Here, two stonemasons were proud of setting up a votive altar on behalf of their village, Sakle. There is no tool on the altar but their professions can be seen on the inscription. Another marble worker attested in Ancyra can be counted here.32 As for Docimeum quarry, there were two brother sculptors (Dokimatoglyphoi) attested in Iconium although depictions of tools do not exist.³³ Moreover, epigraphic records also provide multiple generations who are involved in the same business, stonemasonry. Interestingly a funerary altar from Kirgil in Kütahya (Tiberiopolis in Phrygia) shows a stonemason Euprepes mentioning his father and mother as people who trained his trade.34

Considering all those possibility, first, we cannot talk about a quarrymen or stonemason community only based on two stelae although they bear the main tools for stone dressing. In our context, however, there are stone quarries in the survey area, even one at walking distance to Çalçak necropolis, and there is a considerable level of marble use in architectural and religious contexts in this very corner of Roman Asia Minor. This leads us to think of a stonemason community in Çalçak as will be further examined below.

Secondly, some scholars believed that hammer depicted on epitaphs is an *ascia* and it conveyed a religious and ritual significance.³⁵ However this is another issue related to regional differences in terms of epigraphic material. This difference will shed some light on our case study in Roman Phrygia. In general there is the rarity of

- 30 RUSSELL 2013, 205.
- 31 FREI 1988, 25, no. 12.
- 32 SEG 27, 883.
- 33 HALL-WAELKENS 1982, 151-155.
- 34 RUSSELL 2013, 346.
- 35 WALTERS 1974, 86; *cf.* McLEAN 2002, 7 fn. 17; SUSINI 1973, 26: "the ascia is the visual expression of the tool abandoned on the tomb at the moment of completion-abandoned because together with the tomb itself, it has become sacred to the chthonic deities". For the case of Roman Gaul, see HAEUSSLER 2014, 323-347.

occupational identity statements in antiquity, a topic examined by Valerie Hope in the cases of Aquileia, Mainz and Nimes.³⁶ The majority of inscriptions provide only names and images and reveal little about how people earned their living. Even when the epigraphic evidence is complemented by pictorial elements, only a minority of the funerary monuments carry images related to the decedents' work.37 In antiquity for many reasons people refrained from indicating their professions, which reflects their social status.38 As studied by Sandra Joshel, professions like trader, dealer and servant were thought to be involved in some unclean business.39 According to Zimmer, among the stonemasons perhaps marble workers can be separated as a group since they worked with expensive material. They were probably also responsible for more difficult and prestigious tasks, so that they must be granted a higher social rank.40

Grave and votive monuments from Phrygia - especially rural Phrygia - are unusual in comparison with those from most of the rest of the Ancient World in that they regularly display agricultural and other tools, and thus show Phrygians' pride in their way of life.41 It had been suggested by Marc Waelkens that visual references to agriculture, grazing and viticulture on Phrygian grave monuments need a more literal interpretation. 42 Jane Masséglia more recently studied the implications of this for iconography. Her analysis highlights the fact that Phrygian reliefs reflect biographical props and features including households with in-laws and adopted children.⁴³ As stressed by Stephen Mitchell, "So, already in three important respects, through the visual depiction of the tools of farmers, domestic textile workers and other artisans, through the foregrounding of literacy and through the presentation of elaborate, multi-generational family structures, the funerary inscriptions of inner Anatolia offer a quite different perspective on Roman provincial society from that provided by civic epigraphy."44 As

³⁶ HOPE 2001.

³⁷ HOPE 2001, 57.

³⁸ HOPE 2001, 57. "This can be interpreted in a variety of ways: they did nothing, they took no pride in what they did, they were ashamed of what they did or their occupation had no relevance or importance in the face of death."

³⁹ JOSHEL 1992, 62-71.

⁴⁰ ZIMMER 1982, 166-167.

⁴¹ MITCHELL 2014a, 271-275; 2014b, 275-299.

⁴² WAELKENS 1986, 131-141; WAELKENS 1977, 277-315.

⁴³ MASSÉGLIA 2013, 122-123.

MITCHELL 2014a, 279; for the difference between the urban and rural epigraphy see, MITCHELL 2014b.

is seen, we are dealing with an idiosyncratic region in terms of epigraphic material. For that reason hammer depictions should be interpreted as the main tool used by the quarryman community in Çalçak.

When it comes to social status of those people, in our inscriptions with hammer depictions, there are only single names, which are usually the sign of a slave or non-citizen.45 In Çalçak necropolis only one inscription indicates a freedman name among ten inscriptions. Besides this, all names mentioned in the inscriptions are single names and two inscriptions clearly show family ties between commemorated and commemorators.⁴⁶ The inscriptions that we found in Çalçak necropolis and in Mihalıççık County seem to cover only a few names of Roman citizen freedmen, and other single Latin names occur.⁴⁷ Personal names and epigrams on inscriptions found indicate a relatively wealthy and culturally intelligent community.⁴⁸ Like other families attested in Yukarı İğde Ağaç, the people buried in Çalçak may have been members of the families running the northern part of this imperial estate.⁴⁹

For the hypothesis that there was a community of quarrymen or stonemasons in Çalçak and surroundings another set of evidence again comes from inscriptions. In our survey in 2015 a votive inscription to Zeus Sarnendenos was attested in a village a few km away from Çalçak necropolis. Another fragmentary inscription found in the same village provides a temple that belonged to Zeus Sarnendenos. ⁵⁰ Zeus Sarnendenos, Zeus Narenos and Zeus Akreinenos were the cults that originated in our survey area.⁵¹ Votive inscriptions to Zeus Akreinenos are also attested in another village in close proximately to Çalçak necropolis found during the 2015 survey. More interestingly votive inscriptions to Zeus Sarnendenos and Narenos have also been found in mining areas in Alburnus Maior and Apulum in Dacia.⁵² Sorin Nemeti in his article on Zeus Sarnendenos mentions the existence of Galatian immigrant communities who

carried their cult to Dacia.53 An article written by Mitchell reveals another cult of Jupiter Erusenus that originated from Galatia but is also attested in Dacia. Mitchell concludes that those people who made a vow to Iupiter Erusenus in Dacia were part of the community that migrated from Galatia to this newly conquered territory under Trajan.54 The rich natural resources including gold and marble in this new territory could only be exploited by a labour force skilled in stone and marble working. As is known, the most prominent gold mines were at Ampelum (Zlatna) and the administrative centres of the territory at Alburnus Maior (Roși Montana) and Brucla (Aiud).55 Dacia was also very rich in salt mines and stone and marble quarries. The largest quarry of marble which was used in the Roman period is at Bucova which is 1 km away from Ulpia Traiana Sarmizegetusa and major marble supplier for this city.⁵⁶ This quarry was 100 km from Apulum and 170 km from Alburnus Maior, where votive inscriptions to Zeus Sarnendenos were found. It is worth verifying whether there is any evidence that these were exploited by quarrymen from Asia Minor. According to archaeometric research conducted in Dacia, exploitation of the Bucova quarry started shortly after the foundation of the province under Trajan. Judging from pedestal bases from the forum at Sarmizegetusa and the statue of Emperor Septimius Severus, artists and sculptors were recruited to this quarry from Asia Minor.⁵⁷ Moreover, the existence of Nicomedian marble workers, sculptors and traders who are attested in funerary inscriptions in Dacia proves the ongoing relationships between Dacia and Asia Minor.58 To sum up, people who were attested in quarry areas in Dacia in the votive inscriptions to Zeus Sarnendenos may have come from the same quarryman community in the Çalçak Roman necropolis.

To conclude, our samples collected from the survey area require a further provenance analysis (thin section, XRD, ICP-MS etc), as well as petrographic, chemical and statistical analyses to reveal to what extent the quarries in the region have been exploited. Although it is difficult to answer many of them, this discovery throws

⁴⁵ HOPE 2001, 21.

⁴⁶ GÜNEY 2016, nos. 3-4.

⁴⁷ GÜNEY 2016, 129.

⁴⁸ GÜNEY 2016, nos. 1, 3-4, 9.

⁴⁹ GÜNEY 2016, 129.

⁵⁰ GÜNEY, forthcoming, "The Sanctuary of Zeus Sarnendenos: The Cult of Zeus in Northeast Phrygia" Anatolian Studies 69 (2019).

These epithets were toponyms indicating the settlements called Sarnenda, Akreina and Nara in our survey area.

⁵² PISO 2018.

⁵³ NEMETI 2008, 179-183.

⁵⁴ MITCHELL 2017, 15-21, also see PISO 2018, 37-70.

⁵⁵ GĂZDAC 2010, 60-61.

⁵⁶ GĂZDAC 2010, 60-61.

⁵⁷ MÜLLER *et al.* 1999, 139. Along with skilled people, marble from Marmara, Uşak and Afyon was also attested in Dacia.

⁵⁸ Sculptors at Nicopolis ad Istrum: *IGBulg* II: 674 and at Tirguşor near Constanza: *CIMRM* II 2306-2307; shipowners at Tomi, *CIL* III Supp. 7532; traders at Tomi: ROBERT 1978, 424.

up many questions such as: How were the quarries operated? How much of the stone used for the inscriptions found in the region is from the nearby quarry? What was the economic value of the quarries for the estate, the Choria Considiana?⁵⁹ Secondly a detailed survey on votive inscriptions belonging to the Zeus cult originated from Galatia but found in the Balkans may provide some details about quarryman/stonemason community. The results may help us in answering the questions raised about the economic resources and activities of the Roman Imperial estate, as well as provide us with information about an unknown quarryman/stonemason community in Choria Considiana.

ACKNOWLEDGEMENTS

Eskişehir District Mihalıççık, Alpu, Sivrihisar, Beylikova, Çifteler and Mahmudiye Counties Epigraphic Survey Project was approved by the Turkish Ministry for Culture and Tourism. The 2014-2015 survey staff consisted of Hale Güney (Project Director), Erman Yanık (Research Assistant), Murat Dirican (Ph.D. Student at Middle East Technical University, Geologist) and Süleyman Güney (Driver and Guide). I would like to express my sincere thanks to the Ministry and to its representatives N. Baybostan and Yılmaz Ergi for their interest and contribution to the successful outcome. I would like to thank Erman Yanık for all his help in recording inscriptions during the survey and also Murat Dirican for introducing us to the world of stones. I wish to thank Ertunç Denktaş for drawing the maps. I am indebted to Professor Stephen Mitchell and ASMOSIA editors for their comments which helped to improve this paper. Finally, I am obliged to my parents, Süleyman and Emine Güney, for their support during the surveys. This article is dedicated to them.

BIBLIOGRAPHY

- AKYÜREK ŞAHİN N. E. 2006: Yazıdere Zeus Kutsal Alanı. Phrygia'da Yerel Bir Tapınım Merkezi, İstanbul.
- AULOCK H. von 1980: Münzen und Städte Phrygiens, vol. 1, Istanbuler Mitteilungen Beiheft 25, Tübingen.
- BELKE K. 1984: Tabula Imperii Byzantini 4, Galatien und Lykaonien 172. Wien.
- CIL Corpus Inscriptionum Latinarum, Berlin 1863.
- CIMRM Corpus Inscriptionum et Monumentorum Religionis Mithriacae, by M. J. Vermaseren, The Hague 1960.
- DREW-BEAR T., THOMAS C. M., YILDIZTURAN M. 1999: Phrygian votive steles, Turkish Republic, Ministry of Culture, Museum of Anatolian Civilizations, Ankara.
- FANT J. C. 1989: Cavum Antrum Phrygiae. The organization and operations of the Roman imperial marble quarries in Phrygia, BAR Intern. Ser. 482, Oxford.
- FREI P. 1988: "Phrygische Toponyme", Epigraphica Anatolica 11, 9-34.
- HAEUSSLER R., 2014: "Differences in the epigraphic habit in the rural landscapes of Gallia Narbonensis", in W. ECK, P. FUNKE (eds.): Öffentlichkeit Monument Text. XIV Congressus Internationalis Epigraphiae Graecae et Latinae, eds. Berlin-Boston, 323-347.
- HOPE V. M. 2001: Constructing identity: the Roman funerary monuments of Aquileia, Mainz and Nimes, Oxford
- GĂZDAC C. 2010: Monetary Circulation in Dacia and the Provinces from the Middle and Lower Danube from Trajan to Constantine I (AD 106-337), Cluj-Napoca.
- GÜNEY H. 2016: "New Inscriptions from Choria Considiana: Çalçak Roman necropolis", Anatolian Studies 66, 125-139.
- IGBulg. Inscriptiones Graecae in Bulgaria repertae, vol. II: Inscriptiones inter Danubium et Haemum repertae, by G. Mihailov, Sofia 1958.
- IPhrygChr The "Christians for Christians" Inscriptions of Phrygia, E. GIBSON (ed.): HThS 32, Missoula 1978.
- JOSHEL S. R. 1992: Work, identity, and legal status at Rome: A study of the occupational Inscriptions, (Vol. 11), Norman, Oklahoma.
- HALL A., WAELKENS M. 1982: "Two Dokimeian Sculptors in Iconium", Anatolian Studies 32, 151-155.
- MASSÉGLIA J. 2013: "Phrygians in relief: trends in self-representation", in P. THONEMANN (ed.): Roman Phrygia: Culture and Society, Oxford, 95-123.
- McLEAN B. H. 2002: An introduction to Greek epigraphy of the Hellenistic and Roman periods from Alexander the Great down to the reign of Constantine, (323 B.C.-A.D. 337), Ann Arbor.

- MITCHELL S. 1974: "The Plancii in Asia Minor", The Journal of Roman Studies 64, 27-39.
- MITCHELL S. 1993: Anatolia: Land, Men and Gods in Asia Minor. I: The Celts and the Impact of Roman Rule; II. The Rise of the Church, Oxford: Clarendon Press.
- MITCHELL S. 2014a: "Rocks, Religion and Rural Epigraphy. Introductory Remarks", in W. ECK, P. FUNKE (eds.): Öffentlichkeit Monument Text. XIV Congressus Internationalis Epigraphiae Graecae et Latinae, Berlin-Boston, 271-275.
- MITCHELL S. 2014b: "Epigraphic Display and the Emergence of Christian Identity in the Epigraphy of Rural Asia Minor", in W. ECK, P. FUNKE (eds.): Öffentlichkeit Monument Text. XIV Congressus Internationalis Epigraphiae Graecae et Latinae, 275-299.
- MITCHELL S. 2017, "Two Galatian Cults in Dacia" Gephyra 14, 15-21.
- MÜLLER H. W., SCHWAIGHOFER B., BENEA M., PISO I., DIACONESCU A. 1999: "Marbles in the Roman Province of Dacia", in ASMOSIA IV, 131-140.
- NEMETI S. 2008: "Zeus Sarnendenos", Ephemeris Napocensis 18, 179-183.
- NIEWÖHNER P., DIKILITAŞ G., ERKUL E., GIESE S., GORECKI J., PROCHASKA W., SARI D., STÜM-PEL H., VARDAR A., WALDNER A., WALSER A. V., WOITH H. 2013: "Bronze Age höyüks, Iron Age hilltop forts, Roman poleis and Byzantine pilgrimage in Germia and its vicinity. 'Connectivity' and a lack of 'definite places' on the central Anatolian high plateau", Anatolian Studies 63, 97-136.
- PISO I. 2018: "Kleinasiatische Götter und Kolonisten in Dakien", Gephyra 15, 37-70.
- RAMSAY W. M. 1890: The Historical Geography of Asia Minor, London.
- RECAM Regional Epigraphic Catalogues of Asia Minor, Vol. II: The Inscriptions of North Galatia. The Ankara District by S. Mitchell, British Institute at Ankara Monograph Series, Oxford.
- ROBERT L. 1978: "Documents d'Asie Mineure, 6. Epitaphes de Nicomédie", Bulletin de Correspondance Hellénique 102, 408-428.
- RUSSELL B. 2013: The Economics of the Roman Stone Trade, Oxford.
- SEG Supplementum Epigraphicum Graecum. Leiden 1923
- SIVAS T., SIVAS H. 2005: "Eskişehir, Kütahya, Afyonkarahisar İlleri 2004 Yılı Arkeolojik Envanteri ve Yüzey Araştırması", Türkiye Bilimler Akademisi TÜBA Kültür Envanteri Dergisi, Journal of Cultural Inventory, 4, 33-58.

- SUSINI G. 1973: The Roman Stonecutter: An Introduction to Latin Epigraphy, Oxford.
- TALBERT R. 2000: The Barrington Atlas of the Greek and Roman World, Princeton, NJ.
- THONEMANN P. 2014: "Poets of the Axylon", Chiron 44, 191-232.
- WAELKENS M. 1977: "Phrygian Votive and Tombstones as Sources of the Social and Economic Life in Roman Antiquity", Ancient Society 8, 277-315.
- WAELKENS M. 1986: Die kleinasiatischen Türsteine. Typologische und epigraphische Untersuchungen der kleinasiatischen Grabreliefs mit Scheintür, Mainz.
- WALTERS V. J. 1974: The Cult of Mithras in the Roman Provinces of Gaul, Leiden.
- ZIMMER G. 1982: Römische Berufsdarstellungen, (Archäologische Forschungen 12), Berlin.