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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 <i>Massimiliano David, Stefano Succi and Marcello Turci</i>	22
	Alabaster. Quarrying and Trade in the Roman World: Evidence from Pompeii and Herculaneum Simon J. Barker and Simona Perna	
	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	
	The Trade in Small-Size Statues in the Roman Mediterranean: a Case Study from Alexandria Patrizio Pensabene and Eleonora Gasparini	101
	The Marble Dedication of Komon, Son of Asklepiades, from Egypt: Material, Provenance, and Reinforcement of Meaning <i>Patricia A. Butz</i>	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 Diego Peirano	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 Nº 17 Goyeneta Street (Seville, Spain)	
	Ruth Taylor, Oliva Rodríguez, Esther Ontiveros, María Luisa Loza,	
	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
	Amethystus: Ancient Properties and Iconographic Selection	
	Luigi Pedroni	167
2.	PROVENANCE IDENTIFICATION I: (MARBLE)	
	Unraveling the Carrara – Göktepe Entanglement	
	Walter Prochaska, Donato Attanasio and Matthias Bruno	175
	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,	105
	Anthony H. Cooper, Pierre-Yves Le Pogam, Dominique Vingtain and Noel Worley	195
	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
	Simon J. Burker, Simonu Fernu, J. Cluyton Funt, Lorenzo Luzzarini unu igor M. Villa	213
	Roman Villas of Lake Garda and the Occurrence of Coloured Marbles	
	in the Western Part of "Regio X Venetia et Histria" (Northern Italy)	001
	Roberto Bugini, Luisa Folli and Elisabetta Roffia	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 Marble Objects from the Temple of Apollo	
	and the House of Augustus (Palatine Hill, Rome)	247
	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

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	
Coloured Marbles in the Neapolitan Pavements (16th And 17th Centuries):	
the Church of Santi Severino e Sossio	
Roberto Bugini, Luisa Folli and Martino Solito	
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	
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
Truce I Fochusku unu muju zirre	
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	
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	245
John J. Herrmann and Annewies van den Hoek	
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	
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	272
Lisu Noux, jeun-wine wignon, r nuppe dunc and Annie dunc	
Updated Characterisation of White Saint-Béat Marble. Discrimination Parameters	
from Classical Marbles	
Hernando Royo Plumed, Pilar Lapeunte, José Antonio Cuchí, Mauro Brilli and Maria Clairo Savin	270
Mauro Brilli and Marie-Claire Savin	

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 <i>Gallaecia</i> (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 <i>Virginia García-Entero, Anna Gutiérrez Garcia-M. and Sergio Vidal Álvarez</i>	427
Imperial Porphyry in Roman Britain 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 John J. Herrmann and Donato Attanasio	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 <i>Albert D. Kollar</i>	491
Analysis of Classical Marble Sculptures in the Michael C. Carlos Museum, Emory University, Atlanta	471
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	537

3.

	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 (Tarraco, Hispania Citerior).	
	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	612
	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	622
	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) <i>Matthias Bruno</i>	651
	The Green Schist Marble Stone of Jebel El Hairech (North West of Tunisia):	
	a Multi-Analytical Approach and its Uses in Antiquity	
	Ameur Younès, Mohamed Gaied and Wissem Gallala	659
	Building Materials and the Ancient Quarries at <i>Thamugadi</i> (East of Algeria),	
	Case Study: Sandstone and Limestone <i>Younès Rezkallah and Ramdane Marmi</i>	673
	A C FFFF WC A CONFERENCE VERIFUL A CONFERENCE A CONFERENC	

	The Local Quarries of the Ancient Roman City of <i>Valeria</i> (Cuenca, Spain) Javier Atienza Fuente	683
	The Stone and Ancient Quarries of Montjuïc Mountain (Barcelona, Spain) Aureli Álvarez	693
	<i>Notae Lapicidinarum</i> : Preliminary Considerations about the Quarry Marks from the Provincial Forum of <i>Tarraco</i> <i>Maria Serena Vinci</i>	699
	The Different Steps of the Rough-Hewing on a Monumental Sculpture at the Greek Archaic Period: the Unfinished Kouros of Thasos <i>Danièle Braunstein</i>	
	A Review of Copying Techniques in Greco-Roman Sculpture Séverine Moureaud	717
	Labour Forces at Imperial Quarries <i>Ben Russell</i>	
	Social Position of Craftsmen inside the Stone and Marble Processing Trades in the Light of Diocletian's Edict on Prices <i>Krešimir Bosnić and Branko Matulić</i>	
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	
	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 <i>Guntram Koch</i>	809

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	
Marble Slabs Used at the Archaeological Site of Sorna near Poreč Istria – Croatia <i>Deni Gobić-Bravar</i>	871
Ancient Marbles from the Villa in Verige Bay, Brijuni Island, Croatia Mira Pavletić and Đeni Gobić-Bravar	
Notes on Early Christian Ambos and Altars in the Light of some Fragments from the Islands of Pag and Rab <i>Mirja Jarak</i>	
The Marbles in the Chapel of the Blessed John of Trogir in the Cathedral of St. Lawrence at Trogir <i>Deni Gobić-Bravar and Daniela Matetić Poljak</i>	
The Use of Limestone in the Roman Province of Dalmatia Edisa Lozić and Igor Rižnar	
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 <i>Caterina Previato</i>	933
The Remains of Infrastructural Facilities of the Ancient Quarries on Zadar Islands (Croatia) <i>Mate Parica</i>	941
The Impact of Local Geomorphological and Geological Features of the Area for the Construction of the Burnum Amphitheatre <i>Miroslav Glavičić and Uroš Stepišnik</i>	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	

Island of Korčula – Importer and Exporter of Stone in Antiquity	
Mate Parica and Igor Borzić	
Faux Marbling Motifs in Early Christian Frescoes	
6 7	
in Central and South Dalmatia: Preliminary Report	
Tonči Borovac, Antonija Gluhan and Nikola Radošević	
INDEX OF AUTHORS	1009

IASOS AND IASIAN MARBLE BETWEEN THE LATE ANTIQUE AND EARLY BYZANTINE ERAS

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Abstract

Iasian marble seemed to reach the highest point of its reputation in the 6th century when it appeared in three of the most important edifices built by Justinian: in the Constantinopolitan churches of Hagia Sofia and of the Holy Apostles and in the church of San Vitale in Ravenna. At the time, evidence of this material also became more frequent in Iasos. Firstly, the raw blocks found at Balık Pazarı¹, some ready to be sawn into slabs, then the columns and colonnettes discovered in the neighbouring quarries and in two of the Iasian churches. Here the marble also appears as mosaic tesserae in the acropolis basilica and as tiles in the agora basilica. Similarly, furniture such as tables made with marmor iassense, both rectangular and sigma-shaped, were found in secondary places everywhere throughout Iasos. A study of these elements, concerning their shapes, processing techniques and functions, is in progress. The preliminary results will be presented.

Keywords use of marble, Iasos, furniture

Iasian marble was already known and was used for small objects from the Middle-Late Bronze Age² and for architectural elements between the Classical-Hellenistic³ and the Roman ages. At this time the systematic exploitation of the quarries as a planned intervention and investment by the polis seemed to have begun. In any case, examples of this marble only became more frequent in late antiquity in Iasos⁴ and in the regions outside the Caria, while in the latter area there is little evidence of marble⁵.

In Iasos many tables found in secondary places pertain to this time; they assume different shapes, mainly circular, but sigmoid or rectangular ones have also been found. Between the last two types the *trait d'union* is the highly pointed edging that encloses the central surface. These kinds of tables were classified by Roux⁶ in the form of clôturées. They were extensively employed from late antiquity, in both domestic and ecclesiastical contexts7. In home furniture, circular and sigma shaped tables were used at the centre of half-moon dining couches named stibadia8 while rectangular was the usual shape of a central table for the triclinia9. In ecclesiastical settings, while circular and sigma shaped tables were used to collect offerings, more generally as secondary furniture, the rectangular form was preferred for altars¹⁰. However, the erratic discoveries of the Iasian series hinder any precise assumptions about their origin. The only indicative character of the potential uses is the smooth or rough under side. The former was designed to remain visible on metallic or wooden bases and was thus removable, the second requiring a masonry base. While the smooth underside is common to both types of tables,

- 6 ROUX 1973, 136.
- 7 TOCCI 2012, 115–116.
- 8 These appear at the end of the 3rd century. ELLIS 2000, 67.
- 9 DUNBABIN 1991, 123.
- 10 CHALKIA 1991, 54, note 117.

¹ About the monument: PARAPETTI 2013, 161–172.

² At the time the inhabitants obtained from this stone small artefacts such as spindles and vessels. See: BERTI, PEIRANO 2014, 25 note 2 and related bibliography.

³ Different constructions such as watchtowers and terracing are located near the marble outcrops; here are also evident architectural elements including a small Doric capital: BERTI, PEIRANO 2014, 25 note 3.

⁴ Around the Common Era evidence of the material also became more frequent in Iasos: within the *bouleuterion* and south *stoa* of agora, always in portals or within *opus sectile* flooring. BERTI 1999, 336; PARAPETTI 1985, 105–136.

⁵ Few remains are conserved in Labraunda, Cnidos, Sinuri (sanctuary of high antiquity also next to outcrops where, as in the *chora* of Iasos, marble was used for construction and as a support for inscriptions), Xanthos, Ephesus. For Labraunda see BLID 2012, 58, fig. 45; for Cnidos YALCIN 1996, 122, fig. 20; for Sinuri ROBERT 1945, 14, tav. VIII; for Xanthos FROIDEVAUX, RAYNAUD 2005, 145; for Ephesus DEICHMANN 1976, 216, MANGA-RTZ *et al.* 2010, tav. 19.1; BRUNO 2012, 706.

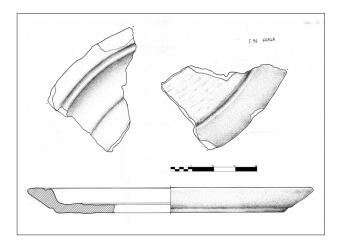


Fig. 1. Fragment of a circular table (drawing: L. Ruffoni)

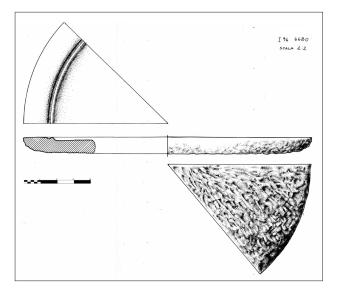


Fig. 2. Fragment of a circular table (drawing: L. Ruffoni)

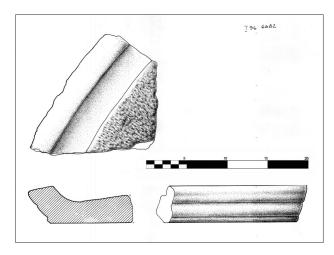


Fig. 3. Fragment of a circular table (drawing: L. Ruffoni)

domestic or Christian, the masonry bases were habitual in *stibadia* but extremely rare in religious buildings¹¹.

It should also be noted how the high border is rare in sigma shaped tables¹² which, as stated, were mainly used for domestic purposes; due to this, the presence of the channel, originally sloped to rid the table centre of food residue, was rendered useless.

Let us now examine the most significant examples of these tables¹³, describing their processing and seeking to make a number of assumptions about their original settings.

Circular tables

As attested by the Pompeii findings, in addition to a number of fresco representations from the same city¹⁴, in secular buildings circular precede sigmoid tables. In late antiquity these continued to be used in *stibadia* as an alternative to sigma-shaped tables and were largely used in Christian buildings¹⁵.

A fragment made of red breccia (inv. no. 6684b) originated from a circular table with a deducible diameter of 66 cm. Its central area is smooth, both above and below, and is enclosed by means of a simple molded profile consisting of a fascia, a groove and a *cyma reversa*. Smoothing on both sides suggests that it may have rested on a base, perhaps wooden, allowing visibility while the reduced diameter hints that it may have been movable.

Instead, the fragment of table inv. no. 6680 has sides with only the base that is roughened, perhaps because they were intended for a masonry base; on top, a wide fascia was separated by a *scotia* from an astragal that leads to the central area, without the interposition of a frame (deducible diameter of 83 cm).

Fragment inv. no. 6682 (deducible diameter of 88 cm) has a similar profile with a smooth base and edges moulded by two fillets that frame a smoothed ovolo section. A feature of this piece is the channel following the borders and enclosing the central area, worked by a toothed chisel and with increasing thickness toward the centre. It seems unlikely that this is an unfinished conventional table; before sanding of the edges the artisan would have had to have lowered the central area; as such, the idea of a table intended for particular uses must be considered.

- 12 CHALKIA 1991, 45.
- 13 For the full records see: BERTI, PEIRANO 2014, 31–34.
- 14 VROOM 2007, 320.
- 15 CHALKIA1991, 46 ff., 73 ff.

¹¹ See the examples of Kos, Aliki and Kourion. On these, respectively: ORLANDOS 1966, 32–34, figs. 32–34; SODINI KOLOKOTSAS 1984; 462 and 466, fig. 15; LOVERANCE 2007, 322.

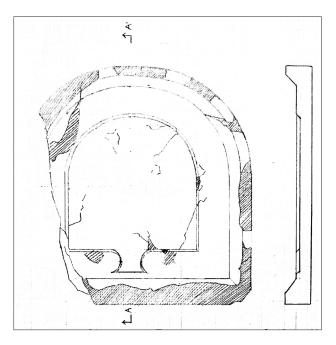


Fig. 4. A sigma shaped *clôturée* table (drawing: D. Peirano)



Fig. 5. Fragmentary rectangular *clôturée* table (photo: D. Baldoni)



Fig. 6. Fragment of a red breccia table (photo: M. Molinari)

Sigma shaped table

Sigma shaped tables appear in the banquet halls at the end of the fourth century¹⁶ and within Christian buildings from the following century¹⁷.

A sigma shaped clôturée table (inv. no. 2050) was found in front of an apsed room containing mosaics, within the so-called east basilica complex¹⁸. As usual the table has square proportions, 1.03 x 1.02 meters. It is 11 cm high at the border, 6 cm at the internal cornice and 5 cm at the centre. The table was made of veined marble and shows the typical central surface enclosed by a large cornice interrupted by a channel with rounded edges. The rough underside and edges, created using a point chisel, show how this table should rest on a masonry base; however, the absence of *stibadia* in the parts of this building that have been explored means that the true origin of the table remains unclear¹⁹.

Rectangular tables

The fragmentary *clôturée* table inv. no. 6663, made of brecciated marble, is 89 cm wide, 10.8 cm high at the edge, 4 cm at the inner frame and 2.8 cm in the central part; the length, however, cannot be determined. The rectangular shape associated with the *clôturée* border and the apparent absence of the channel on the short side, usual in this kind of table, are characteristic of this piece²⁰. The smooth base indicates that this was visible.

Another fragment of red breccia table, *clôturée* and belonging to a corner of a table, was found in the recent excavations of the castle of the Acropolis²¹: it is likely that the table was part of the furnishings of the nearby

- 16 DUNBABIN 2003, 191.
- 17 The first to suppose a derivation of the Christian sigma shaped tables from those of banquet halls was LASSUS 1940, 348–349; LASSUS 1947, 199–201, following the discovery of two of these pieces of furniture in private buildings of Antioch.
- 18 *Contra* SERIN 2004, 137 that relates this table to the acropolis basilica.
- 19 This unless one would interpret the masonry wall that closes the apse devoid of a floor mosaic as the front part of one *stibadium*. However, this hypothesis collides with the thickness of the apse's wall (74 cm) which seems to suggest a high wall, incompatible with the access to the rear structure, already limited by the reduced chord of the apse. On *stibadia* see MORVILLEZ 1996; DUNBABIN 1991; DUVAL 1997.
- 20 CHALKIA 1991, 42.
- 21 PEIRANO 2012, 28. On this excavation: BERTI, MEN-GOLI, MOLINARI 2011, 386–396.

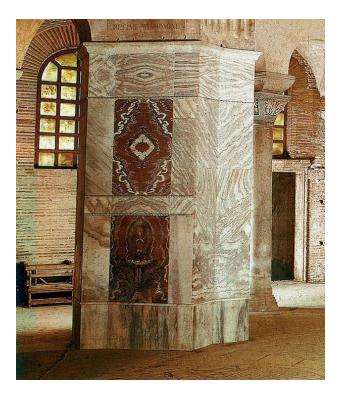


Fig. 7. San Vitale in Ravenna, wall cladding made of Iasian cipollino (photo: D. Peirano)

Christian basilica where, in fact, a rectangular altar base (133 x 88 cm) was found²².

Among the production of Iasian tables, all forms and profiles known exist with the exception of polylobed ones. Common traits are linear forms, devoid of figurative representations, symbols or inscriptions. These choices were made by workshops that only attended to local needs. In fact, with the exception of a round table stored at the Museum of Milas²³, there are no current findings of this type evident outside the city. It seems, then that the frequent occurrence of high borders can be attributed to local custom.

Iasian marble was also used for pavement *sectilia* as in the east church or cathedral of Xanthos (late 5th century – beginning 6th century), in church D of Knidos (late 5th century – beginning 6th century)²⁴ or in the basilica of Mitropolis in Gortyna, where it appears in the floor of the lane crossing the solea from north to south (second half of the 6th century)²⁵.

The stone seemed to reach the highest point of its reputation in the 6th century when it appeared alternating with other precious polychrome marble in some of

- 23 BERTI, PEIRANO 2014, 52.
- 24 YALCIN 1996, 110.
- 25 FARIOLI CAMPANATI, BORBOUDAKIS 2005, 167.



Fig. 8. Basilica of St. John in Ephesus, the column bases that enclosed the presbyterium (photo: M. Molinari)

the most important edifices of the time. Firstly in Bosra, in the wall revetments of the Church of SS. Sergius, Bacchus and Leontius, dated to the years 512–513²⁶. The octagonal church in Gadara, Jordan, from the early 6th century, also conserves traces of Iasian marble²⁷ but in an unknown position.

The first occurrence in Constantinople is related to the church of Saint Polyeuktos, built under the patronage of Anicia Giuliana in the years 524–527; here the marble appeared in slab lining and *sectilia*²⁸.

At the time the marble seemed to become one of the most appreciated revetments in the buildings built by Justinian and his entourage: the Constantinopolitan churches of Hagia Sofia (562²⁹) and of the Holy Apostles (after 565³⁰) and in the San Vitale church in Ravenna (548³¹). From the description of St. Sofia written by Paul the Silentiary, we know that the atrium *phiale* was made of red cipollino, similar to the wall claddings³², where the stone took the form of open book slabs. In Holy Apostles and in San Vitale also, the same marble appeared on wall claddings³³. Another church in Ravenna, the Sant'Andrea Maggiore (546–556), had columns made from Iasian marble³⁴. Two of these are now conserved in

- 26 MASTURZO 1995, 378.
- 27 AL-BASHAIREH 2011, 317 and 320.
- 28 HARRISON 1993, 42.
- 29 RUSSO 2011.
- 30 THEOPHANES, Chronographia, A.M. 6058/A.D. 565.
- 31 RUSSO 1996, 710.
- 32 SILENZIARIUS, Description S. Sophiae, 595, 630.
- 33 SODINI 2002, 131.
- 34 The insertion of these columns, whose original position is unknown, may be related to the works promoted by

²² SERIN 2004, 136.



Fig. 9. Above the monumental tomb where marble slabs were sawn; below the nearby aqueduct (photo: M. Molinari)

the local cathedral. Choricius of Gaza tells us that Iasian marble was also present in the church of St. Sergius in Gaza (before 536³⁵) although in an unknown location³⁶. In the basilica of St. John in Ephesus (c. 560) the column bases that enclosed the presbyterium and certain portal elements³⁷ are made of red cipollino.

The description of Hagia Sophia written by Paul the Silentiary cites Iasian marble together with others produced by well-known imperial quarries; it thus seems probable that at this time the extraction of our marble was also an imperial privilege.

At the same time the stone also became part of local churches, initially as mosaic *tesserae* in the acropolis

- 35 MANGO 1986, 60 note 25.
- 36 CORICIUS, Laudatio Marciani, I, 17 ss.
- 37 SODINI, BARSANTI, GUIGLIA GUIDOBALDI 1998, 315; SODINI 2002, 133.



Fig. 10. A block conserving traces of cutting (photo: Levi's excavations, Archive SAIA)

basilica (late fifth-early sixth century³⁸); these reappear in the agora basilica (Justinianic age³⁹) where Iasian marble was also found in square, rectangular and triangular tiles of the *sectilia*. In the basilicas small columns of unknown origin were also found⁴⁰.

This limited use in local construction, together with the presence of imported marble, also fine, suggests that the value assigned to this marble made it more profitable to export, with a tendency to purchase other types of marble rather than using this particular one.

As is known⁴¹, slabs of cipollino marble⁴² were cut into the quadriporticus of a 2nd century tomb located near the east port and the aqueduct which supplied water power⁴³. That particular transformation of the tomb resembles one represented on a sarcophagus in Hierapolis⁴⁴ and those discovered in Ephesus and Gerasa⁴⁵. These examples date from the late 3rd to the 6th-7th century. These data, together with the systematic evidence of slabs in buildings of the 6th century, suggest the Late Antique – Early Byzantine eras for the insertion of the workshop. The excavations of two galleries of the quadriporticus unearthed, on an emery thick layer, 114 discarded blocks

- 38 SERIN 2004, 188.
- 39 PEIRANO 2011, 15 note 1.
- 40 SERIN 2004, 82.
- 41 BRUNO 2012, 706–714.
- 42 In fact, no traces of breccia were found in the workshop. BRUNO 2012, 708.
- The quadriporticus pavements were located at least 4m. below the water level. BRUNO 2012, 711 note 21.Compare these data with KESSENER 2010, 286–287.
- 44 RITTI, GREWE, KESSENER 2007, 138–163.
- 45 See respectively: MANGARTZ 2010; SEIGNE 2006, 371–378.

the bishop Maximianus. The prelate, according to Agnellus of Ravenna, replaced the original wooden supports of the aisles with others made from Proconnesian marble. Liber pontificalis ecclesiae ravennatis, ed. Holder Hegger 329; DEICHMANN 1972, 61–64.

with traces of multiple saw blades. Excavations also extracted a flat chisel, one of which was used to regularise the corners⁴⁶. Instead, columns roughened with point chisels left at quarries testify to the processing of these pieces in these areas.

Extraction could take place in the quarry closest to the city but located in a gorge (which increased the cost and time due to transportation by animals) or in the wider quarry front on Karaoğlan Deresi. In the latter case, the stone-boating road identified during the surveys in Chora⁴⁷ allowed the the material to be taken down as far as the "small sea", until boarding and transportation; from the port of the peninsula it would then be shipped, worked or not.

If the extraction of marble was related to initial transportation by sea⁴⁸, the sea was the main route for shipping of *marmor iassense*, which, as mentioned, is rarely evident in Caria and in the surrounding areas. The map of the findings, drawing two roughly concentric circles (the first corresponding to the Aegean Sea, the second to the central and eastern Mediterranean) shows that they are almost exclusively found along the coasts⁴⁹.

A small port such as Iasos probably depended on the most important *emporion* of Ephesus; from here the marble, sorted and then combined with others from different areas, ultimately reached the final destination.

The many wrecks with worked and semi-worked marble shed light on the means of transportation (the "lapidary vessels"). Particularly strong evidence in this regard is provided by the wrecks of La Mirande, Torre Sgarlata, of Porto Nuovo and of Punta Scifo D⁵⁰.

To this primary production must be added mortars of different capacity and with a different degree of precision, some with grips decorated with geometrical patterns and/or representations such as diagonal patterns, segments, oblique crosses or other simple geometries, but also the figure of the dove. The extensive

46 MENICHINI 2011, 335.

- 47 PIEROBON BENOIT 2011, 411 ff.
- 48 MARANO 2014, 415.
- 49 LAZZARINI, CANCELLIERE, PIEROBON BENOIT 2005, 322, fig. 2.
- 50 RUSSELL 2011, 139–155; in the sixth century onwards the marble intended to be sawn could travel in the form of blocks (requiring, once it arrived, equipment and labor to be worked), but wrecks with marble slabs are also known. Wrecks with marble slabs, from the sixth century onwards, are recorded in CASTAGNINO BER-LINGHIERI, PARIBENI 2011, 64–75. On *naves lapidariae* MEDAGLIA, BELTRAME, LAZZARINI 2013, 137–165 and the related bibliography.

documentation, collected along the entire Mediterranean⁵¹, helps to date these finds, made in Iasos mainly from brecciated marble, to the seventh century.

The excavations also evidence the production of basins and trays, generally small and difficult to distinguish due to the fragmentary condition, with the remains mainly from the edges. Some of these maintain, on the underside, traces of an umbo that testify as to how they should stand on a base. The pieces made of cipollino, regardless of their size, are shallow, depending on the need to use the veins during manufacturing.

Other examples originating from the Mediterranean basin suggest how this lower level of output might be related to the inactive periods of quarries⁵². Numerous constructions are evident close to the quarries where many fragments and artefacts, some related to Byzantine times, offer clues as to the local marble processing method.

Some provisional conclusions

In Iasos, before the 6th century, the production and export of architectural artefacts seems limited to columns while items such as tiles might be derived from sawing of the former. Tables were instead confined to the city and surrounding areas, as well as to certain by-products such as mosaic tiles.

At the beginning of the 6th century and even more during the Justinian era, marble quarrying became more intensive, almost reaching "industrial" levels. It should be remembered that 114 blocks with saw traces were found in the Balık Pazarıand were the waste products of a much wider manufacturing process. The sources, in addition to the excavation data, suggest the use of marble as a lavish material in construction promoted by the most eminent patrons of the time, juxtaposed with other exotic coloured marble extracted from imperial quarries. Even in the absence of any direct evidence of imperial ownership of the Iasian quarries, the contemporary appearance of a workshop capable of slab sawing, an operation that used a public resource such as the aqueduct, seems to suggest a fiscal property for the entire production chain.

The city of Iasos undoubtedly drew important economic benefit, as testified by the excavations. The circulation of coins increased for another century, evidence of which is confirmed by the ceramics and amphorae, some of Constantinopolitan origin. These data depict a wealthy city where marble would also get into everyday life in the form of basins, trays and mortars.

⁵¹ BERTI, PEIRANO 2014, 46 and related bibliography.

⁵² MARANO 2014, 421.

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