

Recent Work on the Stone at the Villa Arianna and the Villa San Marco (Castellammare di Stabia) and Their Context within the Vesuvian Area

Barker, Simon J.; Fant, J. Clayton

Source / Izvornik: **ASMOSIA XI, Interdisciplinary Studies on Ancient Stone, Proceedings of the XI International Conference of ASMOSIA, 2018, 65 - 78**

Conference paper / Rad u zborniku

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

<https://doi.org/10.31534/XI.asmosia.2015/01.04>

Permanent link / Trajna poveznica: <https://urn.nsk.hr/urn:nbn:hr:123:583276>

Rights / Prava: [In copyright](#) / [Zaštićeno autorskim pravom.](#)

Download date / Datum preuzimanja: **2025-02-24**



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

Association for the Study of Marble & Other Stones in Antiquity

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



Split, 2018

Nota bene

All papers are subjected to an international review.

The quality of the images relies on the quality of the originals provided by the authors.

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 <i>Patrizio Pensabene</i>	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>	33
Alabaster. Quarrying and Trade in the Roman World: Evidence from Pompeii and Herculaneum <i>Simon J. Barker and Simona Perna</i>	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 <i>Simon J. Barker and J. Clayton Fant</i>	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 <i>Dorothy H. Abramitis and John J. Herrmann</i>	89
The Re-Use of Monolithic Columns in the Invention and Persistence of Roman Architecture <i>Peter D. De Staebler</i>	95
The Trade in Small-Size Statues in the Roman Mediterranean: a Case Study from Alexandria <i>Patrizio Pensabene and Eleonora Gasparini</i>	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 <i>Barbara Burrell</i>	117
Iasos and Iasian Marble between the Late Antique and Early Byzantine Eras <i>Diego Peirano</i>	123

Thassos, Known Inscriptions with New Data <i>Tony Kozelj and Manuela Wurch-Kozelj</i>	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) <i>Ruth Taylor, Oliva Rodríguez, Esther Ontiveros, María Luisa Loza, José Beltrán and Araceli Rodríguez</i>	143
<i>Giallo Antico</i> 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) <i>Stefan Ardeleanu</i>	155
<i>Amethystus</i> : Ancient Properties and Iconographic Selection <i>Luigi Pedroni</i>	167
2. PROVENANCE IDENTIFICATION I: (MARBLE)	
Unraveling the Carrara – Göktepe Entanglement <i>Walter Prochaska, Donato Attanasio and Matthias Bruno</i>	175
The Marble of Roman Imperial Portraits <i>Donato Attanasio, Matthias Bruno, Walter Prochaska and Ali Bahadır Yavuz</i>	185
Tracing Alabaster (Gypsum or Anhydrite) Artwork Using Trace Element Analysis and a Multi-Isotope Approach (Sr, S, O) <i>Lise Leroux, Wolfram Kloppmann, Philippe Bromblet, Catherine Guerrot, Anthony H. Cooper, Pierre-Yves Le Pogam, Dominique Vingtain and Noel Worley</i>	195
Roman Monolithic Fountains and Thasian Marble <i>Annewies van den Hoek, Donato Attanasio and John J. Herrmann</i>	207
Archaeometric Analysis of the Alabaster Thresholds of Villa A, Oplontis (Torre Annunziata, Italy) and New Sr and Pb Isotopic Data for <i>Alabastro Ghiaccione del Circeo</i> <i>Simon J. Barker, Simona Perna, J. Clayton Fant, Lorenzo Lazzarini and Igor M. Villa</i>	215
Roman Villas of Lake Garda and the Occurrence of Coloured Marbles in the Western Part of “Regio X Venetia et Histria” (Northern Italy) <i>Roberto Bugini, Luisa Folli and Elisabetta Roffia</i>	231
Calcitic Marble from Thasos in the North Adriatic Basin: Ravenna, Aquileia, and Milan <i>John J. Herrmann, Robert H. Tykot and Annewies van den Hoek</i>	239
Characterisation of White Marble Objects from the Temple of Apollo and the House of Augustus (Palatine Hill, Rome) <i>Francesca Giustini, Mauro Brilli, Enrico Gallochio and Patrizio Pensabene</i>	247
Study and Archeometric Analysis of the Marble Elements Found in the Roman Theater at Aeclanum (Mirabella Eclano, Avellino - Italy) <i>Antonio Mesisca, Lorenzo Lazzarini, Stefano Cancelliere and Monica Salvadori</i>	255

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

Grey and Greyish Banded Marbles from the Estremoz Anticline in Lusitania <i>Pilar Lapuente, Trinidad Nogales-Basarrate, Hernando Royo Plumed, Mauro Brilli and Marie-Claire Savin</i>	391
New Data on Spanish Marbles: the Case of <i>Gallaecia</i> (NW Spain) <i>Anna Gutiérrez García-M., Hernando Royo Plumed and Silvia González Soutelo</i>	401
A New Roman Imperial Relief Said to Be from Southern Spain: Problems of Style, Iconography, and Marble Type in Determining Provenance <i>John Pollini, Pilar Lapuente, Trinidad Nogales-Basarrate and Jerry Podany</i>	413
Reuse of the <i>Marmorata</i> from the Late Roman Palatial Building at Carranque (Toledo, Spain) in the Visigothic Necropolis <i>Virginia García-Entero, Anna Gutiérrez García-M. and Sergio Vidal Álvarez</i>	427
Imperial Porphyry in Roman Britain <i>David F. Williams</i>	435
Recycling of Marble: Apollonia/Sozousa/Arsuf (Israel) as a Case Study <i>Moshe Fischer, Dimitris Tambakopoulos and Yannis Maniatis</i>	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 <i>Robert H. Tykot, Ouahiba Bouzidi, John J. Herrmann and Annewies van den Hoek</i>	467
Marble and Sculpture at Lepcis Magna (Tripolitania, Libya): a Preliminary Study Concerning Origin and Workshops <i>Luisa Musso, Laura Buccino, Matthias Bruno, Donato Attanasio and Walter Prochaska</i>	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 <i>Robert H. Tykot, John J. Herrmann, Renée Stein, Jasper Gaunt, Susan Blevins and Anne R. Skinner</i>	501
3. 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) <i>Bojan Djurić, Divna Jovanović, Stefan Pop Lazić and Walter Prochaska</i>	523
Aspects of Characterisation of Stone Monuments from Southern Pannonia <i>Branka Migotti</i>	537

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

The Local Quarries of the Ancient Roman City of <i>Valeria</i> (Cuenca, Spain) <i>Javier Atienza Fuente</i>	683
The Stone and Ancient Quarries of Montjuïc Mountain (Barcelona, Spain) <i>Aureli Álvarez</i>	693
<i>Notae Lapidinarum</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>	711
A Review of Copying Techniques in Greco-Roman Sculpture <i>Séverine Moureaud</i>	717
Labour Forces at Imperial Quarries <i>Ben Russell</i>	733
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>	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 <i>Maria Apostolopoulou, Elissavet Drakopoulou, Maria Karoglou and Asterios Bakolas</i>	749
7. PIGMENTS AND PAINTINGS ON MARBLE	
Painting and Sculpture Conservation in Two Gallo-Roman Temples in Picardy (France): Champlieu and Pont-Sainte-Maxence <i>Véronique Brunet-Gaston and Christophe Gaston</i>	763
The Use of Colour on Roman Marble Sarcophagi <i>Eliana Siotto</i>	773
New Evidence for Ancient Gilding and Historic Restorations on a Portrait of Antinous in the San Antonio Museum of Art <i>Jessica Powers, Mark Abbe, Michelle Bushey and Scott H. Pike</i>	783
Schists and Pigments from Ancient Swat (Khyber Pukhtunkhwa, Pakistan) <i>Francesco Mariottini, Gianluca Vignaroli, Maurizio Mariottini and Mauro Roma</i>	793
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 <i>Nenad Cambi</i>	827
Marble Revetments of Diocletian's Palace <i>Katja Marasović and Vinka Marinković</i>	839
The Use of Limestones as Construction Materials for the Mosaics of Diocletian's Palace <i>Branko Matulić, Domagoj Mudronja and Krešimir Bosnić</i>	855
Restoration of the Peristyle of Diocletian's Palace in Split <i>Goran Nikšić</i>	863
Marble Slabs Used at the Archaeological Site of Sorna near Poreč Istria – Croatia <i>Đeni Gobić-Bravar</i>	871
Ancient Marbles from the Villa in Verige Bay, Brijuni Island, Croatia <i>Mira Pavletić and Đeni Gobić-Bravar</i>	879
Notes on Early Christian Ambos and Altars in the Light of some Fragments from the Islands of Pag and Rab <i>Mirja Jarak</i>	887
The Marbles in the Chapel of the Blessed John of Trogir in the Cathedral of St. Lawrence at Trogir <i>Đeni Gobić-Bravar and Daniela Matetić Poljak</i>	899
The Use of Limestone in the Roman Province of Dalmatia <i>Edisa Lozić and Igor Rižnar</i>	915
The Extraction and Use of Limestone in Istria in Antiquity <i>Klara Buršić-Matijašić and Robert Matijašić</i>	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 <i>Ivan Alduk</i>	957
Marmore Lavdata Brattia <i>Miona Miliša and Vinka Marinković</i>	963
Quarries of the Lumbarda Archipelago <i>Ivka Lipanović and Vinka Marinković</i>	979

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

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. Barker¹ and J. Clayton Fant²

¹ Norwegian Institute in Rome, University of Oslo, Rome, Italy (simon.barker3@gmail.com)

² Department of Anthropology and Classical Studies, University of Akron, Akron, Ohio, United States (jcfant47@gmail.com)

Abstract

The paper presents the preliminary results of the *Marmo al Mare* Project (co-directed by the authors), an on-going campaign to undertake the first comprehensive study of the lithic decoration for the most prominent elite villas and houses within the Vesuvian area. Presented here are the initial results of three seasons of fieldwork at the Villa Arianna (and the so-called *Secondo Complesso*) and the Villa San Marco at Ancient Stabiae (modern Castellammare di Stabia, Italy). We present a comparison of the levels of marble décor at the villas, the range of stones represented at each site, their qualities and quantities, and how the villas compare to other houses within the wider Vesuvian area in the use of marble in domestic décor.

Keywords

marble, Bay of Naples, Stabiae, villas

Introduction

Three campaigns (2013 – 2015) at the Villa Arianna (Fig. 1) and the Villa San Marco (Fig. 2) at ancient Stabiae (modern Castellammare di Stabia) have allowed the complete documentation of the overall marble-use at each villa, most prominently marble thresholds, pavements and wall *crustae*.¹ We present here the initial results of fieldwork at the villas, their use of marble in domestic décor and the implications for the importance of marble in Vesuvian villa decoration.

The site of ancient Roman Stabiae, located south of the Sarno River, contains at least six enormous villas and represents the largest concentration of well-preserved *villae maritimae* in the Mediterranean world. Although first explored in the eighteenth century, the sites were immediately reburied and not rediscovered until their partial re-excavation during the 1950s.² Out of the six villas discovered, two remain partially uncovered from the excavations of the 1950s: the Villa Arianna with the so-called *secondo complesso* and the Villa San Marco. These two villas are comparable in siting, size and décor to the other two well preserved villas excavated on the Bay of Naples that remain accessible today: Villa A at Oplontis and the Villa of the Papyri in Herculaneum. The villas of ancient Stabiae therefore present two of the four largest villas in the area destroyed by the eruption of Mt. Vesuvius in AD 79 that still retain substantial architectural remains.

Unfortunately, the quantity and scale of marble-use is hard to calculate in absolute terms for any Vesuvian site, given histories of extensive stone-robbing, especially during the eighteenth and nineteenth centuries.³ Indeed, what survives at Stabiae is now much reduced due to later looting⁴ and there is no way of knowing if all the varieties of marble originally employed in the four villas mentioned above are still preserved today. Furthermore, none of the four villas are entirely uncovered; however, even with these constraints we can draw a number of significant conclusions about the use of marble decoration at the villas of ancient Stabiae and their standing relative to other villas and elite houses around Vesuvius.

Both the Villa San Marco and the Villa Arianna feature *sectilia pavimenta*, walls of marble revetment, marble thresholds and windowsills, and at San Marco

1 We are grateful to the Soprintendenza Speciale per i Beni Archeologici di Napoli e Pompei, and, Dott.ssa G. Bonifacio, Dott.ssa Maria Paola Guidobaldi and Prof. Massimo Osanna, as well as Prof. Thomas Howe and Dott. Paolo Gardelli. Funding came from the Loeb Classical Library Foundation.

2 D'ORSI 1996.

3 i.e. the removal of marble revetment and statuary via exploration tunnels at Herculaneum; PIROZZI 2003, 27-32.

4 RUGGIERO 1881, 148-150.

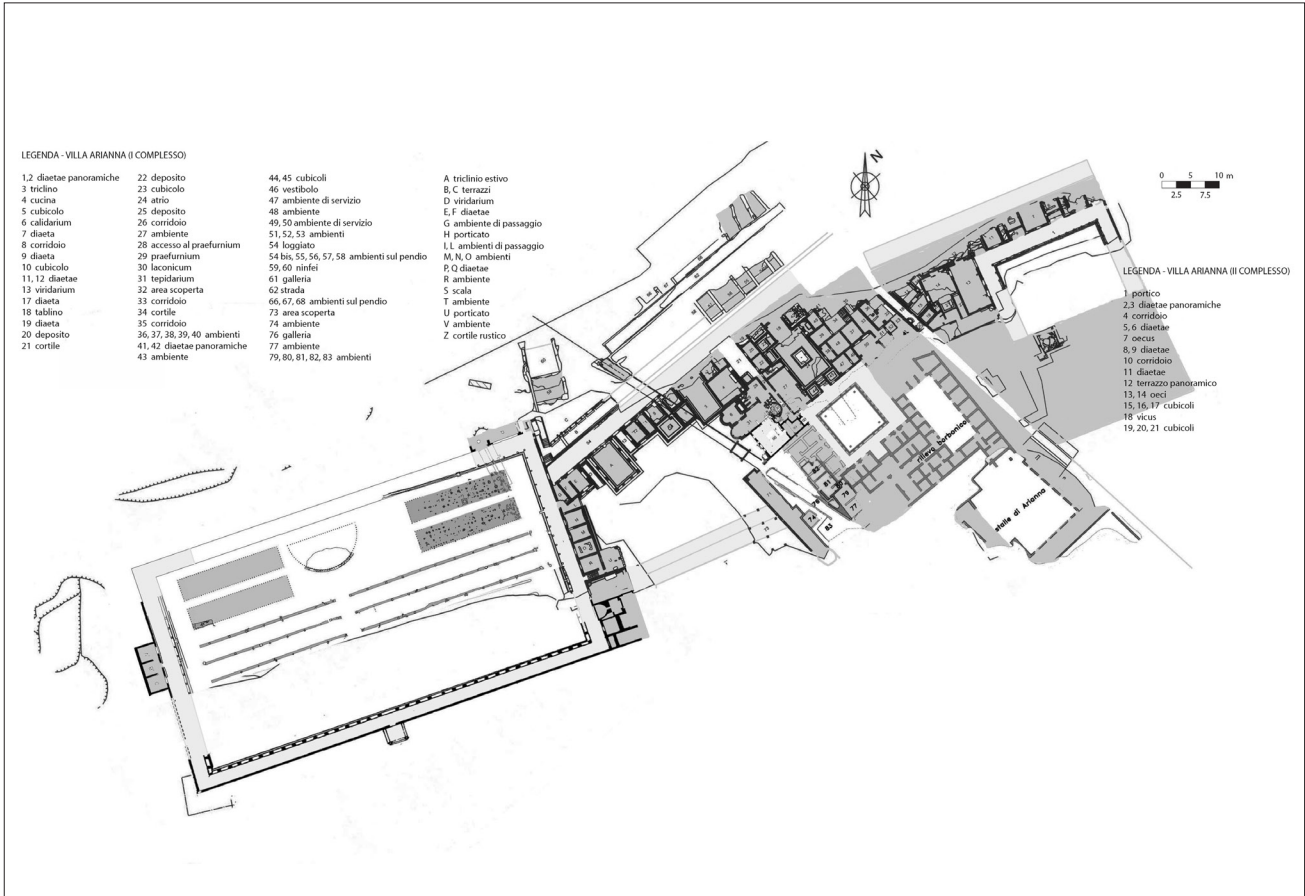


Fig. 1. Plan of the Villa Arianna (courtesy of Thomas Howe)

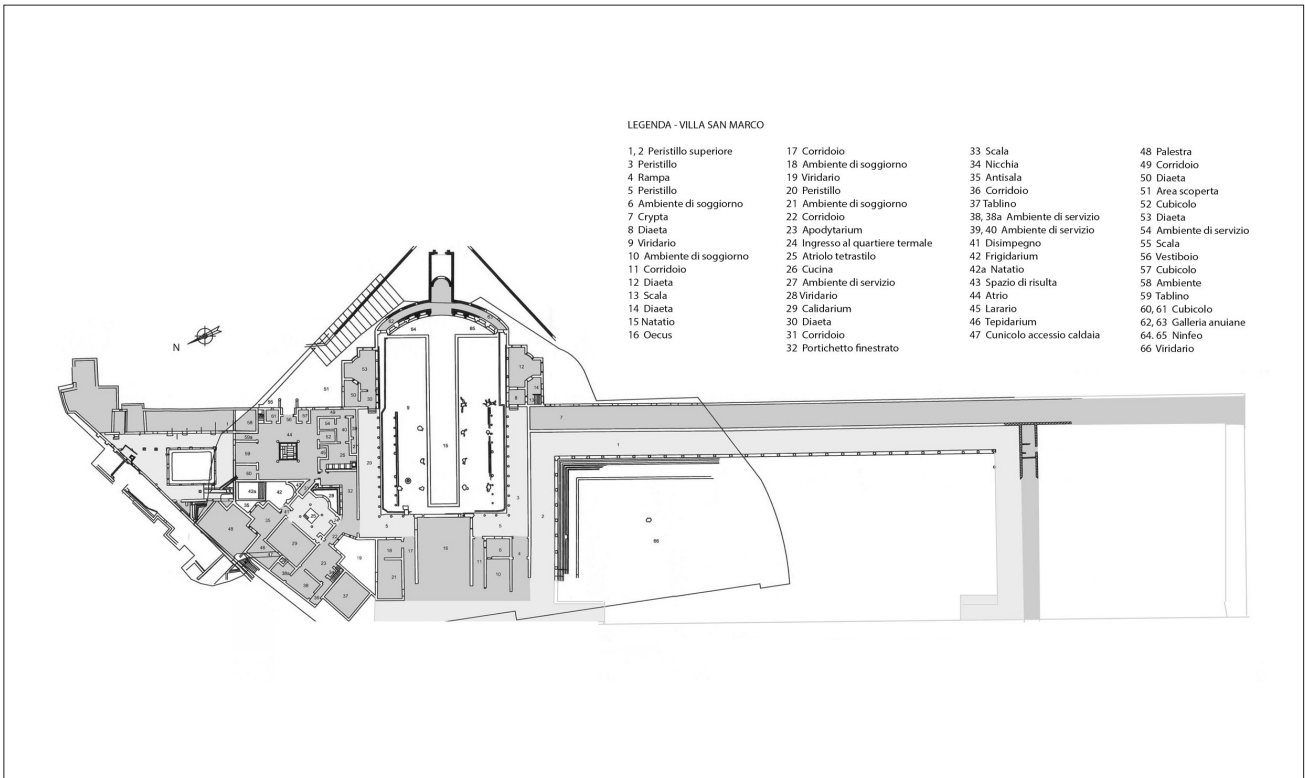


Fig. 2. Plan of the Villa San Marco (courtesy of Thomas Howe)



Fig. 3. Stabiae, Villa Arianna, Room 34, surviving portion of mosaic pavement with marble inserts (photo: S. Barker)

there is a marble pool surround. The Villa Arianna also features a number of mosaic pavements with marble inserts. The villas date from between the Republican period and 79 AD.⁵ Much of the marble decoration at the villas belongs to construction phases in the Augustan and Claudian-Neronian periods, contemporaneous with the installation of Third- and Fourth- Style frescoes.

Villa Arianna

At the Villa Arianna our investigation included the complete documentation of all the pavements characterized by marble pieces of more or less irregular sizes and shapes inserted into cement pavements or mosaic backgrounds of either black or white.⁶ (No such pavements are attested at the Villa San Marco.) In total, three pavements with marble inserts are known at the villa and are located in Rooms 3, 34-35-41 (Fig. 3) and M (Fig. 4). Unfortunately, Room 34-35-41 was not sufficiently preserved to allow detailed investigation, but the pavement in Room M contains a relatively limited number of varieties (Fig. 5).⁷ The pavement in Room 3 (Fig. 6), the largest and grandest pavement with marble inserts at the Villa Arianna, contained a total of 854 marble inserts with 14 different varieties (Fig. 5), but only *breccia di Aleppo* and *breccia corallina* could be considered particularly unusual for the Vesuvian area in the first century AD.

The pavements and wall revetment in Rooms 6 and 31 of the thermal complex (Fig. 7) were almost entirely robbed,⁸ but the motifs can still be discerned from

5 HOWE 2015.

6 GRANDI, GUIDOBALDI 2006, 34-38, Tables 1 and 2.

7 BARKER *et al.* 2013, 4.

8 The marble wall revetment from the thermal complex



Fig. 4. Stabiae, Villa Arianna, Room M, detail of cement pavement with marble inserts (photo: S. Barker)

the imprints in the mortar bedding. These pavements most likely belong to the second phase of construction in the first half of the first century AD⁹ and have similar designs, each consisting of two parts: a main floor of rectangular slabs with a *listelli* border (composed of slate as can be inferred from a single *in situ* fragment in Room 6),¹⁰ and a semi-circular niche at the south-west end of the room with rows of hexagons and triangles. The main floor in both rooms is bordered by slabs on the north, east and south: two of these slabs (*giallo antico* and grey) remain *in situ* in Room 31. While no fragments from either motif remain *in situ*, the presence of polychrome marble is suggested by d'Orsi's report of finding 'pezzi di marmo pregiato',¹¹ although these could be from the pavement or wall revetment.

Room R was also systematically stripped but its motif is preserved in the mortar preparation layer.¹² The imprints preserve two phases of flooring. Only the second phase, which is preserved on most of the floor, concerns us here: Guidobaldi's QrQ with the addition

was spoliated during the eighteenth century Bourbon excavations; CAMARDO 2001a, 74-83; 2001b, 78; RUGGIERO 1881, 90ff.

9 GARDELLI *et al.* forthcoming.

10 GUIDOBALDI's *Quadrati listellato* (ML); GUIDOBALDI 1985, 205, fig. 25a.

11 D'ORSI 1996, 46 (7-10 July 1950).

12 The floor was completely stripped during the Bourbon excavations and re-used in the Royal Bourbon Museum; RUGGIERO 1881, 149-150.

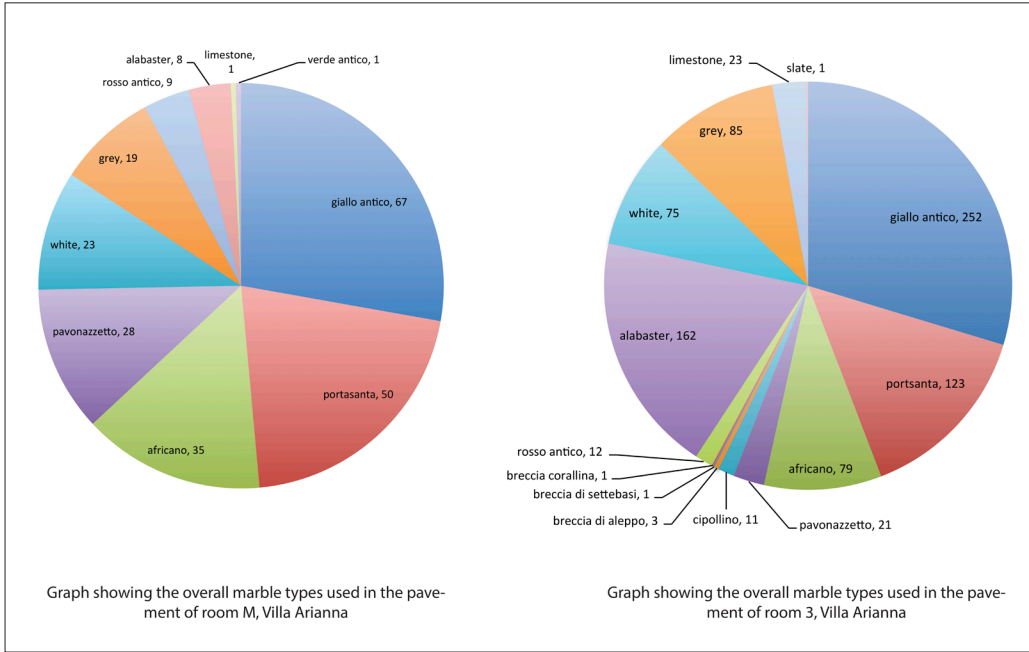


Fig. 5. Graphs showing the overall marble types used in the pavements of Rooms M and 3, Villa Arianna (drawings: S. Barker)



Fig. 6. Stabiae, Villa Arianna, Room 3, detail of mosaic pavement with marble inserts (photo: S. Barker)

of *listelli* (Fig. 8).¹³ A small fragment of the *listelli* (slate) survives *in situ*. Thanks to the reports from Ruggiero, we know that the materials from Room R were most likely *giallo antico* and *africano*.¹⁴

Two further rooms at the Villa Arianna that employed marble decoration were also documented. Room 13 featured a wall-to-wall *sectilia* pavement datable to the first half of the first century AD. The floor area is 72 m², making it amongst the largest within private residences in Campania (see below). Almost all of the marble has been stripped from the floor. Two fragments of triangles in *portasanta* remain *in situ* on the west wall next to the original

grey marble (probably Luna *bardiglio*) border, along with a fragment of a *pavonazzetto* triangle in the same vertical row of squares, but towards the north wall. The grey marble border survives for almost the entire length of the west wall and in the northwest corner of the north wall. The pavement's motif is Guidobaldi's Q2, which consists of oblique squares surrounded on all four corners by triangles.¹⁵ The room's pavement was partially stripped in 1762 to pave a room in the *Museo Reale di Portici* (now the *Museo Ercolanese* in the Reggia di Portici) and the remaining floor was almost entirely stripped in 1775 to pave one of the rooms in the *Real Museo Borbonico* (now the Museo Nazionale di Napoli). The reconstructed floor in the *Museo Ercolanese* indicates that the pattern was a central square in *portasanta* and triangles in *pavonazzetto* and a central square of *pavonazzetto* and triangles in *portasanta*.

Atrium (24) features Third-Style frescoes and marble wall revetment, possibly installed simultaneously since the surviving Third-Style scheme shows no signs of having been cut into for the addition of the marble decoration. The wall revetment consists of a socle (22 cm high by 11 cm thick) of warm white marble with large crystals (which rules out an Italian provenance, see below) that is preserved in two places in the northwest *ala* and in a stretch of the long east wall, as well as in mortar impressions around the room generally.¹⁶ The socle is surmounted by a frame of *cipollino* (9.5 cm high and

13 *cf.* GUIDOBALDI 1985, 183, fig. 4, 206-208, fig. 25k.

14 RUGGIERO 1881, 147-150.

15 GUIDOBALDI 1985, 183. See also PISAPIA 1989, 54, cat. no. 104.

16 The marble revetment may have been removed in Antiquity; RUGGIERO 1881, 162.

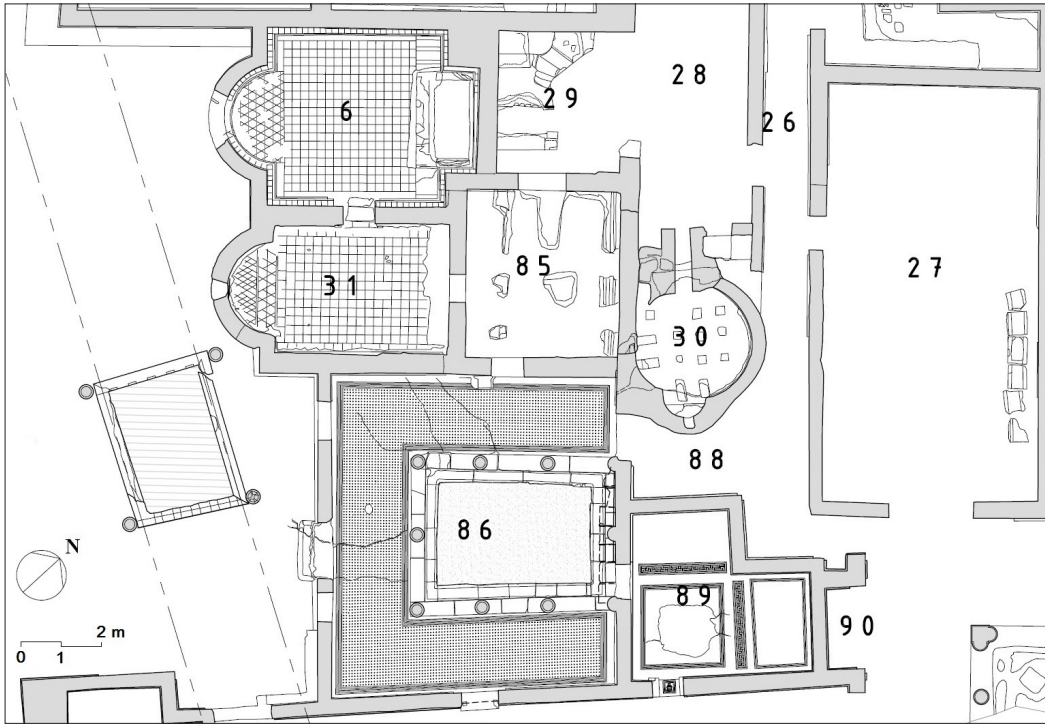


Fig. 7. Stabiae, Villa Arianna, plan of the Thermal Complex (courtesy of RAS Foundation)



Fig. 8. Stabiae, Villa Arianna, Room R, detail of pavement (motif OrO) (photo: S. Barker)



Fig. 9. Stabiae, Villa Arianna, Atrium 24, surviving portion of marble revetment (photo: S. Barker)

3 cm thick, Fig. 9), which is preserved at a single point on the northwest wall. Above this, mortar impressions indicate a large panel.¹⁷ The total circumference of the revetment is 44.7 m, making the atrium one of the largest marble-revetted rooms in Campania (see below).

White marble in the Villa Arianna

Visual analysis indicates the prevailing presence of *marmor Lunense* (modern Carrara) throughout the villa; however, we identified several *in situ* pieces of white marble revetment that visually did not fit the characteristics of Luna: in the doorway between Rooms 31 and 6 of the thermal complex, the socle of Atrium (24) and the windowsill of Room P (Fig. 10). Visual inspection of the crystal characteristics with the 10x lens indicated that the marble employed has medium-coarse grained crystals, with maximum grain sizes (MGS) over 3.5 mm, which excludes Luna marble with its MGS of 1mm as a possible source. This is an important discovery that sets the Stabian villas apart from other Campanian examples, even those of first rank like Villa A at Oplontis.

While non-Italian white marble is not unprecedented in the Vesuvian area, examples are usually restricted to small-scale uses, motivated as much by the desire to

17 The use of large framed panels makes the room comparable to *diaeta* 78 at Villa A, Oplontis (see BARKER, FANT, *forthcoming*) and the House of the Telephus Relief (Ins. Or. I, 2) at Herculaneum; GUIDOBALDI *et al.* 2014.



Fig. 10. Stabiae, Villa Arianna, Room P, garden window sill with non-Italian white marble (photo: J. Clayton Fant)

display a spectrum of white marble types as by the specific virtues of non-Italian marble. This can be seen in the “marble museum” of the water garden in the House of the Vettii at Pompeii (VI, 15, 1) where a large rectangular basin in Thasian was sited on the N-S axis along the south side of the portico.¹⁸ The outdoor *triclinium* (31) of the House of the Golden Bracelet at Pompeii (VI, 17, 42) was also composed of no less than 5 varieties of white marble,¹⁹ and more haphazard combinations are evident in *triclinia* at the *hospitium* at Murecine (600m south of Pompeii’s Stabia Gate), the Praedia of Julia Felix (II, 4) and the *aedicula* behind the *biclinium* of the House of Octavius Quartio (II, 2, 2) at Pompeii.²⁰ The use of non-Italian marble in the thermal complex, and most likely elsewhere in the Villa Arianna, including c. 10 m² of revetment socle in Atrium (24) and the extensive windowsills of Room P, is a different case. The presence of such a quantity of non-Italian white marble singles out the Villa Arianna for its use of white marble from other elite villas in the Vesuvian area.

Villa San Marco

Two panels of *sectilia* (now in the Stabiae Antiquarium) from Room 10 of the Villa San Marco, the *oecus* flanking the great *exedra* 16 and the grandest small reception

18 FANT *et al.* 2002.

19 FANT 2009.

20 FANT, ATTANASIO 2015.

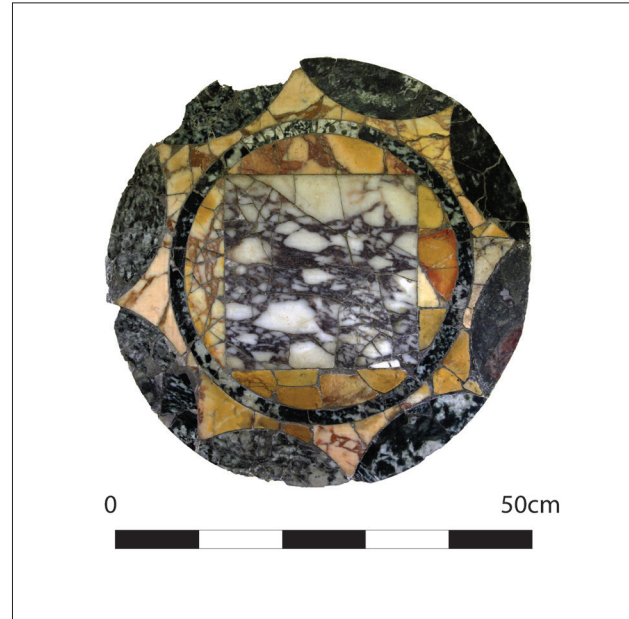


Fig. 11. Stabiae, Villa San Marco, Room 10, detail of *sectilia* panel (now in the Stabiae Antiquarium) (photo: S. Barker)

room of the villa, include several rare Egyptian granites, including *Granito della Colonna* (Wadi Umm Shegilat) and *Sedia di S. Lorenzo* (Wadi Semna) (Fig. 11). These granites are used in striking and complex figures (eight segments or circles - one of which is in fact *africano* - form the border of the entire circular composition, and a narrow circular band), to frame a square of *pavonazetto*. The floor may also have used red porphyry as a survey of the shims preserved in the floor bedding mortar found multiple fragments of this stone. All of these materials are at the top of the scale of prestige and scarcity.

In 2014 the floor was uncovered to trace the mortar-bedding layer into the center of the *sectilia pavimenta* of Room 16 (Fig. 12). The investigation indicated that the room’s entire surface, 138.6 m², was paved with marble and is therefore the largest marble floor of any residence in the Vesuvian area.²¹ The pavement’s motif is Guidobaldi’s QOrQ, with a module of c. 60 cm (two Roman feet). The geometric scheme features an oblique central square

21 Wall-to-wall *sectilia pavimenta*, not all of which are marble, are rare in houses at Herculaneum and Pompeii with examples only at the House of the Skeleton (III, 2), the House of the Stags (IV, 21), the House of the Telephus Relief, the House of the Alcove (IV, 3-4), and the House of the Atrium Mosaic (IV, 1-2) in Herculaneum, and the House of M. Fabius Rufus, the House of Sallust (VI, 2, 4), the House of Apollo (VI, 7, 23), the House of the Golden Bracelet (VI, 17, 42), the House of the Centenary (IX, 8, 3), the House of Cornelius Rufus (VIII, 4, 15) and the Villa of the Mysteries at Pompeii.



Fig. 12. Stabiae, Villa San Marco, Room 16, uncovered floor section (photo: S. Barker)



Fig. 13. Pompeii, Villa of the Mysteries, Room 1, detail of mosaic pavement (photo: S. Barker)

surrounded by four rectangles. Only a small portion of the pavement survives *in situ* and so the types of marble used in the overall scheme cannot be reconstructed with certainty; however, the panels certainly employed *portasanta*, *giallo antico*, *africano* and *pavonazzetto*.

The villas of ancient Stabiae in their Vesuvian context

The following survey is not intended to be exhaustive but rather to provide some context for the marble-use in the villas of ancient Stabiae, highlighting some differences and similarities between neighboring villas and the nearby cities of Herculaneum and Pompeii.

Stone decoration was used in each of the three phases of Villa A at Oplontis, in the initial construction (c. 50 BC), the renovations and additions during the Augustan period (c. AD 1-15) and finally in the east wing constructed during the Julio-Claudian period, after AD 45.²² At its construction in c. 50 BC, most of the decorative stones used at Villa A were unremarkable. However, the villa's 14 threshold blocks of alabaster, requiring at least 1.5 m³ of alabaster, singled the villa out from other villas and houses in the region in this period (and even those in Rome), and highlight the luxury status of the villa within the wider context of private residences in Campania. The actual quarry source still remains uncertain (see Barker *et al.* this volume) but it must have represented a significant investment on the part of the villa's owner.

Although we find a lack of investment in marble decoration during the Augustan period at Villa A, which may well reflect the owner's preference or focus towards painted decoration, the mid-Julio-Claudian East Wing (c. AD 45) shows a substantial investment in marble. In this period at Villa A we find *sectilia* floors (Rooms 69 and 78), mosaic pavements with marble inserts (i.e. Portico 60 and Peristyle 32) and wall revetment in four rooms (64-65, 69, 74-75 and 78), which made use of wider varieties of imported marbles, including *pavonazzetto*, *africano*, *giallo antico*, *portasanta* and some rarer varieties, such as *breccia di Settebasi*, *cipollino rosso* and *breccia di Aleppo*. This shows that the villa was well aligned with metropolitan (and imperial) tastes, but large quantities and prominence in display of *breccia corallina*, the chief material for the villa's wall revetment (to judge by the extant evidence), may well attest to local innovation and ingenuity.

The Villa of the Mysteries at Pompeii is located 400 m from the Herculaneum gate on the northwest side of the city. While the villa compares to Villa A and the villas of Stabiae in its use of impressive painted wall decoration, mainly datable to the Second-Style period, marble decoration is notably lacking. The villa features a number of Second-Style mosaic pavements with inserts of coloured limestone and Egyptian alabaster, similar to that of Room 15 at Villa A.²³ Room 5 (*sala "dei misteri"*) is notable for its

22 See BARKER, FANT, *forthcoming*.

23 Corridors F¹, F² and F³ and P¹, P², P³, P⁴, room 62 and corridor 43; CICIRELLI, GUIDOBALDI 2000.

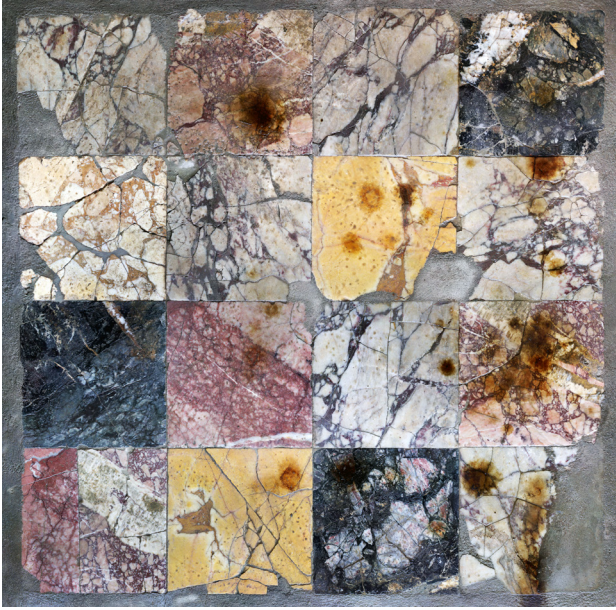


Fig. 14. Pompeii, House of the Fruit Orchard (I.9.5), Room 13, detail of *emblemata* (photo: S. Barker)



Fig. 15. Pompeii, House of M. Lucretius, *tablinum* (15), detail of a panel of *gabbro eufotide* from Egypt's Wadi Maghrabiya (photo: S. Barker)

inclusion of a wall-to-wall *sectilia* pavement with squares of *palombino bianco*, *ardesia* and *pietra paesina* during the Second-Style period, and during the Third-Style period, we find a mosaic pavement with inserts of coloured marble (*alabastro fiortio*, *giallo antico*, *pavonazzetto* and *portasanta*) in Room 1 (Fig. 13).²⁴

The Villa of the Papyri, located just outside the city wall of Herculaneum, was originally constructed between 60 and 40 BC,²⁵ and contained a circular belvedere with an intricate circular *sectilia* pavement with marble and colored limestones.²⁶ The most notable pavement from the atrium quarter of the villa is a Second-Style floor, located in corridor (h) in the western sector.²⁷ It features a white ground tessellated mosaic with inserts of colored limestone and marble.²⁸ Most of the late Augustan or early Julio-Claudian *sectilia* pavement in the center of the lower terrace (VPSO

a)²⁹ was removed, but the decorative scheme of *giallo antico* squares and lozenges framed by *rosso antico* listels can still be reconstructed.³⁰ The lower sections of the room also featured marble wall revetment, which shows signs of renovation during the Neronian and Flavian periods.³¹ This revetment had a height of 1.10 m and included a lower plinth of *africano* crowned with a white marble molding cornice, above which were rectangular slabs of *africano* and *giallo antico*. This was crowned by another white marble molding cornice, on top of which was another row of rectangular panels of *africano*, *cipollino*, and *luna bardiglio*.

The range of lithotypes available to private individuals at Pompeii has already been well studied.³² This range is typical for central Italy in the first century AD; *cipollino*, *giallo antico*, *africano* and *portasanta*, for example, are well attested. A range of other imported materials can also be found, albeit in much smaller quantities, including *breccia di Settebasi*, *pavonazzetto*, various alabasters, *rosso antico*, *breccia corallina*, *breccia di Aleppo* and *semesanto*. However, one clear factor distinguishes the villas of ancient Stabiae (and Villa A), namely the quantity of marble being used.

24 CICIRELLI, GUIDOBALDI 2000, 18.

25 DE SIMONE 2010; M. P. GUIDOBALDI, ESPOSITO 2010.

26 The pavement from the belvedere is now in the Museo Nazionale di Napoli; RUGGIERO 1881, tav. XII, 4, WORCIK 1986, 26, tav. XI. For another pavement possibly associated with the villa: RUGGIERO 1881, tav. XII, 3, WOJCIK 1986, 27, tav. XII.

27 See M. P. GUIDOBALDI *et al.* 2012, 128-131, fig. 86, 87, 89 and 90; DE SIMONE, RUFFO 2005, 168.

28 DE SIMONE, RUFFO, 2005, 168, n. 27.

29 The entire lower terrace was labeled VPSO (Villa dei Papyri area Sud-Ovest): GUIDOBALDI, ESPOSITO 2010, 23, 45-50, n. 69.

30 GUIDOBALDI, ESPOSITO 2010, 46-47.

31 GUIDOBALDI, ESPOSITO 2010, 47-48, 59.

32 FANT 2007.

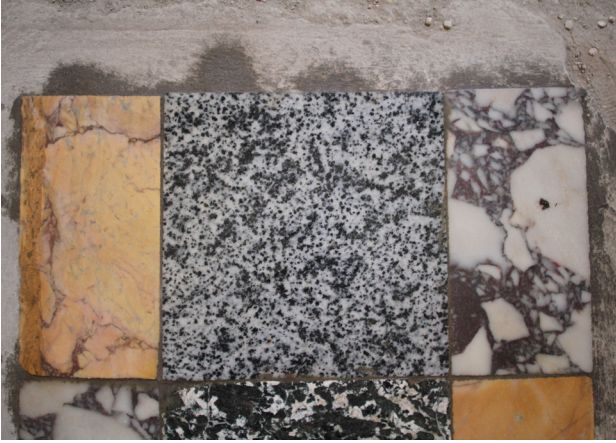


Fig. 16a. Pompeii, House of the Small Fountain, Room 9, detail of panel of *granito del foro* (photo: S. Barker)



Fig. 16b. Pompeii, House of the Small Fountain, Room 9, detail of panel of *granito bianco e nero* (photo: S. Barker)

Both wall-to-wall *sectilia pavimenta* and wall revetment are rare at Pompeii; the latter features in only seven houses at Pompeii.³³ Similarly, marble *emblemata* (i.e. the House of the Fruit Orchard (I, 9, 5), Fig. 14), if somewhat more numerous, remain rare, even into the Fourth-Style period. Most marble-use was restricted to irregular or geometric inserts in mosaic or cement pavements. This suggests that marble supplies remained limited into the mid-first century AD. The most significant display of marble can be found in the House of the Golden Bracelet³⁴, the House of the Ephebe (I, 7, 10), the House of Caecilius Jucundus (V, 1, 26) and the House of the Centenary (IX, 8, 3), although with the exception of the pavement in *triclinum* 17 of the House of the Ephebe, these examples are not on the scale of the best houses at Herculaneum.

While private houses in AD 79 had more marble on display than ever, Pompeii seems to have been poorer in its use of rare stones than Herculaneum. The late Fourth-Style *sectilia pavimenta* of the House of M. Lucretius (IX, 3.5) is one of only a few pavements to employ stone from Egypt's Eastern Desert. At the House of M. Lucretius we find three 15 x 15 cm panels of *gabbro eufotide* from Egypt's Wadi Maghrabiya (Fig. 15).³⁵ In the House of the Small Fountain (VI, 8, 23), we find two 30 x 30 cm panels, one of *granito del Foro* (*marmor Claudianum*) from Mons Claudianus, and the other, *granito bianco e nero* from Wadi Barud, near Mons Claudianus

(Fig. 16a and b).³⁶ We can add these examples to other known uses of Egyptian granite on the façades of bar counters at Pompeii – a large rectangular panel of green-grey *granito della sedia di San Lorenzo* from Wadi Umm Wikala, was used in the face of the bar at VI, 10, 1/19, and a disc of the black variety of Aswan granite (*lapis syenites* or *Thebaicus*) was used in the same way at VII, 15, 5. The pavement in *triclinum* 17 of the House of the Ephebe, dated to the late Third-Style or Fourth-Style period,³⁷ also features a number of granites, including *porfido rosso antico* (*lapis porphyrites*) from Gebel Dokhan (Mons Porphyrites), *granito della sedia di San Lorenzo* and *granito bianco e nero* (Fig. 17a-c).

We also find very small amounts of other less common stones: *semesanto* was used for small hexagons in the cement pavement of the House of M. Lucretius Fronto (V.4.a); *breccia di Aleppo* is found in only in a small number of houses, such as the House of P. Casca Longus (I, 6, 11) and the House of the Golden Cupids (VI, 16, 7).

At Pompeii we should also note the important houses belonging to the *Insula Occidentalis*, such as the House of Marcus Fabius Rufus and the so-called Villa Imperiale (VII, 1, a),³⁸ which demonstrate, as at Herculaneum, the investment of elites during the Julio-Claudian period in constructing substantial multi-storied villas. The early Fourth-Style (45-62 AD) structural remodeling of the House of Marcus Fabius Rufus was accompanied by the installation of *sectilia pavimenta*, and in Room 21 on the piano terra, the most impressive example of marble wall revetment at Pompeii (and probably anywhere on the Bay of Naples)

33 The House of the Citharist (I, 4, 5), the House of Sallust, the House of M. Fabius Rufus (VII, 16, 22), the House of Castor and Pollux (VI, 9, 6), the House of the Vestals (VI, 1, 6-8), House at VIII 2, 14-16, and the House of Queen Caroline (VIII, 3, 14).

34 CIARDIELLO 2006.

35 BROWN, HARRELL 1995; HARRELL *et al.* 1999.

36 HARRELL 2010.

37 GUIDOBALDI 1985, 192, tav. 5,6; GUIDOBALDI, OLEVANO 1998, 235-236, tav. 12,6.

38 GRIMALDI 2006; PAPPALARDO *et al.* 2008.



Fig. 17a. Pompeii, House of the Ephebe, *Triclinium* 17, detail of pavement, *granito della sedia di San Lorenzo* from Wadi Umm Wikala (photo: S. Barker)



Fig. 17c. Pompeii, House of the Ephebe, *Triclinium* 17, detail of pavement, square of *porfido rosso antico (lapis porphyrites)* from Gebel Dokhan (Mons Porphyrites) (photo: S. Barker)



Fig. 17b. Pompeii, House of the Ephebe, *Triclinium* 17, detail of pavement, *granito bianco e nero* from Wadi Barud, near Mons Claudianus (photo: Simon Barker)

with floor-to-ceiling revetment c. 3.8 m high (Fig. 18). However, quantification of the total marble decoration remains difficult because several rooms (i.e. Rooms 21 and 62) were in the process of being stripped of marble after the earthquakes of AD 62.

Sectilia pavimenta is present at Herculaneum in 44 different rooms (30 in private houses and 15 in public buildings) within 17 private and public buildings,

covering c. 352 m².³⁹ Many of the pavements at Herculaneum are extremely rich in terms of range of materials, including a number of rare stones, such as *breccia di Settebasi* and *breccia rossa Appenninica*, with *gabbro eufotide*, *semesanto*, *breccia di Aleppo*, *fior di pesco*, and *porfido rosso antico* represented by only a few small panels (i.e. House of the Stags (IV, 21)). The ever-increasing importance of marble display in elite décor during the late Fourth-Style period can be seen in Room 18 of the House of the Telephus Relief, which employs 23 different types of stone, including small amounts of these rare varieties. In fact, the House of the Telephus Relief and the House of the Stags outdo both the villas of ancient Stabiae and Villa A at Oplontis in terms of the range of marble varieties employed.

Large pieces of marble, such as the *cipollino* thresholds and green porphyry blocks awaiting installation in the House of N. Popidius Priscus (VII, 2, 20), suggest that substantial pieces of imported polychrome stones were only just beginning to be obtained at Pompeii in AD 79. It seems that such blocks or panels were already available at Herculaneum, as the windowsills of large *cipollino* blocks at the House of the Gem (Ins. Or. I.1) demonstrate (Fig. 19). In fact, larger panels found at Herculaneum like the *africano* threshold slab of the House of the Bicentenary (V, 15) seem to be missing entirely in the houses of Pompeii.

39 SAVALLI *et al.* 2015.



Fig. 18. Pompeii, House of Marcus Fabius Rufus, Room 21, N-W corner, imprint of wall revetment (photo: S. Barker)

Toward a comparative perspective

Certain difficulties arise when trying to take a comparative approach to the study of ancient marble decoration. In addition to the large quantities of marble now missing from houses and villas, there is the problem of what criteria to use when judging ancient displays of marble. For example, what was more important (or prestigious) to an ancient house owner and/or guest: was it better to have more rooms with smaller quantities of marble, or one or two rooms with a large volume of marble? Was quantity more important or number of varieties on display? Were more heterogeneous compositions of the marbles favored in imperial architecture (i.e. *pavonazzetto*, *giallo antico*, *portasanta* and *africano*) seen as superior to those with a plethora of less well-known varieties?

Dates are also problematic when marble-use is compared. We must be mindful of the date of the marble-use (particularly with reference to the first examples of particular marble varieties within Italy) and the removal of



Fig. 19. Herculaneum, House of the Gem, detail of *cipollino* window sill (photo: S. Barker)

earlier marble pieces through renovation and/or recycling. If we look at the use of marble during the Second-Style period, for example, Villa A seems to be ahead of the competition with its use of alabaster thresholds, but the same is not true in the Fourth-Style period. Therefore we should be aware that elite owners and/or houses may have been more prestigious in earlier periods but were surpassed at a later date.

In examining the marble-use of villas and houses at Pompeii and Herculaneum we can certainly see general trends over time. Firstly, we can see an increasing use of marble, which reached its peak during the period after the AD 62 earthquake. Secondly, we can see new trends developing in the way marble was displayed, moving from inserts in mosaic pavements to *sectilia pavimenta* and finally to wall revetment. Thirdly, we can see an ever-increasing range of marble being displayed, especially in the late Fourth-Style period, including genuinely rare materials, such as Egyptian granites. This reveals a clear trend of local elites working hard to keep up with fashions at Rome, obtaining small pieces of granite from quarries in the Eastern Desert, which had been prospected and developed to supply imperial architecture. The house and villa owners of the Bay of Naples clearly understood the value of these materials and took care to display them conspicuously. Fourthly, we have a clear impression that those owners, pondering the choice of materials when commissioning renovations or new construction, had to work within an atmosphere of scarcity. While some houses and villas were clearly privileged in their supplies of marble (Villa A or the House of the Stags, for example), no property was exempt from local difficulties and supply shortages on the Bay of Naples in the mid-first century AD. It seems likely that not all marble was coming directly from the quarries but much was being re-used, recycled, gifted or perhaps sold on as

surplus from public projects.⁴⁰ Therefore, the stone used for a project might depend (at least to some extent) on what was available on the secondhand market. Even the impressive marble displays at the House of the Stags were in part supplied by recycled material, as evidenced by the majority of slabs, which show evidence of having been reworked.⁴¹

The following preliminary observations about the relative richness of marble-use in the houses and villas on the Bay of Naples may provide support for a broader discussion. The Villa San Marco is the richest of the villas in the Bay of Naples in terms of its range of marble, including Egyptian granites, and is comparable to the House of the Telephus Relief and the House of the Stags at Herculaneum, and the House of the Ephebe at Pompeii. In terms of the overall quantity of marble used for floors and walls, the Villa Arianna (c. 122 m² of marble required for rooms 13, R and 24 alone) and the Villa San Marco (well over 150 m² for Rooms 16 and 10) exceed Villa A (c. 90 m²) and even the most marble-rich houses at Pompeii and Herculaneum, such as the House of the Telephus Relief (c. 154 m² of marble in total). Moreover, while the House of the Stags contained the most rooms with marble *sectilia pavimenta* (over 10 rooms – double that of the Villa Arianna (5) and substantially more than the Villa San Marco (2) and Villa A (3)), the largest single *sectilia pavimenta* floor in the Vesuvian area is at the Villa San Marco. This floor (Room 10) may have been one of the richest floors, with a complex geometric pattern and a probable heterogeneous composition of two Egyptian granites (most likely including porphyry). As for wall revetment, which was relatively rare on the Bay of Naples, the Villa Arianna does have a large quantity in its atrium (24) and, importantly, may be one of the earliest examples of wall revetment in the area; however the House of M. Fabius Rufus contained the single largest example of wall revetment (Room 21, which required over 100 m² of marble).

To sum up, the elite houses of Pompeii are very much poorer in their use of marble than those of Herculaneum and the other villas considered in this article. Yet, we should be mindful that by AD 79 several pavements (from the House of the Golden Bracelet, the House of Caecilius Jucundus, the House of the Centenary, and the House of the Ephebe) had impressive displays of marble. This broad contrast cannot simply be seen as a result of preservation, because it is closely paralleled in the cladding of street-side bars, reflecting the span of marbles in original use.⁴²

Comparisons between the major villas are not as straightforward, and not solely because of accidents of preservation. Even objective measures like area of *sectilia*

pavimenta and revetment as wall décor do not produce clear rankings: e.g., Villa A has the largest area of revetment but it has neither the largest number of rooms with *sectilia pavimenta* (Villa Arianna) nor the largest single room (Room 16 at San Marco). On the somewhat more subjective scale of “prestige and rarity,” San Marco seems (caution is needed because preservation is key here) to stand out in quantity of prestigious polychrome varieties, but if we frame the comparison with monolithic columns as the key element,⁴³ Villa A has no competition at all. Again, if variety of white marble is a key criterion, Villa A is at the bottom and the Villa Arianna with its (likely) Thasian atrium, bath revetment and cliffside windowsills stands alone.

What we can be sure about is that all of the major villas (Villa Arianna, Villa San Marco, Villa of the Papyri, Villa A) seem to be ahead of the houses at Pompeii in terms of installation of significant examples of marble floors and wall revetment; however, the latest houses at Herculaneum (Telephus, Stags, Alcove) incorporated many more “new” varieties of marble in the period after AD 62. The question is whether the villas in the area would have progressed further in terms of marble-use if not for AD 79. Room 10 at San Marco, the latest floor in any of the major villas, seems to suggest this, as it uses Egyptian granites and new *sectilia pavimenta* motifs popular in Rome.

40 FANT *et al.* 2013.

41 DE CAROLIS, ESPOSITO 1998, 354-256.

42 FANT *et al.* 2013.

43 22 sets of marble columns (probably Lesbos grey), Luna capitals and bases.

REFERENCES

- BARKER S. J., FANT J. C., WARD C., AMIET B. 2013: "The Marmo al Mare Project 2013. Marble décor at the Roman Villas of Stabiae", *FOLD&R: the Journal of Fasti On-Line*: 298.
- BARKER S. J., FANT J. C. (forthcoming): "Lithic Decoration: sources, styles, repair and spoliation", in J. R. CLARKE and N. K. MUNTASSER (eds.): *Villa A ("of Poppaea") at Oplontis (Torre Annunziata, Italy) Volume 2: Decorative Ensembles: Painting, Stucco, Pavements, Sculptures*, New York.
- BROWN V. M., HARRELL J. A. 1995: "Topographical and petrological survey of ancient Roman quarries in the Eastern Desert of Egypt", in *ASMOSIA III*, 221-234.
- CAMARDO D. 2001a: "La riscoperta di Stabia negli scavi negli anni Cinquanta", in D. CAMARDO, A. FERRARA (eds.): *Stabiae dai Borbone alle ultime scoperte*, Castellammare di Stabia, 69-72.
- CAMARDO D. 2001b: "La Villa di Arianna a Stabia", in D. CAMARDO, A. FERRARA (eds.): *Stabiae dai Borbone alle ultime scoperte*, Castellammare di Stabia, 74-83.
- CIARDIELLO R. 2006: "VI 17 Insula Occidentalis 42. Casa del Bracciale d'oro", in M. AOYAGI, U. PAPPALARDO (eds.): *Pompei. (Regiones VI-VII). Insula Occidentalis*, Napoli, 69-256.
- CICIRELLI C., GUIDOBALDI M. P. 2000: *Pavimenti e mosaic nella Villa dei Misteri di Pompei*, Napoli.
- DE SIMONE A., RUFFO F. 2005: "I mosaic della Villa dei Papiri ad Ercolano (NA). Il quartiere dell'atrio", in C. ANGELELLI (ed.): *Atti del X Colloquio dell'associazione Italiana per lo studio e la conservazione del mosaico (Lecce, 18-21 febbraio 2004)*, Tivoli (Roma), 161-181.
- DE SIMONE A. 2010: "Rediscovering the Villa of the Papyri", in M. ZARMAKOUPI (ed.): *The Villa of the Papyri at Herculaneum: Archaeology, Reception, and Digital Reconstruction*, Berlin, 1-20.
- D'ORSI L. 1996: *Gli scavi Stabiae*, *Giornale di scavo* (ed. A. CAROSELLA), Ministero per I Beni Culturali ed Ambientali Soprintendenza Archeologica di Pompei *Monografie* 11, Roma.
- FANT J. C., CANCELLIERE S., LAZZARINI L., MARTINEZ M., TURI B. 2002: "White marble at Pompeii: sampling the Casa dei Vettii", in *ASMOSIA VI*, 309-315.
- FANT J. C., 2007: "Marble real and painted (imitation) at Pompeii", in J. J. DOBBINS and P. FOSS (eds.): *The World of Pompeii*, New York and Abingdon, 336-346.
- FANT J. C. 2009: "White marbles in the summer triclinium of the Casa del Bracciale d'Oro, Pompeii", in *ASMOSIA VII*, 53-57.
- FANT J. C., RUSSELL B., BARKER S. J. 2013: "Sub-elite marble use and re-use at Pompeii and Herculaneum: the evidence from the bars", *Papers of the British School at Rome* 81, 181-209.
- FANT J. C., ATTANASIO D. (forthcoming): "Columns and Couches: Studies in the selection of white marble in and around Pompeii", *Marmora: an international journal for archaeology, history, and archaeometry of marbles and stones*.
- HARRELL J. A., BROWN V. M., LAZZARINI L. 1999: "Two newly discovered Roman quarries in the Eastern Desert of Egypt", in *ASMOSIA IV*, 285-292.
- HARRELL J. A. 2010: "Table 1. Ancient Egyptian hardstone quarries. Revised 23 July 2010." (http://www.eeescience.utoledo.edu/Faculty/Harrell/Egypt/Quarries/Hardst_Quar.html).
- HOWE T. N. 2015: "The architectural evolution at the villas of Stabiae, c.80 B.C.–A.D. 79", in D. FAVRO, F. K. YEGÜL, J. PINTO, G. MÉTRAUX (eds.): *Paradigm and Progeny: Roman Imperial Architecture and its Legacy. Proceedings of a conference held at the American Academy in Rome on 6-7 December, 2011 in Honor of William L. MacDonald*, Portsmouth, R. I., 63-78.
- GARDELLI P., BARKER, S. J., FANT, J. C. (forthcoming): "Resti pavimentali in opus sectile nel tepidarium e nel caldarium di villa arianna a stabiae", *XXI Colloquio dell'Associazione Italiana per lo Studio e la Conservazione del Mosaico (AISCOM)*, Reggio Emilia, 18-21 March, 671-680.
- GRANDI M., GUIDOBALDI F. 2006: "Proposta di classificazione dei cementiti e mosaici omogenei ed eterogenei", in C. ANGELELLI (ed.): *Atti dell'XI Colloquio dell'Associazione italiana per lo studio e la conservazione del mosaico: (Ancona, 16-19 febbraio 2005)*, Tivoli (Roma), 31-38.
- GRIMALDI M. 2006: "VII 16 Insula Occidentalis 22. Casa di M. Fabius Rufus", in M. AOYAGI, U. PAPPALARDO (eds.): *Pompei. (Regiones VI-VII). Insula Occidentalis*, Napoli, 257-418.
- GUIDOBALDI F. 1985: "Pavimenti in opus sectile di Roma e dell'area romana. Proposte per una classificazione e criteri di datazione", in P. PENSABENE (ed.): *Marmi Antichi: problemi d'impiego, di restauro e d'identificazione*, Roma, 171-233.

- GUIDOBALDI F., OLEVANO F. 1998: "Sectilia pavimenta dell'area vesuviana", in P. PENSABENE, A. ALVAREZ i PÉREZ (eds.): *Marmi antichi. II. Cave e tecnica di lavorazione, provenienza e distribuzione*, Roma, 223-240.
- GUIDOBALDI F., GRANDI M., PISAPIA M. S. 2014: *Mosaici antichi in Italia: regione prima; Ercolano. 1 1*, Roma.
- GUIDOBALDI M. P., ESPOSITO D. 2010: "New archaeological research at the Villa of the Papyri", in M. ZARMAKOUPI (ed.): *The Villa of the Papyri at Herculaneum: Archaeology, reception and digital reconstruction*, Berlin and New York, 21-62.
- GUIDOBALDI M. P., ESPOSITO D., FORMISANO E. 2012: "L'Insula nord-occidentale a la Villa dei Papiri di Ercolano una sintesi delle conoscenze all luce delle recenti indagini archeologiche", *VESUVIANA: An International Journal of Archaeological and Historical Studies on Pompeii and Herculaneum* 1, 43-180.
- PAPPALARDO U., CIARDIELLO R. GRIMALDI M. 2008: "L'insula Occidentalis e la Villa Imperiale", in P. G. GUZZO, M. P. GUIDOBALDI (eds.): *Nuove ricerche archeologiche a Pompei ed Ercolano, Atti del Convegno di Studi Soprintendenza Archaeological di Pompei (Roma 1-3 Febbraio 2007)*, Roma, 293-307.
- PIROZZI M. E. A. 2003: *Ercolano, la storia, il territorio: gli scavi*, Napoli.
- PISAPIA M. S. 1989: *Mosaici antichi in Italia. Regione prima, Regione prima. Mosaici Antichi in Italia* 7, Roma.
- RUGGIERO M. 1881: *Degli Scavi di Stabia dal MDCCLIX al MDCCLXXXII*, Napoli.
- SAVALLI A., PESARESI P., LAZZARINI 2015: "Casa del Rilievo di Telefo and opus sectile at Herculaneum", in *ASMOSIA* X, 349-363.
- WORCIK M. R. 1986: *La Villa dei Papiri ad Ercolano. Contributo alla ricostruzione dell' ideología délia nobilitas tardorepubblicana*, Roma.