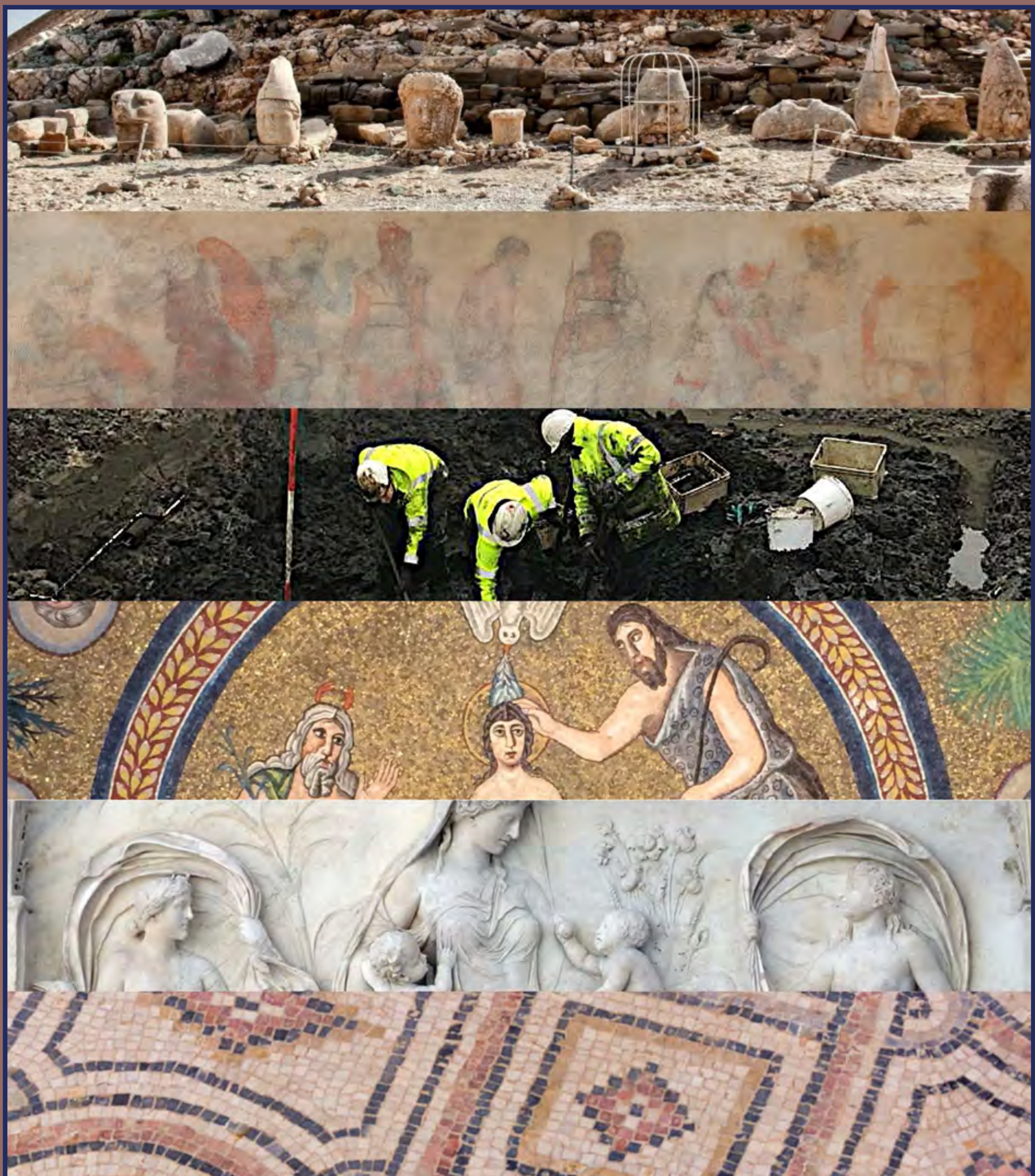
KLEOS

Amsterdam Bulletin of Ancient Studies and Archaeology



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Kleos – Amsterdam Bulletin of Ancient Studies and Archaeology

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COLOPHON

KLEOS - *Amsterdam Bulletin of Ancient Studies and Archaeology* is a peer-reviewed, open access academic online journal, launched in 2014, which publishes current research and review articles by graduate and PhD students, as well as starting independent researchers, from the fields of archaeology and ancient studies (i.e. classics and ancient History). *Kleos* also provides reviews of recent books, conferences and exhibitions.The journal is published once a year and its main goal is to provide a possibility to graduate and PhD students to publish their research. The journal thus mainly aspires to serve as a platform for starting academic careers, and help students and starting researchers to share their research, gain experience in publishing, and improve their scientific skills. At the same time the journal aims to provide an overview of the research being conducted within the fields of archaeology, ancient history and classics, and support the interdisciplinary dialogue between these adjacent academic disciplines.

Editors

The *Kleos* editorial team consists of an interdisciplinary team of seven (R)MA, PhD students and professionals (two editors from each main study field and one chief-editor). This editorial team is supported by an academic advisory council of professors from the different disciplinary fields.

Layout

Karin Scharringhausen, Maarssen
Based on design by Bert Steensma, Leiden

Contact

KLEOS
AAC - University of Amsterdam
Turfdraagsterpad 9
1012 XT Amsterdam
The Netherlands
▶bulletin.kleos@gmail.com

Submissions

The editors invite submissions of original research on any topic related to ancient history, classics and archaeology. Information on the editorial policy, the submission process, as well as guidelines for authors and other matters that concern potential contributors, is to be found on our website. For further information, authors and readers are referred to:

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Academic Advisory Council

Acknowledgements

The *Kleos* editorial board is supported by an interdisciplinary group of renowned scholars, covering fields from classic linguistics to archaeological theory and heritage studies, brought together within the *Kleos* Academic Advisory Council (AAC).[1] The members of this board hail from prominent Dutch research institutes – such as ACASA. The AAC functions in an advisory role to the editors, providing them with advise in their consideration of specific theme issues or search for peer reviewers from particular niche areas.

Thanks to their help, the editorial board has a wide network of experts and peer-reviewers at their disposal. Their endorsement is invaluable and paramount to guarantee the quality of the journal. The editors of *Kleos* would like to thank the following members of the Academic Advisory Council for their valued contribution to *Kleos*.

1 The listed affiliations and research interests were accurate at the time the individuals joined the AAC of *Kleos*.

CONTENTS

The second *Kleos* issue is out! The first issue of *Kleos* was presented some time ago in 2015.[1] As became apparent when a new call for editors was published towards the end of 2017, the need for a platform such as *Kleos* is still felt strongly amongst ReMA and PhD students. In January 2018 a new editorial team came together and started working on the second issue, the result of which we now present to the reader with pride. As a new editorial team, we full-heartedly subscribe to the original aims of *Kleos* as stated in the first editorial. Publishing articles early on in one's academic career remains vital and mastering this process is sometimes difficult, especially considering the fact the number of peer-reviewed journals for starting scholars is limited. *Kleos* aims to provide starting scholars with a digital, open-access, international medium through which they can share their research, hone their scientific skills, and gain their first publishing experience. In order to achieve this, the editorial team provides authors with extensive feedback, intensive editing and anonymous peer reviews to ensure the academic level of their publication.

Not only is second issue out, but the journal has also undergone several important changes! As *Kleos* aims to be an interdisciplinary platform, the new editorial team has been formed in such a way as to reflect this goal: each discipline – classics, ancient history and archaeology – is now represented by at least two editors to ensure the editorial team possesses the necessary interdisciplinary knowledge. A whole new website – www.kleos-bulletin.nl – has been created in order to present the journal to the wider public, provide interested scholars with information, and to serve as the platform where contributors are promoted alongside our Facebook and LinkedIn pages. Completely new is our Academic Advisory Council, which consists of an interdisciplinary group of professors from all the different fields represented by *Kleos*. The role of this council is to support and advise the editorial team in their work, thus ensuring the journal's academic quality, and to provide the editorial team with access to their broad networks. Last, but not least, thanks to generous contributions of our sponsors, we have raised sufficient funds to make the journal a non-profit foundation. All these changes and developments will ensure the journal's continuity for the long-term. For that matter, we are happy to announce that, at the moment of writing this editorial, the work on *Kleos* issue 3 has already started!

Having worked hard on *Kleos* Issue 2 over the past year, we believe the result reflects what the journal sets out to do. The issue presents the work of starting scholars, including not only scholars of the PhD-level, but also of (R)MA and even advanced BA level. The open-theme Call for Papers for this issue resulted in a wide range of contributions, the distilled result of which lies before you. Subjects range from archaeological studies of southern-Italy to the historical link between Ancient Greek and WWI cryptographic methods, and the academic fields touched upon vary from archaeology to ancient history and to museology studies. Though this issue is open-themed, the articles share similar concerns in their aims. Of particular interest to all research articles, is reconsidering the archaeological or historical data from a new perspective and examining ways in which the past has been studied, adopted and adapted, not only within antiquity but also in modernity.

In the first article, Mattia D'Acri describes how in current archaeological research of the hinterland of the South-Italian archaeological site of Sybaris/Thurii, the period of the fifth century BC has been more or less neglected. He argues that this period deserves a much greater degree of academic attention and that the currently held view that the region was abandoned in this period does not seem to be reflected in the data. Through an extensive overview of the relatively limited amount of published data on this period, he comes to a preliminary interpretation of the settlement patterns and the nature of the region's occupation during the fifth century BC.

Sander Egberink provides an interesting analysis of the Forum of Augustus as an example of cultural appropriation. Borrowing this notion from the field of cultural history, the author develops a new approach to the process of appropriation, by investigating how, why and who underwent this process in Augustan propaganda. The case study under review is the group of Republican statues at the forum, more specifically the statue of Pompeius Magnus. The author not only concludes that appropriation is a useful notion for the study of monuments where the past played a pivotal role; but also that the appropriation of the Republican past in the *Forum Augustum* relied heavily on psychological preparations, selection criteria, deliberate alterations of the past, and the design of comparison for visitors.

In her article Verburg presents some of the results of the author's Research Master thesis in the field of Etruscology in which she combines both archaeology and museology studies. Her research focusses on the important 19th-century antiquarian Giovanni Campana and his 'discovery' of the very rich Tomba Campana, which since its discovery has played a main role in Etruscology. This discovery and the tomb's contents are, however, surrounded by strong academic doubts as to their authenticity. Verburg engages with previous research on this topic and corroborates the sceptical view on this important discovery by combining all the fragmentary data. She furthermore shows how important it is to contextualize this type of 'discovery' within past socio-cultural frameworks and to be careful when applying our modern-day conceptions of authenticity to past dealings with archaeological heritage.

In her study, Diepenbroek examines the relevance of ancient cryptography and steganography in confidential correspondence in Graeco-Roman warfare for the development of modern cryptography, specifically of the German ADFGX cipher used in WWI. The fourth-century BC military author Aeneas Tacticus wrote '*How to Survive under Siege*', in which he describes ancient cryptography and steganography techniques. Using this ancient work as a starting point, Diepenbroek thoroughly explains Tacticus' description of transferring confidential messages and shows that Polybius improved his cryptographic device, which formed the basis for the modern Polybius square. Furthermore, she argues that the German ciphers were inspired by this Polybius square during the First World War, enabling them to invent the ADFGX and ADFGVX ciphers.

In addition to these research articles, this *Kleos* issue includes several other interesting reads. Firstly, the issue contains a newsletter of the national Dutch research school of archaeology – ARCHON – in which they go into some of the developments taking place within the organization and discuss the yearly ARCHON Day. At this day one of the topics discussed was the current climate for academic publishing. As the editorial team we were very pleased and grateful to be invited for a panel discussion on this topic. Secondly, in the review section, dr. Marlena Whiting and Emilia Salerno present an extensive review of the international conference 'Women and Pilgrimage in the Ancient and Pre-modern world" held at the University of Amsterdam (UvA) in 2018. Whiting, who organised this conference, reflects on the different presentations and goes deeper into some of the theoretical topics which were discussed at this two-day conference. Lastly, this issue ends with a discussion based on a question raised by dr. G.J. van Wijngaarden during the yearly 'I Know What You Did Last Summer' conference in September 2018. He questions whether archaeological fieldwork of the Amsterdam Centre for Ancient Studies and Archaeology

(ACASA) should include more attention for formalized education in public outreach and project management, and he thus wonders whether the fieldwork section of our institute's archaeological curriculum is possibly outdated with regard to the new challenges of commercial-based and development-led archaeological practice. Van Wijngaarden's call for discussion is met by several 'parties', including archaeology ReMa student and experienced fieldworker Vita Gerritsen, dr. Mark Groenhuijzen, recently promoted at the Vrije Universiteit Amsterdam, Prof. dr. Vladimir Stissi, director of the Halos fieldwork project, and drs. Eva Kars, director of the geo-archaeological company Earth, together with Prof. em. dr. Henk Kars of the VU. We are very glad to present this discussion and hope that *Kleos* can help stimulate further discussions surrounding the development of academic archaeology curricula.

The editors of *Kleos* hope you enjoy reading this issue and already look forward to *Kleos* Issue 3 as much as we do. If you are interested in submitting a contribution to *Kleos*, if you have ideas for reviews or topics to be discussed, we invite you to contact us through mailing us at kleos.bulletin@gmail.com. All the information on publishing can be found on our website and academia page.

Acknowledgements

This issue of *Kleos* would not have been possible without the support of several institutions and persons. First of all we would like to thank our sponsors, the Graduate School of Humanities of the UvA, the VU Graduate School of Humanities and the CLUE+ institute at the VU. Without their generous financial support it would not have been possible to realize this issue and further develop *Kleos* as a journal. We would also very much like to thank ACASA for their continued support of the editorial team and facilitating our digital infrastructure. We must also thank Mark Hannay and Lindsay Morehouse for their editing of the English. Last, but certainly not least, we are very grateful to all the anonymous expert peer reviewers who took the time from their busy schedules to review articles, guarantee the papers' academic quality and help authors along in their publication process.

The *Kleos* Editorial Team

Notes

1 See the editorial of *Kleos* issue 1 on its creation and original goals (https://www.kleos-bulletin.nl/previous-issues/).

New observations on the Sybaritide between 510 and 444 BC

Mattia D'Acri

Abstract

In 510 BC, the city of Sybaris, an ancient Achaean colony founded in 720/710 BC, was destroyed by the city of Kroton by diverting the river Crathis, according to Strabo. Some seven decades later, in 444 BC, the same site saw the foundation of the Panhellenic colony of Thurii, situated just above the remains of the ancient settlement. While the centuries preceding the destruction of Sybaris and following the foundation of Thurii are widely documented both archaeologically and historically, research on the period between these two cities has been based almost entirely on historical and numismatic sources, without serious reference to the regional archaeological data. During this seventy-year period, contrary to the prevailing hypothesis, life in Sybaris and its territory continued, as testified by archaeological evidence from the city and its chora. This paper focuses on this particular historical period, drawing on that evidence, especially ceramics and related contexts, and provides an initial interpretation of the data in their regional context, re-establishing a forgotten connection between the Achaean colony and its Panhellenic successor.

Mattia D'Acri is a graduate of the Scuola di Specializzazione in Archeologia - Matera and is currently a PhD student in the Classical Archaeology program at the University of Missouri-Columbia. His main interest is the study of ceramics, with particular focus on the Protohistoric and Archaic periods in central-southern Italy. Supervisor: Prof. Marcello Mogetta.

▶Profile page

Introduction

The historical vicissitudes of the period between the destruction of the Achaean colony of Sybaris and the Panhellenic foundation of Thurii have been examined by various scholars, primarily through the use of historical and numismatic sources.[1] The picture that emerges from these data is that of a territory reeling in the absence of Sybaris, in which Kroton, on one side, and Metapontum, on the other, tried to extend their influences, expanding to the north and south respectively, so as to replace

1 Among others, see Guzzo 1976; Bugno 1999; Fischer-Hansen et al. 2004, 295-299; Napolitano 2016; Colelli 2017, all with numerous further references. These studies generally seek to verify notices in ancient historical sources of attempts, failed or otherwise ephemeral, by the Sybarite exiles to restore the Achaean colony.

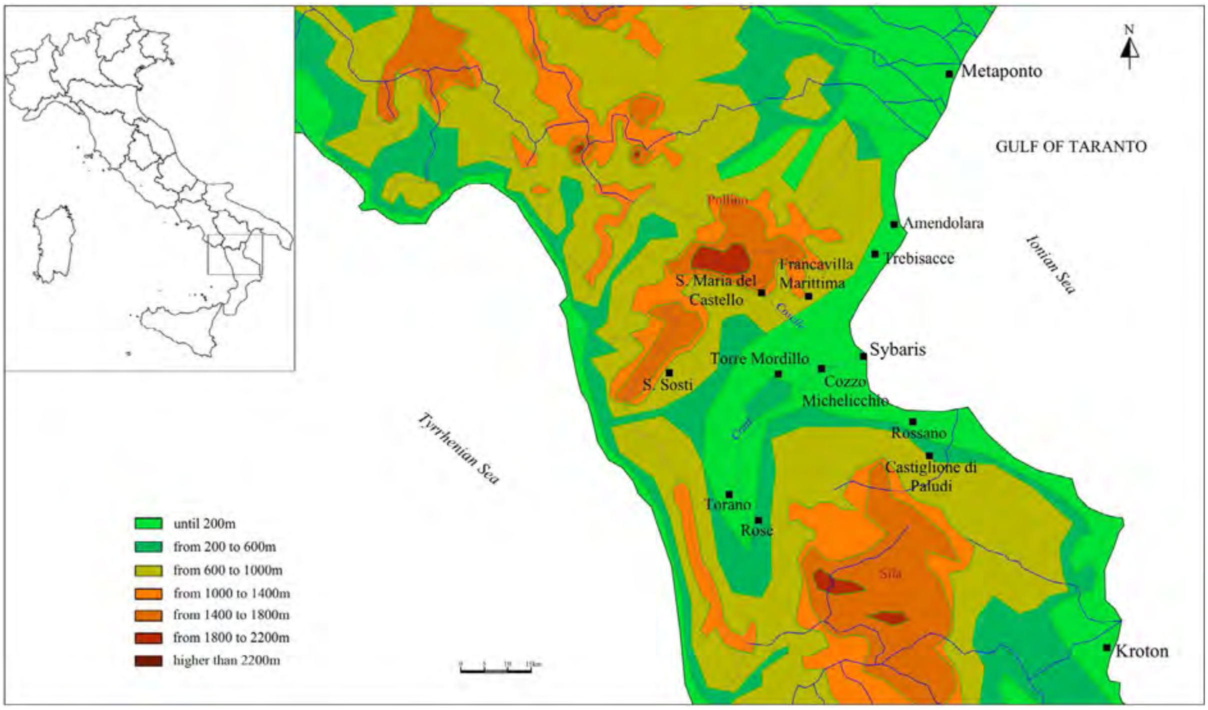

Figure 1
Sybaris and other sites examined in the text (created by author).

the destroyed city (Figure 1).[2] Both poleis, however, faced severe and destabilising internal crises. Moreover, the distance made it particularly difficult for both centres to control the wide extent of the Sybarite territory.[3] In the first years after the destruction of Sybaris, it was especially Kroton that tried to keep the Sybaritide territory under its control, and had to face the attempts to re-establish the city by the Sybarite exiles, before the eventual Athenian intervention that sanctioned the foundation of Thurii.[4] These attempts to recolonise the area have been interpreted by scholars as evidence for a total or near-total abandonment of Sybaris and its surroundings during the seventy-year period examined here.

The following contribution examines this alleged abandonment of the territory around Sybaris from an archaeological point of view and questions whether the area was really abandoned in this period by collecting all the relevant published data for the region. First, all sites that have signs of frequentation in this particular historical period will be identified, including Sybaris,

2 Especially for Metapontum. Thanks to the systematic studies carried out, it was possible to interpret the entire territorial order of the period (see Zuchtriegel 2017, 131-136 with bibliography). We can see how Metapontum extended its influence to the south at least up to the site of Cugno dei Vagni, where a small village of 12 huts dated between the sixth and fifth century was found (unpublished, some notes in Bianco 2000 and Zuchtriegel 2017, 134-136). The site of Cugno dei Vagni can be considered a satellite centre of Metapontum, it is approximately 50 km from Sybaris. On the role played by Kroton and Metapontum in this period, see also Colelli 2017 with previous bibliography.

3 Zuchtriegel 2017, 133.

4 Napolitano 2016, 175. For a summary of all the attempts to refound Sybaris, see for example Guzzo 1976 and Nafissi 2007.

by means of both stratigraphic investigations and other research such as surveys, occasional digs and so on, as well as chance finds.[5] The sites are grouped into those of the nearer hinterland of Sybaris – Francavilla Marittima, Cozzo Michelicchio, Torre Mordillo, Trebisacce, and Rossano – and into those of the city's further hinterland - Amendolara, S. Maria del Castello, S. Sosti, Torano, Castiglione di Paludi, and Rose.[6] This summary of the data will be followed by a contextualisation and discussion with the aim of providing a historical and archaeological interpretation of the period between the fall of Sybaris and the foundation of Thurii. The aim of this paper is not only to try to demonstrate the settlement continuity of the Sybaritide after the destruction of Sybaris, but also to interpret its nature.

Analysis of sites

The territory of Sybaris is characterised by a large plain, the valley of the Crathis river, which originates southeast of the city in the foothills of the Sila massif and flows north to the Ionian Sea. The northern reach of Sybarite territory is delimited by the mountain massif of Pollino, where the source of the Coscile river – the ancient Sybaris and a tributary of the Crathis – is located (Figure 1). Sybaris stood alone on the plain, while the other centres treated here were located on hills of varying heights, naturally fortified and easily defensible. In this study, those sites nearer to the polis centre have been distinguished from those more distant, in order to see whether the fall of Sybaris had different effects on the indigenous settlements in the poleis' close orbit.[7]

Sybaris

The analysis must begin with the site of Sybaris itself (Figure 2) during the aftermath of the diversion of the Crathis and Sybaris rivers, as mentioned by Strabo.[8] Though archaeological confirmation is difficult to obtain, the destruction of the site by a flooding event would seem to be corroborated by the discovery of destruction layers and a layer of alluvial silt,on average often

5 In fact, it should be noted that one of the problems is the lack of systematic research on the territory, with certain key exceptions. Moreover, one of the objectives of the study is precisely to bring out these critical issues and begin to revise all the data at our disposal.

6 The division was not based solely on the real geographical distance, but also on the ease of access to the sites.

7 All sites other than Sybaris are here considered indigenous. Without entering into the merits of the colonial-indigenous relationship, still the subject of debate in the scientific world, during the historical period examined in this article, some two centuries after the foundation of the colony, there seems to be a relatively peaceful and integrated relationship. The relationship will change with the arrival of the Lucani in Calabria after the conquest of Poseidonia at the end of the fifth century BC.

8 Strabo, 6.1.13.

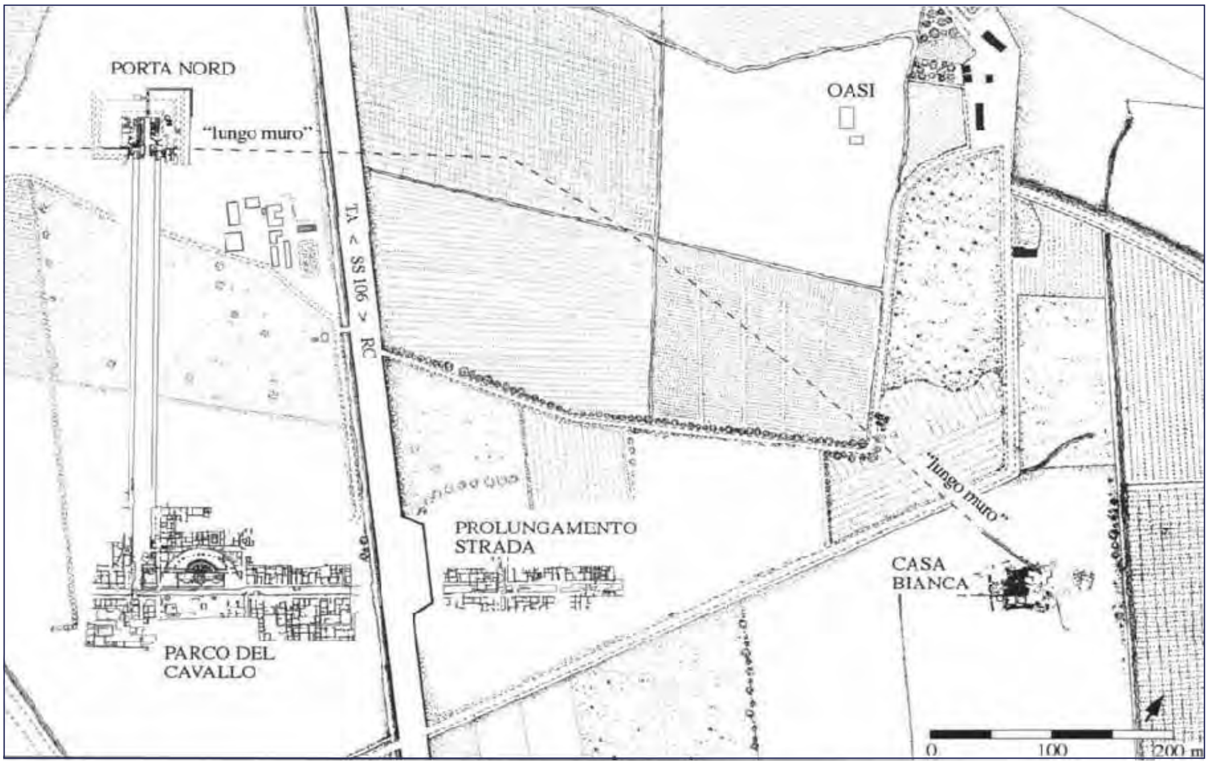

Figure 2
General plan of the site of Sybaris with the location of the excavations (from Greco 2013a, 77, fig. 1).

about 40 cm thick, covering the Sybaris phase.[9] Other alluvial layers found in recent excavations in the area seem to be due to the continuous flooding of the Crathis, which occurred after the destruction of Sybaris, likely due to the cessation of river maintenance.[10] Flooding of the area still occurs today and remains an unfortunate problem of the area, including the frequent flooding of the Sybaris archaeological park. This characteristic of the area must be taken into consideration with regard to the visibility of the archaeological data in the Sybaris plain.

Despite these floodings, the site does not seem to have been completely abandoned: activity is attested by ceramics found during the extensive excavations undertaken between 1969 and 1976 at Stombi, Parco del Cavallo, Prolungamento Strada, and Incrocio ("Lungo Muro").[11] Among the finds, I mention in particular miniature vessels and terracotta votive statuettes (Figure 3)

9 Greco 2013a, 78; Greco 2013b, 200.

10 D'Alessio et al. 2017, 965.

11 While there does not seem to be any material dating between 510-444 BC during the initial investigations (see Sybaris I, 139-144), this changes with the continuation of the excavations: Sybaris II, 17-18, 87-88 note 23, 95, 101-102, 110, 113, 130 note 113, 143; Sybaris III, 104 note 173, 115 note 209, 124 note 232, 441-448; Sybaris IV, 57 note 47, 61 note 65, 535-536, 153; Sybaris V, 108 note 95, 238, 252 note 12, 286 note 162; 506 note 554. For a review of the findings relevant to this chronological period, see Guzzo 1976. Greco 2013a, 78 note 9, notes a layer of silt of ca. 40 cm deep that physically separates Sybaris and Thurii. He also highlights new fragments dated to the period of the hiatus, discovered by S. Luppino, still unpublished but exhibited at the Museo archeologico nazionale della Sibaritide, especially from the locality of Favella della Corte. Perhaps it is possible that part of the material recovered from the new excavations may also be included in this chronological period, but this material remains unpublished to date, and is only known by mentions (D'Alessio et al. 2017, 964-965).

which could suggest cult activities practised by the last remaining inhabitants of Sybaris.[12] These small finds are of considerable importance as a clear indicator of a certain continuity in the life of the site, despite the heavy demographic and spatial contraction at the site which seem to be attested by the thick layers of alluviation. Taking these layers into mind, I of course do not mean to state that the site of Sybaris was frequented consistently, but these small discoveries are signs of small groups of people, perhaps exiles.[13]

Figure 3
Votive terracotta figurine, representing a female face (from Sibari III 1972, 104 fig. 105).

Sites in the nearer hinterland of Sybaris

The extent and power of the Sybarite domain were so well known in antiquity that we may speak of a real 'Sybarite empire', even if this characterisation is more suitable for understanding the extent of the polis' territory, than its political structure.[14] It is not by chance that even sites situated relatively far away from the Achaean colony were somehow affected by its fall. Among the sites in the immediate vicinity and more easily reached from Sybaris are Francavilla Marittima, Cozzo Michelicchio, and Torre Mordillo, to which we can add chance finds from Trebisacce and Rossano (Figure 1).

The first site, Francavilla Marittima, has been the subject of numerous studies and research projects, during both the last century and the current one.[15] On the Timpone della Motta of Francavilla there is a notable sanctuary, which perhaps was already active before the Achaean foundation of Sybaris.[16] This is a fundamental site for the interpretation of the relationship between indigenous peoples and colonists during the migratory movements from Greece. After 510 BC, the sanctuary suffers a contraction of cult activities, leading some scholars to posit a complete cessation of activity.[17] However, numerous finds are ascribable to the period between the end of the sixth and the middle of the fifth century BC, including fragments of Black and

12 Unfortunately, the contexts in which these objects were found cannot be associated with architecture, and precise stratigraphic associations are lacking. In fact, all the materials seem to come from secondary deposits. Admittedly, the objects in question are few in number (consisting of a few dozen of those published), insufficient to prove the continuation of regular cult activities. It is worth noting that other excavated materials from the site need to be restudied and could in fact date during the hiatus (see below, note 43).

13 Greco 2013a, 78.

14 Greco 1993; Greco 2013a; Greco 2013b.

15 The bibliography concerning the site of Francavilla Marittima is extensive. For a history of studies and a summary of the research see Kleibrink 2010 and the most recent publications of Colelli 2014 and Brocato/Altomare 2018.

16 The sanctuary includes five different structures and a huge amount of archaeological material including imported pottery, votives, architectural terracottas, and a Greek bronze inscription of the sixth century BC with dedication to Athena by "Kleombrotos son of Dexilawos," victor at Olympia. Athena was probably one of the sanctuary's gods.

17 E.g. Granese 2013, 59.

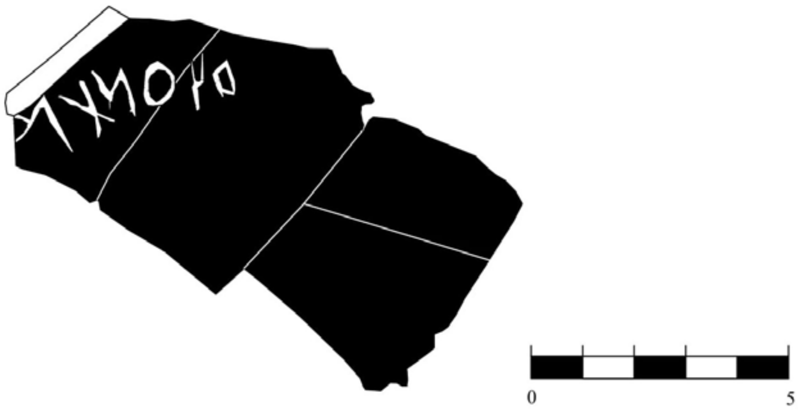

Figure 4
Reconstructive drawing of the Attic Black Figure kylix sherd with a retrograde inscription "DIONYS" from Torre Mordillo (created by author from Colburn 1977, 502 fig. 86).

Red Figure ceramics (with the former more commonly attested), votive terracottas, and possibly structures connected to a temple building.[18] The materials have a certain importance because they show that the sanctuary remained in use in this phase, and the presence of ceramics also indicates that commercial traffic did not cease in the investigated area after 510 BC. There is, however, a reduction of activities at the site, plausibly related to the demographic contraction after the fall of Sybaris. This seems to be confirmed by the fact that even the well-known necropolis of Francavilla does not appear to contain burials dating beyond the end of the sixth century BC.[19]

Another site very close to Sybaris is Torre Mordillo. This site is mostly known due to the discovery of an Iron Age necropolis and a settlement related to the Middle Bronze Age, which saw habitation – with alternating phases – until the end of the third century BC.[20] With regard to the seventy years which are analysed in this paper, I highlight the presence of a well-known fragment belonging to an Attic Black Figure kylix, bearing the retrograde inscription "DIONYS" and datable to 500-490 BC (Figure 4).[21] In addition to this imported fragment, there are other finds, including pottery and votive statuettes, that have been related to a possible sanctuary frequented from the middle of the sixth century into the following century.[22]

18 Osanna et al. 2009, especially 475-476, from Stoop 1989. See also Maaskant-Kleibrink 1993, 44; Granese 2013, 59, in which the author also mentions other unpublished artifacts from Building IV, datable to the first half of the fifth century BC.

19 Osanna 1992, 138-139; Granese 2014 with further bibliography.

20 For the Iron Age see: Pasqui 1888; Trucco/Vagnetti 2001; Mollo/Smurra 2012 with further bibliography.

21 Colburn 1977, 500 pl. 50, fig. 86; Osanna et al. 2009, 476.

22 Colburn 1977; Genovese 1999, 46-48. Colburn and Genovese interpret it as a sanctuary, or at least a place of worship, based on the nature of the material found. As in Sybaris, the quantity of relevant artifacts is not large and requires more detailed analysis: "L'esistenza di statuette, circa una quarantina in gran parte femminili, consente di ascrivere la frequentazione del luogo di culto ad un periodo oscillante fra il VI ed il III sec. a.C." (Genovese 1999, 46).

Completing the picture of the sites in the near hinterland of Sybaris is Cozzo Michelicchio. At this site, no systematic excavations have been carried out, despite the undeniable archaeological potential of the site.[23] Still, chance finds and those recovered during brief investigations have made it possible to ascertain the sacred nature of the site. This is indicated by the probable presence of a temple building adorned with architectural terracottas, mostly from the second half of the sixth century BC, but with some specimens that could fall in the years after 510 BC.[24] There are also some ceramic fragments, even if few in number, dated between the late sixth and the middle of the fifth century BC, also attributable to a cultic assemblage.[25] As with the previous cases of Torre Mordillo, Francavilla, and Sybaris itself, therefore, the activity of a sanctuary, or in any case a place with a cultic function, can be hypothesised at Cozzo Michelicchio.

Rounding out the picture of the nearer hinterland of Sybaris is an isolated female burial in the municipality of Trebisacce and other chance finds from the territory of Rossano. The burial is datable to around 460 BC based on the presence of an Attic Red Figure stamnos, and also included three lekythoi.[26] Attested at Rossano, and probably part of one or more grave assembles, are a bronze mirror with a female figural support, datable to the first quarter of the fifth century BC, and other fragments, including some Attic ceramics of the same period.[27] These finds, though isolated, still indicate some continuing, albeit not very intensive, occupation of the territory.

Sites in the further hinterland of Sybaris

Despite a higher degree of heterogeneity in the data, it is possible to outline an overall picture for those sites located further away from Sybaris, including the sites of Amendolara, S. Maria del Castello – Castrovillari, S. Sosti, Torano, Castiglione di Paludi, and Rose (Figure 1). These sites have also provided materials for the

23 For a history of the studies on Cozzo Michelicchio see Quondam 2014.

24 Aversa 2014, in particular an antefix (Aversa 2014, 384-386 fig. 5, 443-444 nr. 1287), which has an iconographic parallel with an Etruscan Black Figure hydria dated to 510-500 BC. The proposed date of the antefix is 530-500, so production prior to the destruction of Sybaris cannot be ruled out.

25 For the pottery, see Quondam 2014, 379 note 23, 420 nr. 1186 (head of a terracotta figurine), 434 nr. 1237 (fragment of bronze hydria handle). Only these two objects can be dated with certainty to the period in question, but there are many others whose chronology is uncertain, and could fall within the hiatus (Quondam 2014, 379 nrs. 1216-1224). Quondam writes that "La successiva storia del luogo di culto è più evanescente: come Timpone Motta, è probabile che anche Cozzo Michelicchio risenta della traumatica fine di Sibari. All'assenza di votivi inquadrabili con sicurezza nella prima metà del V sec. a.C. fa seguito una certa ripresa dell'attività cultuale tra la seconda metà del V e il IV sec. a.C." (Quondam 2014, 379) — illustrative of the general scholarly tendency to lead with an assumption of general abandonment in the Sybaritide.

26 Masneri 2006.

27 Orsi 1919; Guzzo 1976.

period analysed, although it is important to note that different materials were found when the study was in a different stage and the researchers did not have the knowledge they have now.

Amendolara has traditionally been defined as an indigenous site that was abandoned with the destruction of Sybaris and is known for some research carried out by J. de La Géniere, among others.[28] Thanks to other recent research (surveys and archival research), it has been possible to verify the presence of materials dating between the sixth and fifth centuries BC. These seem to point to sporadic and disjointed zones of occupation. The material found is mainly ceramic. Unfortunately, the quantity, the precise chronology and the interpretation of these data during the period under investigation are not further clarified by De La Genière.[29]

The second of these sites, S. Maria del Castello – Castrovillari, is located on the slopes of the Pollino mountain range and has never been the subject of systematic research; all the known artifacts are chance finds.[30] An Attic lekythos, a bowl, rims of louteria, and fragments of votive statuettes can certainly be dated to the chronological period examined, implying a site frequented from the seventh to the third century BC, and interpreted as a place of worship. At another locality of S. Maria del Castello, Ietticelle, the remains of an antefix and a bronze representing Herakles were found, both dated within the fifth century.[31]

A similar case, also located at the foot of the Pollino massif, is the site of S. Sosti. During recent excavations inside the Chiesa del Carmine in the historic centre, numerous archaeological remains and stratigraphies emerged, dating from the Bronze Age to the Medieval period.[32] For the phase in question, there is evidence of a sacred area, including a possible temple, which came into use in the sixth century BC and continued without interruption until the fourth century.[33] Imported Attic pottery, miniature vessels, and coroplastics (Figure 5) are clues that can let us attribute a cultic function to the area.

From the foot of Monte Pollino, we now pass to two sites in the middle of the Crathis river valley. The first, Torano – Cozzo

28 Including the necropolis in the Paladino district (De La Genière 2012). The other research projects carried out on the territory are mentioned in Colelli/Altomare 2018.

29 De Rose 2008; Colelli/Altomare 2018.

30 Novellis 2003.

31 Novellis 2003, 19.

32 The excavation and material are almost entirely unpublished, known only from a preliminary article (Marino/Papparella 2008), so at present it is not possible to define with certainty which material is attributable to the period concerned.

33 Marino/Papparella 2008, for the remains of the building interpreted as a temple, see table I, fig. 4.

La Torre, has been investigated only minimally in a scientific manner, through the excavation of 13 tombs and scarce remains of the city walls, but its territory has provided abundant evidence, mostly unpublished.[34] These excavations do not do justice to the enormous potential of the site, in which activity seems to span from the Iron Age to the Hellenistic period.[35] The publication of a quantity of Archaic material from the territory of Torano, recovered through surface collections, attests some fragments relating to the period examined, datable between the end of sixth and the end of the fifth centuries BC, including a miniature vase and some Black Gloss pots.[36] So far, imports are lacking amongst this material, unlike in the cases discussed above. This absence can perhaps be attributed to the dearth of systematic research. In this case, the fragmentary data simply indicate some presence during the hiatus period, and do not allow for a more exhaustive interpretation of the site, nor establishing the nature and dimensions of the site itself.

A site investigated only in very recent years is that of Rose, already known from chance finds, including the so-called Kore of Rose, a bronze statuette of exquisite workmanship dated to the end of the sixth century BC (Figure 6).[37] In recent years, stratigraphic excavations have brought to light the remains of a structure in the 'Area delle Fate', interpreted by researchers as a place of worship, due to the presence of coroplastics, miniatures, and imported pottery.[38] The structure, which has only been published in preliminary form, has produced material that ranges from the Iron Age to the fourth-third century BC, among which are a kotyle and a small olpe, both in fine ware fabric, dating from the middle of the fifth century BC, and an Attic lekythos dating to the period of 480-470 BC.[39] In contrast with the other cases, the Rose site is quite notable because a high percentage of the published artifacts (a few dozen in total) fall within the chronological period under investigation. Before it can be confirmed as a possible cult

Figure 5
Terracotta figurine from S. Sosti (from Marino/ Papparella 2008, 3 fig. 6).

34 Pace 2011, 40, who notes materials originating from occasional chance finds made by local farmers, rather than from scientific research. This is a widespread problem throughout Calabria, and such chance finds are often simply stored and not studied.

35 De La Genière 1977.

36 Pace 2011, 45-46. In this case, the date indicated for the material slightly postdates the analysed chronological period, considering the difficulty of a more precise dating for the material itself.

37 Arias 1941.

38 D'Alessio/Taliano Grasso 2014a; D'Alessio/Taliano Grasso 2014b.

39 The first two fragments come from the foundation trench of an ashlar structure. However, these blocks seem to have been removed from the original monumental structure of the Late Archaic period and reused (D'Alessio/Taliano Grasso 2014a, 96). From the same context, we can also note a miniature bronze olpetta dated to the fifth century BC and a fragmentary fibula dated to the last quarter of the sixth century BC (D'Alessio/Taliano Grasso 2014a, 98-99 note 273-281).

place in operation between the end of the sixth and the middle of the fifth century, however, we must await final publication of the excavation.

There are also signs of activity, albeit fragmentary, between the end of the sixth and the middle of the fifth century BC at Castiglione di Paludi. This is a hillside site located south of Sybaris and is located the nearest to Kroton of the sites collected here. Associated with the remains of a building made of sandstone blocks are a fragment of an Attic Black Figure krater dated to the end of the sixth century BC and other ceramics of the late sixth and fifth centuries BC, including fragments of stamnos with brown strips, hydriai, small cups and plates in Black gloss fabric, lamps, miniaturist pottery, and so on.[40] From another area of the site, there is a bronze statue depicting Herakles, dated between the end of the sixth and the beginning of the fifth century BC.[41] Unfortunately, the nature of the site during this period has not yet been interpreted. However, based on the published data, there could be another cultic area at Castiglione di Paludi, corresponding to other, similar findings from the worship contexts analysed so far.

Figure 6
The kore of Rose, dated to the end of the sixth century BC (from Museo Archeologico Nazionale della Sibaritide, photograph by Dr. Daniel P. Diffendale).

Discussion

Between its foundation and destruction, the polis of Sybaris had set up a very specific settlement system, which, in the sixth century, seemed to be powerful and extensive enough to be called an empire. Having presented the data that have been published thus far, it is now necessary to consider how further research, including the study of unpublished materials, may revise the picture.

Many problems arise from all the sites examined, including data scarcity. The data in question are not always obtained through scientific research, but mostly come from sporadic findings, rather than from stratigraphic investigations or surveys. Moreover, for the territory of Sybaris, especially that of the plain of the Crathis, it is necessary to take into consideration the scarce archaeological visibility that makes it even more difficult to know the real archaeological data of the territory.[42] Despite all these problems, this study has tried to make the most of the available

40 Novellis/Paoletti 2011, 195, 199 note 23, note 53. A recent paper on all the excavation campaigns carried out until 2008 in Castiglione di Paludi (Tosti 2017, 710-712 especially), assumes, taking into account these findings, that the site was frequented between the Archaic and Classical periods.

41 Tosti 2017, 689 note 76. Although they are not accurately dated in the text, it has been suggested that even the architectural elements from the so-called "Saggio Triglifi" may be dated to the period in question (Tosti 2017, 689 note 76, 704, 710-711, 724-725).

42 Factor also emphasised in Osanna 1992, 229.

data. With regard to the first part of this paper's research question, on the presence of habitation in the area, even if we are forced to come only to preliminary conclusions due to the imperfect nature of the data, it seems that there are non-negligible quantities of material dating between the end of the sixth and the mid-fifth century present, although not so abundant as throughout the previous centuries.[43] According to a settlement model for the territory of Sybaris proposed by Osanna, a cornerstone of archaeological literature, the territory was the subject of violent conquest by Achaean colonists, which led to a widespread destructuring of the indigenous sites in favour of the needs of the polis.[44] According to the same model, this system collapsed with the destruction of Sybaris, causing the territory of Sybaris to be abandoned after 510 BC, with continued habitation restricted to Francavilla Marittima.[45] This model, however, though of great importance, should be re-evaluated in light of the data collected in this article. Though these data suggest that Sybaris certainly influenced all the centres of the surrounding area, they evidently suggest at the same time that the site was not fundamental for the continuity of survival of these centres.

With regard to the nature of the settlement pattern and habitation – the second part of this article's research question – a picture emerges from the archaeological data of a territory populated in a manner less extensive than in the preceding period, whilst remaining vibrant despite the significant demographic decline. This decline cannot be precisely quantified, but the almost total absence of burials in this period compared to the previous or the following moment speaks volumes.[46] In the areas surrounding Sybaris, there is a more variable and unstable situation due to the absence of the city itself: the small indigenous communities seem to survive, as evidenced by the overview presented above.[47] All the same, such sites probably suffered from the fall of Sybaris,

43 There is also a need to revisit the dating of some materials, which may have been assigned dates before or after the hiatus on the basis of now-superseded chronologies, or which may have been dated before or after on the assumption that the area was abandoned. It should be noted, in fact, that only Attic imports fall unequivocally within the seventy years examined, thanks to a greater progress of studies and to a rigid chrono-typological seriousness that does not oscillate too much. An example of the materials that should be restudied are the type B2 Ionic cups or the Bloesch C amphorae, whose chronology has been lowered, thanks to the advancement of research since the 1990s, to between the second half of the sixth and the beginning of the fifth centuries BC.

44 Osanna 1992.

45 Osanna 1992, 140. Also recalling the attempts of refoundation by the exiles (see below also).

46 Only two burials are known from the period in question, compared to the numerous graves known from the early to mid-sixth century BC from, for example, Amendolara (De La Genière 2012) and Francavilla (Brocato 2011; Brocato 2014). A change in funerary customs cannot be ruled out, but a lack of systematic research is certainly a factor.

47 Lombardo 1993, 274 defines the Sybaritide as "un territorio senza città".

given the abundance of evidence from these sites from the seventh and sixth centuries, a probable indication of a peaceful coexistence between Achaeans and indigenous inhabitants in that period, in contrast to scarce data for the period under study. This scarcity does not suffice to illuminate settlement patterns during the hiatus, but the consistent presence – sometimes subtle, sometimes more marked – of cultic materials suggests that groups continued to congregate at religious sites.

From the contextualisation of the data collected and the results obtained, it is also possible to make some brief observations on the inhabitants of Sybaris who, once the polis had fallen, found refuge elsewhere. In fact, of the Sybarite exiles, on the other hand, it is known from textual sources that they found refuge in the sites of Laos, Skidros, and Pyxous, all sub-colonies of Sybaris.[48] While not yet securely identified archaeologically (with the probable exception of Laos), these sites should all be located on or near the Tyrrhenian coast, and therefore separated by the Pollino massif and the western mountain range from the plain.[49] From these sites, the exiles prepared vain or, in any case, brief attempts to re-establish Sybaris, as attested by ancient sources and by certain coin types minted together with these sub-colonies. A coin series of Sybaris dated to 453 BC, for instance, would represent one of these attempts at recolonization by the exiles with the help of Laos and Poseidonia. The diobolo with Poseidon and a bird enclosed within a crown seems to allude to the types and cults of those two cities (Figure 7).[50]

The Sybarite exiles coming from the territory of the sub-colonies, located on the Tyrrhenian coast, or in the immediate vicinity, had to pass near the indigenous centres during their re-foundation attempts. There are no indications that suggest a hostile relationship between the parties, although on the whole there is little evidence one way or the other. Moreover, the presence of places with a sacred nature in the indigenous settlements also suggests a phenomenon that is extremely well known and archaeologically verified in the contemporary contexts of Basilicata. For example, at Timmari and Garaguso,

48 Guzzo 1976; Bugno 1999, 36-55. The main sources are: Herodotus 5.45, 6.21; Diodorus Siculus 11.48.3-5, 11.90.3, 12.10; Iamblichus, *De vita Pythagorica liber*, 74.

49 Guzzo 1976, 53. The Tyrrhenian area was excluded from the present work as it is located in an area rich in finds for the period in question and probably suffered less from the fall of Sybaris, gravitating more in the Poseidoniate orbit — even if it was probably a territory closely linked to the Achaean colony, given the presence of the three sub-colonies discussed.

50 Rutter 2001, note 1744; Spinelli 2010, 64. It should be reiterated that even historical sources recall attempts, albeit very ephemeral, to refound Sybaris, of which these monetary issues are the only evidence. For all other numismatic aspects, see Guzzo 1976 and Bugno 1999.

and particularly in the colony of Metapontion, there were areas of worship that aimed to connect Greeks with the indigenous communities.[51] This clue could corroborate the hypothesis of a peaceful relationship between the parties, and might even mean that even some of the exiles lived in these places. There is nothing inconsistent with a coexistence between exiles and autochthonous peoples, which lasted until the foundation of Thurii and the arrival of people of Lucanian ethnicity in Calabria after their conquest of Poseidonia at the end of the fifth century BC. Even though, in this case, the archaeological visibility of the Sybarite exiles is difficult to find and demonstrate, it is a factor that cannot be left out, considering the aim of the paper and this scenario deserves to be further contextualised within future studies. The overall picture is particularly interesting because it shows a frequentation of the area between the destruction of Sybaris and the foundation of Thurii. As to why the evidence from the hiatus is almost exclusively related to cult, this may be due to a lack of systematic research; indeed, such material is more easily recognisable, and it is worth highlighting how much of the evidence is due to chance finds. In addition, systematic research has focused more on sites of the Iron Age or the Roman period. A research program targeted at recovering evidence from the period between the fall of Sybaris and the establishment of Thurii would be likely to yield interesting results.

Figure 7
The back of the Sybaris coin with chronology at 453 BC with bird enclosed within a crown (from Spinelli 2010, 70 TAVOLA III nr. 16).

Conclusion

In conclusion, the period between 510 and 444 BC is characterised by serious uncertainty and instability. Between its foundation in 720 BC and its destruction two centuries later, Sybaris had built itself an empire, founded numerous sub-colonies, and become famous for its power and wealth. After its devastation by Kroton, the whole territory was affected by the absence of the Achaean colony, to such an extent that modern scholars have spoken of abandonment of the area, while surviving exiles took refuge in the sub-colonies. Compared with the pre-destruction period, there is an apparent contraction in habitation traces registered by the archaeological data, but not an abandonment. Rather, all the sites examined show continuity. Almost all of the contexts known from the period of hiatus seem to be attributable to places of a sacred nature, some of which had already been frequented since the Archaic period.

51 Osanna 2010; Osanna 2011. We must however consider the different knowledge of the investigated sites compared to the Lucanian ones, so the comparison remains partial and is proposed with caution.

From the evidence collected here, it is clear that after the destruction of Sybaris, the Sybaritide was in fact still occupied, even if it is not clear to what degree, and many sites continue to exist. The Sybarite exiles who found refuge along the Tyrrhenian coast are likely to have known these sites from their frequentation of the territory. Moreover, it is conceivable that places of worship in the indigenous centres played a role in guaranteeing peaceful contact and coexistence between the parties. Considering their poor relationship with the poleis of Kroton and Metapontion, it is likely that the Sybarite exiles found some kind of support among the indigenous communities, perhaps in the form of allies, or of hospitality within their former territory.

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Revisiting Statues: The appropriation of Pompeius Magnus at the Forum of Augustus

Sander Egberink

Abstract

Ever since Paul Zanker published his book '*Forum Augustum*' in 1968, there has been debate regarding the Forum of Augustus as a 'propaganda forum'. In this article, a novel approach is suggested to add to this debate by borrowing the notion of 'appropriation' from cultural history. In order to attune this approach to the study of ancient monuments, the three questions of how, why and who serve as analytical tools to study the process of appropriation. The case under study is the group of Republican statues at the Forum of Augustus, more specifically the statue of Pompeius Magnus. The result of the analysis is twofold:

1. appropriation is a useful notion for the study of monuments in which the past played a pivotal role;
2. psychological preparation, selection criteria and deliberate alterations, as well as the design of comparison for visitors, were all highly relevant in the appropriation of the Republican past in the *Forum Augustum*.

Sander Egberink is a Bachelor student of history at the University of Amsterdam. He specialises in early Roman Imperial history and the role of the Roman past in the cultural plan of Fascist Italy. Tutor: mw. drs. J. A. Stobbe, University of Amsterdam.

▶Profile page

Introduction

The transition of the Roman Republic to the Roman Empire was by some accounts an inevitable event.[1] Despite the fact that the old political remnants of the Republic were still clearly visible in society, the reality was undeniably different. The Republic was still present in collective memory, and Augustus' new regime found adequate ways to exploit the heritage of the previous political institution.[2] This exploitation is visible in his *Forum Augustum*, which may be seen as an example of the new imperial ideology in a political and cultural sense, all stemming from the values of the

1 See the first chapter of Levick 2010, 23-62.

2 Gowing 2005, 20-23.

Roman Republic.[3]

The Forum of Augustus is one of the most studied monuments of the Roman world (Figure 1-3). It has been labelled as a culmination of Augustan ideology, propagated through extensive means of 'propaganda' interwoven in the ideological message of the forum's statues.[4] As the debate regarding the purpose and message of the Forum of Augustus is still ongoing, this article hopes to add to this debate by providing a novel approach to the study of this important Roman monument.[5] Crucial to this end is the concept of *(cultural) appropriation,* as developed by Robert S. Nelson in *Critical Terms for Art History* (2003).[6] Nelson mainly concerns himself with the theory of appropriation in the present day. In this article, his theory will be used as an analytical tool for the study of the past. In doing so, this study hopes to show that even well-studied monuments such as the Forum of Augustus can still prove valuable as an object of study in the light of new ways of thinking. Moreover, by stepping outside the conventional discourse concerning the Forum of Augustus, this new analysis allows for an alternative approach to and interpretation of the significance of both the Forum of Augustus and the role played by the Republican past in the Roman Empire.

The main question this article poses is how the Republican past was appropriated at the Forum of Augustus. To narrow the subject down, this article will specifically look at the representation of Pompeius Magnus among a statuary group at the Forum of Augustus; the *summi viri*, the 'most prominent men' of the Roman Republic.[7] The article starts with an overview of the term 'appropriation' as developed by Nelson, followed by a thorough analysis of appropriation drawing on the case of Pompeius among the *summi viri*. This specific case will serve to exemplify the process of the appropriation. The analysis will focus on the depictions of and alterations to the Roman Republican past in relation to Augustus, and leads, ultimately, to the construction of a new narrative focused on Augustus.

3 Zanker 1988, 192-194.

4 The term propaganda can in some ways be seen as problematic with regard to antiquity. Barbara Levick calls the term anachronistic, yet refrains from providing an alternative. She suggests that the term "may be used with caution […] (and) is still legitimate for use in connection with Roman History"(Levick 2010, 10-11). See also: Hekster 2005, 245-247. This article is aware of the controversy concerning the term and, following Levick, uses it with caution. However, it goes beyond the scope of this article to propose a new term that may work better. See also: Zanker 1988, 192-194.

5 Zanker 1968; Spannagel 1999; Geiger 2008; Luce 2009; Van den Hengel 2009; Shaya 2013.

6 Nelson 2003.

7 Van den Hengel 2009, 271.

Setting the analytical framework: cultural appropriation

In modern literature and society, the term 'appropriation' has become a ubiquitous phenomenon. Commonly known as 'cultural appropriation', it has come to serve left- and right-wing political movements alike, and serves as an explanation for certain cultural movements.[8] Regarding the appropriation of the Roman past, the extensive usage of *romanità* by Benito Mussolini's fascists in the 1920s and 1930s comes to mind as one of the more recent examples.[9]

Nelson begins by defining appropriation through an etymological lens, in which the term roughly means 'to make one's own'.[10] Appropriated, Nelson says, means "annexed or attached" and "belonging to oneself" on the part of the appropriator.[11] This should be seen in light of a process of appropriation, or in Nelson's words: "taken positively or pejoratively, appropriation is not passive, objective, or disinterested, but active, subjective and motivated."[12] According to Nelson, the true power of appropriation is that it is completely unopposed and, above all, that it involves selectively taking over something that was once meaningful and complete. In so doing, it forms a 'second system', which means a newly formed narrative.[13] This newly formed narrative coincides with the process of appropriation, which occurs before and after the formation of the second system. In other words: the process of appropriation is under constant influence by various factors, as a result of which the newly created system, thus, either fades away or is suppressed, deliberately altered, or radically transformed over time into a new myth.[14]

Another important feature of appropriation is closely related to the execution of a particular process of appropriation in which the surroundings play an important role, known as 'psychological preparation'.[15] However, Nelson refrains from giving a clear definition of the term, and thereby leaves the reader to come up with their own interpretation. I shall elaborate on psychological

8 Nelson 2003, 163-165.

9 A state-sponsored culture in (Italy's) Fascist times, *romanità* was perceived as the idea of Romanness, including a resurgence of old Roman (cultural) values. These were appropriated by the Fascist regime in order to construct a modern Fascist narrative. *Romanità* was an overarching element in Fascist Italy, present in various types of media such as newspapers, stamps, film and music, but also architecture and rhetoric. See: Arthurs 2012; Stone 1999.

10 Nelson 2003, 162.

11 Ibid.

12 Ibid., 163.

13 Ibid.

14 Ibid., 164.

15 Ibid., 161.

preparation in the following section, since I believe it is a vital aspect of appropriation in a monumental style such as the Forum of Augustus. In addition to psychological preparations, the alteration coinciding with the selectivity of the appropriated subject is another vital aspect of any kind of appropriation, as "it cuts away the privileged autonomy".[16] The alterations and selectivity of appropriation will be explained through the selection criteria for the *summi viri*.

Following Nelson, I propose to see appropriation as an active process, instead of a passive one. However, Nelson leaves questions unanswered such as the *how* (in what way did the appropriation occur), the *why* (the purpose of the appropriation) and the *who* (who carried out the appropriation).[17] In this article, I will discuss the questions of the how, the why and the who to structure my analysis and to use these questions as analytical tools for the application of Nelson's theory of appropriation.

At the same time, appropriation is hard to define; it can encompass not only ideas and ideals but also the past. Moreover, it is often the case that the *how*, the *who* and the *why* merge and are difficult to disentangle when explaining a specific case of appropriation. The *how*, the *who* and the *why* should be seen as analytical structuring tools, yet at the same time be regarded as entangled instead of separate when considering the results. Appropriation may be tentatively regarded as the taking over of certain practices, elements, or aspects from one culture into another culture, and the deliberate alteration at the hands of the appropriator. The previously mentioned *romanità* of Mussolini is frequently cited as an example of appropriation.[18]

The main point I wish to make in this article, however, is that we are not dealing with a clear form of cultural appropriation in the case of the Republican past. The Forum of Augustus is an exemplary case to state that appropriation does not necessarily concern culture *per se*, since the process of appropriating is much more diverse and complex and, thus, exceeds culture. The complexity of the process of Augustus appropriating his own past does not carry the same contemporary consequences as appropriating the culture of an oppressed minority. The past is merely invoked without oppressing or stealing from an existing group of people. Therefore, we should refrain from viewing the appropriation at the Forum of Augustus with modern connotations of the term.

16 Nelson 2003, 172.

17 Swetnam-Burland 2010, 138.

18 Stone 1999; Notaro 1997, 59.

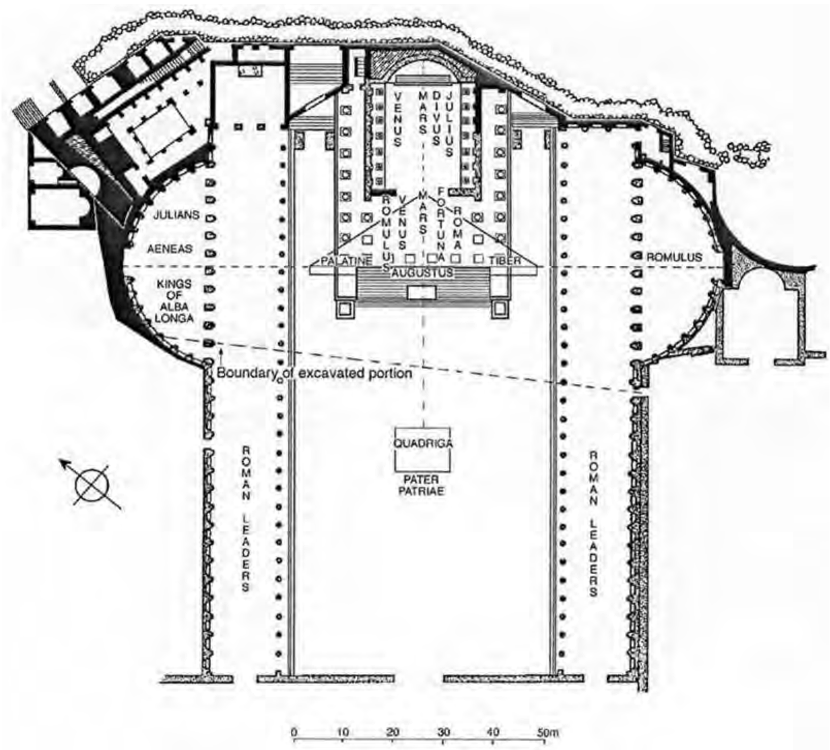


Figure 1
The location of the Roman leaders, the summi viri, on the eastern side of the Forum of Augustus (after Galinsky 1996, fig. 111).

Instead, one should regard the characteristics of appropriation in a broader sense.

Despite the fact that Augustus himself was a remnant of the Roman Republic, the above, combined with the gradual formation of the Principate, is what allows us to speak of a clear appropriation of his own past. Thus, Augustan propaganda exploited the memory of a Roman Republic as an abstract concept of ideas and moral examples through the *Forum Augustum* and *summi viri*, maintaining the illusion of a still functioning Republic.[19]

This brief overview of insights into appropriation is relevant for our understanding of the specific appliance of appropriation in this article. A monument can represent, exemplify or symbolise simplified meanings of complicated events such as the history of the Roman Republic. In doing so, monuments not only embody this memory,[20] but they also propagate it to the general public through added alterations.[21] The Forum of Augustus serves as a highly tangible example of this, as I will show by posing the questions of the *how*, the *why* and the *who*.

The how: psychological appropriation at the Forum

From its very beginning, the *Forum Augustum* was intended to evoke an overwhelming feeling, diminishing the importance

19 Gowing 2005, 19-24; Wallace-Hadrill 1993, 53-55.

20 For memory, see: Assman 2006; Flower 2006; Wiseman 2015; Popkin 2016.

21 Alterations consist of the changes of a story and the selection of events. Shaya 2013, 83.

Figure 2
Reconstructive view of the Forum of Augustus (http://fori-imperiali.info/en/002-2/2-2/ accessed on 20-03-2019).

of anyone who entered (Figure 1-3). This may be regarded in light of psychological preparation.[22] As noted, Nelson refrains from developing the term. However, that does not mean it has no potential. As stated before, a crucial aspect of psychological preparation is the assembly and composition of the environment, in this case staging the Forum of Augustus as a monumental environment. Psychological preparation at the Forum of Augustus could be regarded as a means to somehow intimidate the visitor, be it through splendour and stunning architecture or through the immensity of the scale. Consequently, any visitor to the forum would already be unwillingly engaged by it before they reached, in this case, the *summi viri*.

Psychological preparation occurred at the Forum of Augustus through three features. The first is the composition and use of materials. The *Forum Augustum* was decorated with the most valuable and luxurious types of marble. The main square was paved with a white marble known as *Luni*, matching perfectly with the yellow-red marble known as *giallo antico*, which cladded the columns of the hallways on either side of the square.[23] The materials used are too numerous to list here, but these two examples show the thoughtfulness of the constructors regarding the material effects of the forum.[24] Secondly, when considering the extent of this material splendour with the immense scale of the forum, which measured 125 metres by 118 metres, it becomes

22 Nelson 2003, 162.

23 For more information on the marble, see: Galinsky 1996, 202-203; Goldsworthy 2014, 388.

24 Zanker 1988, 193.

clear that the Forum of Augustus must have overwhelmed or, in other words, 'psychologically prepared' its visitors.[25]

Figure 3
Reconstructive view of an exedra in the Forum of Augustus, with a trial scene (http://fori-imperiali.info/en/002-2/1-2/ accessed on 20-03-2019)

The effect of psychological preparation would also be generated by the boundaries of the forum, the last feature. The rear of the Forum of Augustus was guarded by a 33-metre high tufa wall, used to protect it from the fires of the Subura. This wall secluded the forum from the rest of Rome, making it an area *alien* to and *separate* from the crowded city.[26] Thus, the seclusion combined with the other environmental elements of the forum influenced the viewpoint and feeling of the visitor. Through this combination, the term gets its strength and thereby its value for the narrative at the Forum of Augustus. In other words: psychological preparation was a precursor imposed on visitors, influencing their state of mind before arriving at the narrative of the *summi viri*.

The why: selecting *summi viri*

The statuary group of the *summi viri* were part of a larger arrangement of statues, often referred to as 'the hall of fame'.[27] These statues were a selection of heroes from the history of the Roman Republic. While the exact number of statues is unknown, it is fair to assume that the total number in this hall of fame was well over a hundred statues. Though all evidence is fragmentary,

25 Van den Hengel 2009, 255.

26 Wallace-Hadrill 1993, 57-58; Van den Hengel 2009, 256, 258.

27 Geiger 2008, 2.

we are able to clearly identify 26 men of the *summi viri*.[28] They included Scipio Africanus of the third century BC and statesmen from the period just before the Augustan period, such as Marius and Cornelius Sulla.[29] These 26 statues stood in a crescent in the eastern corner of the forum (Figure 1 and 3). All were regarded as triumphators from the Republican past and were respected for their role in the Roman military or for their propagation of Roman values, thereby serving as an example for future Romans.[30] Therefore, it is the *summi viri* at the *Forum Augustum* where appropriation of the Republican past can be recognised.[31]

Prominent among the *summi viri* was Pompeius Magnus (Figure 4). Pompeius will serve as an exemplifier of the process of appropriation. The selection of Pompeius as a case study in this article is based on the allure that the name of Pompeius Magnus carried, as well as his deeds and their importance for the building of the Roman Empire. All these elements make him a valuable comparison with Augustus, as is argued further on in this article.

The presence of Pompeius amongst other Republican *summi viri*, such as A. Postumius Regillensis and Tiberius Gracchus, requires explanation.[32] Why include him in this specific company of men, and not another group? The inclusion of Pompeius was likely based on his defeat in the civil wars by Julius Caesar, Augustus' adoptive father. In addition, the son of Pompeius, Sextus Pompeius, fought against Augustus in the Sicilian revolt of 36 BC.[33] Therefore, the presentation of Pompeius not only exemplifies the victory of Julius Caesar, but it is possible that displaying Pompeius as a member of the *summi viri* also invoked the former and his opposition against Julius Caesar, and the opposition of Sextus against Augustus. The statue of Pompeius should be considered as a representation of the lineage of Pompeius and, therefore, the statue symbolises a direct opposition to Augustus and his ancestors at the forum. This direct opposition makes the appropriation of Pompeius a precarious matter.

It is exactly here where the appropriation of Pompeius, and, for that matter, other Republican heroes, reaches its peak. It explains why Augustus would display Romans who clearly fought

Figure 4
Bust of Pompeius Magnus/ Pompey the Great (106-48 BC) Museo Correr, Venice, Italy (photograph by Sander Egberink 2017).

28 Goldbeck 2015, 35; Shaya 2013, 89.

29 Geiger 2008, 147, 154-155.

30 Gowing 2005, 146; Van den Hengel 2009, 271; Suetonius, *Augustus*, 31.

31 Luce 2009, 403-408.

32 A. Postumius Regillensis was famous for the victory against the Latins in 496 BC, and promptly became seen as the builder of the temple of Saturn. Tiberius Gracchus was famous for a triumph celebrated in 178 BC over the Celtiberians; Gowing 2005, 142.

33 Goldbeck 2015, 40; Luce 2009, 403-406.

against him and his ancestors. The *summi viri* were put together in such a way that the narrative of its 'members', including Pompeius and Marius, was largely and intentionally altered.[34] A new narrative was formed and displayed in various ways: through the selection of the specific men – and accordingly the absence of other important men of the Republican period – and through the selection of deeds that were mentioned on the bases of the statues.

To start with the deeds: these were listed at the bottom of the statue. Various in sort, the deeds concerned different kinds of achievements, from the foundations of temples to military triumphs. Though evidence is poor, it is fair to state that the inscriptions mainly listed men with military achievements.[35] Yet despite their great accomplishments, the prominent men of the *summi viri* all had a tainted past with a black page in their narrative of glory. Pompeius was, for instance, nicknamed 'the butcher' in the civil wars under Sulla and Marius.[36] However, such black pages did not form an obstacle for the appropriation process as such. For inclusion, on which side of Rome's history of civil wars one once stood was irrelevant.[37] What mattered was how a person had contributed to the grandeur of the Roman state, the *maiestas imperii*.[38]

Maiestas imperii – based on virtues such as discipline or achieving peace, combined with achievements such as territorial gains or military victories – may be seen as a vital criterion for selection and appropriation.[39] What also mattered was the relationship between Augustus and the potential *summi viri*, which possibly influenced the selection process to a greater extent than other criteria. The Forum of Augustus, then, functioned as a threshold for who was worth remembering and appropriating, and who was simply not worthy. The selection of those men regarded as worthy or unworthy was also influenced by alignment with the newly created narrative of the Imperial family and their ancestors. The inclusion occurred by the grace of Augustus, representing the shift in control over public memory and opinion from the Senate to Augustus himself.[40]

34 Galinsky 1996, 197; Goldsworthy 2014, 389.

35 Luce 2009, 404; Shaya 2013, 88.

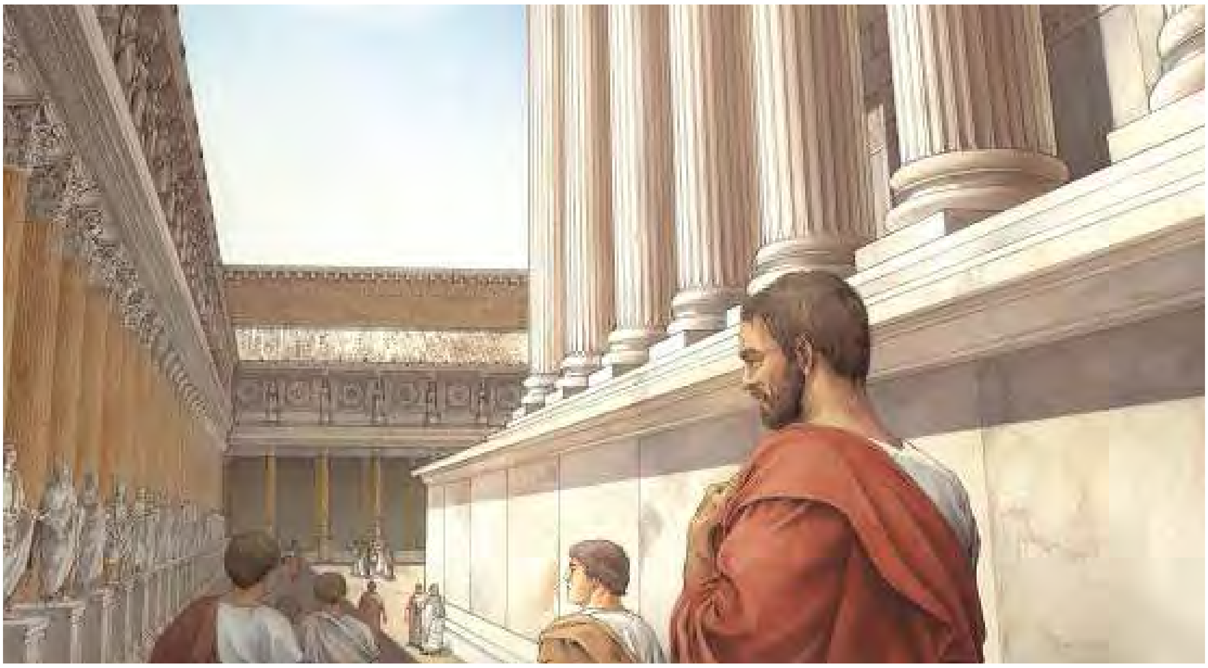
36 For Pompeius 'the butcher', see: Valerius Maximus, *Memorable Deeds and Sayings*, 6.2.8; Gowing 2005, 142-143.

37 Geiger 2008, 156.

38 Galinsky 1996, 197; Goldsworthy 2014, 389.

39 Shaya 2013, 88. Josephine Shaya talks of the importance of virtues of the *summi viri* such as discipline, fortitude and piety, and she emphasises peace and prosperity as well. I agree that these played an important part in the selection process, which could be assessed by contextualizing it within *maiestas imperii*.

40 Flower 2006, 115, 117, 122.



The who: comparing statues, changing appropriations

Figure 5
Reconstructive view of the Forum of Augustus from the nort-east.
Left: The eastern portico, with the statues of the illustrious members of the Gens Iulia and of the history of Rome.
In front: the southern portico, adjacent to the Forum of Caesar.
Right: The Temple of Mars Ultor (http://fori-imperiali.info/en/002-2/ accessed on 20-03-2019).

The purpose of the *summi viri* was to evoke comparisons. In order to understand the purpose of these comparisons, it is vital to realise that the target audience was not just the elite; the forum could be entered by anyone (Figure 5).[41] It should come as no surprise that a comparison between Pompeius and Augustus would probably lead to the conclusion that Augustus had been more valuable for the grandeur of the Roman state than Pompeius, at least according to Augustus.[42]

It is worth wondering whether a comparison between Augustus' and Pompeius' military accomplishments would sufficiently exalt Augustus. I believe that what exalted Augustus above the rest of the *summi viri* was a combination of the criteria of *maiestas imperii.* The accomplishment of ending the civil wars and bringing peace to the Roman Empire compensated for his lack of militarism. At the same time, it served as a comparison with, for instance, Appius Claudius Caecus, also among the *summi viri*, who had constructed the Via Appia in 312 BC.[43] In my view, the deciding factor in these comparisons, and a vital aspect in countering the illiteracy of the larger part of the population who visited, was the central position of Augustus' statue in the middle of the forum.[44] Whilst the *summi viri* stood in a crescent circle in

41 Zanker 1968, 13-14.

42 Luce 2009, 404.

43 For Appius Claudius Caecus, see: Shaya 2013, 88.

44 For the statue of Augustus, see: Van den Hengel 2009, 251.

the eastern corner, the placement of the statue of Augustus – to be seen in the light of psychological preparation – made him the central point of attention and thus the most valuable for *maeistas imperii*.

These comparisons and alterations formed the basis of a new 'myth'. Appropriation is not a static process; it changes over time. The original narrative either fades away or gradually transforms into a new one: namely, the second system.[45] The transformation happens over time, often without a clear and visible initiator deliberately steering for the change.[46] The (Late) Roman Republic was the original narrative that gradually was transformed by various types of propaganda over the course of the reign of Augustus; the *Aeneid* of Virgil is a prime example of this propaganda.[47] Comparing Pompeius to Augustus, the latter becomes raised on an even higher pedestal, enhancing his persona and status. Augustus became an embodiment of an abstract idea of Roman qualities, detached from the person himself, but nevertheless forming an example for future emperors.[48]

The Forum of Augustus serves as a tangible example of how this myth was propagated and of what it was constituted. This newly formed 'myth' went further than simply aggrandising Augustus. The comparison in place showed Augustus' value for the *maiestas imperii*, yet simultaneously made him a 'successor' of these Republican heroes, the *princeps* he proclaimed to be, not the emperor he actually was.[49] Making Augustus a successor, the *summi viri* provided him and the Julian family with legitimacy for his rule. As a result, people slowly forgot how Augustus had ascended to power, with the new myth taking over.[50]

In sum, it may be possible to say that the formation of this new myth could only occur because of the fact that Pompeius – and, in a larger perspective, all the *summi viri* – had been altered through appropriation. Selectivity, therefore, forms a vital part of appropriation, as it provides the comparison needed for this new myth.

This process of alteration, by which Pompeius and his identity – in the broadest sense of the word – was appropriated,

45 Nelson 2003, 164.

46 Ibid., 164.

47 I am aware of the controversy surrounding the *Aeneid*, however, I withhold in taking a stance in this debate, since it is beyond the scope of this article, see: Zanker 1988, 193.

48 Gowing 2005, 143-145.

49 Zanker 1988, 192-193.

50 Ibid., 192-193.

can be repeated indefinitely.[51] New and differing aspects useful to appropriation by a second system often come up and either replace the current narrative or are added to it. The Forum of Augustus, as a monument, forms the basis for the additions and continues the appropriation process.[52]

Concluding remarks

This article discussed the Forum of Augustus, a landmark of monumentality in early Imperial Rome. The monument has been analysed through the novel approach of appropriation, as developed by R. Nelson. Whereas appropriation is a contemporary theory used to understand the present, I have proposed applying it to the past, more specifically to the statues of the *summi viri* in the Forum of Augustus. To study this case through the lens of appropriation, I have used the questions of the *how*, the *who* and the *why* as analytical tools to structure the argument.

The analysis of the *how* concerned the question of how appropriation occurred. Psychological preparations turned out to be a vital element in the general appropriation process at the *Forum Augustum*, as well as for the specific case of the statue of Pompeius. The analysis of the why question explained the purpose of appropriation. The selection process for appropriation played a central role, especially the selection criteria of *maiestas imperii* for the *summi viri* and the deliberate alterations that coincided with these. These alterations served the construction of a newly formed narrative, propagated by the *summi viri*, which aggrandized the persona of Augustus. The analysis of the *who* question concerned itself with who was behind the appropriation process. In this case, the appropriator was Augustus, with his forum serving as a transparent mechanism for this process. The appropriation of Pompeius, in particular, played a vital role in the formation of a second system, namely the newly constructed narrative of Augustus. Crucial for this formation were the comparisons between Pompeius and Augustus, a process in which appropriation was flexible since it could be altered indefinitely.

As this article demonstrates, appropriation is a useful concept to apply to monuments for which the past plays an important role. The group of the *summi viri* statues on the Forum of Augustus has served as a tangible example of this. Besides the application of appropriation, its perception in the Roman past as part of memory practices may also be a viable topic of study. The topic

51 Nelson 2003, 163.

52 Assman 2009, 6.

of perception is beyond the scope of this article, but it may be interesting in the future to combine the notions of appropriation and perception in order to highlight both the process and the reception of a monument.

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The Tomba Campana: a long-debated 'discovery'

Considering the finds of a 19th-century excavation that never happened

Eline Verburg

Abstract

This paper critically re-evaluates the publication history of the Tomba Campana in Veii from its discovery until today. The Tomba Campana is of great value for Italian archaeology because of its unique and early wall paintings and rich grave goods. However, its modern post-excavation history is turbulent and controversial. The aim of this paper is to give a short overview of the events surrounding the discovery of the tomb and its contents both during and after the discovery, in order to add to the line of interpretation developed by F. Roncalli, F. Delpino et al. The introduction will discuss publications from the 19th and 20th centuries. Following this introduction, a short biography of the discoverer, Giovanni Pietro Campana, will be given. Subsequently, the contents of the tomb will be discussed. Lastly, this paper will contextualise the 'discovery' within the context of how antiquarians dealt with authenticity in the field of archaeology in the early 19th century, the period in which the tomb was discovered.

Eline Verburg completed her Research Master in Archaeology with a thesis titled: 'New Research on an Old Discovery': the Tomba Campana. In addition, she studied Etruscology for a year at the oldest University of Europe, the Università di Bologna. Her main interests centre on the archaeology of Pre-Roman Italy and specifically the Etruscan culture. Supervisor: mw. drs. P. S. Lulof, University of Amsterdam.

▶*Profile page*

Introduction

The Tomba Campana is an Etruscan tomb, dating to 600 BC. It is located close to the Etruscan city of Veii and is famous for its rich contents and extraordinary wall paintings (Figure 1). The tomb was officially discovered in February 1843 by Giovanni Pietro (or Giampietro) Campana, a rich banker and amateur archaeologist from Rome. He presented it as the only visitable Etruscan tomb with its grave goods still *in situ*, which attracted many travellers during their journeys to the Italian peninsula. Giovanni Pietro Campana even received a golden medal from Camerlengo Riario Sforza in 1843 because he left the numerous objects in the tomb untouched and donated the tomb to the Pontifical Government, showing that Campana's activities concerning archaeology, at

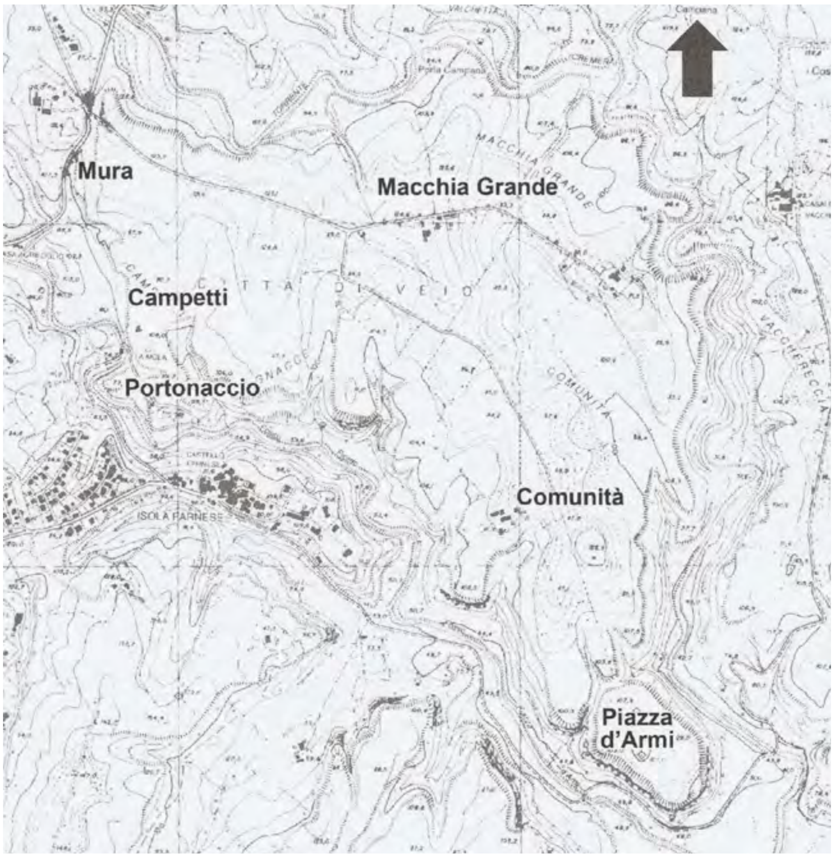


Figure 1
Map of the plain of Veii. The arrow shows the location of the Tomba Campana (after Bartoloni et al. 2013, 134 fig. 1).

that time, were highly appreciated.[1]

The subsequent discussion

In the first publications by Campana and the important architect and archaeologist L. Canina, written in 1843, immediately after the discovery of the tomb, the authenticity of the tomb was emphasised, with both men stating that the tomb had remained almost entirely untouched during the past centuries.[2] The tomb was also thoroughly described by G. Dennis in his masterpiece *Cities and Cemeteries of Etruria*, again with a focus on the supposedly excellent condition of the tomb.[3] In the early 20th century, the focus shifted to the marvellous wall-paintings and their significance, with articles written by A.M. Harmon and A. Rumpf, and later in the 1970s by L. Banti and C. Bettini.[4] In 1963, M. Cristofani and F. Zevi wrote an article in which they tried to identify the archaeological objects that were found in the tomb

1 Delpino 1985, 118.

2 Campana 1843a, 4. *"Frutto di più stagioni di scavi fu il ritrovamento di un sepolcro, che col nome volgare diremo grotta sepolcrale (...) che mi presentasse uno stato di straordinaria conservazione immune dal guasto del tempo e da quello degli uomini."* and hereafter *"La porta era di pietra anche essa, ma caduta naturalmente o piuttosto infranta dagli antichi profanatori de'sepolcri, i quali pare che siensi limitati a rubar soltanto gli ori, lasciando ogni altra cosa salva dalla umana repacità."* Campana 1843b; Canina 1847.

3 Dennis 1848.

4 Harmon 1912; Rumpf 1915; Banti 1970; Bettini et al. 1977.

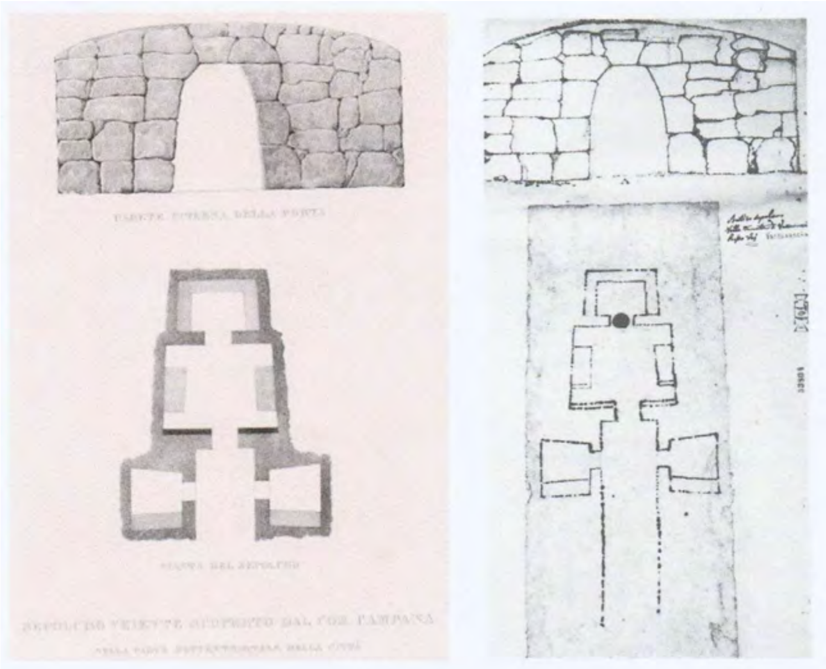


Figure 2
Left: the cyclopic entrance wall and plan of the Tomba Campana (after Canina 1847 plate XXIX).
Right: illustration by Francesco Caracciolo of the cyclopic entrance wall and plan of the Tomba Campana (courtesy of BiASA, Collezione Lanciani, Roma XI, 64, I n, 101, inv. 33804).

by using drawings from the inside of the tomb, which had been published with the articles of Campana and Canina in the 19th century.[5]

Although Campana stated that he had discovered the tomb in an intact state and many scholars believed this statement long into the 20th century, in a 1979 article, Roncalli cast doubt on the nature of the tomb, which initiated a discussion on the origins of many of the objects that had been claimed to hail from the Tomba Campana.[6] Roncalli revealed, for example, that the terracotta cinerary urns could not have belonged to the tomb's original inventory, as he discovered that these objects originally came from the San Bernardino necropolis in Orte, near Viterbo.[7] Subsequently, doubts emerged about the origin of more objects inside the tomb, and once again regarding the unique wall paintings, which had already been questioned by Rumpf as early as 1915. Doubts intensified when F. Delpino published an article in 1985 in which he presented a drawing from 1825 that showed the plan of the tomb, and thus made clear that the tomb had possibly already been discovered years before Campana announced his 'discovery' (Figure 2).[8]

5 Cristofani/Zevi 1963.

6 Delpino 1985, 117; Campana 1843a.

7 Roncalli 1979, 157-167.

8 Delpino 1985, 137.

The aim of this paper

Ever since Roncalli published his article in 1979, no new archaeological research has focused on the Tomba Campana. Furthermore, even after Delpino wrote two new articles in 1984-1985, in which he published the 1825 Caracciolo drawing, the old publications were not reconsidered with regard to the question of the tomb possibly having been staged.[9] This is perhaps due to the fact that archaeologists were unsure of how to deal with the revelations of Roncalli and Delpino about this tomb.[10] As Roncalli only discussed a couple of objects and there is a lack of new studies, the origins of many objects, as well as the authenticity of the wall paintings, are still questioned.[11] Further studies on the objects and wall paintings of the Tomba Campana are thus necessary to clarify their origins and authenticity.

This paper will revisit the 19th- and 20th-century publications in order to reconsider the 'facts' presented in the earliest articles, and to provide room for new insights following the line of inquiry established by Roncalli and Delpino. Following this review of the tomb and its contents, the authenticity of the Tomba Campana and its contents will be discussed, including how antiquarians dealt with authenticity in the field of archaeology in the early 19th century. First, however, some background on the discoverer of the tomb, G. P. Campana, is needed to be able to contextualise the 'discovery' of the tomb.

The discoverer: Giovanni Pietro Campana

Giovanni Pietro Campana was a 19th-century collector with a primary focus on antiquities. He came from a family of bankers and owned many buildings in Rome and the surrounding area. These buildings included a factory that produced marble – or a substance resembling it – of which statues, columns and pavements were made, and a laboratory in which terracotta and ceramics were restored, an important fact that will be discussed more thoroughly later in this article.[12] His villa, which he inherited from his grandfather, was located on the via di San Giovanni in Laterano in Rome.[13] Due to rebuilding projects in the late 19th century, it unfortunately no longer exists. In 1846, he completely renovated the villa, with the exterior resembling a Roman temple and

9 Delpino 1985; Delpino 1984-1985.

10 The article written by Delpino in 2012 is mainly an extract of his publications in the 1980s.

11 Roncalli 1979, 163.

12 Sarti 2001, 6.

13 Nadalini 1996, 420.

Figure 3
Photograph of the 'casino' of the Villa Campana in Rome, which eventually became the museum of antique sculptures, of which some are displayed between the columns (after Sarti 2001, fig. 3).

featuring plaster casts of famous sculptures such as the Capitoline Wolf. He also modified a small building close to the villa into a '*casino*', a small house with the characteristics of a Roman villa. In his garden stood the statue of Giove Celimontano, an original statue, though updated with modern additions, derived from the villa of Domitian in Castel Gandolfo.[14] His garden also contained reconstructions of a Roman columbarium and an Etruscan tomb, both furnished with ancient objects. Apparently, he did not object to placing reconstructions and original antique statues within the same context.[15] Eventually, Campana established his museum of sculptures in the Villa Campana (Figure 3). On 12 April 1854, Campana applied for his first loan from his own Monte di Pietà bank, offering his collection as a security. On the 28 November 1857, Campana was arrested for stealing 983,959 *scudi* during his time at the head of the Monte di Pietà bank. He was sentenced to 20 years of forced labour and his collection was confiscated by the Pontifical Government.[16]

The tomb's (alleged) contents

> "[…] an Etruscan funerary grotto, manufactured out of tufa, with several painted walls in good condition together with some urns, funerary objects, vases and other, mostly black ceramics of the most antique style."[17]

14 Pianazza 1993, 440.

15 Ibid.

16 First, the Pontifical Government tried to keep the Campana collection in Italian territory, but in 1860 it decided to sell it, resulting in the dispersal of the collection between England, Russia and France.

17 Campana 1843a, 4. Translation by the author. *"[…] una grotta sepolcrale etrusca, fabbricata nel tufo, con entro alcuni dipinti parietarii di buona conservazione insieme ad alcune urnette, oggetti mortuarii, vasi e tazze fittili la più parte di tinta nera e del più antico stile."*

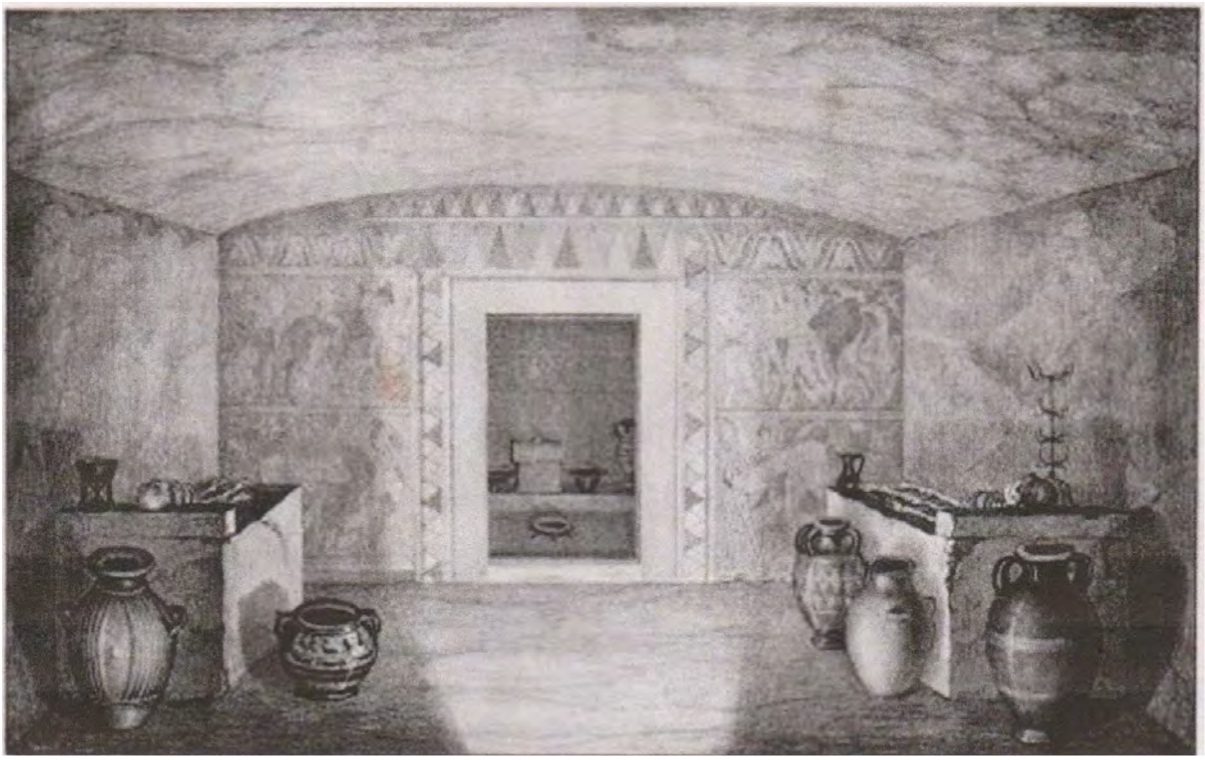


Figure 4
Illustration of the first chamber of the Tomba Campana by L. Gregori (after Canina 1847, pl. XXX).

This is how Campana describes the tomb in two separate but similar articles that were published a few months after the discovery.[18] In these two articles he also writes that vases with human ashes and two funerary beds with two skeletons were found in the first chamber of the tomb, one still covered by his armature (Figure 4). Oxidation, as Campana says, had caused parts of the harness and helmet to crumble. The helmet showed two holes made by a spear, which, according to Campana, was the cause of death. A chandelier, a vase in the form of a *prefericolo*, several mirrors and a fireplace were also found.[19] The latter was found in the middle of the room. The other vases in the room, some of which contained human ashes, had different shapes, some had a black slip, some had relief ornaments and others were black with a yellowish base. According to Campana, they all belonged to one style that he calls *della prima etrusca maniera*.[20] He also mentions that several figurines of terracotta and some animals cut out of amber were found in the chamber. The second chamber was smaller than the first one and contained three cinerary urns, a multitude of large vases and some objects of use (Figure 5). On the back wall of the second chamber, three circles were painted and the wall in the

18 Campana 1843b, 99-102; Campana 1843a, 1-8. The following discussion of the contents of the tomb as presented by Campana are based on his two articles.

19 A prefericolo is a bronze vase that was used to execute sacrificial rituals.

20 Translation by the author: 'Of the first Etruscan style'.

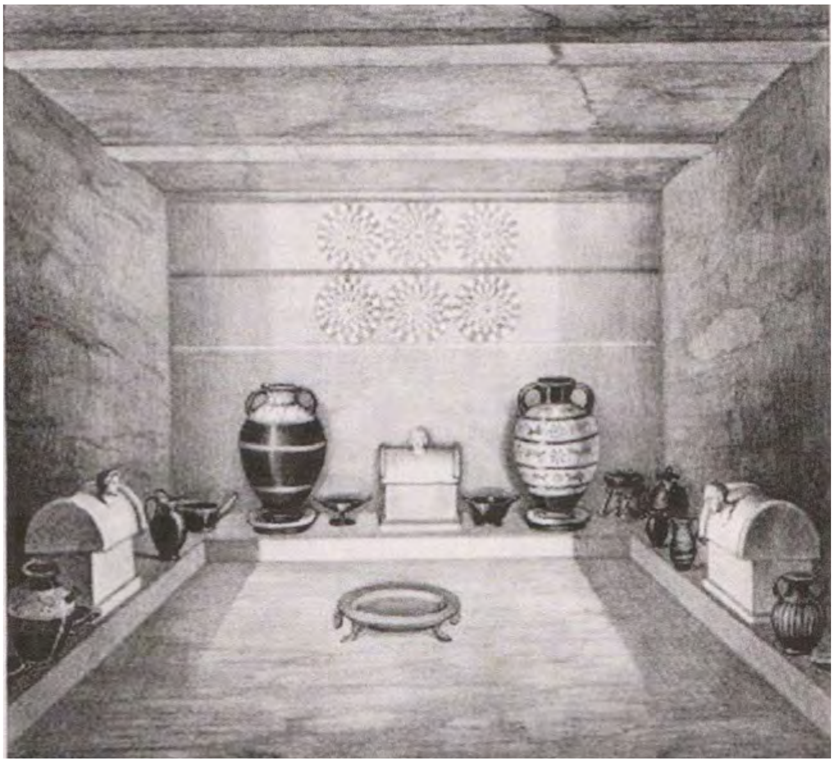


Figure 5
Illustration of the second chamber of the Tomba Campana by L. Gregori. Visible are several ceramics, the three cinerary urns from Orte, two vases standing in terracotta braziers, and one brazier with lion paws in the centre (after Canina 1847, pl. XXXII).

first chamber contained beautiful wall paintings as well (Figure 6).[21]

Despite the fact that Campana states in his publication that the discovery of the Tomba Campana was "the result of several seasons of excavation", it is interesting that absolutely nothing can be found about these excavations immediately before the discovery of the tomb.[22] A plan and a drawing of the entrance arch of the Tomba Campana, probably made by Francesco Caracciolo around 1825, is the evidence that the tomb had possibly already been discovered (Figure 2).[23] Francesco Caracciolo and his father Ludovico occupied themselves with the documentation of Veii, probably inspired by William Gell and Antonio Nibby, who surveyed Veii for their book *Carta de' dintorni di Roma*, first published in 1827.[24] Delpino suggests that Luigi Canina and the Caracciolo father and son participated in this study and contributed to the body of documentation for Gell and Nibby.[25] The similarity between the Caracciolo drawing and a plate in the publication of Canina from 1847 (Figure 2) does indeed confirm

21 Campana 1843a, 8.

22 Campana 1843a, 4.

23 Delpino 2012, 101.

24 Nibby 1827.

25 Delpino 1985, 79-83, 137-142, 79 note 19, 137 note 36. Delpino thinks this because the legend belonging to the drawings has Canina's handwriting and a passage in his book '*Etruria Marittima*' suggests this as well.

Figure 6
Illustration of the wall paintings in the first chamber by L. Gregori (after Canina 1847, pl. XXXI).

that Canina knew this drawing and that he, too, was possibly aware that the tomb had already been discovered.[26] If it is true that the tomb had already been discovered, it makes it unlikely that all the aforementioned objects were still present in the tomb, and that fragile objects such as the skeletons were still intact when Campana 'discovered' the tomb in 1843.[27]

Several other sources describe the tomb and its contents, but these sources contain many irregularities. L. Grifi, the secretary of the *Commissione di Antichità e Belle Arti* of the Pontifical State, for example, made an inventory list of the tomb a few months after the discovery for the new custodian of the tomb. In this list, he does not mention the skeletons, nor the amber animal figurines or the terracotta figurines which were mentioned in Campana's 1843 publication (Figure 7).[28] It has always remained unclear what happened to these objects after the discovery, and their absence from this list confirms that they were probably either taken out of the tomb right after the discovery, or were never present in the tomb. Grifi also mentions two tufa heads, which are not mentioned by Campana. Another interesting point is that Grifi describes '*tre vettine coi loro catini*', which means something like 'three vases with their basins'. According to Cristofani and Zevi, the 'basins' are in fact the three braziers that were found in the tomb, two of which can be seen on a picture taken by Romualdo Moscioni around 1900, and are now in the Museo dell'Agro Veientano (Figure 8).[29] All illustrations of the inside of the tomb show that the vases are standing in the braziers. This is

26 The Caracciolo drawing does not occur in the publications of Campana.

27 Delpino 2012, 101-102.

28 Delpino 1985, 189. ASR, Ministero Commercio, Belle Arti, Industria, Agricoltura e Lavori Pubblici, b. 365, fasc. 19.

29 Cristofani/Zevi 1965, 6.

51

(1843 N° 1479)

Nota degli oggetti
che appartengono al sepolcro di Veii

Prima Camera

1. Due letti di tufa
2. Un elmo di bronzo
3. Un prefericolo di bronzo
4. Quattro vettine grandi
5. Sette anfore
6. Un vaso arcaico figurato con due ordini di pitture ed altro più grande a due anse con varie fascie di animali
7. Due teste di tufa, e vario vasellame nero, che si limita in tre dozzine di tazze e vasetti di varie forme e un vaso grande a quattro manichi

Seconda Camera

8. Un focolare di bronzo
9. Tre urnette di argilla con coperchio con ivi sopra una testa
10. Tre vettine coi loro catini
11. Alcuni specchi di bronzo
12. Un utensile a foggia di candelabro di bronzo.

Nella prima camera le pareti sono dipinte con cavalli, figure, e mostri a vari colori, e ben conservate.

Nella seconda vi sono dipinti alcuni circoli formati da quadretti a vari colori.

Nell'esterno della tomba vi sono due lioni di tufa, e due altri di minor conservazione al principio della via che mena al sepolcro.

Cav. Luigi Grifi Cons.re Segretario
Antonio Valerj

(ASR, *Ministero Commercio, Belle Arti, Industria, Agricoltura e Lavori Pubblici*, b. 365, fasc. 19).

Figure 7
Inventory list made by Luigi Grifi (after Delpino 1985, 189).

highly unusual, because braziers were used to burn fuel to heat a space, to cook, or to burn incense. Therefore, the function of the amphorae – that of storing food – is not connected to that of the braziers. Thus, the fact that they are standing in the braziers, shows that somebody was unaware of their function, and this is important evidence. This fact can be interpreted as proof that the contents of the tomb were staged, since it seems unlikely that an Etruscan would have put two objects together that absolutely do not correlate with each other from a functional point of view (Figures 4, 5 and 6).

Doubts emerged around the origin of the objects as well. In his 1979 article, for instance, Roncalli revealed that the cinerary urns from the Tomba Campana did not originally come from Veii, but from the San Benardino necropolis in Orte.[30] This assertion is proven by drawings made by Giovanni Vitali, who was involved in the excavations at Orte, in which the three urns from the Tomba Campana are visible (Figure 9). The presence of the same inscription on one of the urns on the drawing and on one urn from the Tomba Campana gives conclusive evidence as to the provenance of these pieces.[31]

Roncalli's hypothesis, stating that these objects had been transferred to the Tomba Campana, becomes even more likely

30 Roncalli 1979, 157-167.

31 Ibid., 161; Archivio Camerlengato, Parte II, tit. IV, busta 254, f. 2701.

Figure 8
Picture of the outside of the Tomba Campana made by Romualdo Moscioni between 1868 and 1901 showing head no. 12395 placed on the right lion. On the left hand the two terracotta braziers are visible standing upwards against the wall (after Cristofani/Zevi 1965 pl. IV).

if one considers the fact that Campana participated in the excavations at Orte in 1839, partnered by Giuseppe Ferri and Luigi Arduini.[32] It is therefore plausible that Campana put the cinerary urns in the Tomba Campana himself, perhaps without Grifi's knowledge. Arduini was involved in the excavations at Veii as well, since a document was discovered in the administration of Prince Chigi in which a contract is mentioned between Prince Chigi, Campana and Arduini dating to 6 April 1842. This contract concerned the division of the objects found during excavations that took place on the property.[33] Given the evidence, it is possible that the idea of placing the cinerary urns in the Tomba Campana was a joint decision made by Campana and Arduini.[34]

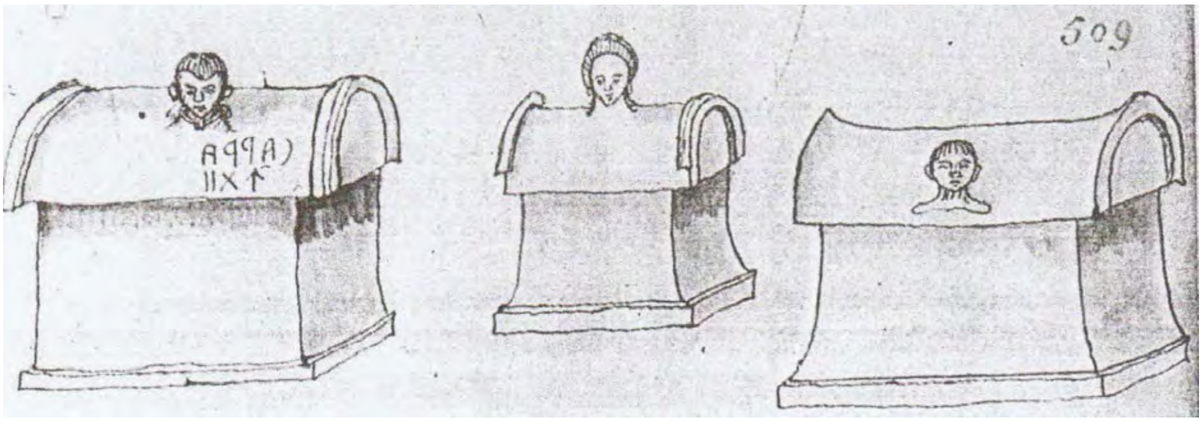
More objects from the Tomba Campana are of dubious origin. Two of the three tufa heads, for example, which were found without their 'bodies' inside the Tomba Campana, are already mentioned on Grifi's list, but the third must have been added later. In his 1961 book *Recherches sur la statuaire en pierre étrusque archaïque* Alain Hus states that "[...] if you had not known they [i.e. the heads] came from Veii, you would attribute them to Vulci."[35] According to Iefke van Kampen, the two 'original' heads of the Tomba Campana (with inventory number 12394) possibly come from Vulci, maybe

32 Sarti 2001, 19, 21; Archivio Centrale di Stato di Roma, *AABBAA I versamento*, N. 95 no. 120.5: "Giuseppe Ferri fin dall'anno 1839 incominciò a scavare con il Sig.re Marchese Campana e Luigi Arduini nei terreni di Orte e Montorso in Sabina, poscia col medesimo Campana nel 1843 a Cerveteri e Falleri."

33 Delpino 2012, 101-102; Timbro 'R. Soprintendenza ai musei ed agli scavi della Prov. Di Roma, 13 GIU 1917 N. di Prot. 440 N. di Pos. 4-XII'.

34 Delpino 2012, 102.

35 Van Kampen 2009, 140; Hus 1961, 311. "*Si l'on ne savait que la tête provient de Veies, on pourrait l'attribuer à Vulci.*"



from Orte, based on their stylistic features.[36] The third head, which is visible on the Moscioni picture (Figure 8), probably comes from Veii and was deposited in the Tomba Campana for a while in the 19th century. This head has a different artistic quality and is more crudely executed in comparison with the other two, suggesting an earlier date and Veii as the place of origin, since Veii was not a very important centre for stone sculpture.[37] This means that two of the three heads did not originally originate from Veii, and it is therefore likely that they did not originally belong to the Tomba Campana.

Figure 9
Illustration made by Giovanni Vitali of the cinerary urns from Orte (after Roncalli 1979 pl. VI fig. 3).

The authenticity of the tomba Campana: Archaeology and Antiquarianism

During the 19th century, collectors became more and more aware of the importance of the archaeological contexts of the artefacts they excavated or obtained. This resulted in a new way of displaying these objects in museums; they tried to display objects that they felt belonged together. This idea was pioneered by the Campanari family, who organised a celebrated exhibition of reconstructions of Etruscan tombs in London in 1837.[38] Their exhibition of Etruscan antiquities took place only a few days after the inauguration of the Museo Etrusco Gregoriano in Rome, nowadays part of the Vatican Museums. For many people outside of Italy, the London exhibition was the first time they were able to become acquainted with Etruscan tombs, since Nibby and Gell's book about Rome and the surrounding area only contained a few pages on Etruria.[39] The exhibition showed life-size reconstructions of Etruscan tombs, with the extraordinary and detailed wall paintings executed as copies on canvas. The exhibition intended

36 Van Kampen 2009, 140.

37 Lulof/Kars 1994, 51, 59.

38 Colonna 1978, 82.

39 Ibid., 83.

to show the tomb right after its discovery, with all the ceramics, skeletons and golden ornaments in situ. The tombs were lit by torches, to give visitors the experience of descending into a real Etruscan tomb.[40]

Giovanni Pietro Campana probably did not see the Campanari exhibition in London, but must have been inspired by it, since he was also celebrated for his habit of reconstructing original tomb contexts.[41] C. T. Newton and S. Birch described the objects from the Campana collection in their 1856 report, which was commissioned by the British Government in connection with the potential acquisition of the Campana collection for the British Museum. They mentioned that the *sarcofago degli sposi,* which is now in the Louvre in Paris, was exhibited in a room that had been painted so as to represent the original chamber in which it was found in Cerveteri.[42]

However, Campana seems to have made associations between objects based not only on his archaeological knowledge, but also on his imagination.[43] In his *Archaeological Discoveries*, A. Michaelis mentions that Campana had:

> "Unfortunately adopted the wretched Roman custom of restoring arbitrarily broken statues and reliefs, and finally covering the whole with a dull white paste [Gnaccarini paste].[…] In consequence of his work the marbles lost all artistic charm and scientific value."[44]

The way in which Campana restored his pieces gives an important indication of his approach to archaeology. Perhaps the Tomba Campana is the best example of his reconstructive activities. Since we now know that many of the objects did not originally belong to the Tomba Campana, this can no longer be considered as an authentic context, but should instead be seen as an antiquarian reconstruction.

In the first half of the 19th century, a first step towards more scientific research was made in excavations that were controlled by the Pontifical State. The focus of these excavations was still on finding precious objects, but adequate publication of the excavation results, as well as the provenance and historical

40 Colonna 1978, 85-86.

41 Because of their mutual interest in antiquity, Campana knew the Campanari family well.

42 Newton/Birch 1856, 49; Sarti 2001, 78; Pianazza 1993, 439.

43 Sarti 2001, 70.

44 MIchaelis 1908, 74-75.

significance of finds also became important.[45] Reports were published by the *Instituto di Corrispondenza Archeologica*, founded in 1829, and by the *Pontificia Accademia Romana di Archeologia*.[46] Campana managed to bypass the rules of the Pontifical State and execute excavations, which were not so scientific, like that of the Tomba Campana. He also did not publish the results of the Tomba Campana excavation properly, failing to submit them for academic scrutiny and debate, which paints a picture of an amateur archaeologist rather than an academic.

That being said, when looking at archaeological activities in the 19th century, it is important to keep in mind the fact that a different idea of authenticity existed. Showing an object as it was excavated and conserving it at the same time was not the aim. Rather, the aim was to present aesthetically pleasing reconstructions of the past to the public. The important architect and archaeologist Canina, for example, who also published with Campana about the Tomba Campana, combined his archaeological knowledge and his skills as an architect to create reconstructions of ancient monuments. He was in charge of the excavation, consolidation and presentation of the Roman remains along the Via Appia, and established an evocative image of that road that appealed to the Romantic spirit of the age.[47] In the 1820s, Pompeii was also extensively cleared and restored to make the site comprehensible as an urban entity and give visitors a better sense of daily life in Pompeii.[48] Nowadays, the aim of archaeologists and restorers is to preserve antiquity by showing the object as authentically and originally as possible, whilst necessary modern additions are deliberately made visible at the same time to distinguish between authentic and restored elements. The interaction with archaeological heritage was thus completely different than in modern-day heritage management.

Campana had many contacts in the Roman antiquarian community, some of whose reputations are nowadays considered questionable. During the first half of the 19th century, museums in Northwest Europe also became interested in the Etruscans, and Etruscan antiquities were highly sought after.[49] Antiquities dealers cleverly tried to make money from this by producing

45 Sarti 2001, 19; Dyson 2006, 22.

46 Dyson 2006, 31-35.

47 Ibid., 37-38.

48 Ibid., 45.

49 Paul 2012, preface xii. See, for example, the collection of Sir William Hamilton, Hans Sloane, Charles Townley and Auguste Durand.

Figure 10
Photographs from left to right of vases C664, C667, and C627 (after Pottier 1897, pls. 25, 26 and 28).

semi-original or even totally fake objects.[50] Amongst Campana's close friends were members of the Castellani family, a family of goldsmiths who advised Campana in forming his jewellery collection.[51] They were not afraid to refurbish and modify objects, just as Campana did. Several bracelets from Campana's collection are actually made up from Etruscan 'box-type' earrings, which were flattened and combined.[52] The Castellani family produced several versions of the box-type earrings and became famous for making modern jewellery in Etruscan design, which they sold as authentic. Two other famous forgers, Pietro and Enrico Pennelli, worked for Campana in his restoration laboratory. They are famous for the 'Pennelli Sarcophagus': a fake Etruscan sarcophagus that was sold as though it were authentic via the Castellani family to the British Museum, where it still remains in storage.[53] According to S. Reinach, the Pennelli brothers had started to construct fragments and pieces made of antique-looking terracotta because of the many visitors who asked Campana for antique objects as a souvenir after having visited Campana's museum in Rome.[54]

The practice of combining fragments from several different objects is confirmed by E. Pottier in his *Vases antiques du Louvre*, a catalogue of the archaeological department of ceramics at the Louvre, of which a large part belonged to the Campana collection. Pottier writes that Campana restored fragmentary objects, using other ancient fragments to complement them.[55] Perhaps this is the reason why Campana also collected many fragments of ceramics.[56] Pottier's catalogue also shows that Campana even

50 Paul 1962, 6.

51 Vlad Borrelli 1992, 437.

52 Sarti 2001, 74.

53 Paul 1962, 190-192.

54 Reinach 1905, 10; Nadalini 1996.

55 Pottier 1897, 33.

56 Michaelis 1908, 75; Sarti 2001, 6.

invented provenances for forgeries in his catalogue.[57] Even if we leave Tomba Campana's dubious history out of the equation, then, it is clear that Campana had a colourful history of manipulating ancient objects.

Around 20 objects taken from the Tomba Campana are now exhibited in the Museo dell'Agro Veientano in Formello, but it is unclear what happened to the other objects over the years. However, the vases included in the publication of Pottier do give us insight into the possible destination of some of them. Three vases from the Tomba Campana that were published by Canina in his book *L'antica città di Veii* are possibly included in Pottier's publication (Figure 10).[58] Number C664 of Pottier's catalogue has an unknown provenance, but we recognise this kind of caryatid chalice on table XXX in Canina's *L'antica città di Veii* (Figure 4) and twice on plate XXXIV in the same publication (Figure 11). Pottier also mentions that several fragments of the chalice come from another original chalice. Number C667 from Pottier's publication comes from Caere, but, again, the resemblance with a vase on plate XXXIV in Canina is striking. Number C627 from Pottier resembles a vase found in Canina's book as well, on plate XXXIV, but again the provenance is 'unknown'. Only one vase in the whole publication is mentioned as coming from Veii: an impasto spiral amphora C 551. This research into the Louvre catalogue can indicate two things:

1. either that the vases had already belonged to Campana's collection before he discovered the Tomba Campana and he placed them in the tomb to stage an archaeological funerary context,
2. or that Campana added many of the objects that disappeared after the discovery in 1843 to his own collection, which was partially sold to the Louvre in 1860.

Conclusion

This paper has assessed the old publications on the Tomba Campana in order to add new insights with regard to the discovery and the modern history of the tomb. This study has reviewed the line of inquiry that was started by Roncalli and Delpino. Their discoveries have been confirmed here, with added supporting evidence that confirms the idea that the discovery of the Tomba Campana was actually a staged event.

57 Pottier 1897, 33.

58 Cristofani/Zevi 1965, 24; Canina 1847; Pottier 1897, objects C664,C667, C627.

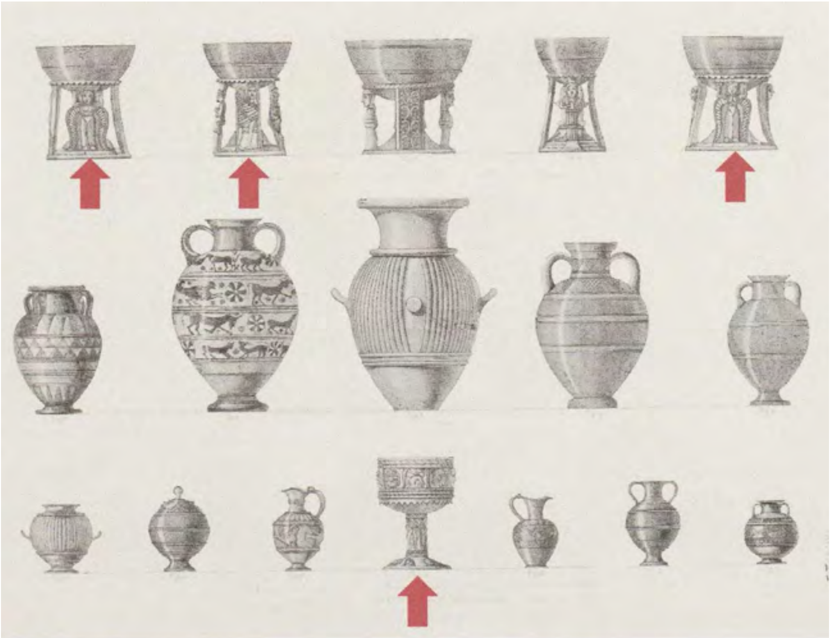


Figure 11
Illustrations of objects from Veii by L. Gregori. The red arrows show the vases that match the vases from the Campana Collection in the Louvre (after Canina 1847, pl. XXXIV).

Previous work by Delpino already followed this line of inquiry with the presentation of the Caracciolo drawing, which was made several years before the discovery. Furthermore, having conducted an accurate re-examination of the publications by Campana, Dennis and the Grifi's list, we can clearly see that these documents show irregularities both in the documentation of the grave goods as well as the composition of the funerary context. Special attention should therefore be paid to the 'stand-in pans' mentioned by Dennis or the '*tre vettine coi loro catini*' mentioned by Grifi, which are a key piece of evidence proving that the objects were put together by someone who was unaware of their historical function.

In addition, the article by Roncalli has demonstrated that the cinerary urns did not originally belong to the Tomba Campana, but hail from Orte. A conclusive piece of evidence for this discovery is the document found by Sarti, which shows that Campana himself participated at the excavations at Orte, together with Arduini and Ferri. This links Campana to the location where the three terracotta cinerary urns were originally found, and indicates that Campana, possibly in cooperation with Arduini, put the cinerary urns in the Tomba Campana. Roncalli suggests that it is plausible that there are more objects from the Tomba Campana with dubious origins, and, in fact, two of the three tufa heads are more likely to come from Vulci then from Veii, according to Hus and van Kampen. The antique vases that are now in the Louvre are firm proof that either these vases were already part of Campana's collection and were used to stage the Tomba Campana or that they were taken out of the tomb after the discovery and show us how the grave goods from the tomb disappeared over time.

Not only the examination of the objects of the tomb, but also the biography of Campana (and his network of antiquarians), has given us insight into his way of collecting archaeological objects, emphasising how Campana restored the objects in his collection. His restorations were not focused on conservation, but merely on the completion of objects in an aesthetically pleasing way. This habit of combining ancient and modern objects can also be seen in the Villa Campana, where he assembled ancient statues with plaster casts, set against the background of his Roman-style villa. This habit of conservation was not unusual, since it was common practice among antiquarians of the 19th century to make reconstructions, as is shown by the example of Canina and the reconstruction of the Via Appia.[59] From this perspective, and bearing in mind the Campanari exhibition of reconstructed tombs, the step towards an entirely staged tomb must not have been that big.

By revisiting the 19th- and 20th-century publications and archival documents about the Tomba Campana, this paper has provided new insights and new evidence that confirms the hypothesis of earlier publications by Roncalli and Delpino, who questioned the authenticity of the Tomba Campana. Further research could give a definitive answer about the origins of some of the grave goods from the tomb. In the same vein, recent research on the wall-paintings in the Tomba Campana has started under the supervision of Lucina Giacopini and Francesca Boitani with ENEA laser technology. The results of this study have not yet been published, but they will be of decisive importance for the many questions on this tomb that still have to be answered.[60]

59 Dyson 2006, 37-38.

60 The Louvre recently dedicated a large exhibition on the Campana Collection that was held from 7 November 2018 until 18 February 2019 with the title: *Un rêve d'Italie: la collection du marquis de Campana*. In this exhibition the Campana Collection was partially brought back together.

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From Fire Signals to ADFGX. A case study in the adaptation of ancient methods of secret communication

Martine Diepenbroek

ARTICLE

Abstract

Very early-on in Greek history mountaintops were already used as watch-towers and signalling stations from which messages could be sent over long distances by fire signals. In these earliest examples it was only possible to send one prearranged message, something that was often not sufficient in case communicating parties needed to communicate on urgent matters. The fourth-century BC military author Aeneas Tacticus accordingly invented a method for fire signalling, whereby a series of messages could be sent related to events that often occur in warfare. The system might have been used as a cryptographic device. Due to errors in Aeneas' system, Polybius improved another system based on the same principles, which in turn formed the basis for the modern 'Polybius square', used by the Germans for their ADFGX- and ADFGVX-ciphers: secret cipher systems used in the First World War. There is no clear evidence linking Aeneas' fire signalling method directly to the German ciphers. However, it will be shown that Polybius used Aeneas' system in his own fire signalling method. Polybius' method in turn impacted the development of the Polybius square and its use in the ADFGX and ADFGVX ciphers. By analysing the ancient history of Polybius' method for fire signalling and the merits of applying this to the use of the square in the German ciphers, it will be shown how an ancient fire signalling method inspired modern ciphers.

Martine Diepenbroek is a Dutch PhD student at the University of Bristol (UK). In her PhD thesis she works on the role of ancient cryptography and steganography in confidential correspondence in Greco-Roman warfare. A key figure in this field was the fourth-century BC military author Aeneas Tacticus. In her thesis she thoroughly analyses Aeneas' work 'How to Survive Under Siege', and compares this to other ancient sources on cryptography and steganography.

▶*Profile page*

Introduction

In a lost work on military preparations, the mid-fourth-century BC strategist and military author Aeneas Tacticus discussed a method for fire signalling, as discussed by Polybius.[1] Since Aeneas' method

1 Polybius, *Histories*, 10.44.

was laborious and open to errors, Polybius improved a method based on the same principles, forming the basis for the modern 'Polybius square' which is referenced by numerous modern cryptographers.[2] However, there is a gap in the literature; none of these scholars seem to fully appreciate the Polybius squares' origins, nor do they recognise the ways in which Polybius' original method anticipated the ADFGX and ADFGVX ciphers that were used by the Germans in the First World War. The current study will show the relevance of understanding the history of Polybius' method for fire signalling, and the merits of applying this to the use of the square in the German ADFGX and ADFGVX ciphers, thus filling a lacuna in our understanding of modern ciphers.

Aeneas Tacticus' method for fire signalling

Very little is known about the life of Aeneas Tacticus.[3] In the middle of the fourth century BC, he wrote a manual for generals known as *How to Survive Under Siege*.[4] The most important theme of this work was that there was always the threat of treachery from within a city during sieges.[5] Given the significant risk of citizens within the *polis* conspiring and communicating with the enemy, it was vital for the commanding forces to be able to communicate between themselves secretly and securely. In chapter 31 of his work, Aeneas accordingly described 16 different ways in which cryptography could have played an important role in surviving sieges.[6] In another lost work on military preparations, Aeneas discussed a method for fire signalling that could also have been used in cryptography.[7] A description of this method can be found in Polybius' *Histories*.[8]

Early-on in Greek history mountaintops were already used as watch-towers and signalling stations.[9] From these 'towers'

2 Polybius, *Histories*, 10.45.6-12; Kahn 1996, 76-77, 83; Mollin 2005, 9-10; Mollin 2006, 89.

3 Aeneas Tacticus is identified as Aineias of Stymphalos, an Arcadian general from the fourth century BC, mentioned by Xenophon (*Hellenica* ,7.3.1. See also: Oldfather 1928, 7; Sheldon 1986, 39; Whitehead 1990, 4, 10; Whitehead 2018, 21.

4 Hug 1877, 28; Brownson 1918, 281; Oldfather 1928, 7; Hunter / Handford 1927, ix-x., xxii, xxiv-xxv, 264; Barends 1955, 171; Delebecque 1957, 430; Star 195, 68; Bon 1967, vii, xii; David 1986, 343; Whitehead 1990, 10-12; Bliese 1994, 108; Vela Tejada 2004, 141-142; Rawling 2007, 13; Millett 2013, 65.

5 Aeneas Tacticus, *How to Survive Under Siege*, 4.1-4, 5.1, 9.2, 10.6, 10.11, 10.25-26, 11.3-6, 18.3-6, 18.13-18.21, 22.5, 22.7, 31 (*passim*); Liddel 2018, 124.

6 There is little evidence that any of these techniques were used in Antiquity (Pretzler 2018, 98). However, several of the events discussed in the work are narrated with such detail that it seems plausible that Aeneas played a part in some of them himself (Oldfather 1928, 4; Hunter / Handford 1927, xxxviii; Sheldon 1986, *passim*).

7 Aeneas referred to this work in *How to Survive Under Siege* (7.1-4).

8 Polybius, *Histories*. 10.44. Polybius was read widely by the ancients, as is shown by quotations of his work in the works of Strabo, Athenaeus, Cicero, Diodorus Siculus, Livy, Plutarch and Arrian (*all passim*). Much of the text that survives today from the later books of the *Histories* was preserved in Byzantine anthologies.

9 Homer, *Iliad*, 4.275-276, 5.770-771; Simonides, *Elegies*, 130; Vergil, *The Eclogues*, 8, 59; *Aeneid,* 10.454, 11.526.

messages could be sent over long distances by lighting strategic fires, as is known from e.g. Homer's *Iliad* (seventh century BC), and Aeschylus' *Agamemnon* (mid-fifth century BC).[10] Yet, in these examples the lighting of the fires communicated one prearranged message, which often did not suffice in case communicating parties needed to contact each other on urgent matters.[11] Aeneas Tacticus found a solution for the problem of only being able to send prearranged messages, and invented a method for fire signalling, whereby various messages could be sent, as has been discussed in Polybius' *Histories*.[12] According to Polybius, Aeneas discussed the system in the following way:

> "[…] those who are about to communicate urgent news to each other by fire signal should procure two earthenware vessels of exactly the same width and depth, [as well as corks]. [Through] the middle of each cork [they] should pass a rod graduated in equal sections […], each clearly marked off from the next. In each section should be written the most evident and ordinary events that occur in war […]. [Whenever] any of the contingencies written on the rods occurs [Aeneas] tells us to raise a torch and to wait until the corresponding party raises another. When both […] torches are […] visible, the signaller is to lower his torch and at once allow the water to escape through the aperture. Whenever, as the corks sink, the contingency you wish to communicate reaches the mouth of the vessel [Aeneas] tells the signaller to raise his torch and the receivers of the signal are to stop the aperture at once and to note which of the messages written on the rods is at the mouth of the vessel. This will be the message delivered, if the apparatus works at the same pace in both cases."[13]

What Polybius, and therefore Aeneas, described was an inventive and laborious method for fire signalling by using water clocks and torches.[14] Two parties who wanted to communicate with each other by means of fire signals had to take two vessels, rods and corks. The rods had to be divided into equal parts by marking them with notches. On each part of the rods one had to inscribe

10 Homer's *Iliad*, 18.203-214; Aeschylus, *Agamemnon*, 281-316. See also e.g.: Herodotus, *Histories*, 7.183, 9.3; Diodorus Siculus, *Library of History*, 19.57; Julius Africanus, *Kestoi*, 77; Onasander, *The General*, 25.2; Frontinus, *Stratagems*, 3.11.5; Polyaenus, *Stratagems of War*, 6.16.2, Hyde 1915; Dvornik 1974, 31-33; Sheldon 1987, 135; Russell 1999, 145; Sheldon 2005, 127; Woolliscroft 2001, *passim* (especially Appendix 1).

11 Polybius, *Histories*, 10.43.5-6.

12 Ibid., 10.43-46.

13 Ibid,. 10.44; translation: Paton, Walbank *et. al.* 2011, 235-237.

14 Oldfather 1928, 46-47; Hunter / Handford 1927, 120, 122-123; De Agapayeff 1939, 16-17; Dvornik 1974, 42-43; Rihll 2018, 281-287.

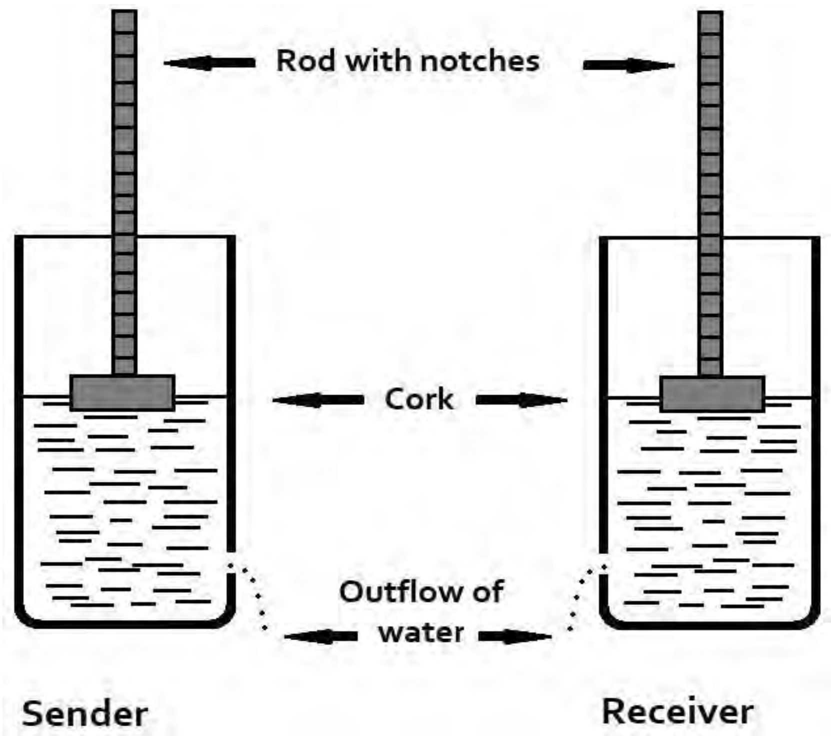

Figure 1
A possible reconstruction of Aeneas' water clock as described by Polybius (created by author, based on Aschoff 1984, 47-48).

events that often occurred in warfare. Both parties then had to set up signalling stations on a visible distance from each other. When any of the events ascribed on the rods occurred, one party had to raise a torch, and wait for the other party to respond in the same way. At this point, both parties had to pull the plugs out from the bottom of the vessels in order to let the water escape, thus causing the rod to sink into the vessel. When the right inscription reached the top of the vessel, the sending party would raise the torch again to show the receiving party that they should replace the plug and read the message that was revealed at that water level. In this way the receiving party understood the intended message (Figure 1). Since Aeneas understood the need for secrecy, because of the constant danger of treachery, it is possible, yet not provable that Aeneas' system was used for secret communication.[15] When the system was used in this way, it could have allowed communicating parties to send prearranged secret messages via the rods.

Polybius' system for fire signalling

Recent experiments in archaeology have shown Aeneas' system to be feasible.[16] Also, it is known from the second-century AD author Polyaenus that the Carthaginians used a similar method

15 Aeneas Tacticus, *How to Survive Under Siege*, 31.1.

16 Sheldon 2005, 205.

successfully.[17] However, there are two large downsides to Aeneas' method. It would have been extremely difficult to let the two water clocks run exactly parallel, and still only prearranged messages could be transferred between communicating parties.[18] Accordingly, Polybius discussed a more sophisticated system of fire signalling in his *Histories*. According to Polybius:

> "[A] recent method, [...] perfected by myself, is quite definite and capable of dispatching with accuracy every kind of urgent messages [..]. It is as follows: We take the alphabet and divide it into five parts [...] Each of the two parties [...] must [...] get ready [two sets of five torches and] five tablets and write one division of the alphabet on each tablet. [Both parties must then raise] two torches [...] for the purpose of conveying to each other that they are both at attention. [After this] the dispatcher of the message will [...] raise the first set of torches on the left side indicating which tablet is to be consulted [...]. Next, he will raise the second set on the right on the same principle to indicate what letter of the tablet [should be consulted]."[19]

Like Aeneas, Polybius still used torches, but replaced the water clocks by tablets on which the letters of the Greek alphabet were written (Figure 2).[20] The recipient had to write down all the letters that were communicated to him by means of fire signals to understand the intended message. If necessary, he could reply in the same way.

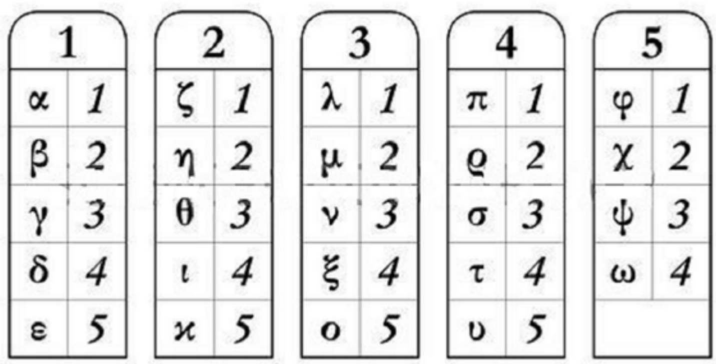

Figure 2
Five tablets with the letters of the Ancient Greek alphabet used for fire signalling, as described by Polybius (Polybius, Histories, 10.45.6-12); (John Savard 1998/1999, The Bifid, the Trifid, and the Straddling Checkerboard, Source http://www.quadibloc.com/crypto/pp1322.htm).

Although Polybius' method was still laborious, it was clearly an improvement over Aeneas' method, since in Polybius' method no water clocks were involved that had to run parallel, and

17 Polyaenus, *Stratagems of War*, 6.16.2; Dvornik 1974, 56; Sheldon 1987, 28.

18 Polybius, *Histories*, 10.45.1-2; Hunter / Handford 1927, 120.

19 Translation: Paton, Walbank *et. al.* 2011, 239-241.

20 Polybius, *Histories*, 10.45.6-12.

every possible message could be sent, instead of only a series of prearranged messages. The fact that every possible message could be sent, makes Polybius' method easier to use in cryptography than Aeneas' method. However, once more, clear evidence for its use in secret communication remains inaccessible. Out of Polybius' method, a modern variation developed that provably has been used in cryptography: the 'Polybius square'. Among cryptographers, Polybius is often incorrectly seen as the creator of this modern cryptographic device.[21] However, the term 'Polybius square' only appears in 20th- and 21st-century cryptographic literature.[22]

	1	2	3	4	5
1	a	b	c	d	e
2	f	g	h	i/j	k
3	l	m	n	o	p
4	q	r	s	t	u
5	v	w	x	y	z

Figure 3
Polybius square: a 5x5 square in which a modern alphabet is placed (Salomon 2003, 29).

The Polybius Square

The Polybius square is a mathematical square – in contrast to Polybius' tablets – used in modern cryptography. A basic Polybius square consists of five rows and columns, which gives 25 cells. In these cells the 26 letters of a modern alphabet are written in their normal order from left to right, and top to bottom (Figure 3). Hereby, the letters 'I' and 'J' are usually placed in the same block.[23] All rows and columns in the square have a number. In a basic square these are the numbers one to five for both rows and columns. Every letter in the square gets a coordinate. The letter 'A', for example, can be found in the first row on the first column, which gives the coordinate 1-1, written as '11'.[24] In this way, all the letters in the square have a coordinate between '11' (A) and '55' (Z). So, in a Polybius square, first the row is indicated, and then the column. Polybius' method worked the other way around. Polybius discussed indication of the tablet first, which can be compared to the column of the Polybius square, and then the letter on the tablet, which can be compared to the row of the Polybius square.[25] A message that is sent by means of a Polybius square looks like a series of numbers. The message:

'*SEND MORE TROOPS BEFORE MIDNIGHT*',

for example, would look like the following sequence:

43 15 33 14 - 32 34 42 15 - 44 42 34 34 35 43 - 12 15 21 34 42 15 - 32 24 14 33 24 22 23 44

Since every coordinate contains two numbers – one for the row

21 Kahn 1996, 76-77, 82-83; Mollin 2005, 9-10; Mollin 2006, 89.

22 Kahn 1996, 76-77, 82-83; Mollin 2005, 9-10; Mollin 2006, 89.

23 Kahn 1996, 83; Mollin 2006, 90; Lunde 2012, 78-79.

24 Mollin 2006, 90; Kahn 1996, 83, Lunde 2012, 78-79.

25 Polybius, *Histories,* 10.4.6-12.

and one for the column – an encrypted text is created that is twice as long as the non-encrypted text.[26] To decipher the message, the recipient would take a Polybius square, look for the coordinates in the square, and check which letters correspond to these coordinates. The Polybius square has been used for cryptography in this way by the British army in the Boer War, and by the British and German armies in the First and Second World War.[27] Yet, the Polybius square could also be used as the basis for other cryptographic methods. In the last year of the First World War, for example, the German military intelligence services used the Polybius square in the ADFGX and ADFGVX ciphers.[28]

Adaptation of the Polybius square

The ADFGX and the ADFGVX ciphers were a combination of a substitution and a transposition cipher. In substitution ciphers the letters of a normal non-encrypted text, known as plaintext, are substituted into other letters, characters, or symbols.[29] In a transposition cipher, on the other hand, the normal sequence of letters of the plaintext is only rearranged. No letter is substituted into another letter or symbol.[30] The text that is formed after substitution and transposition is known as the ciphertext.[31] The ADFGX and ADFGVX ciphers are named after the only five, later six, letters that appeared in the ciphertext: the letters A, D, F, G, V, and X.[32] Messages encrypted with the ciphers were transmitted by Morse code. The six letters were chosen to minimise transmission errors, since the letters sound very different form one another in Morse code.[33] Since the ADFGX and ADFGVX ciphers were a combination of a substitution and a transposition cipher, a multistep process was used to create encrypted text with these ciphers.

In March 1918 the first of the cipher systems was introduced: the ADFGX cipher. This cipher used a Polybius square of 5x5. This square was filled with 25 of the 26 letters of the German alphabet in random order, agreed upon between sender and recipient (Figure 4).[34] The rows and columns of the Polybius square used

A	N	B	R	I
Q	E	U	H	P
K	L	O	W	D
S	C	V	X	Z
G	T	Y	F	M

Figure 4
ADFGX cipher: Table filled with 25 of the 26 letters of the modern alphabet in a random order agreed upon between sender and recipient (created by author).

26 Mollin 2005, 1; Reba / Shier 2015, 480.

27 Mollin 2006, 90; Kahn 1996, 83; Van Tilborg, 2006, 32; Lunde 2012, 78-79.

28 Van Tilborg, 2006, 32.

29 Reinke 1962, 113; Singh 1999, 5-7; Bauer 2007, 382.

30 Ibid.

31 Mollin 2005, 1; Reba / Shier 2015, 480.

32 Childs 1919, 13; Mollin 2005, 1; Klima / Sigmon 2012, 55; Reba / Shier 2015, 480; Dooley 2016, 65.

33 Klima / Sigmon 2012, 55.

34 Ibid.

for the cipher were then labelled with the letters 'A', 'D', 'F', 'G', and 'X'. Each letter of the plaintext that had to be encrypted was then replaced by a pair of letters consisting of the letters 'A', 'D', 'F', 'G', and 'X' that could now be found in the utmost left cells of the rows, and in the top cells of the columns, hereby following the table.[35] First, the letter in the row was written, followed by the letter in the column. Therefore, the plaintext letter 'Y', was encrypted as 'XF' (Figure 5). In this way, a ciphertext was created that was twice as long as the plaintext, and that only contained the letters 'A', 'D', 'F', 'G', and 'X'.[36] The plaintext message:

'*Send weapons quickly*',

for example, would have been substituted into the following ciphertext:

GA DD AD FX - FG DD AA DX FF AD GA - DA DF AX GD FA FD XF

One of the characteristics of a Polybius cipher is that the length of the ciphertext is twice the length of the plaintext. The ADFGX cipher has this Polybius square characteristic. Yet, after the substitution of the message into ciphertext, the second step took place: the transposition. The origins of transposition ciphers can be traced back to the use of the Spartan *scytale*.[37] From Plutarch and Aulus Gellius we know that around a *scytale* (stick) a strip of writing material was wrapped, on which a secret message was written. Then the strip was unwrapped from the *scytale* whereby all letters changed place.[38] The principle of the changing positions of letters can also be found in the ADFGX cipher. The ciphertext that was created in the first step of the process (GA DD AD FX FG DD AA DX FF AD GA DA DF AX GD FA FD XF) was then written in a rectangular table from left to right, and from top to bottom in as many rows as necessary to write the entire message. The top row of the table was used for a 'key' (Figure 6).[39] In cryptography, the 'key' is the information that is needed to encipher and decipher a

Figure 5
ADFGX cipher table with rows and columns marked with the letters 'A', 'D', 'F', 'G', and 'X' (created by author).

	A	**D**	**F**	**G**	**X**
A	A	N	B	R	I
D	Q	E	U	H	P
F	K	L	O	W	D
G	S	C	V	X	Z
X	G	T	Y	F	M

Figure 6
ADFGX cipher table with keyword 'attack' (created by author).

A	**T**	**T**	**A**	**C**	**K**
G	A	D	D	A	D
F	X	F	G	D	D
A	A	D	X	F	F
A	D	G	A	D	A
D	F	A	X	G	D
F	A	F	D	X	F

35 Klima / Sigmon 2012, 56.

36 Ibid.

37 Childs 1919, 13; Dooley 2016, 65.

38 Plutarch, *Life of Lysander*, 19.5; Aulus Gellius, *Attic Nights*, 17.9.9. The two *scytalae* must have had the same diameter for the cipher to work. Otherwise, the letters would not have returned to their original place. It has been incorrectly argued by S. West and T. Kelly that *scytalae* were never used for cryptographic purposes (West 1988, 42; Kelly 1998, 246). According to these scholars, the principal meaning of the word *scytale* is 'stick' (Kelly 1985, 162; 1998, 245; West 1988, 42. See also: Strasser 2007, 278). However, these definitions in themselves do not mean that *scytalae* could never have been used for secret communication. On the contrary, the method as described by Plutarch and Gellius is so detailed and obviously useful, that it seems more than likely that *scytalae* were regularly used for this purpose in contexts where secrecy of communication was important.

39 Klima / Sigmon 2012, 34-35; Dooley 2013, 8.

message. Normally, this is a word or short sentence.[40] In Figure 6, for example, the keyword 'attack' is used.

The text in Figure 6, already once encrypted, was considered to be plaintext text again, which had to be encrypted into ciphertext.[41] This was achieved by rearranging the order of the columns in the table.[42] For this, the letters of the key were written in alphabetical order. In the case of the key '*attack*' the letters would be rearranged as A, A, C, K, T, and T. The associated columns were then rearranged in the same order, since they moved along with the letters of the key.[43] In case a letter appeared more than once in a key, like we see twice in the case of '*attack*', the leftmost column was written first.[44] So, in this case the columns were rearranged in the order 1-4-5-6-2-3 (Figure 7). Eventually, the ciphertext was taken column by column from left to right and written horizontally.[45] This provides the following sequence of letters:

GFAADF DGXAXD ADFDGX DDFADF AXADFA DFDGAF

So, this was the second time that the original message '*SEND WEAPONS QUICKLY*' was encrypted. This encrypted text was sent to the receiver who had to decrypt the text by taking all the steps in the process in reverse order.

Figure 7
ADFGX table with rearranged order of columns (1-4-5-6-2-3) (created by author).

A	A	C	K	T	T
G	D	A	D	A	D
F	G	D	D	X	F
A	X	F	F	A	D
A	A	D	A	D	G
D	X	G	D	F	A
F	D	X	F	A	F
1	**4**	**5**	**6**	**2**	**3**

The ADFGVX cipher

In June 1918, three months after the introduction of the ADFGX cipher, the Germans added an extra row and column to the Polybius square that was used for the cipher to create a 6x6 grid. Extending the grid meant that an extra letter was required to create ciphertext. The letter V was chosen for this, since this letter sounds different from the five other letters in Morse code. The newly created cipher was called the ADFGVX cipher.[46] It worked in the exact same way as its predecessor the ADFGX cipher. The ADFGX and ADFGVX ciphers were the most advanced cipher systems that the German military intelligence used during the First World War.[47] In fact, they turned out to be the toughest

40 Klima / Sigmon 2012, 34-35; Dooley 2013, 8. Aeneas Tacticus already understood the importance of a key (*How to Survive Under Siege*, 31.1).

41 Klima / Sigmon 2012, 56. This ciphertext was converted from the original plaintext '*SEND WEAPONS QUICKLY*'.

42 Klima / Sigmon 2012, 34-35; Dooley 2013, 8.

43 Klima / Sigmon 2012, 56-57.

44 Ibid.

45 Ibid.

46 Ibid., 55-57.

47 Mollin 2000, 12.

ciphers known in secret communication until the end of this war.[48]

Conclusion

The fundamental principles of fire signalling systems can be traced all the way back to Aeneas Tacticus in the fourth century BC. Clear evidence for its use in the context of secret communication remains inaccessible. Also, there is no clear evidence linking Aeneas' fire signalling method directly to the ADFGX and ADFGVX ciphers used by the Germans in the First World War. However, if we take a step back, we can see how Aeneas' system for fire signalling has inspired Polybius' system, which in turn impacted the development of the Polybius square. We do have direct evidence for the way in which the Polybius square was used in the ADFGX and ADFGVX ciphers, which turned out to be the toughest ciphers known in military secret communication until the end of the First World War. The fact that ancient core principles are still in use in modern methods for communication security demonstrates that these methods would have worked well in Antiquity – potentially and presumably conferring military and strategic advantage even though the concrete evidence for this remains inaccessible.

48 Kahn 1996, 334, 535-539; Churchhouse 2002, 45-46; Mollin 2000, 12.

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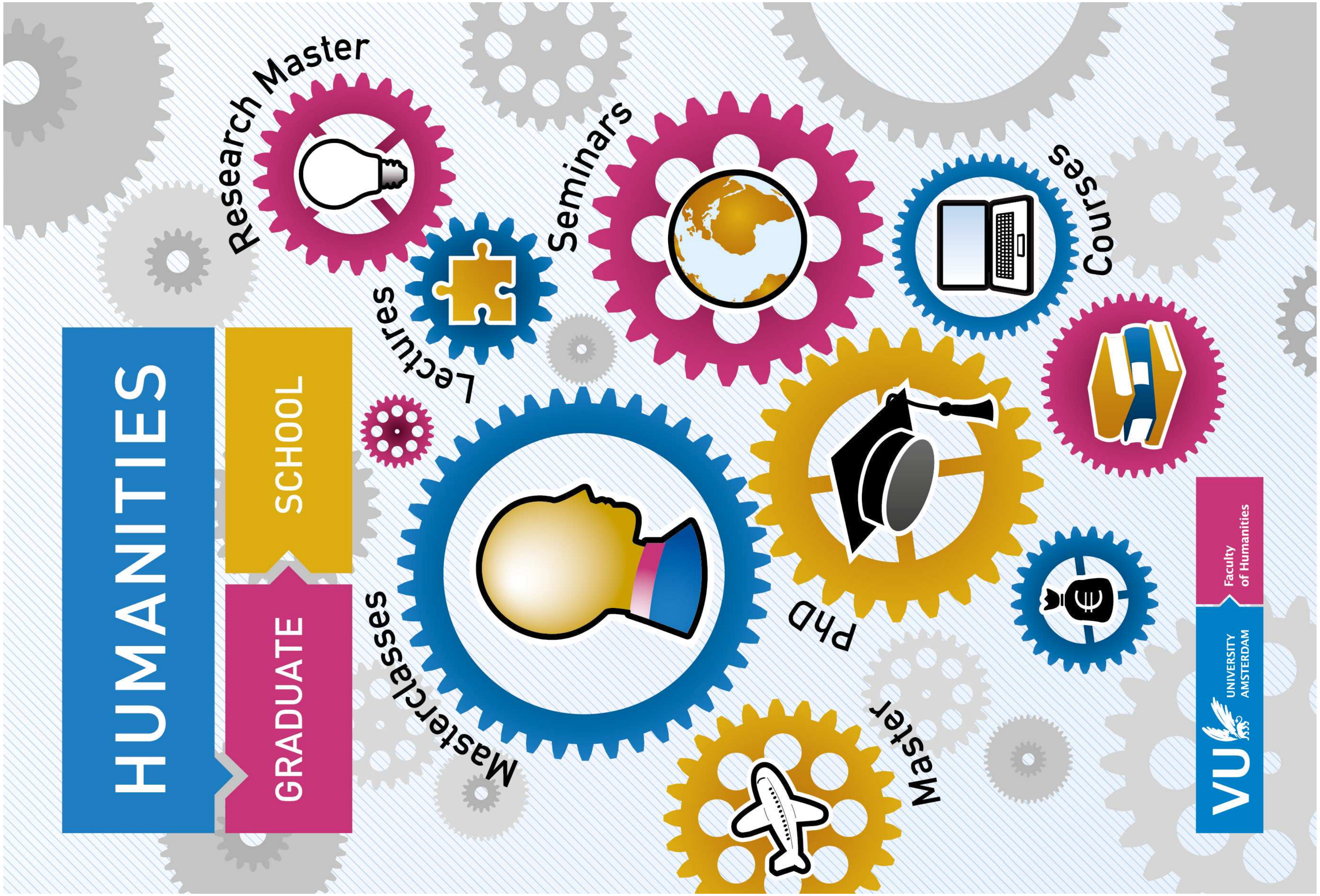

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ARCHON research school of archaeology

A platform for Dutch academic archaeology

Last year, The Dutch National Research School for Archaeology ARCHON moved its office from the University of Leiden to Vrije Universiteit Amsterdam, with dr. Philip Verhagen taking up the position of scientific director. Also, IJk van Hattum started working as the new coordinator for ARCHON in October 2018. This change of residence was a good occasion to reassess ARCHON's role in Dutch academic archaeology and to make plans for the next five years.

ARCHON is responsible for organizing the educational programme from RMA and PhD students in archaeology in the Netherlands. In order to achieve this goal, ARCHON (co-) organizes and subsidizes all kinds of educational events, such as seminars, skills courses and conferences. Information on the current agenda and how to register for events and apply for subsidies can be found on our website www.archonline.nl. Being an inter-university institute, ARCHON's priority is to make sure that educational activities are attractive to as many students as possible.

An evaluation of past performance, however, has made clear that the role of ARCHON is not always very evident to students and staff. Staff members are usually underrepresented in our educational activities. At the same time, they would like ARCHON to be a more active platform for academic debate. For this reason, we are currently setting up Working Groups that can act as sub-disciplinary networks within the Dutch academic archaeological community. These Working Groups should take the initiative for more frequent and more regular educational and networking events. At the moment we are focusing on groups that are already collaborating within Dutch archaeology, in order to offer them a platform within ARCHON. However, we are very much interested in getting in touch with anyone who wants to set up such a Working Group. ARCHON can offer Working Groups logistical and financial support for organizing events as well as a space on our website to reach ARCHON members.

A second initiative we have taken is to organize the annual

Archon is the Dutch inter-university research and graduate school for archaeology. It unites staff members, PhD students and Research Master students of its participating institutions.

▶ *Website*

ARCHON Day in a different way in order to generate more debate and ideas for events. On 26 October 2018 we tried out a new format with two workshops and a panel discussion (http://www.archonline.nl/october-2018/26-october-2018-archon-day/).The first workshop discussed the role of publishing for young scholars and the effects of changes in publication culture on academic careers. From this, it was concluded that a larger meeting dedicated to publication would be very useful, especially where it concerns non-traditional forms of publication, for example on social media. We will therefore work towards such a meeting in 2019. The second workshop, on the relationship between academic research and non-academic archaeology, was also very well received, and will most probably also get a follow-up this year. All in all, we conclude that that we will pursue involving the ARCHON members in developing our agenda in the future.

Furthermore, ARCHON has worked to improve its visibility to the archaeological academic community by redesigning its website and taking a more active role on social media, in particular through our Facebook page where we now post announcements and reminders of all our activities, as well as job and grant offers. Content for this page can always be submitted by ARCHON members, provided it is within the ARCHON sphere of interest.
If you are interested in contributing to a Working Group or to organize an educational activity, ARCHON can be contacted by e-mail at secetary@archonline.nl. Also, we are always looking for members who are interested to join our Steering Committee, where we discuss educational activities and evaluate requests for subsidies. We are looking forward to hearing from you!

Dr. Philip Verhagen, scientific director
IJk van Hattum MSc, coordinator

ARCHON Research School of Archaeology,
Vrije Universiteit Amsterdam
Faculty of Humanities
De Boelelaan 1105,
kamer 14A-99,
1081 HV Amsterdam,
The Netherlands
Tel: + 31 (0)20 598 28 48

secetary@archonline.nl
www.archonline.nl

Women and Pilgrimage
In the ancient and pre-modern world

University of Amsterdam. June 8-9, 2018

Marlena Whiting and Emilia Salerno

Introduction

This conference was organized as part of Dr. Marlena Whiting's NWO Veni research project "Gendering Sacred Space: Female Networks, Patronage, and Ritual Experience in Early Christian Pilgrimage", to encourage scholars working on the field of women and pilgrimage in different periods and different cultures to explore and share some of the methodological challenges and insights that their particular area of expertise has yielded. The conference was co-organized by Ms Emilia Salerno (MA), a specialist in gender and the Roman cult of Magna Mater.

The main question this conference sought to answer was: how did women's participation in religious travel contribute to their accessing and expressing social agency, religious authority, or power over their bodies within their communities? In the call for papers we identified four areas through which speakers might engage with the question:

1. Gender and "performance" in pilgrimage.
2. Power and agency in pilgrimage.
3. Methodological innovations for "recovering" women from the historical record, and potential contributions of other fields such as archaeology, epigraphy, art history, anthropology, sociology of religion, etc.
4. Material and economic aspects of women's pilgrimage.

Dr. Marlena Whiting is a postdoctoral researcher in the Department of History at the University of Amsterdam.

Ms Emilia Salerno is a graduate student of the Vrije Universiteit of Amsterdam, specialised in Ancient Roman History.

▶Programme

Summary of Proceedings

The conference was opened by Emily Hemelrijk, Professor of Ancient History at the University of Amsterdam, who welcomed the speakers and guests. Marlena Whiting gave an introduction to the topic, contextualizing the four main themes that the conference speakers would address in light of recent scholarship in pilgrimage and women's studies.

In the first paper, Grace Stafford (University of Oxford, "*Literary and material evidence for early Christian female pilgrimage*") delivered a re-examination of some of the key pilgrimage sites of Late Antiquity with a view to identifying spaces that might have been used or occupied by women. Stafford noted that while many of the Late Antique texts are biased towards elite women, archaeology offers the opportunity to understand the experiences of women across a broader spectrum of social class. Stafford presented evidence from the shrine of St Menas in Egypt (an "equal-opportunity" fertility saint, able to intercede not just in matters of fertility for women, but for livestock and the land as well), where she identified duplications of spaces - peristyles and baths known to have been in use at the same time - as possible evidence for segregated use along gender lines. Stafford's research marks a real leap forward in our understanding of the archaeological evidence for the gendered experience of pilgrimage attested in literary sources.

Peter Stabel (University of Antwerp, "*Between Mary and Magdalene: women and gender on the road*"), presented work from his forthcoming book on perceptions of the world by late medieval pilgrims. He analysed accounts of pilgrimages to the Holy Land from the Low Countries in 15th century as a source for writing social history. Although the preserved texts were all written by men, the stereotyping of women on the basis of class and ethnicity found in these accounts is revealing about attitudes to women at that time. In general, the women were presented either as "Maries" - devout caretakers enduring "invisible" suffering (like Christ), or as "Magdalenes" - seductresses, linked with debauchery but also a kind of sexuality without guilt. This was especially the case of the Venetian courtesans, whose identity as foreigners and "other" made them acceptable sexual partners for liaisons that would not have been permissible "at home".

Paweł Nowakowski (University of Oxford, "*Facing death abroad. Epitaphs from pilgrim shrines as a potential source for the study of women's pilgrimage in late antique Anatolia*") delivered a paper pushing the methodological boundaries of detecting the presence of women on pilgrimage, by considering the potential of epigraphy, and funerary epitaphs in particular. His paper examined the funerary inscriptions found at known early Byzantine pilgrimage sites in Asia Minor: Euchaita, Heliopolis, and Germia. He found that women were not specifically identified as "pilgrims", a terminologically murky concept prior to the Middle Ages anyway (although some expected terms might be *proskunetes* or *xenos*). Nevertheless, one way of identifying a pilgrim might be through the inclusion of "ethnics" signalling that the woman's origins or homeland lay outside the immediate region of the shrine itself. The epitaphs do shed light on the range of connectivity of these pilgrimage sites and that their devotees undoubtedly included women.

Sari Katajala-Peltomaa (University of Tampere, "*Creating the sacred – late medieval demoniacs in search for a cure*") presented research from an ongoing Academy of Finland Centre of Excellence project "History of Experiences", on the testimony of female demoniacs in Scandinavia and Northern Italy as part of canonization processes. These testimonies are part of the judicial assessment of a saints' candidacy for sainthood, but they also provide rare first-hand insight into lay women's own perceptions of their experiences being cured at shrines or by saints, and their understanding of what had happened to them. Katajala-Peltomaa noted that demoniacs were not necessarily social outcasts, and that many of the women made the choice themselves to seek the cure from the shrine. Instead, the bodily experiences of these women, especially the physical manifestation of the expulsion of malign spirits in the form of black smoke or spiders, were essential in the social processes through which sacred space was negotiated, constructed, and reinforced.

Konstantin Klein (University of Bamberg, "*Travelling Saints and Travelling Ideas: Melania the Younger and Empress Eudocia Revisited*") offered a detailed re-examination of the church building activities of two famous late antique pilgrims travelling to Jerusalem: the aristocratic ascetic Melania the Younger, and the Byzantine Empress Eudocia. In AD 439, both these women were in Jerusalem, and involved in the translation of the relics of the protomartyr Stephen and the construction of the martyrium and churches to honor the spot where the relics were found, while Eudocia transported the relics themselves to Constantinople. The relationship between the two women has been presented as one of competition, even "cattiness". However, Klein's examination of the precise chronology suggests that there must have been collaboration, rather than competition, between the two women.

Lilly Stammler (Institute for Literature, Bulgarian Academy of Sciences, "*The Pilgrimage of St Parasceve of Epibatae to the Holy Land*") took us into the world of Byzantine hagiography. St Parasceve lived in the 10th century, and her cult spread in the 11th century. In the earliest preserved Greek version of her *vita* from the 11th/13th century, her travels took her to Constantinople and the Holy Land, where she lived an ascetic life beyond the Jordan River. A later Middle Bulgarian version of the hagiography from the later 14th century changes her story: she travels only briefly to Constantinople, and references to Jerusalem and the Holy Land are omitted altogether. Stammler argued that the Middle Bulgarian version appears at a time when tales of travelling saints were popular, but all those saints were male. A woman travelling on her own (and against her parents' wishes) would not have been considered an appropriate model of feminine behaviour, even if her journeys were pious ones.

Helena Guzik (University of Oxford, "*A Marchesa on the Move: The Pilgrimages of Isabella d'Este (1474–1539)*") focused on Isabelle d'Este, Marchioness of Mantua. Although well-known as a patron of the arts, Isabelle d'Este's religious activities have often been overlooked. In fact, she went on pilgrimage seven times in her adult life, as recorded in her letters, celebrating the birth of her children and their marriages. Guzik argued that these pilgrimages reflected not only Isabelle's personal piety, but were also used as a public means of displaying her and her husband's political authority and dynastic consolidation. As with the art she commissioned and collected, Isabelle d'Este used pilgrimage as a means of displaying morality and good governance.

Sonya Beyo (Bar Ilan University, "*'Why Are You Going to Him Today – Neither New Moon nor Sabbath?' (2 Kings 4:23): Women Pilgrims in the Bible*") examined the Biblical episode of the Shunnamite Woman (2 Kings 4:8-37). Beyo noted that the episode, in which a woman actively seeks to venerate the prophet Elijah, and travels to him, is in notable contrast to other descriptions of pilgrimage in the Bible, which is emphasized as an activity in which only men take part (Exodus 5:1; 10:8-11). Furthermore, the Shunnamite woman travels to Elijah without her husband and without his permission, which is a further departure from expectations based on biblical descriptions of Jewish pilgrimage. Beyo proposed the possibility that the Biblical episode harks back to a historical reality in which a woman was responsible for initiating a local cult of Elijah, a peripheral cult in which women could participate directly.

Dženita Karić (Oriental Institute in Sarajevo, "*From* fiqh *manuals to travelogues: Sources for the study of female pilgrimage in premodern Islam*") pointed out the lack of systematic study of gender and Islamic pilgrimages (the *hajj* to Mecca and *ziyara*, local pilgrimage to shrines and tombs of saints), especially in the early modern period. Karić noted that women's pilgrimage had long been a topic of debate in *hadith* (a record of the sayings of the Prophet Muhammad): can a woman go on *hajj* alone, if she does is it valid; can a woman go on *hajj* if she is menstruating, etc. Karić observed that these were abstract legal exercises, not likely to have been reflective of lived experience. Other writers, like 14th century geographer Ibn Battutah or 17th century Evliya Çelebi, were able to confirm the presence of women on *hajj*, but their descriptions were very much tinted by the male gaze. Ibn Battutah commented on the beauty of Meccan women and their perfume, while Celebi commented negatively on women's perfume, saying it distracts holy men. For the most part, however, the sources focus on visible, privileged elite women, such as the women of the Ottoman royal family.

Päivi Miettunen (Finnish Institute in the Middle East, "*The role and agency of Bedouin women in pilgrimage and visiting holy sites in South Jordan*") shared the results of her many years' anthropological field work studying the folk religion and associated customs and rituals of the Bedouin of southern Jordan. She found that many of these rituals played an important role in women's agency over their own lives and that of their families. Miettunen also observed that among the Bedouin, elements in the landscape, such as rocky outcroppings, could be ascribed a feminine spirit, who could be invoked to help women with issues concerning their daily lives.

The second day of the conference began with Emilia Salerno (Vrije Universiteit) presenting on *The Travelling Mother: the summoning of Cybele to Rome and women's role in her cult*. The focus of this paper was to assess whether women had a specific role in the Magna Mater cult, which is attested in Rome starting from at least the 3rd century BC. Salerno explained that two feminine types were attached to the cult. On one hand, elite women, such as *matronae*, priestesses, and empresses, were representatives and actors of the "official" version of the cult. On the other hand, satirical accounts take am at some female worshippers of the Magna Mater for their attachment to the most lascivious and exotic aspects of the cult,the castrated priests, the *galli.* These largely mysterious attendants of Cybele were not only deemed to encourage superstition, but were also despised for their effeminacy and their lack of defined gender.

Rianne Hermans (University of Amsterdam, "*Female deities, female worshippers, female concerns? Gender-specific ritual practices in the cults of Latium Vetus*") examined the religious experiences of women in the sanctuaries of Juno at Lanuvium and Diana at Nemi. Modern interpreters have identified these two cults as particularly appealing to women. The hundreds of terracotta anatomical votives found on the sites (representations of uteruses, breasts, swaddled babies) seem to confirm this reading. Hermans critically examined the supposed femininity of the cult practices in Latium Vetus, by noting that modern scholars tend to give preferential attention to votives related to the female anatomy, often at the cost of votives of more neutral body parts such as feet or arms that could have been left by men, and noted the preponderance of men's names in the inscriptions from the sites.

Alessandro Crispino (Aldo Moro University of Bari, "*Egnazia, a layover for pilgrimage in Late Antiquity*") presented the results of the excavations of Egnazia on the southeast coast of Italy. Due to its location connecting the Balkans and eastern Mediterranean with Rome and Western Europe, Egnazia played a strategic role in all sorts of journeys, including pilgrimages. Furthermore, women's religiosity had a place there, as there were shrines to Magna Mater and possibly also the Syrian goddess Atargatis. From the end of the fourth century AD until the sixth century the urban landscape changed dramatically, showing the rise of the bishop's influence not only in promoting the construction of religious buildings but also in encouraging local productions and trade. The site also presents evidence of female pilgrims: fragments of *eulogiae* ("blessings") engraved in necklaces, pendants, glass vases and ceramics, and a magnificent golden ring in the shape of the Aedicule in Jerusalem, for which a known parallel was found in a burial of a woman at Grez-Doiceau in Belgium.

The final panel focused on the writings of Egeria, the fourth century AD author of a pilgrimage diary to the Holy Land. In his paper *Egeria's journey to the Middle East*, Vincent Hunink (Radboud University of Nijmegen) presented an insightful analysis of the linguistic and stylistic features of the text. Hunink made the surprising observation that, although Egeria's stated aim is to provide descriptions of holy places to allow her readers to visualise them, her actual descriptions are too vague to be adequate for this purpose!

Nienke Vos (Vrije Universiteit Amsterdam, *The Riddle of Religious Roles: Autonomy and Community in Egeria's Travel Journal*) revisited the ambiguities relating to Egeria's religious identity, and her relationship to her "sisters" (*sorores meae*) to whom her work is addressed. Some scholars argue that Egeria was in a role of leadership (an "abbess") and others assume Egeria received spiritual direction from the women to whom she wrote. Vos was able to make a convincing argument, based on comparisons with other literature of the fourth century AD, that Egeria's use of specific phrases, including *luminae meae* to describe her "sisters" denoted a hierarchical relationship with Egeria looking up to these women as her spiritual – and possibly also social – superiors.

Finally, Hugh Bonsey (King's College London, *Women and Pilgrimage in the Fourth Century: Helena and Egeria*) examined the two case studies of Helena, Emperor Constantine's mother, and Egeria to analyse the crucial role women had in the establishing of Christian pilgrimage in the fourth century. By asserting their individual authority and having access to their own financial resources in the context of safe and reliable transportation, these two women demonstrated a newfound freedom, which opened the way to further Christian pilgrimage.

Synthesis

Gender and performance

Several papers addressed the issue of gender and performance. Sari Katajala-Peltomaa's paper on cured demoniacs stressed the highly public and performative nature of their illness and their cures, and how this performance was essential for constituting the *communitas* of the shrine. The performance of gendered behaviour relating to the Magna Mater cult (by the castrated priests, and by Roman women in processions) challenged deep-seated gender and cultural norms in Rome and was a source of great anxiety, as shown by Emilia Salerno. Several papers touched on stereotypes of womanly behaviour: for instance, Peter Stabel's contribution on the women that pilgrims from the Low Countries encountered on pilgrimage to the Holy Land and the strong stereotyping into "Maries" and "Magdalens". Lilly Stammler's paper demonstrated that a female saint's hagiography reflected less the "historical" person and was recast as a model of appropriate female behaviour.

Several papers also touched on gender bias in modern scholarship. Konstantin Klein's paper belied the stereotype of women's friendships as competitive and "catty" that had persisted in modern scholarship by showing that the historical sources speak to mutual support and collaboration. However, the most significant challenge to scholarly stereotyping of "womanly" interests came from Rianne Hermans' analysis of the cults of Juno

Sposita and Diana Nemorensis. She demonstrated that modern scholarship, by focusing on votives of female body parts from these shrines to female divinities, had upheld a structuralist interpretation of female/male interests for ancient religion, and obscured male participation in the rites to the goddesses.

Power & Agency

Several papers discussed how the performance of pilgrimage could be converted into political capital by elite women. Hugh Bonsey discussed Empress Helena's involvement in pilgrimage in these terms. Helena Guzik's paper demonstrated how Isabelle d'Este's very gendered performance of pilgrimage as a new mother, or mother-of-the-bride, was used to consolidate the political power of her family by displaying dynastic successes. Dzenita Karić made a similar argument for the women of the Ottoman royal family, whose pilgrimages and patronage were juxtaposed with the *hajj* to make a political statement promoting the power and legitimacy of the Ottoman state.

Apart from power (defined in masculine terms as political power), women could also use pilgrimage to achieve other forms agency, over their own religion or their own bodies. Päivi Miettunen explored mechanisms of agency available to Bedouin women through pilgrimage, for example as a means of protecting their family. Sofia Beyo's interpretation of the Biblical story of the Shunnamite woman demonstrated that pilgrimage could provide context for a woman's self-determination even in the face of objections by her husband. It is possible that this Biblical exemplar of "defiant pilgrimage" may form a prototype for women's pilgrimages in the early Christian period (for example in Jerome's *Life of Hilarion*).

Methodological innovations, from sources to "material turn".

One of the main methodological challenges of studying women and pilgrimage is "recovering" women's experience from the historical record. Anthropologists rely mainly on interviews with subjects responding within a framework suggested by the scholars research interests. Päivi Miettunen's presentation made use of such first-hand interviews and fieldwork among Bedouin women in modern-day Jordan. In the case of historical subjects, historians might rely on autobiographical sources, letters, diaries, etc. Dženita Karić drew on some of these sources for reconstructing women's participation in *hajj* pilgrimage in the early modern period. Isabelle d'Este preserved a first-hand account through her voluminous correspondence. Sari Katajala-Peltomaa's paper also demonstrated the potential for legalistic documents –

testimonials for the canonization processes – to reveal something about lived religious experience of women. The further back in time we go, of course, the fewer and fewer first-hand accounts by women remain to us. The autobiographical travel account by Egeria from the late fourth century is wholly unique – a much treasured and informative document, but sadly incomplete when it comes to information about the author. Through detailed textual and intertextual analysis, Vincent Hunink and Nienke Vos were able to flesh out a bit more about Egeria herself.

However, the majority of texts surviving to us from the medieval and ancient periods are by male authors, promoting a specific perception of womanhood in light of the male gaze, as demonstrated by Stabler, Stammler, and Karić. Ideally we should like to stay as close to direct testimony as possible, which means turning away from textual sources to consider other evidence. Paweł Nowakowski offered a novel means of understanding funerary epitaphs, in particular the use of ethnic designations, as evidence for women's pilgrimage. Finally, we have the contributions that archaeology and art history can make through the analysis of material culture, buildings, and artifacts. Pilgrimage studies is also enjoying a "material turn", with artifacts related to pilgrimage, particularly pilgrim tokens and votives being analysed not just from an art historical perspective for their iconography, but also for what they can tell us about the economics of pilgrimage. Alessandro Crispino's paper offered an excellent case study of how certain elements of pilgrimage archaeology remain the same despite religious context (for example the geographic location of Egnazia as a landing stage from the East Mediterranean on the way to Rome meant that it had shrines to eastern deities and was also a stopping point on the pilgrimage to the Holy Land from the fourth century onwards), and the possible presence of female pilgrims based on the types of artifacts recovered. Grace Stafford's analysis of known pilgrimage sites in light of a gendered reading of space, especially the duplication of facilities, is a methodological innovation that will hopefully have a major impact on the field. Finally, Helena Guzik also offered a new methodological avenue by suggesting we look at the art commissioned by Isabelle d'Este in tandem with her pilgrimages as a means of self-representation and personal expression.

Conclusion

The conference succeeded well in its aim to bring together scholars of different fields. Employing a broad definition of pilgrimage as encompassing a range of forms of religious mobility encouraged interdisciplinary examination of the topic. We learned that pilgrimage is an important context in which women of different periods and faith traditions were able to enact agency on their own behalf, but also an important context for representing female behaviour. The speakers demonstrated not only the vibrancy of the field, but also the extent to which methodological innovations are taking place serve to increase our ability to reconstruct and understand women's religious experience in historical contexts. While there are no plans to publish the proceedings of this conference, we very much hope that we have planted the seed for future networking and research collaboration.

Figure 1
Contributors and organising committee (picture taken by Mauro Locati).

Acknowledgments

This conference was generously funded by the Netherlands Organisation for Scientific Research (NWO) as part of Dr. Marlena Whiting's Veni research project "Gendering Sacred Space: Female Networks, Patronage, and Ritual Experience in Early Christian Pilgrimage". The organisers would like to thank the University of Amsterdam, especially Gaby Zijlstra and Carien Van't Pad Bosch of the Department of History for their assistance with planning, and Coralie Thomson (MA, University of Amsterdam) for her assistance during the conference itself.

What did you do last summer? Any outreach?

Archaeological practice in University education

Gert Jan van Wijngaarden

Dr. Gert Jan van Wijngaarden is Associate Professor at the Amsterdam Archaeological Centre, Faculty of Humanities, University of Amsterdam.
▶Profile page

Just as at many other universities around the world, fieldwork is an integral part in the curriculum of the Amsterdam Centre of Ancient Studies and Archaeology (ACASA).[1] Amsterdam archaeology students are obliged to follow a four-week training course (6 ECTS) of fieldwork at the end of their first BA year at a site in the Netherlands, where they are taught the basics in archaeological fieldwork, documentation and finds processing. At the end of the second year they must follow a second course of fieldwork (6 ECTS) at one of the ACASA projects in the Netherlands or abroad. In addition, students can choose to do additional fieldwork as an elective in their third BA year, or as a tutorial during their master's degree program. For many students, participation in fieldwork is one of the highlights of their studies. Some even seem to extend their studies in order to continue to go to surveys and excavations!

The fieldwork projects to which the students go are most often research programs of ACASA staff members.[2] For their training, students, generally, are put to work in the various roles of excavator, surveyor, find processor or supervisor, learning through practice and reflecting on it in a report. As educational

Figure 1
Archaeological site of ancient Troy open to the public while students are excavating (August 2018, photographer Dr. Gert Jan van Wijngaarden).

modules, the fieldwork is less regulated than most parts of the curriculum in terms of course objectives and assessments. In this paper, I would like to address the students' role in these projects from the point of view of university training: what do we teach students and how does it relate to modern archaeological practice, now and in the future.[3]

Fieldwork as education

During my studies, in 1988, I myself participated in a second-year fieldwork course, which was done at Lavda in Greece.[4] Thinking back to that experience, I find it striking how little has changed. I worked as a student excavator and trench supervisor, I helped measuring and drawing, assisted in the find processing in the afternoons and wrote daily reports of our activities. As became clear form the presentations at the ACASA seminar "What did you do last summer?", these are still the core activities of the current generation of students. The training of students in archaeological fieldwork is oriented very much towards the techniques of archaeological practice: excavation, survey and the handling of find materials. I suspect that this is the case also at many other universities in the Netherlands and abroad.

Figure 2
Poster of the third symposium "What did you do last summer?", 13th November 2018 Amsterdam (courtesy of the ACASA-student association Synkratos).

The conventional, technical approach in the training of future archaeologists is surprising, since both the practice and context of archaeology have changed enormously in the last thirty years. These changes go well beyond the introduction of new equipment and software for recording and planning. For example, most projects now integrate various research methods, as can be seen in the combination of excavations and surveys. In particular, the context of archaeological fieldwork has changed significantly. Most fieldwork outside of academia is now development-led and this has resulted in an increase in the importance of certification and archaeological bureaucracy and, especially, in the necessity to inform a broad non-academic public. Should we not incorporate these changes in our training of students for archaeological field work?

Outreach activities of ACASA programs

To elaborate on this question, I would like to focus on public outreach, which in archaeological practice is gaining an increasingly prominent position.[5] The ACASA fieldwork projects in which students participate for their training are no exception to this: the staff members of these projects all engage in activities for the general public.[6] These vary from the organization of public days at excavations (Oerle), to public lectures for local inhabitants (Geraki, Halos) and even music festivals (Muro Tenente, Satricum) and the creation of a local museum (Satricum).

In many cases, students help with these activities, for example by touring local visitors at the excavation (Oerle) or by selling the tickets for a music festival (Satricum). However, the students' engagement is usually voluntary and the students as well as the staff do not consider these activities as an integral part of the fieldwork course. As a result, students are not actually trained in doing outreach activities in connection to fieldwork, which would include theoretical background and, most importantly, assessment. In fact, such a training, and the time it would take, is by some considered to be a distraction from the real work: excavating, surveying and the processing of materials.[7]

Discussion

Because of the changes in archaeological practice, fieldwork projects nowadays require intensive management of the social context in which they take place. In addition to outreach, professional archaeologists, within, but especially outside of academia, increasingly spend time on things such as fundraising, bureaucratic contacts with authorities, budget control, administration etc. Techniques of fieldwork and finds administration, to which students now devote most of their time in their educational fieldwork, in contrast, are increasingly automated and vary according to institution.[8] Thus, as training grounds, the academic fieldwork projects in which our students participate are moving ever further away from modern archaeological practice.

As a point for discussion, I state here that we should incorporate aspects of social context management, such as outreach, in the student fieldwork training. Of course, this should be done systematically and include proper course objectives, theoretical background and assessments. This would necessarily divert attention from archaeological techniques. It would also mean that we involve different specialist in our education programs than we currently do: budget managers, planners and PR experts, for example. By actually being trained in these matters, our students would also be able to adopt a critical attitude towards these activities. This would make them even better prepared for their professional future.

Responses

- *Vita Gerritsen*
- *Mark Groenhuizen*
- *Vladimir Stissi*
- *Eva Kars/ Henk Kars*

Notes

1 Since 2013 (MA) and 2017 (BA) the University of Amsterdam (UvA) and the Vrije Universiteit of Amsterdam (VU) collaborate in ACASA by offering joint programs in Archaeology, Ancient Studies and in Classics.

2 See the list at the ACASA website for the fieldwork projects of ACASA: http://acasa.uva.nl/onderzoek/fieldwork-projects/fieldwork-projects.html.

3 This paper is the result of a discussion held on the student-organized seminar "What did you do last summer?" held at 13 November 2018 at the Allard Pierson Museum in Amsterdam (see Figure 2).

4 The Lavda Excavations were carried out by the Netherlands Institute at Athens and were directed by Professor G.J. te Riele. See Y.C. Goester/ D.M. Van de Vrie, 1998: Lavda. The excavation: 1986-1988, *Pharos. Journal of the Netherlands Institute at Athens* 6, 119-134, for the campaign in which I participated.

5 See, for example R. Skeates/ C. McDavid/ J. Carman 2012: *The Oxford Handbook of Public Archaeology*, Oxford.

6 This article is partly based on a questionnaire, which I send around my colleagues. I would like to thank all those who have responded to my questions.

7 In the discussion at the seminar "What did you do last summer?" everyone was in favor of involving students in outreach activities, until I suggested that the time spent on it would have to be taken from other activities.

8 See, for example, the various papers in L. Webley (ed.), 2012: *Development-led archaeology in northwestern Europe: proceedings of a round table at the University of Leicester* (19th-21st November 2009), Oxford.

Public over practice?

Discussing the mandatory fieldwork curriculum.

Vita Gerritsen

Vita Gerritsen is an research Master student Archaeology at the University of Amsterdam. She has participated in a number of archaeological excavations and surveys in the wider Greek world, including serving as a trench supervisor.
▶Profile page

In his paper Gert Jan van Wijngaarden suggests that universities should offer their students more training in social context management and public outreach, as skills in these fields are becoming more and more important in the work field outside of academia and within academic archaeological projects. This training would be fitted into the mandatory fieldwork programme, which now consists of a mere 12 ECTS in the first two years of the bachelor degree programme, and would therefore mean an unavoidable diminution of the time available for learning the technical and practical skills that are currently the objectives in the fieldwork courses.

One of the reasons for van Wijngaarden to propose this change in the curriculum is that, in his view, students need to be better prepared for the fieldwork outside of academia, as he claims that the university projects and the involved training are 'moving ever further away from modern archaeological practice'. In preparation for this response, I have discussed this issue with several recently graduated archaeologists, who have completed their bachelor and master's degrees at either the UvA or the VU, and are now professionally active in modern archaeological practice, working for several commercial companies throughout the country. Their experiences have helped me to gain more insight into the reality of doing fieldwork outside of academia. I have furthermore based my opinion on my own experience as a student, having so far participated in eight fieldwork campaigns during my studies, four of which as a trench supervisor, and six of which were outside of the mandatory curriculum.

I am not convinced that we should oblige students to be trained in public outreach, for two reasons. Firstly, this training would inevitably take up much needed time from other parts of the fieldwork curriculum that cannot easily be obtained elsewhere, or at least cannot be obtained in the same manner that a regulated academic curriculum provides. In such a context, students can learn fieldwork skills in a pace that fits with the rest of their education, while being embedded within a group of peers. In the non-academic context however, the pace is much higher, leaving less room for learning skills. Secondly, making public outreach training mandatory for every student would overlook the fact that not all students are either interested in, or suited for, public engagement. Therefore, in my view, students should not be forced to participate, but should rather be encouraged when they show interest.

Illustration 1[1(Eds.)]
Recent example of a public outreach activity, the staging of Coriolanus at the archaeological site, July 2018, Satricum Project – UvA (Italy), photographer Anneke Dekker.[1]

Within the official curriculum, the fieldwork courses in their current form provide the only opportunity to gain the basic practical and technical skills needed for a career in field archaeology. In my view, social context management and public outreach skills can, and should, be obtained in the post-graduate workforce when they are needed. The development-led fieldwork in the Netherlands that Van Wijngaarden mentions, does indeed include informing a broad public, but this is usually done by a field director or a senior archaeologist, who has had years of training in order to reach that level of certification and authority. Early career archaeologists and students would not be placed in a position where they would be addressing officials or stakeholders. They can easily participate in providing tours for schoolchildren or writing a promotional Facebook post, however, but this does not require the extensive and formalized training that Van Wijngaarden proposes. Especially if this training would take up a part of the precious and limited time there is to learn the archaeological skills, such training seems of secondary priority to me.

If we want to prepare students for the actual fieldwork outside of academia, even more time should be spent on technical and practical skills, not less. The training provided in the mandatory fieldwork courses is only 12 ECTS and only results in a basic level of practical archaeological skills. To reach a higher level, and compete for jobs after their studies, students who want to continue in field archaeology will already have had to participate in additional fieldwork outside of the official curriculum. The necessity of giving fieldwork a considerable part within the curriculum and teaching students practical skills can be especially understood, when taking into account that early career university students have to compete with students from Saxion, who can follow a specific 'field archaeologist' track, which provides them with more experience on paper. I would thus suggest that instead of partially replacing the practical fieldwork programme with public outreach and project management training in the curriculum, even more time should be made within the curriculum for practical fieldwork courses. Even students who do not pursue a career in practical archaeology might benefit from additional fieldwork, as it teaches not only technical skills, but also cooperative and social skills, it helps them to better understand the relationship between practice and theory, and it demonstrates how archaeological data is obtained.

In my opinion, basic public outreach activities that students and young professionals would be allowed to execute in the work field do not require the systematic training that Van Wijngaarden mentions, but rather a lot of enthusiasm and a fitting personality. As only a small fraction of early career archaeologists will be involved in public engagement activities during their professional life, we should definitely stimulate those students that show an interest in or a talent for such activities, or who are determined to pursue a career in fieldwork. These students can be encouraged to develop their skills through electives, tutorials or other forms of education outside of the mandatory fieldwork curriculum. In this way, the students who are not comfortable with or suitable for such activities do not need to be forced into a situation that would not benefit them.

Another point is that, in general, the more experience you have with fieldwork, the more comfortable you will be in speaking about the site and your work. This point rules out first and second year students by default and further questions the usefulness of public outreach training at that point in one's education. We should also not overlook the fact that there may be a language barrier when participating in fieldwork abroad, which would be less of a problem for more experienced students who are dedicated to such a task.

How to proceed?

Even after several years of experience, some students may still not be up for it, especially if they do not plan to continue in field archaeology. Those who do pursue a career in fieldwork, and have an interest in public outreach:

- could do training through tutorials, papers or even theses, with the assessments and support as proposed by Gert Jan van Wijngaarden;
- Another possibility would be to organize skill-training courses through ACHON, our national research school.

This way, public outreach training does not take up space and time that could be spent on other necessary parts of the curriculum, but will nevertheless be available for those who are interested.

Discussion

- *Gert Jan van Wijgaarden*

Responses

- *Mark Groenhuizen*
- *Vladimir Stissi*
- *Eva Kars/ Henk Kars*

Editorial Notes

1 The editors chose to present an illustration with this response with the aim to illustrate the diversity of public outreach activities. The photograph was provided by the Satricum Project (Italy).

Archaeological practice in university education - A reply

MARK GROENHUIJZEN

dr. Mark Groenhuijzen is a physical geographer at VUhbs and a former PhD researcher at VU University of Amsterdam Part of the team working on the NWO-funded 'Finding the Limits of the Limes' project.

▶Profile page

In his introduction to the discussion, Gert Jan van Wijngaarden has outlined how the archaeological educational (field research) programme has traditionally focussed on the 'core business' of archaeologists: excavation, surveying and processing of find materials, ultimately culminating in the writing of site excavation reports and perhaps academic articles and books.

Archaeological research nowadays is much more diversified. For example, advances in computational archaeology have allowed for the development of different approaches to traditional archaeological research questions, as I have experienced in my previous research at the Vrije Universiteit Amsterdam on the palaeogeography of the Dutch part of the Lower Rhine *limes*.[1] Similar multidisciplinary approaches have recently proven successful in attracting new research funds,[2] and I am glad, therefore, to see that they have become more strongly rooted in the ACASA BA-programme through courses such as 'Science and Archaeology' and 'Digital Archaeology'. Coincidentally, these courses offer skills that also have increasingly become a part of the standard 'toolkit' of archaeologists at commercial archaeological companies.

Like developments in academic research strategies, non-academic archaeological field research has also not stood still. As Van Wijngaarden points out, the majority of field research in the Netherlands is now development-led, and such research involves much more than just the archaeological fieldwork and post-excavation reporting: time is spent on tenders, budget control, project administration, contact with clients and governing bodies, and indeed, public outreach (especially for larger projects). In addition, many parts of the actual fieldwork can now also be undertaken by the increasing number of graduates from the Saxion University of Applied Sciences. Due to the curriculum at Saxion, which is 50% practice-related[3], these graduates are more specialised (and often more experienced) in traditional field techniques and field administration. In contrast, graduates from university programmes spend more time on developing analytical research skills. Their role can thus be imagined to shift more and more towards project management, overseeing not only the scientific process but also the social context of projects.

More diversified roles for graduates from academic archaeology are not limited to development-led commercial archaeology. Many former students also end up in different positions: Jan Kolen recently published an opinion piece in *Trouw* explaining that the problem-solving skills of archaeologists are also in demand outside the traditional work field, including jobs in IT and business.[4] Some of the new roles that graduates may take up can still be related to archaeology but often do not include fieldwork, such as advisors to municipalities, engineering firms, environmental services and auditing organisations. Besides knowledge of archaeological field practice, they have to be closely acquainted with the social context of archaeological projects, including governmental policies and quality standards concerning the archaeological research process.

The archaeological educational programmes of the universities have changed through time to better prepare students for a future in the ever-changing academic world; an example is the stronger integration of multidisciplinary methods. Similarly, I believe that the archaeological programme can also adapt to remain a good fit for the demands of the non-academic archaeological 'job market'. I thus agree with Van Wijngaarden that training in the social context of archaeological field research should be an integral part of the educational programme, and not just for work in the commercial archaeological sector, but also for archaeology-related jobs in governing bodies and other organisations.

Illustration 2
Another recent example of an Public Outreach activity: Tour of the archaeological site for the inhabitants of Le Ferriere, August 2018, Satricum Project – UvA (Italy), picture taken by Nina Gerritsen.[1(Eds.)]

How training in the social context of archaeology should then be incorporated in the curriculum is a wholly different question: at ACASA, many aspects mentioned earlier are already being taught in the BA- and MA-courses 'Archaeology and Society'. These courses aim to educate students in the societal value, stakeholders, actors, legal framework and public dissemination of archaeological research, among other objectives.[5] To some extent, the training that Van Wijngaarden calls for is thus already part of the current educational programme. However, I think these aspects should also be seen as an inherent part of the archaeological field research, and the courses connected to field research should include course objectives related to project management and the social context of projects. The benefit of such an approach would be that students not only learn about the social context of archaeological research in an isolated course, but also learn how to actively integrate their knowledge in practice.

Discussion
- *Gert Jan van Wijgaarden*

Responses
- *Vita Gerritsen*
- *Vladimir Stissi*
- *Eva Kars/ Henk Kars*

Notes

1 Part of the 'Finding the limits of the limes project', See website: limeslimits.wordpress.com.

2 E.g. the Southern Euboia Sea and Land Routes Project (seslr.nl) and the TERRANOVA project (terranovaproject.eu).

3 See website: www.saxion.nl/opleidingen/voltijd/bachelor/archeologie/studie-inhoud.

4 Jan Kolen, 2018: Archeoloog moeilijk aan de bak? Hij krijgt juist makkelijk werk! *Trouw* 11 December 2018. Accessed on 19-03-2019 on www.trouw.nl/opinie/archeoloog-moeilijk-aan-de-bak-hij-krijgt-juist-makkelijk-werk~~a07636dd/.

5 See website: www.vu.nl/nl/studiegids/2018-2019/bachelor/a-b/archeologie/index.aspx?view=module&origin=51406395&id=51422490.

Editorial Note

1 The editors chose to present an illustration with this response with the aim to illustrate the diversity of public outreach activities. The photograph was provided by the Satricum Project (Italy).

Archaeological practice in University education? - Be Prepared!

VLADIMIR STISSI

Prof. dr. Vladimir Stissi is a full Professor at the Amsterdam Archaeological Centre, Faculty of Humanities, University of Amsterdam.

▶Profile page

To start bluntly: I mostly agree with Gert Jan van Wijngaarden's basic analysis that over the last decades student fieldwork has not changed much in its focus on the actual archaeological work and methods, while 'secondary' tasks, like planning, PR and involvement with the local community (etc.), have become more important in 'real life' archaeology. I also agree that we should try to incorporate more of these changes into our student fieldwork. However, at the same time I think there are limits to the need and the possibilities to do so. Some more reflection and perhaps some explorative testing would be useful before we radically change current practices.

My cautious approach is rooted in both sides of the issue: on the one hand, I would say we should not underestimate the continuous relevance and usefulness of 'traditional' fieldwork skills. On the other hand, I think there are practical limitations to the range of tasks and the amount of work in what could be summarized as 'public archaeology' that could be made available to students through university fieldwork projects. The latter issue, of course, could be – and in my view should be – addressed by regular courses and internships within both BA and MA programmes as well – a point I will come to towards the end of this response.

First of all, I think a basic level of understanding of archaeological fieldwork through practical training is an essential part of any academic archaeology programme. In my view, one cannot understand our discipline without having any experience in the fundamentals of how one gathers and starts interpreting our very basic data: finding and contextualizing material data. Leaving aside a few subdisciplines that could be labelled as marginal in the sense that they overlap with other disciplines (like art history or some scientific fields), there is very little archaeology which is not somehow rooted in field data. Likewise, commercial (field) archaeology and public archaeology in practice start from fieldwork and field data. Many people are still employed in gathering and processing data, and even those who do not directly handle field data, usually have jobs that somehow use them, manage them, or make sure others will process them. Field experience is often expected or required to do such jobs. Even when it is not, it helps in understanding what you as a public archaeologist are doing or presenting. More specifically, it follows from this that fieldwork experience is really helpful, even necessary, when training for the additional '21ST century skills' (ict, GIS, PR, 3D reconstruction etc.) which should certainly also be a part of the archaeological curriculum.

This automatically leads to my second point: I think proper training to plan, budget or manage fieldwork, to decide whether fieldwork is needed or not in the first place, or to involve or inform people about it, can only be done after a basic understanding of fieldwork, including its practical aspects, has been built up. It is perhaps after the basic first and second year field courses, that we have to start reconsidering existing fieldwork curricula and have to stimulate students to do other forms of practical training and acquire other skills than just the actual digging/surveying and processing. Of course, to a certain extent this has already happened over the past few decades. Students doing total station, GIS and database work are now doing a lot of work which used to be done mostly by specialists, and students are writing papers and thesis projects involving GIS data, 3D reconstructions etc. Moreover, in many fieldwork projects, students who are trench or team leaders have more responsibilities now than in many more traditional projects in the past.

Still, it is indeed true that students are rarely involved in practical aspects like planning and budgeting. This partly a matter of tradition, perhaps also of trust, but there may also be a very simple reason: many university fieldwork projects are so small that organizational work is limited in amount and cannot easily be divided up without becoming inefficient. Just leaving very

Illustration 3
An example of a more complex public outreach activity. General rehearsal for the temple reconstruction event July 2016, Satricum Project - UvA (Italy), photographer Marijke Gnade.[1(Eds)]

basic tasks to students, as some projects do, may come handy but is not very educational. I would say cooperating with larger public bodies and companies in providing internships would be a more useful way to offer students possibilities to improve their skills.
With regards to public archaeology/outreach in a stricter sense, the problem is perhaps the opposite: the amount of time and kind of preparatory work involved is often too much to hand things over to students. Particularly in foreign projects, the personal networking and language skills needed are often simply out of reach for students. Of course, students can be taken along or can be more directly involved during parts of the process and/or for specific tasks. I think this is where our university projects still have much to gain, although I am also afraid that issues of time and language make it difficult to integrate this into our fieldwork curriculum in such a way that it can become part of the standard package, particularly for our projects abroad. I must also say I see very few cases where students or even PhD candidates have been successfully integrated in public activities in university projects in Italy or Greece. It is clearly up to us, as project directors, to think of ways to improve this situation, perhaps also by taking some more risks and trusting students with parts and aspects of this work which may seem to go beyond what seems easily possible, or by looking at forms of outreach which go beyond traditional networks (of older people and/or people of some local importance) and/or can be reached without language barriers (by involving local youths and/or social media and/or in English).

Finally, there is one other possible approach to the issue brought forward by Gert Jan van Wijngaarden: perhaps we should not, or not only, address the issue through the fieldwork courses, but also in the rest of the teaching programme. Some of the ground work for this has already been done, by introducing a fieldwork 'learning line[1]' in the BA-programme – which perhaps still needs a bit more attention. However, I would suggest we could go a bit further: why not introduce regular courses (or even a MA program), taught in the Netherlands, which offer theoretical introductions and practical training in the skills we seem to be missing in the field, also using cases from our field projects? These cases could, at least partly, take the form of real projects, prepared during the course and then actually set up and done (or in the case of planning/budgeting etc. tested) during the fieldwork seasons, or even in separate trips abroad. The benefits of this would be twofold: students can spend much more time on this kind of work and learn necessary skills without compromising their skills in the field (or even improving those), and the fieldwork projects would have a lot more time available to invest in other things besides just the basic data collection and processing. And, yes, perhaps this may seem a bit 'practical' for an academic program, but practical training does not exclude theoretical aspects and reflection – and aren't we supposed to prepare students for the real world?

Discussion

- *Gert Jan van Wijgaarden*

Responses

- *Vita Gerritsen*
- *Mark Groenhuizen*
- *Eva Kars/ Henk Kars*

Notes

1 A series of courses or parts of courses forming a coherent sequence throughout the whole curriculum, focusing on a particular theme or skill set.

Editorial Notes

1 The editors chose to present an illustration with this response with the aim to illustrate the diversity of public outreach activities. The photograph was provided by the Satricum Project (Italy).

Education
but how and for whom?

EVA KARS AND HENK KARS

Eva Kars is Managing director of EARTH Integrated Archaeology, Amersfoort.
▶Profile page

Prof. em. dr. Henk Kars VU University of Amsterdam, CLUE-Research Institute for the Heritage and History of the Cultural Landscape and Urban Environment.
▶Profile page

Archaeological practice in the Netherlands has changed enormously over the last 25 years. Since the 1990s, low budget archaeological fieldwork and excavations have become a cultural asset in the development-driven economic environment of a rapidly changing society.

One would think that this would also have had an impact on education in archaeology and archaeological fieldwork. However, we fully agree with Van Wijngaarden, who underlines in his paper exactly how little has actually changed since then. In his attempt to adapt the education programme to the new situation, he proposes that attention should be paid to what he describes as social context management, including public outreach and management skills.

Although we do not disagree with Van Wijngaarden, we believe that many more changes are necessary than those he describes.

One could argue that the skills needed for an archaeologist working in the commercial market should be covered by post-academic courses. However, the changes are so fundamental, that we believe university education programmes would have to be extensively revised in order to successfully train archaeologists who could work in knowledge-based archaeological companies. Our opinion is further underpinned by the fact that, based on an educated guess, around 80% of graduates who get a job in archaeology end up at commercial companies. These archaeologists need both the mindset and the tools to cope with the 1992 Treaty of Valletta.[1] This treaty states, among other things, that the European archaeological heritage is seriously threatened with deterioration because of the increasing number of major planning schemes, natural risks, clandestine or unscientific excavations, and insufficient public awareness. This requires appropriate administrative and scientific supervision procedures, and that the protection of the archaeological heritage should be reflected in town and country planning and cultural development

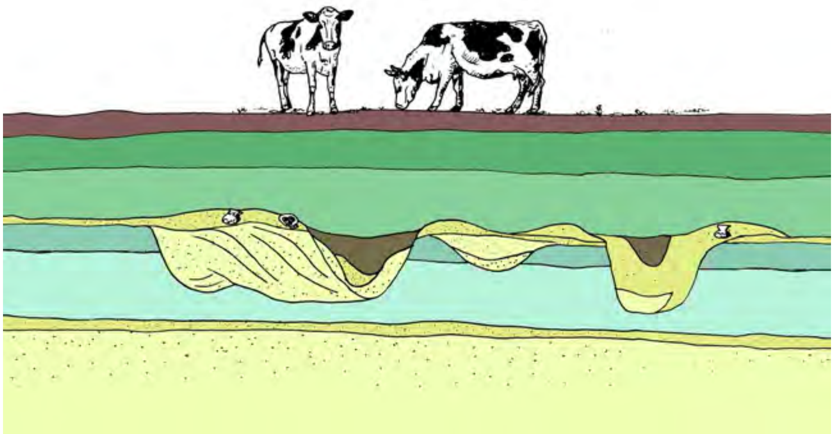

Figure 2
How to prospect and preserve the unknown? (Copyright EARTH)

policies. This leads us to the core of the Treaty, described in article 4, namely that archaeological heritage should be sustainably preserved in situ for future generations. Only in situations where this is not possible, should ex situ preservation by excavation and documentation be allowed.

An important consequence of this policy is that the treatment of our archaeological resources has become the domain of researchers working in the heritage field, as well as all decision-making stake holders who may have any relationship to these resources. This means that linking research-based knowledge to decision making actions is essential when trying to avoid the irreversible decay of archaeological resources and that at every occasion where these resources are under threat an impact assessment should be made that meets the demands of the Valletta Treaty. At first glance, two different interests seem to exist here, on one hand the property developer wants a building-ready terrain, while, on the other, the heritage manager is being challenged to preserve the remains in the burial environment. To bridge this apparent gap a thorough and well-founded evaluation, i.e. an impact assessment of the archaeological remains under threat, is needed, which meets both demands.

This heritage impact assessment is based on two different, but closely related investigations, namely i) a reliable prospecting method to determine what can be expected in the subsoil and ii) an assessment to determine the extent to which the remains can be preserved in situ in the burial environment, whereby excavation is relegated to that of an emergency measure. This means that in order to perform such a thorough impact assessment, two types of science-based archaeologists are needed: a prospection archaeologist and an in situ preservation archaeologist, both having a thorough knowledge of the (inter)national, regional or local research agenda, along with the theories underpinning (archaeological) science.

The prospection archaeologist needs a solid background in how to detect and evaluate archaeological remains in the subsoil, which, among other things, requires a knowledge of quaternary geology, geophysics and geomorphology. The preservation archaeologist should have a fundamental knowledge of hydrology as well as of degradation mechanisms of all kinds of archaeomaterials. It even raises the question of whether experts from other disciplines, such as biology and engineering, should be included in the assessment team.

This heritage impact assessment would be fundamental in determining what gets preserved in situ and what gets excavated, but it could also play a role in the possible adjustment of the building plans.

However, it seems that this paradigm shift in the role of the archaeologist in society, who is no longer employed by government bodies, but who works in an use-inspired commercial environment, is overlooked by archaeological institutes, which in their education programmes are still unilaterally focused on more traditional methodologies, i.e., excavation followed by determination and interpretation of the finds. An attempt made by the Vrije Universiteit to train and create a new generation of interdisciplinary archaeologists has resulted in numerous master's theses and PhD studies in archaeological prospection, landscape archaeology, and in in situ preservation. Unfortunately, this training had to stop because there were too few students to keep the courses cost effective. Excavation is apparently more attractive to the archaeology student than archaeological prospection and the safe-guarding of our archaeological resources in the burial environment.

When we combine our observations from the perspective of the archaeological market with those of Van Wijngaarden, we come to the conclusion that university education programmes have to be revised and significantly broadened. More than ever before, archaeology has become an inter- to multidisciplinary field of study that reaches far beyond the limits of the humanities. It requires expertise from the earth sciences, biology, the social sciences and perhaps even economics and engineering. All this knowledge cannot be represented in just one person and therefore requires differentiation in the curriculum. Differentiations that should be picked up by different academic institutes in the Netherlands.

Notes

1 Valetta 1992: European Convention on the Protection of the Archaeological Heritage (Revised) Valetta, 16.I.1992, Strasbourg (Council of Europe).