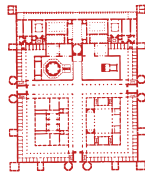# RAC|TRAC2020

Theoretical Roman Archaeology Conference

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ABSTRACTS

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Theoretical **Roman Archaeology Conference**

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SPLIT, HRVATSKA

2022.

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1. TERRA MARIQUE: ECONOMY, SPATIAL MANAGEMENT AND TRANSFORMATION AT THE ANCIENT ADRIATIC / ECONOMIA, GESTIONE E TRASFORMAZIONE DELLO SPAZIO NELL'ADRIATICO ANTICO

Anamarija Kurilić, University of Zadar

The focus of this session is on various forms of human interventions made to the environment of the ancient Adriatic and the consequences they had for both economy and society. Points of interest are land and maritime resources, their exploitation and management, as well as landscape transformations occurring due to such human interventions. The latter include settlements, cemeteries, port structures and installations, production and trade facilities, and other types of human-environment correlations, but also the impact that the exchange of goods and persons had on both societies of origin and destination.

Ana Konestra, Fabian Welc, Paula Androić Gračanin, Bartosz Nowacki, Anita Dugonjić, Kamil Rabiega, Agnese Kukela:

Roman rural settlements on the island of Rab (NE Adriatic): organisation, economy and relationship with the landscape

A project devoted to the diachronic understanding of the archaeological record of Rab island (NE Adriatic) has been implemented since 2013 by the Institute of archaeology, Zagreb, and from 2016 in collaboration with the Institute of archaeology of Cardinal Stefan Wyszynski University in Warsaw. The small dimensions and morphology of the island make it accessible to conduct field research on an island-wide scale, which yielded, among others, a substantial number of previously unknown Roman rural sites in both its internal and coastal areas. Thanks to the interdisciplinary approach employed, it was possible to determine their most relevant features and view them within their different landscape settings. On this occasion a selected sample of sites will be presented as case studies in addressing the issues of site's character, economic features, resources exploitation, as well as settlement organisation, and internal and regional development trends. In fact, new data from recent trial excavations and material studies, allows to build a more robust chorological framework and to propose development trajectories of at least certain sites.

Fabian Welc, Ana Konestra, Goranka Lipovac Vrkljan, Paula Androić Gračanin, Toni Brajković:

Environmental impact on the development of Roman settlement on the eastern Adriatic region in the light of new geoarcheological data

Over the past few years, as part of a joint project between the Institute of Archeology in Zagreb and the Institute of Archeology, Cardinal Stefan Wyszynski University in Warsaw and the Šibenik City Museum selected Roman sites on the North-Eastern Adriatic have been studied with the aim to recognize stratigraphy, spatial extent and possible impact of environmental changes on their development. Methods such as geophysics (magnetometry and ground – penetrating radar), air surveys with UAVs, digital terrain model analysis, geomorphological methods and selected laboratory analysis were implemented. Results of preliminary geoarcheological and paleoclimatological research carried out on the Island of Rab (Podšilo bay), at Plemići bay (Zadar region) and Danilo (ancient Rider near Šibenik) show evidence of abrupt environmental events mostly datable to late antiquity when the areas occupied by these sites were covered by soil-debris flow sediments. The examined profiles revealed at least three generations of slope sediments, formed as results of a dry climate interval, followed, after the 5th c. AD, by a wet phase when sediments were transported downslope and deposited on the Roman structures. Environmental conditions documented on these Roman sites seem to be supported by other paleoclimate evidence from the Adriatic region, such as lake sediments.

Morana Vuković:

Accident at work? Skeletons from the Roman limekiln at Cape Rastovac on the Island of Pag

This lecture presents the results of the excavations carried out at Cape Rastovac near Povljana on the island of Pag in 2016. In a sandy mound, a limekiln and three skeletons were found. On the mound's surface, in the limekiln and around it, many fragments of Roman bricks and roof tiles were found. As the limekiln was used up, the only things that remain are parts of its structure, traces of burning and waste rubble. The remains of three dead persons were also found. One of the burials is particularly interesting because it is located under the embankment built from the limekiln rubble. This made us conduct an anthropological analysis of the skeleton in it. The remains were carbon-dated in the late 1st century AD. As there is a Roman villa in a nearby cove, it is possible that the limekiln was used for its construction.

Zrinka Serventi:
Necropolises and their landscapes - case of Liburnia

Roman burial rituals and sepulchral structures varied according to territory and in many instances were distinct and specific for different regions of the Roman world. Accordingly, necropolises were representations of times, traditions and historical changes and ancient Liburnia was no different. This territory, spanning from the River Raša to the River Krka within the Roman province of Dalmatia, had its own continuities and discontinuities of customs and burial types, from Iron Age to the end of Late Antiquity. Although for Liburnia there are no exact written sources on this subject, numerous archaeological finds indicate that this territory adopted a variety of Roman traditions, which merged with still surviving autochthonous beliefs, while in Late Antiquity it adapted to the overall religious and political changes. Furthermore, necropolises were built in the space that surrounded the settlements and the encompassing landscapes limited and defined the placement and evolution of rituals and burials. As a result, these necropolises were both moulded by their landscape but they also shaped their surrounding in an interconnected symbiotic relationship.

Therefore, this paper will consider the topography of Liburnian necropolises, their connections and interactions with the settlement they belonged to, socio-economic factors in their construction but also the impact various rituals had on their development, use, expansion and eventual abandonment throughout antiquity.

Marco Moderato, Roberto Perna, Jessica Piccinini:
Agricultural Resources, trades and exchanges between the two shores of the Adriatic

The two shores of the Adriatic were in contact since the ancient times, in this paper we will present archaeological and epigraphical evidence concerning production and trade of agricultural resources and food stuff. Special attention will be devoted to cities as sanctuaries, market places, and administrative centres around which the life and activity of countryside revolved.

Anja Ragolič:
Trade and crafts in the epigraphic sources on the outskirts of the south-eastern Alps

The Roman conquest of the south-eastern Alpine region began shortly after the founding of the Latin colony of Aquileia in 181 BC. Economic reasons were certainly one of the key reasons for the conquest of the later provinces of Noricum, Pannonia and Dalmatia, since the Amber Road was long known, and trade contacts between the south-eastern Alps and the Venetic area had existed before the Roman occupation of this territory. It is obvious that this area also had (in addition to its economic role) a transit character, which is reflected in numerous archaeological finds, data from the ancient sources, and epigraphic monuments. The basic aim of the paper is to understand the economic background in the area of the south-eastern Alps between the late Republican era and the 4th century AD. The starting point of the analysis will be Roman inscriptions and inscriptions on the objects of everyday use (tesserae), which mention traders (negotiatores, mercatores), craftsmen and associations (collegia), or the goods with which they traded in the mentioned area. Particular attention will be given to the divine patrons of handicrafts and to water divinities, as well as the few iconographic depictions of the tools of the time.

Alice Vacilotto, Patrizia Basso:
The northern Adriatic coastal landscape along the Via Annia between Roman times and Late Antiquity

The paper offers a breakdown of what is known about the archaeology of the northern Adriatic coastal landscape between Adria and Aquileia, focusing on the considerable transformations the landscape has undergone.

Brikena Shkodra-Rrugia:
Aspects of the transformation of early Byzantine Dyrrachium (Albania)

The traditional perception of the early Byzantine Dyrrachium, in the complete absence of stratified archaeological evidence, regards it as a city no longer flourishing with abandoned civic monuments and the urban graves appearing as the only trace of human activity. This produced incompatible knowledge on the focus of urban and social life during the 7th and 8th century.

Recent adapted stratigraphic archaeology, focused also to more accurate excavations of the later phases have produced the first physical features of early Byzantine city and the artefacts associated with them. This offered the initial bases on which to assess and begin to articulate a new perception of Dyrrachium's image in the crossroad of moving from late antiquity to early middle ages. Identifying some of the features characterizing this phase is what's this contribution is aiming for.

2. APPROACHES TO ROMAN POTTERY USE: NEW PERSPECTIVES AND NEW TECHNIQUES

Penelope Allison, University of Leicester, UK

Jesús Bermejo Tirado:

The good, the bad and the ugly: quality and use-wear analysis of domestic tableware as an archaeological index of inequality in Roman Spain

The study of Roman pottery has been traditionally oriented by chrono-typological approaches. This has been translated into a highly homogenizing vision on the consumption of tableware in the Roman world. However, the way in which productions of similar fabrics and shapes were used can be so different in several social or cultural contexts. The systematic record and comparison of the use-wear traces and manufacture quality indicators can be approached as more accurate method for the characterization of diverse profiles of domestic consumption of this kind of finds than the more usual morphological studies. To illustrate this methodological strategy we will expose the preliminary results from the comparison of previously sampled contexts from various Early Imperial sites placed in different regions of Roman Spain: Eight rural sites from the surroundings of the current Madrid metropolitan area, the Roman villa of Fuente Álamo (Puente Genil, Córdoba) and two urban domestic context from New Carthage (Cartagena, Murcia).

Alessandra Pecci, Sally Grainger, Edward Biddulph, Simone Mileto:

Preliminary study of the content of Samian cups from Britain

In this paper, it is proposed that samian ware cups known as acetabula (as indicated by kiln load markers) were used for the preparation and consumption of fish sauces and oenogarum, which are blended sauces using liquamen, oil, wine or vinegar. Examples of the cups from archaeological sites not infrequently show internal wear formed by repeated and consistent use and, although the characteristic glossy slip covering such vessels has been seen as a barrier to residue penetration, precluding residue analysis to determine use, it has been demonstrated here that such penetration is indeed possible. In order to understand the use of the different forms, many of which are common on Roman sites across the northwest Empire including Roman Britain, we have conducted analyses with gas chromatography coupled with mass spectrometry. Samples were selected by Edward Biddulph, Senior Project Manager at Oxford Archaeology, from the Thameslink project, an excavation of a Roman suburb of Southwark in London by Oxford Archaeology and Pre-Construct Archaeology. Twelve ceramic vessels were analysed, mostly Dragendorff 33, but including samples of Dragendorff 27 and Dragendorff 24/25.

Danai Kafetzaki, Jeroen Poblome, Philip Bes, Rinse Willet and Hendrik Uleners:

Sagalassos pottery meets data and visual analytics

The Sagalassos Archaeological Research Project has recently launched a new research program into the use of data and visual analytics in order to better understand the archaeological record of ancient Sagalassos. In more ways than one, the available datasets have become numerous and grown complex, possibly stretching the limits of human analytical capacities. At the same time, the default archaeological record does not allow computing algorithms to simply take over. The study of the Sagalassos tablewares serves as a case in point. In this paper, we decode morphological characteristics of vessels to attempt a semi-automated exploratory solution to support typology building. First, we discuss retrieval of factors, based on tacit and explicit knowledge, that sufficiently represent vessel morphology. Second, we tackle limitations in data preparation, considering the available format of resources and sample size with respect to the subtlety of classification. Last, we apply existing algorithms discussed in typological arrangement literature and combine these in novel approaches to assess the algorithmic output versus the labels provided by material specialists as metadata. Considering data digitization challenges, imbalances and fuzzy boundaries, our method provides a consistent way of supporting typology building from scratch.

Alasdair Gilmour:

Digitising Death: Using shape data from digital scans of pottery images to investigate consumption in funerary contexts from early Roman/Late Iron Age North-West Europe

This paper seeks to utilise shape data derived from digital scans of pottery images from excavation catalogues to investigate the socio-cultural practices associated with ceramics in funerary contexts from Late Iron Age and Early Roman North-West Europe. By using the raw shape data from the illustrations themselves, analysis is driven by the actual morphology of the vessels rather than which broad form group they are assigned to. In bypassing typological designations and form groups, this methodology permits consideration of the morphologies of un-typologised coarsewares, as well as the inclusion of less widespread wares from different type series within a unified analysis. Moreover, this focus on individual vessel morphology allows for a more nuanced approach to the use, significance, and materiality of the vessels chosen to be interred with the dead, and to what this can elucidate about their broader role in society. To demonstrate the potential of this approach, this paper will compare the ceramic funerary assemblages from the Late Iron Age to Early Roman King Harry Lane cemetery at Verulamium with those from continental cemeteries, extracting new, underutilised data from old excavation reports to shed new light on the varying roles played by ceramics in ancient North-West Europe.

Penelope Allison, Ivan Tyukin, Daan van Helden, Evgeny Mirkes: Arch-I-Scan:

Automated recording and machine learning for collating Roman ceramic tablewares and investigating eating and drinking practices

Roman finewares constitute some of the most essential evidence pertaining to the socio-cultural practices of eating and drinking across the Roman Empire and constitute some of the most extensive archaeological remains from this vast world. However, there are currently major barriers to using this wealth of mainly tablewares to answer consumption-oriented questions. The extensiveness of these remains and current time-consuming and costly specialist processes for classifying and collating these truly 'big archaeological data' means they are often recorded selectively and summarily, rather than comprehensively and consistently for quantitative analyses for more consumption-oriented approaches. This paper will introduce the AHRC-funded Arch-I-Scan project developed at the University of Leicester which involves archaeologists, mathematicians, computer scientists and partner organisations charged with the curation and public presentation of these ceramics. It will outline the project's objectives and the processes it is using to develop an artificial intelligence and machine learning service to automatically record and collate 100,000s of Roman ceramic tableware remains so that they can be used effectively to investigate socio-cultural practices. It outline the procedures, processes and problems of the project's work to date.

Alessandra Pegurri:

Beyond the pot: functional approach for a better understanding of the late-antique Common Wares of Rom

This paper aims to investigate how far Common Wares (everyday ceramics not used for cooking) reflect social and economic change across Late Antiquity (4th-7th centuries AD) in the City of Rome. These relatively humble vessels used in daily life are greatly under-studied archaeologically, despite their potential for reconstructing domestic practices.

The study of this ceramic class, which can rarely lead to the same results of fine wares and amphorae analysis (e.g. precise chronology and large scale economy reconstruction), can provide interesting information on the society who used it, especially by means of a consumption-oriented approach to their functions.

However, the identification of the ceramic forms and their presumed function(s) is usually arbitrary carried out by scholars, mainly following previous studies and rarely using a contextual approach and other kind of analysis (such as use-alteration analysis for example).

In this paper I will investigate the problematic issue concerning the identification of the function(s) of various different Common Ware vessels, and a particular, but emblematic, case study concerning some medium-sized vessels widespread in the late-antique contexts of Rome during the 5th century AD whose recent identification as chamber pots has completely changed our understanding of their role in the ancient society.

Mónica Rolo, Ana Martins, André Carneiro:

Pottery in translation: from the Imperial mode to the post-Roman fabrics in the stibadium room in Horta da Torre Roman villa (Fronteira)

In Horta da Torre Roman villla (Fronteira, Portugal), ongoing excavations since 2012 have revealed a major double-apsed room with a stibadium. The space has probably been used as a triclinium aestivalis, where an elaborated decorative programme and sophisticated architectural solutions created a multisensorial scenario and emulated some well-known parallels of aulic residences from other regions. By the end of the Empire, the area was carefully abandoned. Meanwhile the roman building was still preserved, another occupation will be registered. The construction of a perishable structure documents the precarious presence of people and animals (fauna recollected) in the once sophisticated room.

So, in a short time break, a dramatic shift in the profile of human presence occurs and the material record, particularly pottery, clearly reflects this change. Based on stratigraphic data, contextual analysis and exhaustive study of ceramic material, one intends to characterize the diachronic occupation of the site and depict the different communities that, at distinct moments, inhabit the same space. The available results allow us to go further than a typological approach and fabrics analysis, and unfold daily routines (techniques, patterns of consumption, local productions and trade relations) and cultural backgrounds.

David Griffiths:

Dinner with the Emperor? Dining practices at the Imperial Estate at Vagnari: imposition or freedom of choice?

This paper presents the results of the analysis of Roman pottery from a villa (San Felice), a village and a cemetery considered to have formed part of an imperial estate at Vagnari, Puglia, in southern Italy. The data provide an opportunity to focus on aspects of food preparation and dining practices at Vagnari during the period of its most intensive occupation, between the 1st and 4th centuries AD.

As part of empire-wide landholdings, the estate at Vagnari may have been provisioned, at least in part, with supplies of equipment, goods and people, from other properties and production centres owned by the imperial family, or those with preferential commercial arrangements, which superseded local and regional suppliers. Initial results suggest some level of 'top-down' provision of non-local specialised ceramic vessels for storage and food preparation. In addition, the inhabitants of the estate had access to vessels of specific types (imports and local products) for preparing and serving meals in certain ways which may reflect other cultural and ethnic backgrounds and experiences.

Future research will consider whether communities living and working on Roman imperial estates, including Vagnari, can be recognised as socio-cultural groups with shared collective identities reflected through commonality in material culture.

Sally Grainger:
Roman fish sauces and their amphora: re-use and the practicalities of supply

This paper aims to investigate how far Common Wares (everyday ceramics not used for cooking) reflect social and economic change across Late Antiquity (4th-7th centuries AD) in the City of Rome. These relatively humble vessels used in daily life are greatly under-studied archaeologically, despite their potential for reconstructing domestic practices.

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8. VALENTINIAN I, THE CROATIAN EMPEROR: THE MAN AND HIS AGE

Richard Hobbs, The British Museum, UK
Hrvoje Vulic, Gradski muzej Vinkovci, Croatia

Next year (2021) will be the 1,700th anniversary of the birth of Valentinian I in Cibalae, Pannonia (modern Vinkovci, Croatia). During Valentinian's eleven years as emperor (AD 364-75) he energetically held the empire together, successfully defending the frontiers against a series of invasions by the Alemanni across the Rhine. He fortified the Rhine/Danube frontier and prolonged Britain's position as a Roman province by sending Count Theodosius to repel the so-called 'Barbarian Conspiracy'. He was also known for his toleration of religious identities, both pagan and Christian, throughout his reign, unlike his brother Valens in the east.

This session will invite contributors to explore the period of Valentinian's life, either in terms of those aspects of the empire with which he was directly or indirectly involved (e.g. the strengthening of town defences in Britain) or the archaeological and material culture evidence that characterises the middle part of the fourth century AD. Although Valentinian spent much of his reign in Gaul on campaign, what was his impact on his home province of Pannonia? And who should we believe about his character - Ammianus Marcellinus, who portrays him as angry, cowardly and superstitious, or Jerome, who portrays him as brave, tolerant and responsible?

Valentinian I was one of a number of emperors that hailed from the Balkans region in the fourth century. This session will therefore provide the opportunity to also explore themes related to this important group of powerful men who shaped the empire and its legacy in late Antiquity.

Hrvoje Vulic:
It's good to be the emperor's birthplace – effects of Valentinian's emperorship on Cibalae, Pannonia

We can be certain that only two emperors were born in what today is Croatia and those are Valentinian I and his brother Valens, both born in small provincial town of Cibalae in southeast Pannonia. Not much is known about family affairs and wealth prior to emperorship, but it is reasonable to assume that it was made by their father and his well documented and impressive military career. Sources are even more silent on relationship of Valentinian and Valens to their birth town, but discoveries in last few decades are showing that during 4th century and particularly in second half of it, Cibalae prospered more than in previous centuries. Based on some examples it is possible to connect this economic and building boom with Valentinian I and those examples will be discussed.

Dávid Bartus:
Where did Valentinian die? New excavations in the legionary fortress of Brigetio

The legionary fortress is the least researched of the three main topographical parts of Brigetio. Although the retentura of the legionary fortress is almost entirely covered by modern buildings, the praetentura can be researched by remote sensing methods. The northern wall and gate, several roads and buildings have been identified on aerial photos during the last decades. The most interesting feature is a large, apsidal building near the porta principalis dextra, which we have started to excavate in 2017.

The area of the building is approximately 600 m2, consisting of an apse, two large halls and a number of smaller rooms. Several brick stamps and coins indicate that it was built most likely by the Frigeridus dux in the first years of the 370s. Valentinian I died on 17 November 375 in the legionary fortress of Brigetio, when he gave an audience to the Quadi and suffered a stroke, as told by Ammianus Marcellinus, but the exact location of the audience and the death of the Emperor was unknown until now. The aula-like plan and the dating of the building indicate that it was the most suitable place for an imperial audience, and Valentinian I most likely died there.

Richard Hobbs:
The wealth gap in the age of Valentinian and its consequences for late Roman society

The celebrated Muslim historian Ibn Khaldun (1332-1406) produced a cyclical theory of history based around his idea of the 'science of culture', which concerned itself with social transformations such as the growth of cities and the rise and fall of empires. This paper will explore how material culture evidence in the late Roman empire, particularly at the time of the Balkan emperors such as Valentinian I and Valens, might be used to examine a widening wealth gap between the richest and poorest in Roman society. Khaldun's ideas of 'social cohesion' will be examined in this context: as more and more wealth was concentrated in fewer and fewer hands, what effect did this have on late Roman society? Did it ultimately lead to the collapse of the late Roman empire in the west, its lands usurped by nomadic groups (such as the Visigoths and the Huns), groups bound together by a stronger cohesive force?

Richard Abdy:
Obrizum and pusulatum: refined bullion in a brutal age

From the age of Valentinian I, bullion products of the mint (coin and ingot) carry these technical terms. They indicate not just the refinement process (which was not new) but more importantly a security innovation for avoiding acceptance of spurious plated coinage in taxation as recorded in the later Codex Theodosianus (12.6.2). This involved the melting of coin as it was received by the state before it was passed on in the form of ingots (the gold ingots from near Crasna, Romania, providing a fine example).

This paper will argue, from recent finds evidence, that the new system had an effect on coinage circulation too. In the UK, Portable Antiquities Scheme data shows the tailing off of plated forgeries after Julian. The way forward (for the enterprising forger) is best seen in the West Bagborough (Somerset, UK) hoard of silver coins, forgeries and ingots with tpq AD 367. This was a forging kit producing deliberately underweight siliquae of good silver. Their continued acceptance in circulation is illustrated by the many 5thC siliquae hoards from the end of Roman Britain. Surviving records of transgressions against coinage in medieval Venice provide insight as to how transactions involving small denomination silver coins provided forging opportunities when only larger denomination gold and silver pieces tended to be assiduously checked and weighed.

Zoltan Pallag:
A Conflict of Ideas: Andreas Alföldi and Valentinian I

Andreas Alföldi (1895-1981), as one of the greatest scholars of Roman history of the 20th century, gained great recognition for his work on late antiquity, including one of his masterpieces "A Conflict of Ideas in the Late Roman Empire: The Clash between the Senate and Valentinian I" in 1952, starring Valentinian, the "brave, strict, and harsh" soldier, best known from the contemporary description of Ammianus Marcellinus. Although Ammianus painted him as a savage, temperamental, and cruel ruler, Alföldi was far more sympathetic towards Valentinian, and portraits him a just emperor who resisted the hostile attitude of Rome's pagan senatorial aristocracy. The views of the Hungarian scholar had a great influence on the image of Valentinian in the second half of the 20th century. How did the Alföldi's personal experiences in Hungary before, during, and after World War II shape his views? How did the mid-century totalitarian backdrop inform Alföldi's interest in resistance movements? This paper will explore the binaries which structured Alföldi's analysis of the 4th century, and particularly the age of Valentinian I.

9. MAKING AND SHAPING THE LANDSCAPE: INTEGRATED APPROACHES TO ROMAN LAND USE

Angela Trentacoste, University of Oxford, UK
Ariadna Nieto-Espinet, Consejo Superior de Investigaciones Científicas (CISC), Spain
Silvia Guimaraes, CIBIO-InBIO & Consejo Superior de Investigaciones Científicas (CISC), Portugal
Silvia Valenzuela-Lamas, Consejo Superior de Investigaciones Científicas (CISC), Spain

Field survey and study of site distribution have been instrumental to understanding of settlement dynamics and patterns of change through time. However, such methods offer limited information on the interaction between a location's inhabitants and the landscape. Understanding of this interaction, in terms of agricultural and land-use strategies, is not only crucial to interpretation of settlement dynamics, but also responses to broader climatic and socio-economic change. Reaction to positive/negative pressures will depend on location of a site, but especially on its agricultural strategy and the potential offered by the surrounding environment. Environmental exploitation took many forms throughout the Roman Empire, with differing impacts on the landscape. Moving beyond broad-brush descriptions of land-use (e.g. 'Mediterranean polyculture', 'pastoralism'), to specific patterns of exploitation, is therefore necessary to interpret change in the Roman period.

This session aims to provide a more precise view of Roman land use and agricultural strategies, through papers that offer integrated approaches to environmental exploitation. Contributions combine data from various steams of evidence – field survey, sediments, pollen, plant and animal remains, isotopes, etc. – to address land use in the Roman world. These methods allow for investigation of the topic at different scales – from the regional (pollen, fluvial sediments) to local (agricultural processing tools, plant and animal remains) – and for consideration of topography and cultural traditions alongside climatic and environmental factors. Studies drawn from different regions chronological periods highlight the ecological context of decision-making, but also the particular socio-economic situation in which developments took place. Through contributions that take an integrated approach, this session aims to offer a more nuanced picture of Roman land exploitation and human responses to it.

Tom Leppard, Elizabeth Murphy, Andrea Roppa, Hector Orengo, Arnau Garcia-Molsosa:

Analyzing dense Roman rural settlement with integrated pedestrian survey and systematic UAV-based remote sensing: the Landscape Archaeology of Southwest Sardinia Project

Here we present a preliminary analysis of dense Roman rural settlement in the historic region of Sulcis, Southwest Sardinia, under the auspices of the Landscape Archaeology of Southwest Sardinia (LASS) Project. Since 2016, intensive pedestrian survey (integrated with automated sherd detection via use of machine learning applied to high-resolution UAV photographs) has revealed very dense rural occupation of our survey zone in the second half of the first millennium BC. This occupation is characterized by closely-spaced yet comparatively small (less than 1ha) sites which bridge the transition from Punic to Roman Republican suzerainty. Here we consider and contextualize this phenomenon (which parallels Barreca's observations about 'capillary' settlement in the Campidano), examining analogs from elsewhere in the rural Roman world and assessing the extent to which the micro-contexts of these sites (in terms of pedological variability and moisture gradients) vary. This analysis constitutes part of our broader goal of understanding how these very small rural sites function (i.e., complicating the 'farmstead' model), and how they are economically integrated in the absence of a large, primate site such as Nora or Tharros.

Gijs Tol, Tymon de Haas:

Living and working in a marginal landscape. Human-environment interactions in the Pontine Plain (Lazio, Central Italy)

The Pomptinae Paludes (Pontine Marshes – Lazio, Central Italy) were long considered unsuited for systematic habitation and agricultural exploitation - until the bonifica integrale under the Italian fascist regime in the 1930's. In this paper, we present selected results of over a decade of archaeological work in this area by the Pontine Region Project (PRP). Large-scale field surveys and geophysical prospection on selected archaeological sites were carried out between 2007-2016, and more recently through geo-archaeological and ecological approaches we focused our attention on a Roman centuriation (field system). Together these investigations provide an extremely rich image of the waxing and waning of the human exploitation of this landscape over the long term, and strongly underline the need for integrated field methodologies to fully reconstruct the complex and dynamic interactions between man and landscape in this challenging environment between prehistory and the Roman period. During this time-span human exploitation of the Pontine marshes was characterized by long-periods of small-scale, but specialized economic activities (such as fishing, hunting and pottery production), with a period of intensive – but brief – agricultural exploitation during the mid-Republican period.

Roksana Chowaniec, Rafał Fetner, Girolamo Fiorentino, Anna Gręzak, Matilde Stella:

The ancient human impact on the natural landscape. Case study: Akrai and Hyblaean Mountains, south–eastern Sicily

The presentation presents the recent approaches on the ancient human impact on the natural landscape in the region of ancient town Akrai, SE Sicily. The objectives are focused on tracing the changes and degradation of the environment since the region was inhabited with particular emphasis on the period between Late Republic-Byzantine times. The multidisciplinary observations include the studies on the town, founded in the Sicilian interior, located closed to the modern town of Palazzolo Acreide, in the Hyblaean Mountains. The research consists of plants and animals examination (along with data on husbandry, fishing, hunting), quarries, and water usage, etc., based on geological, archaeobotanical, archaeozoological, stable isotope and mineralogical and chemical analysis. The research allowed for the observation of degradation of the local environment and changes in land usage due to breeding, farming, building, manufacturing, which begun under the Greek occupation and have intensified in Imperial and Byzantine periods. Intensive exploitation of natural resources brought deforestation and depletion of hydrological resources in the region, particularly visible in Late Roman and Byzantine age. These changes affected also the diet, the local economy and crops, investment, productivity.

Jane Millar, Alex Walthall, Tim Beach, Sheryl Luzzadder Beach, Anna Maria Mercuri, Assunta Florenzano, China Shelton, Jonathan Flood:

Investigating long-term environmental change, land use and abandonment at Morgantina, Sicily

This paper presents the results of excavations and environmental analyses at Morgantina in east-central Sicily. Established in the fifth century BCE, the city was given to Iberian mercenaries by the Roman Senate in 211 BCE and abandoned by the first century CE (Livy 26.21.17; Strabo 6.2.4). During 2018 excavations under the Contrada Agnese Project (Alex Walthall, Director), the speaker (Millar) led the first stratigraphic study of environmental change and land use at Morgantina. In a multidisciplinary research effort, samples from a 4.5-meter profile spanning the occupational history of the site have been analysed for soil chemistry (Beach, Luzzadder-Beach), micromorphology (Flood), macrobotanical (Shelton), and pollen data (Mercuri, Florenzano). This paper will focus on our results from Roman strata, which represent refuse from the nearby macellum, abandonment, and agricultural re-use of the agora valley. Results of environmental sampling add to past archaeological survey (Thompson 2002), regional pollen data (Sadori et al. 2016), and geoarchaeology (Bruno 2017) used to argue for regional decline driven by drought in the first centuries BCE and CE. The results of excavation and environmental analyses will test hypotheses of degradation and abandonment in the Roman period with evidence for continued commercial and agricultural activity in the agora valley.

Christian A. Schöne:

Elusa – New insights into the land use of the metropolis in the Negev

Elusa (Haluza) was the only proper city in the Negev region and formed its administrative and economic center. Founded as a stop-over on the Nabatean Incense Route in the 3rd c. BC it developed during the 1st/2nd c. AD into a proper city despite its difficult environmental condition. Since 2015 Elusa has been investigated by a joint cooperation by the Archaeological Institute of the University of Cologne and the Israel Antiquities Authority with a multidisciplinary team. Geophysical and archaeological survey, geoarchaeology and various stratigraphical sondages allowed new insights into the long-term development of the city. Finally, the systematic analysis of finds, especially faunal remains and pottery delivered new information regarding the city's economy. Since 2018, the survey of the city focussed on the periphery of the city. Since then, extensive agricultural remains in the vicinity were discovered with survey and remote sensing. This may reflect the economic realignment of the whole region starting in the 3rd century, which culminated during the 4th to 6th century, when the region occurs as major exporter of huge quantities of wine and cereals into the whole Mediterranean. This paper is summarizing the results of the project and is further focussing on the question of Elusas land use and agricultural approaches.

Ariadna Nieto-Espinet, Angela Trentacoste, Silvia Guimaraes, Silvia Valenzuela-Lamas:

Livestock production from the Iron Age to Roman times – towards an integrative analysis of bioarchaeological data

Livestock were an integral part of creating and maintaining agricultural landscapes in the Roman world. For this reason, the study of the interaction between the natural environment and economic systems is key to understanding socio-political changes. In recent years, the ZooMWest ERC-StG project has collected tens of thousands of zooarchaeological data from distinct areas of Western Europe (Iberian peninsula, Italy). By considering these data in comparison with ecological indicators (pollen, sediments, botanical remains, etc.) and archaeological evidence (field survey) this presentation seeks to characterise changes in agricultural strategy and the relationship between people, livestock, and the land they inhabit. These methods allow for an investigation of the topic at different scales (site, zone, territory) and for consideration of topography and cultural traditions alongside climatic factors. Through this integration of various streams of evidence we aim to better understand the structure of ancient economic systems and the way they conditioned human decision-making. Results show a shifting relationship with the territory between the Iron Age and Roman times, in which husbandry

strategies were increasingly influenced by market requirements and an economic model with a higher degree of integration. These processes are reflected in changes in land use and forms of territorial occupation, although along different rhythms and trajectories. Conclusions have implications for understanding changes in the exploitation and management of the landscape between prehistory and the Roman period, and offer promising new collaborative pathways forward.

Lisa Lodwick:
Landscapes of cereal investment in the north-western provinces: contextualising grain-drying ovens in the Roman countryside

In 2011 Taylor characterised the distribution of grain-drying ovens and villas in south-east Britain as landscapes of agricultural investment. Utilising an updated dataset of over 700 grain-drying ovens from across the north-western provinces, this paper aims to assess the micro- and macro- landscape context of grain drying ovens, in order to evaluate whether more nuanced variation can be identified in agricultural processing activities within the landscape, providing insights on the temporality and intensity of agricultural labour.

Developer-funded excavation has resulted in a vast rural settlement record in the north-western provinces, with open-area excavation being the main methodology utilised. As such, sites are often considered in isolation of their wider landscape context. The processing activities evidenced by grain-drying ovens enable the temporality and flow of agricultural labour to be considered within the context of other settlement and landscape activities. The mode of cereal processing, as seen through the structure, size, archaeobotanical remains and settlement context of grain-drying ovens, will be considered alongside the micro-landscape of the archaeological site, and within the context of available landscape survey and palaeo-environmental evidence. The paper will consider whether agricultural processing activities were locally embedded activities, or indicators or the collation of labour across the landscape.

Dimitri Van Limbergen:
How to approach wine terroirs in the Roman world: examples from Italy and the Adriatic

Reconstructions of Roman wine landscapes through text and archaeology continue to be fed principally by modern and therefore anachronistic and often faulty perceptions. Such issues prevail in all aspects of Roman vine-growing and winemaking, thus having major implications for our views on ancient agriculture, economy and society. Besides, the diverse geographical backgrounds that brought forward Roman wines remain poorly understood, and this lacuna undermines much of our understanding of wine forms and scenarios in the Roman world. In this talk, I would like to reflect on how we can advance our handling of these two crucial aspects; this by arguing for the introduction of paleo-terroir in our studies. In essence, paleo-terroir is here introduced as focusing on how past viticulture landscape were shaped, nurtured and adapted by the continuous interaction between environment and man. Through a series of selected examples from Italy and the Adriatic, I will tackle the various aspects of terroir, and the methodologies suited to study them, to explore how we can deploy this novel concept to generate more historically grounded interpretations of vine and wine in the Roman world.

10. THE HIGH RESOLUTION GROUND PENETRATING RADAR SURVEY OF TWO ROMAN REPUBLICAN CITIES

Martin Millett, University of Cambridge, UK

In the last decades the geophysical survey of Roman towns (principally using magnetometry) has become commonplace, with substantial new topographical information emerging as a result. However, such surveys have been limited by the techniques used, with the result that it has been difficult to understand complex urban topography in three-dimensions. Recent developments in GPR survey, hitherto only used on a very small scale, have enabled much larger areas to be surveyed at very high resolution, offering the potential for producing high resolution 3-D images of whole Roman cities. Since 2016, a collaborative project between the universities of Cambridge and Ghent has surveyed the whole of two Roman Republican towns in Italy (Falerii Novi and Interamna Lirenas) at high resolution (with measurements taken every 6cm across the sites). The results offer entirely new insights into the two cities. In this session the methods, and the results of the surveys will be presented by the team, and there will be a discussion about their broader historical and archaeological implications.

Lieven Verdonk:
GPR fieldwork and analytical techniques

Ground-penetrating radar is one of the most frequently used geophysical techniques in archaeology, and data processing tools are now well developed. In this paper, both its potential (it can generate high-resolution images in 3D) and its limitations (the limited depth penetration in soils with a higher clay content) are illustrated with examples from the two investigated Roman towns. Furthermore, it is discussed how data acquisition and processing methods were adapted to enable the prospection of very large areas. Finally, we look at recent developments which aim to partially automate fieldwork, and enhance the role of the computer during data interpretation.

Alessandro Launaro:
Interamna Lirenas revealed

The Roman town of Interamna Lirenas (Southern Lazio, Italy) was created as a Latin colony in 312 BC and continued to be occupied until the 6th c. AD. Although very little of its archaeology was known, its plan has now been broadly revealed thanks to several seasons of geophysical prospection, involving both magnetometry (2010-12) and - especially - ground-penetrating radar (2013-17). It is in fact the latter technique which has provided the most detailed and impressive results: further enhanced by field survey and excavation, these results have profoundly changed our understanding of the history and development of this town.

Martin Millett:
Falerii Novi explored

Falerii Novi (Lazio, Italy) was founded after Rome's destruction of its predecessor, Falerii Veteres, in 241 BC. The site was abandoned in the middle ages, except for a monastic complex, and remains as open agricultural land. It was the subject of a successful campaign of large-scale magnetometry in the 1990s, allowing much of its plan to be revealed. The resurvey of the complete intra-mural area using high resolution ground-penetrating radar provides addition new information about its plan, as well as generating information about hitherto unknown buildings. This paper will present the result of the GPR survey and consider their implications for our understanding of this city.

Frank Vermeulen:
Implications and issues of surveying Roman cities

Non-invasive technologies of remote sensing, well integrated with legacy data, and the application of integrated geo-archaeological and geophysical approaches, allow today to study abandoned Roman cities in ways never attained before. Based on experiences in intensive fieldwork on and around a number of urban sites in the western Mediterranean, a re-examination is proposed of the role the archaeologist needs to play in order to understand, address and manage new technologies for the study, interpretation and reconstruction of ancient urban landscapes..

Sue Alcock:
Broader archaeological implications

Luuc de Ligt:
Broader historical implications

11. RITUAL AND RUBBISH IN ROMAN RIVERS

Hella Eckardt, University of Reading, UK
Philippa Walton, University of Reading, UK

Over the past 100 years, a large number of Roman objects have been discovered in riverine contexts, particularly at bridges and river crossings. These include material from the Thames at London, the Mosel at Trier and the Rhine at Neupotz. Although a ritual motivation for the deposition of objects in water is commonly suggested for prehistoric objects (e.g. Bradley 1990; 2016), these assemblages have usually been interpreted as the accidental losses of travellers or raiders, or as rubbish deposits revealed by fluvial erosion (e.g. Künzl 1993; Painter 2015). This session will review the evidence for riverine deposition in the Roman period, building on existing, now rather out-dated, surveys (e.g. Torbrügge 1971). Through a series of case-studies we will examine whether the binary opposition between rubbish and ritual is appropriate, reflecting on the character and composition of selected assemblages (e.g. complete weapons vs. fragmented personal adornment) We also intend to move beyond focusing solely on processes of deposition and will therefore combine thinking about how these objects were deposited with an investigation of who was involved in their deposition. Detailed analysis of the range of Roman material culture found in riverine assemblages should enable us to detect the presence of different groups and identities, including soldiers, women and foreigners. By taking this original approach, our session aims to provide new perspectives on the religious, social and cultural significance of rivers in the Roman landscape and on the identities of the people who lived alongside them.

Hella Eckardt, Philippa Walton:

Ritual and rubbish in Romano-British rivers

In recent years, Roman objects have frequently been discovered close to bridges and river crossings. Despite hints in Classical sources that Roman bridges had symbolic, religious and ritual meaning, these Roman assemblages have usually been interpreted as accidental losses or rubbish deposits revealed by riverine erosion. Our Leverhulme-funded project is challenging this assumption by systematically investigating their significance. By looking at both the types of objects found and their exact contexts, we are trying to ascertain whether these assemblages are ritual in nature, rubbish or something else altogether. This lecture will summarise the results of nearly two years of research, illustrating some of the large number of deposits known from Romano-British rivers. We will particularly focus on a case-study which is integral to our project: an assemblage of more than 3,000 Roman objects found on the bed of the River Tees at Piercebridge, County Durham. We will ask why the assemblage ended up there and will demonstrate how the huge range of finds can help us understand more about the lives of people living and working in northern Britain in the second and third century AD.

Stefanie Hoss:

Dutch river finds in the Rhine, Waal and Meuse: rubbish, ritual and renovation projects?

All Dutch rivers have long been known to be treasure troves of archaeological finds. Such finds are often quickly declared to have been ritually deposited, as many seem to have been more or less intact when they went into the river and were reasonably large objects of not inconsiderable value, so they would not simply have been lost unnoticed or thrown away as rubbish. However, many fairly large objects have turned up in the harbours of for instance the *municipium of Forum Hadriani* or the forts at Velsen and Alphen aan den Rijn, all of which are interpreted as wet rubbish dumps.

In addition, the excavation of the fort at Alphen aan den Rijn could determine that rubble and rubbish from the demolition of various buildings was dumped behind newly rebuilt quays to help stabilize them, making it possible that some of the more complete finds had been inside buildings when these were destroyed and were subsequently dumped into the river together with the building debris. In my paper, I would like to present an overview of the river finds in the Dutch part of the Rhine and Waal and discuss whether these are likely to have been ritual or not.

Janka Istenič:

The River Ljubljanica (Slovenia) in the Roman period – accidental losses and religious rituals at the boundary of Cisalpine Gaul/Italy?

The 23 km long silty riverbed of the River Ljubljanica in its stretch across the marshy plain of the Ljubljansko barje, from Vrhnika to Ljubljana, is a rich archaeological site that has yielded a multitude of artefacts ranging in date from the Early Stone Age to the modern period. Recent research suggests the high numbers of *militaria* and several other groups of Roman finds from the river mainly relate to the activities at harbours and control points along the river, as well as to religious rituals performed before crossing the boundary of ager *limitatus*.

Ivan Radman:
Votive deposits, accidental losses or industrial junk? The puzzle of river finds from Roman Siscia

The rivers Kupa (Colapis) and Sava (Savus) at Sisak, the ancient Siscia, have yielded close to 10,000 Roman artefacts due to extensive dredging activities in the early 20th century. While Roman artefacts were discovered in both rivers surrounding the city, there are noticeable differences in the composition of the assemblages recovered. While both rivers were dredged on several occasions over a period of several decades, the dredging of the Kupa was more extensive although on a much shorter stretch, i.e. only at the location of the Roman harbour (which happens to be also the location of the modern harbour). The Kupa has yielded far more Roman artefacts, which cover almost every aspect of Roman everyday life. In contrast, finds from the Sava belong almost exclusively to some categories of military equipment. Even a superficial examination of the finds leads to the assumption that they did not end up in the water for the same reason or in identical circumstances. While votive offerings and accidental losses spring to mind, quite a few of those finds could be interpreted as industrial waste. Is it possible to differentiate them with any level of certainty? It is a matter of discussion…

Jasmina Davidovic:
Archaeological finds from the river Sava in Sirmium

Following the initiative of my colleague Gordana Karović and the official requests of the Republic Institute for the Protection of the Cultural Monuments from Belgrade, in March 2014, numerous items from the collection of the diving club "Yellow seal" from Sremska Mitrovica were handed over to the Museum of Srem. During several years of diving in the Sava river, club members collected more than 2,600 objects of the paleontological, archaeological and ethnographic character. They originate from the 136. km (Road bridge at the entrance to Sremska Mitrovica) to the 142. km (entry into the village of Laćarak) with occasional diving on areas about 20 km upstream and downstream of Sremska Mitrovica.

In addition to several extremely interesting samples of well-preserved Roman weaponry and military equipment (spear and arrow tips, belt buckles, phalerae, tent pegs etc.), the collection includes numerous Roman keys, padlocks, horseshoes, tools and rings, brooches and also variety of Roman lead objects and ceramic vessels. Most have been classified, catalogued and presented to the public as part of the rich history of ancient *Sirmium*. There are also finds from three underwater archaeological excavations undertaken in 1994, 2003 and 2004. Which recovered an array of finds including well-preserved Roman footwear.

Kresimir Vukovic, Peter Campbell:
The river Tiber: objects and myth

The river Tiber has played a decisive role in the history of the city of Rome from its founding to the end of antiquity and beyond. This paper reconsiders the evidence for ritual activities on the river and its banks. The ancient festival of the Argei on the pons Sublicius should be linked with a number of myths that place famous deaths in areas of Tiber flooding. The Tarentum sanctuary was adjacent to the Tiber and housed the cult of the dead and the Saecular Games. Literary evidence for the cult of the god Tiberinus finds an interesting confirmation in the form of an imperial inscription (for which we offer a new reading). As many as 784 votive deposits dredged from the Tiber attest to a lived ancient religion that took place on the river banks, especially in and around the Tiber Island. Current maritime archaeological research offers insight into the Tiber's submerge contexts. Geophysics is revealing maritime infrastructure, bridges, and submerged terrestrial deposits. The river has great potential to provide further information on ritual deposits, which may be revealed by future fieldwork.

12. RAC GENERAL SESSION

Kris Lockyear:
Verulamium: busy places and empty spaces

Since 2013 the Community Archaeology Geophysics Group have been conducting geophysical surveys at the Roman city of Verulamium, Hertfordshire, UK. The group have completed 1km2 of magnetic gradiometry survey both inside and outside the town walls. Additionally, 27ha of Ground Penetrating Radar and 9ha of Earth Resistance survey have been completed on the northern side of the town.

This paper examines what we have learnt of the structure of the settlement, its busy places and empty spaces, by combining the geophysical survey data with information from previous excavations and with the results from the extensive test-pitting exercise undertaken by the Oxford Archaeological Unit in 2000. Areas of industrial activity have been identified along with areas of more modest housing and much grander structures. The route of the town aqueduct has been identified, along with a suggested location for the baths. The problems of topography, erosion and robbing are addressed. Finally, the problem of "the fosse", an area outside the town enclosed by a large ditch and bank, are examined in the light of the new survey data.

Christopher Grocock:

How low can you go? Functional literacy and agency in written sources from Roman Britain

The classical position regarding literacy in Roman society is that it was largely if not exclusively restricted to the upper strata. This paper will provide an initial evaluation of the social status of the users of written evidence, both producers and consumers, in Roman Britain, and will seek to compare their social positions and functions in society with the theoretical models hitherto posited. The considerable body of inscriptional evidence – mostly 'official' civic and military in origin – has been massively augmented in recent decades by the twin archives of writing tablets found at the military site of Vindolanda and at the Bloomberg site from Roman London. The former includes much communication which was 'internal' to the military but significant numbers also seem to involve non-military (or ex-military?) personnel; at London, a range of humble trades are represented in the finds. Further evidence from curse-tablets (from Bath and Uley in particular) and owners' graffiti on pots and tiles will be explored to shed further light on the question, taking into account the 'banausic' or 'humdrum' nature of the evidence, and addressing the extent to which different groups in society may have been, or required to be, 'functionally' literate.

Laia de Frutos Manzanares:

Religious iconography in lamps: the case of Baetulo (Catalonia, Spain)

Roman lamps were one of the most decorated objects, mainly because of the space they had on their central discus. There are many doubts about why some decorations were produced more than others. But surely buyers had their own preferences when they chose an ornamented lamp in the market.

So, if we pay attention to religious iconography, is it possible to determinate the beliefs of a community depending on which kind of decorations they bought?

This paper will analyse the case of the Hispanic municipium of Baetulo; through the study of their lamps, it will try to approach that question and maybe develop some theory for understand our city's ancient religious life.

Lucia Alberti:

Roman Doclea and its territory: new results of an Italian-Montenegrin multidisciplinary project

After the first enthusiastic decades of excavations with the discovery of large sectors of the public centre, the Roman town of Doclea lived a sort of amnesia, partially due to the lack of an integrated and global approach to one of the key-site of the Roman Dalmatia. After some interventions carried on by different international teams during the last century, a multidisciplinary project is in progress by Italian and Montenegrin research institutions. Started in 2017, new important results have been achieved, by means of the application of new methodologies and technologies, as remote sensing (satellite, aerial and drone images analysis) and geophysical prospections (Ground Penetrating Radar method), and the integration with historical approaches, as archival research, archaeological surveys and architectonic reconstructions. Still hidden edifices and roads, not previously known or misunderstood, new items found inside and outside the walls, are giving new light not only to the town itself but also to the surrounding landscape and its diachronic occupation. In particular, the contribution will present new data on the pre-Roman exploitation and control of the area and, inside the walls, on the so-called small and large *Thermae area*, offering new perspectives for the knowledge of the site and its enhancement.

Łukasz Sokołowski:

Empresses and the local communities: Antonine empress imagery from Palmyra and parallels in the Roman East

Since the publication of Meriwether Stuart's seminal paper on the distribution of imperial portraiture, there is no doubt the local communities of the Empire were familiar with Empresses' representations. Moreover, their portraiture appeared on commonly used coins with adjacent propaganda of specific virtues expressed by gestures and attributes. Additionally, literary sources confirm the existence of paintings depicting imperial figures, yet this evidence is more than scarce. The surviving sculptural evidence is vast but very fragmented, particularly in the context of local communities from the Roman provinces. This paper addresses the female representations from Roman Palmyra that depict women with coiffures, robes, and gestures that may be classified as reflecting the specific Antonine female standards attested by imperial imagery. The parallel visual evidence from other sites in Syria and the Roman East is also discussed to demonstrate the spread of the Antonine female imagery in the eastern Mediterranean, its popularity, and variations. Finally, the surviving archaeological and epigraphic data will be presented, proving the ongoing display and veneration of imperial statues in Palmyra and other smaller sites of the border Steppe. It seems that emulation of the imagery of Faustina Maior, Faustina Minor, or Lucilla was chosen by the women whose families aimed to project strong connections to imperial power structures among local audiences. Consequently, the imperial visual programme of unifying Greek values undertaken by the Antonines was reflected in female modes of display and the manifestation of specific female virtues. The process of the reproduction of imperial coiffures aiming to reflect current imperial policies seemed to be continued also later under the Severans and during the third century.

Maria Jaworska
New light from Colchis. Lamps from the Roman fort Apsaros and the Northern Black Sea Region market

Latest discoveries from the Roman fort in Apsaros (modern Gonio, Georgia) constitute an important point in the discussion on the supply system of the Roman garrisons located around the Black Sea Region. The joined Polish-Georgian expedition, excavating in the central part of the fort, found several dozens of fragments of the standard, round Roman oil lamps dated between 1st and mid-3rd century AD. Lychnological data obtained during the 2014-2019 seasons show many similarities with the corresponding material discovered in the ancient centres of the Northern Black Sea Region, such as Olbia Pontica or Chersonesos.

Taking into consideration the typology and relatively low number of lamps' fragments that were found in Apsaros, one can ask several questions. Why are there so little lamps found despite long-term and intensive excavations? Where did the lamps come from? Does the influx of lamps relate to the military supply system or does it reflect the regular Black Sea Region cabotage market? O maybe lamps from the Eastern shore of Colchis reveal another, complex and chronologically diverse problem?

Roberto Montagnetti, David Gerald Pickel, David H. Soren, Gabriele Soranna, Matteo Serpetti, Jordan A. Wilson:
How an integrated approach between the use of cutting edge technologies and the traditional archaeological methodology is implementing the knowledge on the development and transformation of rustic settlements between the imperial and late Roman times in central Italy: the case of the Roman Villa of Poggio Gramignano and its infant cemetery

The site of the roman villa of Poggio Gramignano, is located along the Tiber Valley in central Italy, in the Umbria region.

The archaeological research of Poggio Gramignano is a multi-year research project a partnership between the Soprintendenza archeologica dell'Umbria, the University of Arizona, Yale University, Stanford University, and the council of Lugnano in Teverina.

This project aims to better understand the villa and its surrounding area, with particular focus on the late Roman infant cemetery discovered within the villa's storage magazines.

The use of new cutting-edge technologies, such as the UAV and GPR in the archaeological survey integrated with the data coming out of four years of excavation seasons, are letting us to better understand the development and transformations of the settlement and the territory surrounding between the imperial and the late roman period.

Poggio Gramignano is therefore an example of the evolution of a Roman settlement between the imperial and late Roman times in central Italy.

Berber van der Meulen-van der Veen:
Germanic foederati on Roman soil. The supply of Roman military dress accessories to migrant communities in Germania Secunda

In this paper, I would like to present the research aims/outline and preliminary results of my ongoing PhD project entitled "The role of "barbarian" migrations in the fall of Rome. Changing identities in a transforming world". This project investigates whether we can archaeologically trace the migration of Germanic communities from Germania Magna to Germania Secunda in the late 4th and first half of the 5th century.

First of all, I would like to discuss the various approaches one can use to identify movement and migration in the archaeological record, specifically for the Late Roman period in the West. These include the distribution of select categories of material culture (such as dress accessories), building styles and dietary traditions. Secondly, the social position of Germanic foederati will be discussed in more detail, especially their relation to Rome. This will be done through the chemical analysis of copper-alloy dress accessories (belt sets and brooches) frequently associated with these groups from grave contexts (Böhme 1974). This paper will deal predominantly with how the chemical composition of these objects can inform us about production environments, in particular the question whether they were made in Roman fabricae or local Germanic workshops.

Claire Holleran:
Mapping migration in Roman Iberia

This paper will present the findings of a Leverhulme-funded project exploiting the rich body of epigraphic data from the Iberian Peninsula to explore population movement in the region in the first two centuries AD. The funerary monument of Gaius Camilius Paternus, for example, records his origins in Clunia in Tarraconensis, yet he died aged 25 almost 300 km away, at Capera in Lusitania (Hispania Epigraphica 21760), and was commemorated by a neighbourhood association of Clunians (vicinia Cluniensium). At the individual level, the information provided by such inscriptions is very specific, and subject to the habits of epigraphic recording and survival, but taken as a whole, the epigraphic data can illuminate patterns of movement and indicate quite how mobile – or static – the population really was. We do not know why Camilius Paternus was at Capera, or whether he had moved permanently, but we can see a mobile individual whose movement may have been facilitated by other Clunians. Working with a database of over 350 inscriptions, this project maps this and similar inscriptions in order to enable better visualisation and closer analysis of the epigraphic data. This paper will present this important new open-access resource, consisting of a searchable online database and an interactive map of population movement within (and beyond) the Iberian Peninsula.

Caitlín Barrett, Kathryn Gleason, Kaja Tally-Schumacher, Annalisa Marzano:
Whiteknights: A garden's secrets: planting, performance, and reception of the garden of the 'Casa della Regina Carolina' (Pompeii)

This paper will discuss the results of the Casa della Regina Carolina Project at Pompeii (CRC), which is studying the garden of the elite house at VIII.3.14.

This garden is atypical in many ways. It is one of Pompeii's largest domestic gardens, but it is not a peristyle garden or a commercial garden. It has not one, but two large shrines, an indication that the performance of religious activities was a prominent feature of this space. Our excavations determined that the garden was created over the remains of an earlier grand house, destroyed by the AD 62 earthquake. The study of this garden is thus also giving a glimpse into urban resilience after natural disasters.

The paper will discuss the layout of the ancient garden as revealed by our excavations and the implications for social, economic, and religious performance. It will also present the garden's modern afterlife: we determined that sometime after the first discovery of the house in the 19th century, the garden area was replanted by creating symmetrical planting beds, and this offers insights on the reception of ancient gardens at the time and on how preconceived 'ideas' on Roman gardens have influenced later studies.

14. FROM THE ROMAN TO THE LATE ANTIQUE BALKANS: CHANGES IN THE TOPOGRAPHY, FORM AND FUNCTION OF "ILLYRIAN" AND "THRACIAN" CITIES BETWEEN EAST AND WEST

Christophe J. Goddard, CNRS/AOrOc – UMR 8546 Research Centre, France
Dominic Moreau, University of Lille, France

The founding works of A.H.M. Jones, C. Lepelley and J.H.W.G. Liebeschuetz on cities in Late Antiquity have shown that their so-called decline and fall, defended by Fustel de Coulanges, were rather corresponding to profound changes in terms of topography, forms and functions, than to an actual disappearance. It is undeniable that the Roman classical model one day ceased to be, but it was not by leaving room for nothingness. There was indeed a lively world of Late Antique and Early Medieval cities. The last centuries of Antiquity even saw the foundation of new cities, some of them having never been anything but Christian cities. Given the magnitude of the impact of the great invasions/migrations in this region, the three dioceses of Illyricum, Dacia and Thrace were among those, in the Late Roman World, which saw their civic system most shaken by wars and population movements between the third and the eighth centuries. This session proposes to re-evaluate and to illustrate this historical issue in the light of archaeological discoveries of an overlooked region, especially with regard to the spread of Christinianity, by taking a look at the provinces that covered, in Late Roman times, the northern part of the Balkans.

Etleva Nallbani, Saimir Shpuza:
From the Roman to the late antique Balkans: Changes in the topography, form and function of "Illyrian" and "Thracian" cities between East and West

The paper will discuss, through new archaeological evidence, the fundamental transformations of the cities, in the Western Balkans, during Roman and Late Antique period. These processes will be considered in terms of topography, urban layout and features of public and private investments. The longue durée approach will focus on several important sites, embracing a large geographical area under

Roman and Byzantine Empires. In the Roman period, due to strong Hellenistic tradition, the Imperial urban layout required the adoption of new architectural and urban solutions. As a result, there's no urban standardization of the Roman city and very few ex novo foundations. From the 4th to the 6th c. AD, military imperatives dictated investments mainly on fortifications, reducing the protected size of most of the cities. Meanwhile, new modest cities were established transforming the physical and social urban hierarchy. Starting from the Late Antiquity, ecclesiastic buildings represent the main civic feature of the urban space, whose role increased during the Early Middle Ages as the main pole structuring all activities of the city.

Agnieszka Tomas:
Novae (Lower Moesia). The transition from the legionary fortress to the late Roman town

The legionary fortress at Novae, once established after the mid-1st century AD was manned by the First Italic Legion at least until the 30s of the 5th c. AD. The buildings of the Flavian phase are only partly known. More we know about the solid 2nd-century buildings, including the large headquarters, military hospital, baths and officers' houses. This typical layout covering almost 18 ha in a form of a "playing card" survived probably until the second half of the 3rd century AD. At a certain moment, the military buildings were overbuilt with new, civilian structures – both civic and private, including bishopric, cathedral and churches, private residences. The eastern legionary defensive wall was dismantled, and the area of 8 ha to the east of it was surrounded by the thick defensive walls. The question on when exactly it happened raises many doubts. Even more interesting is the question what was the reason for a change – the Tetrarchic military reform or barbarian raids which affected the settlements? Why the area to the east of the fortress was included and what was there before it happened? How the Novensians used this additional area? Recent excavations in this part of the site have brought some interesting discoveries which partly answer these questions.

Konstantinos T. Raptis:
From Roman to late antique Thessaloniki (four to sixth centuries). The Christianization of the Tetrarchic city and its impact on the urban topography of the late capital of Illyricum, between East and West

Notwithstanding the strategic importance of its location, Thessalonike—the third capital of the Macedonian kingdom—did not play important role in the Balkans until the Roman conquest, when the city found itself at the center of the broad road network organized by the Roman administration, and became the capital of the Province of Macedonia. However, the evolvement of Thessalonike into a major urban center occurred during the Roman Tetrarchy, when Galerius—Caesar (A.D.293-305) and eventually Augustus (A.D.305-311) of the East—chose the city as the seat of his military operations against the Persians, and especially after A.D.308, when he moved officially his court to Thessalonike, upgrading the city to one of the Tetrarchic capitals. Throughout the 4th century Thessaloniki gained the attention of the imperial court, becoming the seat of both Constantine I—for two years before the foundation of the new Capital—and Theodosius I, whose religious policy probably induced probably the first changes to the monumental topography of the city, shifting Thessaloniki towards a new era. On the basis of recent studies regarding the monumental, both religious and secular, architecture of Roman and Late Antique Thessaloniki, and taking into account new archaeological evidence about the Late Antique urbanism of the city, this paper attempts to detect the Christianization of Thessalonike from the 4th and throughout the 5th century, and to trace the impact of this gradual process on the urban development of a city with tetrarchic characteristics, until its conclusive transformation into a Christian metropolis, which seems to have been fully implemented at the turn of the 6th c. during the reign of Anastasius I (A.D.491-518), as a result of his efforts to enforce the religious and by extension political domination of Constantinople against the papal Rome in the capital of the Illyricum. Finally, the paper portrays the dissolution and/or the adaptation of this Late Antique monumentality as the City gradually entered the Early Middle Ages.

Carla Sfameni, Francesca Colosi, Tatjana Koprivica, Olga Pelcer-Vujačić:
From Roman to late antique Doclea (Montenegro): archival, archaeological and topographical research

In 2017 a research project was launched between the Italian National Research Council and the University of Montenegro, aimed at studying the city of Doclea and its territory, so far little investigated in a systematic way. Particular attention has been devoted to the transformations of topography and monuments between the Roman imperial period and the early Middle Ages (4th-7th c. AD). After a building phase, probably referred to the Diocletian age, we are witnessing well documented phenomena in other cities of Dalmatia and of the Roman world in general, such as the abandonment of public buildings and their reuse for other functions, mainly artisanal, the change in the orientation of the roads and the construction of Christian churches. This contribution illustrates the data that have so far been collected by an Italian-Montenegrin team that is working with a multidisciplinary approach: since the site was excavated from the end of the nineteenth century, we started from the collection and the analysis of archival and epigraphical data, and then we are proceeding with archaeological, architectural, topographical and geophysical field research. It is thus possible to begin to delineate the transformation of the city during Late Antiquity.

Jim Crow (University of Edinburgh, United Kingdom):
In the shadow of a megalopolis: the cities of Eastern Thracia from the fourth to the seventh century

This paper will present the findings of a Leverhulme-funded project exploiting the rich body of epigraphic data from the Iberian Peninsula to explore population movement in the region in the first two centuries AD. The funerary monument of Gaius Camilius Paternus, for example, records his origins in Clunia in Tarraconensis, yet he died aged 25 almost 300 km away, at Capera in Lusitania (Hispania Epigraphica 21760), and was commemorated by a neighbourhood association of Clunians (vicinia Cluniensium). At the individual level, the information provided by such inscriptions is very specific, and subject to the habits of epigraphic recording and survival, but taken as a whole, the epigraphic data can illuminate patterns of movement and indicate quite how mobile – or static – the population really was. We do not know why Camilius Paternus was at Capera, or whether he had moved permanently, but we can see a mobile individual whose movement may have been facilitated by other Clunians. Working with a database of over 350 inscriptions, this project maps this and similar inscriptions in order to enable better visualisation and closer analysis of the epigraphic data. This paper will present this important new open-access resource, consisting of a searchable online database and an interactive map of population movement within (and beyond) the Iberian Peninsula.

Bernarda Županek:
From the early to the late Roman Emona: understanding the transformation of the city

The archaeological remains of the colony Emona (under present-day Ljubljana, Slovenia) from the 1st and 2nd CE century suggest a "classical" Roman city of that era: a form of social, political and administrative organisation and an arena for a characteristically Roman lifestyle. A rectangular layout, street grid, insulae, a central forum, Roman architectural forms in both public and private sphere, city walls with towers and moat, extramural cemeteries and small finds all point towards this standard Roman function of Emona and a typical Roman way of life in the city. However, after a decline in the 3rd century (explained mainly by an economic dip due to several factors) in the 4th a radical change is visible archaeologically. In Emona, the 4th century was a period of prosperity, with infrastructure renewal and large-scale building being undertaken. At the same time, the defence system was strengthened and in a considerable part of building investments were geared towards Early Christian buildings, while secular monuments and sometimes also infrastructure such as sewers were often neglected or abandoned. In the paper, I address the following questions: How are we to understand these changes in the outward appearance of Emona? How can we explain the transformations of the 4th and early 5th centuries? And, did the transformation in the city's appearance go hand in hand with a different function of the city, and, relative to that, with a different way of life in Emona?

15. ALT-BORDERS: BETWIXT, BELONGING AND TRANSCULTURATION IN ROMAN BORDERLANDS

Caroline Pudney, University of Chester, UK
Tatiana Ivleva, Newcastle University, UK

A borderland is usually understood as a geographical or political area that can be physically situated between multiple places. Equally, a borderland can exist as more of a conceptual area of overlap between two or more things. This session aims to address the Roman borderlands through the perspectives of transculturation, where neither dominant culture nor the oppressed one prevail, resulting in the emergence of conceptual places of the 'in-betweenness'. We aim to move a discussion of the archaeology of Roman borderlands beyond their military aspects where the scholarship focuses on various military installations, the usage of space or that questions their individual purposes. Rather the session wishes to focus on the people of the frontiers that were stuck in betwixt various cultural forms. The social environment of the borderlands was multi-ethnic, an aspect that is sometimes forgotten due to research priorities focusing on the physical manifestations of a border. The borders were populated with a multitude of social groups consisting of indigenous peoples, Roman soldiers and their families, and traders from across the Roman world.

The session addresses the people and the objects that inhabited Roman borderlands, that moved through and across them, and their effect on the consequent creation of multiple cultural phenomena within the borderland communities. How did the convergence of cultures, forms of dress, languages and foodways contribute to the transcultural nature of the borderlands? Were the conceptual borders materialised within the borderland communities through preferences for specific jewellery types or eating and drinking habits? Can one talk about sub-cultures in a frontier setting? Papers will not be limited to the topic of physical mobility, however, but also focus on the mobility of ideas and concepts. The session aims to emphasise that such contested spaces as borderlands may have contributed to the rise of inter-identities and gender fluidity, or new, previously uncharted, human-object distinctions, entanglements and relationships.

Andrew Birley, Elizabeth Greene:

Cultural expression in a frontier settlement: Extramural occupation at Vindolanda in the early 2nd century CE

The site of Vindolanda is best known for its preservation of organic remains from the early period of Roman occupation in northern Britain, which sheds extraordinary light on the community that lived at this frontier military settlement. Recent excavations have revealed a few structures outside the Period IV fort dating to the early 2nd century CE, which offer a new perspective on the extramural occupation of the site during this pre-Hadrianic period. The structures and their contents help us understand varied social groups living outside the military fort with different motivations for settlement in this newly conquered region. This case study uses two discreet assemblages to evaluate how the inhabitants may have expressed identity differently through material choices. Some of these choices indicate deliberate agency, such as the shape of the structure, while others may have been more habitual and subconscious, such as food preparation practices. The material assemblages associated with each structure reveal both adoption and retention of behaviors, suggesting this was truly an area where "neither dominant culture nor the oppressed one prevail". This space fits well with the mandate of the session to explore areas of 'in-betweenness' and a careful investigation of all the evidence, including structural remains, leather shoes and more durable objects of pottery and stone, reveals a dichotomy of forms and choices by the inhabitants.

Maciej Czapski, Mustapha Atki:

The borderland of Mauretania Tingitana. Romans, indigenous tribes and foreign traders

Conquering the North-West part of Africa caused the incremental process of the new province's romanization, which had been named Mauretania Tingitana. Local inhabitants faced the new era of the foreign domination which was marked by founding the cities, constructing the roads, and harbors. In view of the Roman military dominance, local tribes had to accept the Rome's rules and to yield the Roman law. Some of the "peace altars" discovered in the territory of the ancient city Volubilis proves that not always the local people accepted the new order and tried to stir up some revolts. It might be a reason for the conflicts with local societies where traditionally animal husbandry played a key role. But in a peace time the indigenous tribes lived beside Romans and foreign traders visiting Tingitana and making business in the local markets. The research of the Polish-Moroccan gives an interesting insight in the borderland zone and its inhabitants in the period of Roman domination.

Michela Stefani:

The Rome's Pomerium between 3rd and 4th centuries AD. The conception of boundary and sacred space within pagan, Christian and Jewish culture

This paper concerns the Pomerium of Rome between 3rd and 4th centuries AD, the most controversial sacred and legal boundary of ancient Rome since its creation in the Republican era. The Late Antiquity is one of the most complex periods of ancient Roman history, with important economic and social changes and the coexistence of different cultures: pagan, Christian and Jewish. For this period, there is no direct archaeological evidence that allows us to understand the existence and evolution of the Pomerium, so it is necessary to take into consideration all the possible archaeological and historical data. Based on the assumption regarding the Pomerium in the Roman imperial era, burials are among the most indicative references to identify its course, as they limit, with exceptions, the expansion of cemeteries, as well as the arrangement of places of worship, since, for example, the eastern pagan deities were excluded from the sacred boundary. For this contribution, I will focus on the different conception of the sacred space and legal boundary between pagan, Christian and Jewish cultures, combining the data coming from the written sources related to the late roman Pomerium and the actual position of the burials and places of worship.

Rob Collins:

Frontier and Border: Conceptual constructs of peripheral space and their implications for interpretations of the Roman limites

The resurgence of 'frontiers' and 'borders' as popular concepts across academic disciplines in recent years has underscored the inconsistent lexicon associated with spatial peripheries in English-language scholarship. Even within the relatively well-defined sub-field of Roman frontier studies, the term frontier is applied and understood inconsistently; sometimes a frontier is a zone or region, while it can also be used to mean a linear work or narrow band of territory, and sometimes it is simply a synonym for border. Given the broad agreement that frontiers were contact zones (whether inclusive or exclusive) for different groups, ideologies, and behaviours, it is worth considering the extent to which our inconsistent use and understanding of the concept of frontier has an impact on interpretations of the frontiers and borders of the Roman Empire. This paper argues for a clearly articulated definition of a frontier that distinguishes it from a border, and further explores the degree to which the distinct concepts are complementary, mutually exclusive, and enable scholars to advance in our research of the Roman limites. The paper also highlights how modern paradigms for understanding space, are different from those peoples that populated the limites, to further distinguish between modern academic frameworks and a desire to achieve emic perspectives of historic cultures.

21. CHEDWORTH (UK): ONE VILLA, MANY APPROACHES

Simon Esmonde Cleary, University of Birmingham, UK
Jason Wood, Heritage Consultancy Services, UK

The Roman villa at Chedworth (Gloucestershire, UK) was first uncovered and reconstructed in the mid-1860s. The excavations were never published and no records have been traced relating to the Victorian protection and restoration works. Throughout the 20th century there have been further excavations and numerous campaigns of consolidation, cosmetic alteration and rebuilding of the remains. In the aftermath of the mid-1860s work, a number of articles showed how the villa, its mosaics and the evidence for Christianity were integrated into antiquarian approaches to the interaction between 'Roman' and 'provincial'. From the mid-20th century, with the development of stratigraphic excavation and dating, the conserved remains of the villa made it a key monument for the study of Roman Britain. Yet remarkably no comprehensive archaeological analysis of the site has been reachable until the last decade.

The speakers in this session have all been involved in various studies and in the preparation of the recently published Roman Society monograph. The session will bring to a wider audience the ways in which changes and advances in thinking about the villa have contributed to a re-evaluation of the site not only in the context of Britain but also as an example of the changes in villa studies in the wider Roman world over the last century and a half.

Fresh ways of interrogating the site through a programme of fabric survey and analysis, a reassessment of the material culture and new excavations have allowed a much more complex and layered narrative of the villa and of its reception since the Victorian era to be proposed. Many of these aspects can stand as metonyms for wider trends in villa studies.

Jason Wood:
Chedworth Roman Villa: Fabric Survey and Analysis

This paper sets out to answer not only the familiar question – how much of Chedworth Roman Villa is in fact Roman? – but also attempts to assess how accurately, or imaginatively, the villa was reconstructed after its initial uncovering and when and how the walls were subsequently conserved or changed. Untangling the original Roman fabric from the Victorian overlay, and distinguishing both from the numerous campaigns of consolidation, cosmetic alteration and rebuilding throughout the twentieth century, has been the cause of much head-scratching and mind-straining. Fortunately, help was at hand in the form of a remarkable set of measured plans and elevation drawings made by George E. Fox in 1886, just over twenty years after the villa's discovery. Crucially, it appears that Fox set out to record only what he considered to be Roman. Consequently his work provides a dependable starting point for distinguishing the original Roman fabric and from the Victorian reconstruction. The National Trust's collection of historic photographs and archive of conservation reports and correspondence have also been invaluable for unpicking the complex sequence of twentieth-century rebuilding and repairs.

The fabric analysis has identified new phases of the villa's development in the Roman period, key aspects of the Victorian reconstruction, and the nature and success of the various interventions throughout the twentieth century. The results are intended to facilitate enhanced factual presentation of the visible remains and assist in the prioritisation of future conservation work or other interventions.

Martin Papworth:
Chedworth Roman Villa: Recent Archaeological Excavation and Survey

Chedworth Roman Villa is one of the most complete and accessible sites of its kind within Britain. However, until 2010, much of the detail of the site was known only from scant records. The surviving documentation of the original 1864 excavations is confined to a short account presented to the Scottish Antiquarian Society in 1865

This paper will summarise the archaeological work carried out by National Trust archaeologists and volunteers within the two principal ranges of the upper courtyard of Chedworth Villa.

In the West Range, the excavations from 2010-2012 were in advance and during the creation of a protective cover building which has enabled long hidden mosaics to be revealed to visitors. Following on from this, a research programme was created to better understand the larger North Range and to determine the feasibility of displaying further remains within the rooms there. From 2013-2018, work took place within the bath house and adjoining rooms which better determined the sequence of North Range construction and the extent of buried mosaics.

Though much evidence was lost during the Victorian uncovering, significant new information on the evolution of the site from the 2nd to the early 5th century has been revealed. This can now be supported by radiocarbon and artefactual evidence as well as the results from high resolution digital scans of the newly revealed mosaics, supported by geophysical survey.

Though Chedworth was built within a province on the north west edge of the Empire, the discovery of high status finds has demonstrated that the people who occupied this place still had access to imports from the eastern limits of the Roman world - raising intriguing questions of identity and connection.

Simon Esmonde Cleary:
Chedworth Roman Villa: Chedworth Roman Villa and Changing Views of Romans and Britons

The uncovering in 1864 of the extensive remains of the villa at Chedworth with its mosaics and its evidence for Christianity came at a time of contending views as to how to view the Roman period in Britain. Immediately after its uncovering the Roman fabric was conserved, the mosaics protected and displayed and what is probably the earliest on-site villa museum in Europe constructed, meaning that the villa could be visited, its remains acting as a focus for discussion.

Victorian views of the Roman period sought to understand the place of the Romans and the Ancient Britons (or Celts) in the development of 'Our Island Story' and how, in a cyclical unfolding of history, the ancient presence of a great imperial power in Britain related to Britain's own empire at the time. Some writers sought to assimilate Chedworth to Roman practices as set forth by agronomists such as Columella or revealed by the excavations at Pompeii, while others saw the villa as expressive more of an adaptation of each culture to the other and of the beneficent impact of empire.

The evidence for Christianity was of huge interest for its contribution to the story of Christianity in Britain, especially to clerical antiquaries of the time. Again it could be read in relation to how the history of Roman and later Britain should be seen, and within the framing of views of the ways in which the three ancient races of Briton, Roman and Anglo-Saxon interplayed in setting in train the march towards Victoria's England. It was to be nearly a century before these views were replaced by ones more familiar in the modern literature, in which Chedworth continued to play an important part.

Julie Reynolds:
Chedworth Roman Villa and the National Trust: retrospect and prospect

This paper will present the National Trust's vision to bring to life, to our visiting public, the Golden Age of Roman Britain at Chedworth Roman Villa. Charting our starting position in the 1990s through to present day, the paper will discuss the catalyst report that recognised Chedworth as internationally significant, being one of a small group of substantial and richly decorated villas from the so called 'Golden Age' of fourth-century Roman Britain. The paper will examine the subsequent work that took place over the next decade to enable us to develop our knowledge of the Roman site in preparedness for a large capital project to re-present the villa, with the interpretative focus on the fourth century, a period of Roman Britain recognised as poorly differentiated to visitors at other Romano-British sites. Finally, the paper will share the outcomes of the project as completed in 2012, and the future ambitions for the presentation of the villa.

Rob Collins:
Frontier and Border: Conceptual constructs of peripheral space and their implications for interpretations of the Roman limites

The resurgence of 'frontiers' and 'borders' as popular concepts across academic disciplines in recent years has underscored the inconsistent lexicon associated with spatial peripheries in English-language scholarship. Even within the relatively well-defined sub-field of Roman frontier studies, the term frontier is applied and understood inconsistently; sometimes a frontier is a zone or region, while it can also be used to mean a linear work or narrow band of territory, and sometimes it is simply a synonym for border. Given the broad agreement that frontiers were contact zones (whether inclusive or exclusive) for different groups, ideologies, and behaviours, it is worth considering the extent to which our inconsistent use and understanding of the concept of frontier has an impact on interpretations of the frontiers and borders of the Roman Empire. This paper argues for a clearly articulated definition of a frontier that distinguishes it from a border, and further explores the degree to which the distinct concepts are complementary, mutually exclusive, and enable scholars to advance in our research of the Roman limites. The paper also highlights how modern paradigms for understanding space, are different from those peoples that populated the limites, to further distinguish between modern academic frameworks and a desire to achieve emic perspectives of historic cultures.

22. NEW ARCHAEOLOGICAL PERSPECTIVES ON ROMAN WINE PRODUCTION, STORAGE, AND TRANSPORT

Maureen Carroll

Archaeology offers enormous potential to advance our understanding of Roman viticulture and the movement of wine around the empire. A wide range of evidence is capable of illuminating the chronological and geographically changing patterns of Roman wine production and trade in different ways. The proposed session has, as its primary focus, recent physical evidence for production sites, storage facilities, distribution centres, and waterborne transport in Italy and the Roman provinces. In taking a comparative approach in this session, we hope to gain fresh insight into themes such as:

- *What was the process of setting up a winery and what resources for production and packaging could be mobilised?*
- *Were the vessels for wine storage and transport made locally or were they imported and why?*
- *What evidence exists for knowledge networks related to viticultural production and the expertise in vat construction and related practices?*
- *What do we know archaeologically about the transport of quality wines and the bulk transport of standard table wines?*
- *What provisions for storage facilities or warehouses were present in the ports and distribution points at the consumer end?*
- *On what might the scale of production and degree of market-orientation have depended?*

The session aims to explore these issues by presenting specific case studies, sites, and artefact assemblages, primarily in the central and western Mediterranean.

Candace M. Rice:
From plonk to Falernian: The logistics of Roman wine transport

Hundreds of thousands of wine amphorae across the Roman world testify to the quantity and variety of wine transported and consumed across the Roman world. Numerous textual sources attest to an acute awareness of the varying quality of available wines, as wines such as Caecuban, Falernian, Statanian, Calenian and Sorrentine were renowned while others were derided as vile. But much of the wine consumed, even that which had been imported, must have been considerably more average. The archaeological record reveals clearly that the Romans appreciated choosing from a selection of wines, both fine and not. Regardless of the quality, however, the mechanisms of wine transport are not well understood. Was the transport of fine wine inherently different from that of table wine? To what extent was table wine transported over long distances? This paper draws on several case studies in attempt to elucidate the ways in which the Romans satisfied their desires for wine, whether plonk or Falernian.

Maureen Carroll:
Making, Marketing, and Moving dolia defossa around Italy and the Mediterranean

Dolia were large ceramic wine vats produced by highly specialised craftsmen and they were used either within a wine cellar for the maturation and storage of wine or, in their truly gigantic format, for the water-borne transportation of wine in bulk from Italy throughout the western Mediterranean. The transport dolia were designed to travel repeatedly on tanker ships, but the dolia defossa buried in the floor of wine cellars on agricultural estates were a permanent part of the winery, and they remained in place potentially for decades, being re-filled annually. But they had to travel from the workshop where they were made to their destination as wine storage containers. For any vineyard owner, dolia defossa represented a significant expense and they were assets of the estate. Two major dolium production regions have been identified from stamps and through fabric (archaeometric) analysis, although the application of archaeometry to the study of these vessels is still in its infancy: the Tiber valley in Latium (with Rome at its centre) and the Garigliano (ancient Liris) valley on the border between Latium and Campania (with Minturnae at its centre). This paper explores the evidence for the dolia defossa made in these regions, the production quality and potential marketing of these specialised products, and their exportation for use in wineries at sites in western and eastern Italy and on land sites off the western Italian coast.

Jennifer L. Muslin:
Packaging wine in amphorae at Oplontis B, Torre Annunziata (NA), Italy: A chaîne opératoire approach

The complex of Oplontis B of the first century C.E. is the first large-scale amphora packaging and export centre known in the Pompeian suburbium, serving as an intermediary step between the production of wine on farms and its consumption at Roman tables. While amphorae provide the most ubiquitous evidence for packaging activities, the techniques and mechanics of filling these vessels en masse remain poorly understood. This paper uses archaeological evidence for wine packaging processes gleaned from the analysis of 1,350 Dressel 2-4 amphorae and related equipment recovered from Oplontis B to reconstruct the chaîne opératoire for the five main packaging

steps performed there during the final phase of the site's existence: 1) wine and amphora acquisition; 2) amphora washing and drying; 3) repairing and re-pitching of the amphora; 4) amphora filling; and 5) weighing, stoppering, labelling, and stacking of the filled amphora. Detailed analysis of the materials and their archaeological context, visual and chemical analysis of the extant pitch and residue, and physical experiences of interacting with the amphorae at Oplontis B allow us to address the who, what, and how of one of the most common industrial activities in the ancient world: packaging wine in amphorae.

Emlyn Dodd:
The spectacle of luxurious production at the newly discovered Villa dei Quintili winery (Via Appia Antica, Rome)

The Villa dei Quintili, situated just outside Rome on the Via Appia Antica, has been excavated and researched for centuries with a range of overlapping uses, chronologies, and phases identified from the 2nd century CE onwards. However, recent excavations made clear a new use of central spaces in the monumental villa – well preserved areas for the production of wine and a lavishly decorated cella vinaria from the 3rd century CE. Not only does this provide new evidence for viniculture on an Imperial property close to the centre of Rome, but it highlights production in a luxurious atmosphere with few, if any, parallels. This talk will provide an introduction to the Villa dei Quintili winery and explore what production might mean in this unusually luxurious atmosphere.

Carlos Palacín Capado:
Drinking neighbours' wine. Trade and consumption dynamics between wine productive areas: wine from Tarraconensis in the western Mediterranean and Hispania

Wines from Hispania Citerior Tarraconensis were one of the commercial products of Hispania referenced most frequently by ancient authors (most notably Pliny the Elder) through which we know the different "designations of origin" and their different characteristics. Wines produced on Lauro, Tarraco or Balearis were classified as exceptional quality, while the Laetania and Saguntum vineyards produced mediocre wines but were recognised for their great productive capacity.

The most recent studies show how amphorae related to these wines had a great diffusion in Gaul, in military markets on the German limes, and in Italy (principally Rome), with a sporadic presence in North Africa, the Balkans and Spain.

This study will focus on how this wine trade took place between producing areas, and it will analyse the factors that developed these particular and unbalanced commercial patterns. There are many unexplored aspects of this trade, such as quality differences and consumption models, the socioeconomic and demographic structure of Roman consumer markets, characteristics of commercial networks, and even the dilemma of using perishable containers (cupae, cullae) to assess the global traffic flow of wine from Tarraconensis and their possible role in the transport of mediocre wine.

Antoni Martín i Oliveras, Bruno Parés Sansano, and Josep Matés Porcel:
The Roman 'dolium' experiment: from the original archaeological vessels to the replicas

The dolium is one of the most common pottery elements of the instrumentum domesticum that appears in the excavations of Roman settlements, whether they were urban domus; villae rusticae (endowed with pars urbana, pars rustica and pars fructuaria); farms for intensive cereal crop cultivation; centres specialising in wine-growing and olive oil production; infrastructures for production, storage, distribution, and transport (horrea, cellae vinariae et oleariae); Roman tanker-ships; or establishments for the sale and consumption of the contents of the dolia (tabernae, cauponae, thermopolia etc.).

Despite this, the dolium has been one of the vessels least studied by scholars, perhaps due to its "gross" structural manufacturing and its functional condition as a large pottery container for the collection and storage of agricultural products considered more as an integral part of production and processing facilities than as a container itself.

The main purpose of this paper is to present the whole documentation and manufacturing processes of replicas of Roman dolia from the four originals located at the archaeological site of Veral de Vallmora. Today, these are presented in restored condition in situ in the Cella Vinaria Archaeological Park in Teià (Maresme, Barcelona, Spain). These containers have a similar body shape, differing mainly in their general dimensions and in the type of rims. They belong chronologically to Phase 1 of the site, corresponding to the first wine-growing estate whose full operational period is the 1st century AD.

The objective is to show all the processes of documentation and manufacturing of these replicas, from the dimensional metrological and digital photogrammetric study of the original archaeological vessels enabling a 3D theoretical model of the dolium, which in turn has served as a sample for making the different elements of the replica container by the master potter, to the drying and firing processes, transport, and installation in the original archaeological context located at the site in the so-called northeastern Cella Vinaria.

Finally, a first comparative study of storage capacities of the different dolia (originals and replicas) will be presented using different calculation systems -physical-mathematical, computerized, and empirical- in order to determine the degree of precision or deviation of each method.

24. THE NETWORKS OF ROMAN CRETE

Nadia Coutsinas, Institute for Mediterranean Studies (IMS), Greece

Long outweighed by Minoan studies, research on Roman Crete has been increasing exponentially since Ian Sander's pioneering work, Roman Crete (1982), with heightened interest over the last decade, with the publication of several books and the organization of conferences and conference panels in this field.

In this session, we will explore the networks of Roman Crete. Once viewed as a provincial backwater, recent archaeological research on the island has promoted the island as an economically dynamic hub, highly connected to the rest of Empire.

While being the southernmost and biggest of the Greek islands, Crete occupies a central strategic place in the Eastern Mediterranean at the crossroads of maritime routes, linking the Syro-Palestinian coast to Italy (and further to the Western Mediterranean) and the Aegean to Africa. Indeed, with the Roman conquest of the island, this special political and economic link between Crete and Africa is confirmed by the unification of Crete and Cyrenaica in a single province. With the new Pax Romana, maritime traffic develops in the Eastern Mediterranean, where Crete plays a central role, which can be seen from the imports, exports and craftsmanship influences.

On an island-scale, towns are interconnected with independent city-states no longer fighting each other as they did in the Hellenistic period. They are now all part of a cohesive entity, with their imperial capital at Rome. With flourishing trade, settlement patterns evolved, witnessing a surge in coastal development. Harbours constituted nodal points within the larger imperial network. In the Late Roman period, with the advent of Christianism, churches played a similar role within the island's network.

Nadia Coutsinas:
The coastal temples and related harbours in Roman Crete: intra-island and intra-Mediterranean connections

In the Roman period, Crete is far from being isolated. The island occupies a central strategic place in the Eastern Mediterranean at the crossroads of maritime routes. As such, Crete is in fact an economically dynamic hub, highly connected to the rest of Empire. With flourishing trade, settlement patterns evolved, witnessing a surge in coastal development. Harbours constituted nodal points within the larger imperial network.

We will focus on the major harbours of Roman Crete (Itanos, Chersonesos, Kissamos) and the "coastal temples" that are connected to them, highlighting both the maritime trade routes linking Crete to the rest of the Mediterranean and part of the Roman road network of the island (through archaeological evidence as sections of roads, bridges and miliaries).

This study takes place within the framework of the project "SettleInEastCrete: Spatial Dynamics and Settlement Patterns in Eastern Crete from the Classical to the Venetian Period". This project has received funding from the Hellenic Foundation for Research and Innovation (HFRI) and the General Secretariat for Research and Technology (GSRT), under grant agreement No 2388.

Anna Moles:
The spread of new burial practices in Early Roman Cret

In the first century following the Roman invasion of Crete in 67-69 BC we do not see many new tomb forms or burial practices. However, there are some examples stretching back even to the Hellenistic period of what would become a widespread pattern by the second half of the 1st century AD and continue throughout the 2nd century. This consisted of a diversification in tomb forms that involved greater monumentality with a range of both eastern and western Mediterranean styles evident and a trend towards communal rather than individual burials. The spread of new tomb forms and burial types throughout the island not only demonstrates the relationship of various centres within wider Mediterranean networks but also shows the connections present within Crete and the roles that different types of centres were playing within those networks whether along the north or south coast, harbour or inland settlements, or those centres with special status, such as the capital at Gortyn or colony at Knossos.

Rita Sassu, Vincenzo Tallura, Giulia Vannucci:
Roman Gortys' networks at the basis of the building program for the new provincial capital

The paper means to explore the intense architectural, spatial and urban transformations the city of Gortys underwent from the Hellenistic period to the Roman age, in the light of the latest archaeological discoveries by the University of Rome 'Sapienza', which excavated the area north of the so-called Praetorium during the last two decades, upon concession of the Italian Archaeological School of Athens.

Particularly, the contribution will focus on the crucial role achieved by the Praetorium district, analysing how the different monuments here built - including a stadium, a gymnasium subsequently turned into a bath complex, temples connected to the Imperial cult, a majestic Nymphaeum and an ensemble of massive funerary edifices recently brought to light - reveal the overall transformation of the urban landscape, which mirrors the conversion of Gortys from a Greek polis to a Roman capital. Each monument will be contextualised in its socio-political framework, highlighting the new role played by the city in the novel Mediterranean scenario. Specific attention will be paid to the reconstruction of the network of contacts, political ties and cultural relations at the basis of the intense building program affecting the considered sector.

Dimitris Karampas:
Harbours and ships in Roman Crete

A series of social, economic, and topographical changes occurred in the island of Crete following the island's annexation by the Romans in 67 BC. Specifically, in a timespan of a century Crete transformed into a significant commercial destination, while its role as a steppingstone for vessels travelling between eastern and western Mediterranean was further established. One of the most notable changes that occurred on the Cretan landscape was the expansion and development of the coastal sites. Harbour installations, administration buildings, baths, and theatres are only some of the works conducted along the coasts of Crete following the integration of the island into the Roman Empire.

This presentation aims to discuss the changes and developments that occurred into Crete's Maritime Cultural Landscape through the study of the available shipwrecks and marine installations scattered around the island. Via the study and interpretation of the extent coastal and underwater data the author will attempt to present insights on the facets of the economic and trading patterns that were introduced along the island and its coasts during the Imperial times. Furthermore, the nature and facilities of the available Cretan harbours and ports will be discussed, as well as the potential sailing routes followed between the island and the rest of the Roman world. Overall, the paper aims to provide an assessment of the Cretan coasts and their significance in the island's prosperity.

26. IN RESPONSE: EXPLORING PROVINCIAL IDENTITIES UNDER ROME'S GLOBALISING EMPIRE

Mateo González Vázquez, Universität Trier, Germany
Arnau Lario Devesa, Consejo Superior de Investigaciones Científicas, Spain
Dustin McKenzie, Macquarie University, Australia

This panel will explore the impact of Rome's globalising empire upon identity in the provinces, particularly as it pertains to the realities of 'glocal' identities across the ancient Mediterranean. Across the Empire, individuals and/or groups were able to balance a duality of selves, dependent on their circumstances, needs, and circles, resulting in uniquely localised versions of Roman identity. Moreover, the interconnectivity promoted by Rome's globalising Empire facilitated the diffusion of peoples, ideas, and technologies, resulting in an Empire that was diverse and multicultural to its core. This panel treats this conclusion as a jumping off point. Each paper presents a different region or people of the Roman imperial state, investigating the im-pact Rome's globalising presence had on the formation, negotiation, and continuation of local identities through numismatic, epigraphic, and textual evidence.

Mateo Gonzalez Vazquez, Arnau Lario Devesa:
Rural integration and ethnic identity in early Roman Iberia, c. 150-50 BCE

The realisation of major infrastructure projects during the last few decades in north-eastern Spain and the increasing popularity of landscape archaeology have considerably enriched our knowledge of the history of the rural landscape in the early Roman period (c. 150-50 BCE), and have spurred much debate about how to ex-plain and conceptualise patterns of rural settlement. Some archaeologists contend that we should think of new rural sites as representing a dense network of Roman farmsteads and, in some cases, these are categorized as a 'primitive' form of Roman villas. Others have highlighted the local elements of these settlements and argue that they reflect the persistence of the pre-existing 'local' territorial organization. Thinking in such binary terms, however, closes our eyes to more complex possible scenarios. One of the paradoxes of globalization is that the assimilation of foreign practices or concepts can reinforce

local distinctiveness, as a host of studies on identity and self-representation has shown. By combining an in-depth examination of recent excavations with a cross-disciplinary approach, this paper examines how the inhabitants of rural places are re-made during the period of early Roman expansion. In doing this, it aims to contribute to a better understanding of the range and complexity of rural settlement and open up new avenues of research in which the simultaneous occurrence of both globalizing and particularizing tendencies may be accommodated.

Marc Duret:

Greeks, Romans, or Bruttians: Who were the inhabitants of the Ager Crotoniensis?

This paper proposes a focus on the hinterland of Crotone (Calabria) during the Ro-man period. The inhabitants of the old chora of Crotone, originally a Greek colony, shared Greek, local and Roman cultures. By analysing the destiny of some people living in the area, their identities will be discussed. Epigraphy and archaeology give some interesting clues to understand who the inhabitants of the Crotone's territory were, for instance Amethustus, buried in Farina, or Oecius, who dedicates an in-scription to Hera, and not to Juno, in the 2nd c. AD. Some insights on urban sites will also provide information to enlighten the identity of their inhabitants: in Crotone itself, but also in the sanctuary of Capo Colonna, and in the nearby city of Petelia, whose population is more composed by Bruttians. This will allow to demonstrate that the role of each city during the first contacts with Rome have clearly influenced the composition of the local cultural identities for the next centuries.

Francisco Machuca Prieto:

Phoenician identities in Roman times: an issue of negotiated "glocal" identities from the East to the West

Nowadays we know that the Phoenician communities of the East and the West do not disappear after the Roman conquest. For example, the Phoenicians of what is today the southern coasts of Spain continued to shape their own cultural and political destiny despite the powerful impact of the Roman. In the Syria-Phoenicia region, the Phoenician identity, as a symbolic identity, survived for long in the empire. Some authors from there, in different genres, and men pursuing elite careers found Phoenician claims useful and constructive for their own interests. Roman imperialism in Hispania clearly resulted in struggles over territory, sovereignty and cultural identity, but the archaeological and literary evidences points to a reality different than that underlying much of modern narratives of opposition. Usually, those struggles have been conceptualized as Roman versus local identities, but not as a generational choices involving old and new practices. In the case of Phoenician communities of the Roman Empire, the survival of cultural elements rooted in traditions prior to the arrival of Rome certainly does not indicate an active and hostile resistance to Roman customs. On the contrary, this continuity is seen as a renovation, a way of giving free rein to integration without renouncing the particularities. This phenomenon could be linked to the need for legitimation of the local elites, immersed in the complex game of identity oppositions and aggregations that held the ideological structures of Rome and its imperium, given the considerable degree of flexibility shown concerning the integration of the conquered peoples.

Saskia Kerschbaum:

How to integrate imperial propaganda into civic identity: Nikaia, Caracalla, and an elephant quadriga

Especially the Imperial coinage is regarded as one of the most important media for the communication and representation of the Roman emperors. Thanks to their high degree of distribution and large numbers, coins can be regarded as an important mass medium and as a central element of communication and legitimation of imperial rule. On the other hand, the provincial coinage of the cities in particular was used to represent their own identity. This double potential of the coins to unite imperial and civic identity will be discussed in the following with reference to the Bithynian city of Nikaia.

Under Caracalla, the city coined a small bronze with the emperor on an elephant quadriga. At first glance, this coin is completely imperial in its propaganda, since Caracalla considered himself to be a second Alexander the Great or even being similar to Dionysos on his way to conquer the East. Nikaia met Caracalla's prefer-ence for Alexander, Dionysos and Herakles by minting a great variety of types playing with this themes. On second glance, it becomes quite clear, that Nikaia also used this coins to stage its own identity, because the city claimed to be founded by Dionysos and Herakles. This paper aims to show how Nikaia combined imperial propaganda and civic identity to new images emulating its own significance.

Luca Mazzini:

The place of Macedonian identity in Roman Phrygia and Lydia: ancient tradition and civic memory in face of the imperial power

The paper analyses how the claim of Macedonian ancestry by certain civic communities in Phrygia and Lydia was triggered by the presence of Roman imperial authorities and local civic competition. The epigraphic and numismatic data reveal that the use of the Macedonian ethnic to define collective identities on coins and on inscriptions became consistent when those interacted with the Roman

Imperial administration. This phenomenon is a case study of the fundamental role played by an external power, e.g. the Roman Empire, in local identity formation. The present hypothesis is tested in a limited area of the province of Asia, that is located between the ancient Phrygia and Lydia. More in detail, I analyse the settlements of Hyrkanis and Blaundos, which used to define themselves with the Macedonian ethnic on the civic coins and honorary inscriptions from the first century AD to the second half of the third century AD. The present paper addresses two key questions: 1) Why the Macedonian ancestry became important in the province of Asia under the Roman Imperial regime? 2) Was the Macedonian identity alternative to the claim of "Greek-ness"?

27. WHAT GODS DO YOU PRAY TO? BETWEEN GODS AND MEN, WORSHIPPERS IN ROMAN ILLYRICUM

Ljubica Perinić, Croatian Academy of Sciences and Arts, Croatia
Ivan Radman-Livaja, Archaeological Museum Zagreb, Croatia

Inga Vilogorac Brčić:
Worshippers of Isis and Mater Magna in Dalmatia

Cults of Isis and Mater Magna Cybele, goddesses of fertility and the protectresses of imperial power, have been attested by important artefacts and epigraphic evidence in the Roman province of Dalmatia. The earliest reliable evidence dates to the 1st cent. AD and the last to the third century AD. Twenty seven inscriptions, mainly from in Salona, mention worshippers of Mater Magna Cybele and only three inscriptions those of Isis. We shall examine all the inscriptions, which provide the most vital information not only about worshippers, but also about the appropriation of the cults in Dalmatia.

Anna Mech:
Women's role in public religion in Roman Dalmatia. Case study: Salona

The nature of available sources means that most of what we know about inhabitants of the Roman Empire is mostly reserved to the privileged groups of society, as they were likely to leave behind long-lasting monuments. Epigraphic monuments, especially votive inscriptions, are thus the best evidence for the presence of women in public places. They also allow any glimpse into the female participation in Roman religion in provinces. Besides the name of god or goddess, we can derive information from the text of inscription which would otherwise be completely unavailable. The aim of this paper is an attempt to reconstruct the religious life of women who lived in ancient Salona and its neighbourhood. The paper will also present some important aspects of their private life. Epigraphic monuments were set up – among other reasons – to express the social position of the dedicant. Therefore, it is also possible to track the dedicant's ethnical origin, find their families or examine the individual intentions of their prayers. Through this analysis, the most valuable insight will be reached into the beliefs of individuals and in what ways the "female religiosity" differed (if at all) from the dominant ancient male narrative.

Dino Demicheli:
Votive inscriptions from Salona used as spolia

On wider area of the former Dalmatian capital Salona around 6000 inscriptions were found among which many in secondary use. Some of the most important Salonitan inscriptions were found as spolia, mostly used as building material. This praxis started during Roman times, and it is best attested in city walls which have been continuously maintained, rebuilt or fixed from 2nd to 7th centuries. The aim of this paper is to present several epigraphic votive monuments which were found reused during the archaeological excavations on the territory of Salona. Most of them have been already reused until the Late antique period, while three of them were reused during the later periods. Three of them were dedicated to Jupiter, two can't be determined, one was dedicated to Juno, one to Magna Mater, one to Liber, while the most interesting altar was dedicated to Theos Hypsistos. It is the first attestation of this deity not only in Salona, but in whole Dalmatia.

Amela Veledar:
Silvanus und Diana als göttliches Paar im Römischen Dalmatien

Das Ziel meiner Masterarbeit ist, die antiken Gottheiten Silvanus und Diana gemeinsam als göttliches Paar zu analysieren, wobei ich neben stilistischen und ikonographischen Unterschieden zu den Einzeldarstellungen auch etwaige Besonderheiten im Kult herauszuarbeiten versuchen werde, um zu klären, warum in Dalmatien gerade diese beiden Gottheiten zusammen verehrt wurden. Obwohl Silvanus und Diana beide italischen Ursprungs sind, scheinen die autochthonen Typen bei beiden Gottheiten auf einen indigenen Kult hinzuweisen, der möglicherweise auf autochthone Wurzeln zurückzuführen ist. Besonders sind auch die regionalen

Unterschiede bei den Darstellungen, wobei lediglich grob zwischen der Küstenregion und dem dalmatischen Hinterland unterschieden werden kann. Ältere Konzepte, die Diana und Silvanus in Dalmatien allein als Ergebnis einer interpretatio graeca und/oder interpretatio romana sehen wollen, können gerade vor dem Hintergrund der aus Opačići oder anderen hinterländischen Reliefs nicht vollends überzeugen. Sowohl der Kult der Diana als auch der des Silvanus scheinen eine geeignete Vorlage gewesen zu sein, um ursprünglich indigene Traditionen in einem globalen römischen Kontext einzubetten. Das Erfolgsrezept der Anwesenheit dieser beiden Gottheiten scheint wohl mit ihrem Wirkungsbereich als Beschützer der Natur und der Landwirtschaft zusammenzuhängen, wobei sich ihre Kompetenzbereiche zweifelsohne überschnitten. Daraus ging letztlich wohl auch die Vergesellschaftung als göttliches Paar.

Danijel Dzino:

Afterlife of the Roman gods: The use of pagan dedicatory inscriptions in early Christian churches from Dalmatian hinterland

While appearance of the Roman cults in Dalmatian hinterland reflects cultural contact and interaction between imperial coloniser and colonised indigenous population, the Christian appropriation of earlier pagan sacral places occurred in a very different circumstances. The use of earlier pagan images, tombstones and votive inscriptions as spolia in early Christian churches is visible on numerous places in Dalmatia – especially outside of major coastal cities. This frequent appearance of pagan spolia in ecclessiastic buildings was interpreted by several Croatian scholars, such as for example Migotti and Milošević, as an evidence that process of Christianization in Dalmatia in most cases masked the change under the guise of continuity of the cult on existing sacred places.

This paper will look into several cases of early Christian basilicas from deep Dalmatian hinterland where pagan spolia were discovered. Building on earlier scholarship which assumed peaceful transition from paganism to Christianity, the paper would interpret appearance of these spolia as an outcome of conscious choices and deliberate social strategies chosen by educated clergy and local elites who were in charge of building these basilicas.

Ljubica Perinić, Ivan Radman-Livaja:

Stratification of votaries according to Silvanus' epithets – Case study of two neighbouring provinces

Our main aim is to investigate whether the affiliation of the votaries to a certain social circle was somehow related to a particular epithet of the god Silvanus. After reflection, we decided to process votive inscriptions dedicated to the god Silvanus from two neighbouring provinces, Dalmatia and Pannonia, rather than within the rather loose geographical framework of Illyricum. Using Dalmatia and Pannonia as a case study, i.e. gathering comprehensible data from two clearly defined administrative and geographical entities within the Empire, should provide, in our opinion, a more complete picture of the potential phenomenon. All the votive inscriptions will be analysed from the geographical point of view and by social and gender categories, in order to determine straightforwardly if the social profile of worshippers and/or their ethnic origin leaned towards certain epithets of Silvanus. Since all the votive inscriptions will be collected, it is to be hoped that different connections between devotees and the cult should be established, like for instance the link between dedicants and particular epithets or social positions of devotees, their origins, as well as all the elements of identity which might be obtained or deduced by analysing votive inscriptions.

Salmedin Mesihović:

Principes of civitates peregrinae in province Illyricum Superior/Dalmatia

In available epigraphic monuments, which are found in province Illyricum Superior/Dalmatia and published to this day, there is a mention of institution of principes of civitates peregrinae. These seven epigraphic monuments offer a set of information that is sufficient only to draw a small number of conclusions about institution of princeps in peregrine civitas. They confirm existence and functioning of the institution of princeps in peregrine civitas of Upper Illyricum / Dalmatia certainly during 1st and first half of 2st century AD. The institution of princeps occurs in civitates belonging to all three provincial conventus: Iapydes of conventus in Scardona, Dalmatae and Mazaei of conventus in Salona, Daesitiates, Docleates and Dindari conventus in Narona. Barers of princeps title are members of local indigenous elites. The process of cultural Romanization progresses faster in the province and its elite than process of legal-political Romanization, and even before receiving Roman citizenship, domestic elite accepts and adopts Latin literacy, a way of life characteristic of Greco-Roman classical civilization and acceptance of Roman state. The reception of Roman citizenship was intensified immediately after the end of Fourth Civil War. Holders of the princeps title may at the same time be holders of other functions at level of peregrine civitas, such as in specific cases praepositus and priest of the imperial cult. The institution of princeps is also recorded within smaller components (tribes?) of peregrine civitates, and in that form it continues its continuous existence even after process of municipalization.

Tea Fumić:
The cult of Jupiter Dolichenus in Pannonia

The cult of Jupiter Dolichenus has spread from the city of Doliche (Düluk in modern-day Turkey) to the Roman West in the late 1st / early 2nd century AD. This paper examines the epigraphical and material evidence of the cult in Roman Pannonia. The main emphasis is the analysis of the evidence that provides insight into the social and cultural diversity of his followers. The paper includes a comparison study of the god's image, cult practices and temples in the eastern and western provinces, in order to answer the question how the western followers shaped and changed the cult to better suit their social and religious settings.

28. GOING BEYOND FUNERARY ANOMALIES

Liana Brent: Partial, Partible and Permeable Bodies

Manipulation. Damage. Disturbance. Violation. These are some of the descriptors that are applied to unusual scenarios of post-burial manipulations in mortuary contexts. Whether referring to missing body parts, burials that intersect or those that destroyed an earlier grave, different types of post-depositional activities present an interpretive challenge for archaeologists who excavate Roman cemeteries. These unruly cases of disarticulated and incomplete skeletons rarely fit into neat interpretive categories or within the parameters of normative burial rituals. They can be variously interpreted as post-burial manipulations, as attempts to quiet the restless dead, or as a reflection of the deceased's liminal status in life. Questions of why such manipulations occurred or what they represented are not easily answered, and accordingly, I propose to shift the focus away from questions of agency, intent and meaning. Instead, this paper explores Imperial-period Roman cemeteries for archaeological evidence that can shed light on the responses to such manipulations and how they represented strategies for ongoing interactions between the living and the dead.

Špela Karo, Alenka Miškec, Borut Toškan, Bernarda Županek, Massimo Delfino:
Well buried mystery: re-deposited skeleton in the Roman period burial grounds at Kozolec in Ljubljana, Slovenia

The site of Kozolec (Ljubljana, Slovenia), excavated between 2010 and 2013, was a part of the northern cemetery of the Roman colony Emona. The site yielded 61 graves dating from the second half of the 1st century till the first half of the 5th century and various features, amongst them a boundary ditch and a stone well.

Wells have been found as a part of a cemetery infrastructure throughout the empire. Interestingly, the function of the well at Kozolec changed in the 3rd century, when in was filled with a set of deposits and its upper part used for a construction of a double grave. Deposits in the well were heterogeneous, with a material that could be interpreted as remains of cleaning and maintenance activities in the graveyard: parts of stone and brick grave structures as well as some small finds and animal bones. But, intriguingly, among these deposits a partially preserved skeleton of an adult male was scattered, and animal bone record features a large number of dog and horse finds as well as several dozen amphibian remains, all of which may have ritual connotations.

In the paper, we discuss a hypothesis that the deposition of the skeleton and other material into the well was a ritual action, possibly connected with either a (temporarily) ritual closing or re-consecration of the graveyard or with the status/role of the individual thus deposited.

Alison Telfer, Don Walker:
How did all those skulls get there? The mystery of the upper Walbrook valley

The Roman cemeteries in the upper Walbrook valley to the north of London, England, have been subject to archaeological investigation over a number of years. Past work has focused on the use and manipulation of the landscape and the discovery in and around the river channels of a large number of disarticulated human skulls. Recent work by MOLA on behalf of Crossrail uncovered further clusters of skulls within a roadside ditch and a river channel. To date there has been no agreed explanation for the presence of these deposits. Past theories have included warfare, collection of battle trophies, execution, persistence of Iron Age religious practices, taphonomy and cemetery management. Detailed study of the deposits in which the skulls were found, as well as the bone itself, provides further clues to the origins of these skulls and the cause of their deposition.

Alison Klevnäs, Astrid Noterman, Edeltraud Aspöck:
Disturbed burials in the cemeteries of post-Roman Europe.

This paper presents new research into a long-recognized phenomenon: the widespread reopening and ransacking of burials in the inhumation cemeteries of early medieval Europe. Grave disturbance has been recorded at hundreds of burial grounds since the 19th century, but until recently there was almost no synthetic work comparing evidence between sites and regions. The practice was commonly glossed as 'grave-robbery', and assumed to be an unlawful activity with material motives. Hence reopening was seen mainly as a problem: disturbance not only of the dead but also of the archaeological resource, with analysis of burials, grave goods and social structures all hindered by interference with the original burial context.

However, the last few years have seen significant new findings about the date, extent, and types of grave reopening seen in this period. Detailed investigations of reopening evidence have been carried out in five different areas of early medieval Europe (reopenedgraves.eu). A project based at Stockholm University is now exploring reopening at a European-scale, including its connections to Late Roman and Migration Period grave manipulation customs. Grave reopening was a widespread and intensive practice, with untapped potential for understanding contemporaneous attitudes to death, decay, commemoration, possessions, and ancestors.

Alison Klevnäs, Astrid Noterman, Edeltraud Aspöck:
Identifying and interpreting reopened burials: new evidence and new methodologies

This paper reviews the start of the art of taphonomy-based studies of reopened graves. The focus of the paper is archaeothanatology, but we also consider results from micromorphology and digital archaeology.

Evidence is drawn from the widespread reopening of burials seen in post-Roman Europe (publications and project information at reopenedgraves.eu). Disturbed graves have been observed since the first antiquarian excavations, especially in the 'row-grave' cemeteries of the Merovingian kingdoms, but until recently were rarely investigated in detail. They have also not been discussed in relation to earlier reopening practices in the Roman provinces. Further methodological developments come from the central European early Bronze Age, similarly characterized by inhumation graves involving the interment of the complete body soon after death, usually in an organic container in a single ground-cut grave.

Aiming to promote best practice in excavation and recording, the paper showcases how a variety of approaches can be used to explore why a grave has been reopened in the past. Answers to the following questions are needed: When was the grave reopened? Which practices were carried out upon reopening? How have the human remains been treated? Have objects or human remains been moved, removed or deposited?

Reanna S. Phillips:
Inter-'actions' with the Dead: Burial Process and Performance in Roman Britain

Conventional archaeological approaches have categorized burial practices by final excavated context, encouraging the formation of dichotomized burial 'types'. While increasing evidence demonstrates variation and mortuary manipulation in the burial practices of Roman Britain, archaeological interpretations can be inhibited by this pervasive typological framework which depicts burials as singular events rather than the culmination of extended mortuary rituals of engagement and interaction between the living and the dead.

This paper will explore interaction with human remains through archaeological evidence of funerary performance and extended processes of burials in Roman Britain. Utilizing selected examples from a wider study of the cemetery sites at Cirencester, Lankhills, York, and London, this paper will investigate evidence of extended interaction and mortuary manipulation of remains. The evidence from these final mortuary contexts will be examined in terms of their extended processes of funerary commemoration and mortuary interaction, as well as their significance to theories of performance and the enactment of social memory. This dynamic approach seeks to integrate the evocative, mnemonic performances of mortuary manipulations into the wider spectrum of burial practices as extended interactions between the living and the dead.

30. ROMAN POWER PLAY – NEW PERSPECTIVES ON ROMAN IMPACT ON LOCAL SOCIETIES IN FRONTIER CONTEXTS

Tanja Romankiewicz, University of Edinburgh, UK
Manuel Fernández-Götz, University of Edinburgh, UK
Andrew Lawrence, University of Bern, Switzerland
Christoph Rummel, Roman-Germanic Commission of the German Archaeological Institute, Germany

Andrew Lawrence:
Power and Domination along Rome's northern and western frontiers

The impact of Roman imperialism onto local societies has been profound, known through direct events from the historical record, but also through wider and longer-term transformations detectable in the archaeological record: in shifts in settlement patterns, architecture and other forms of material culture. The exercise of Roman influence, power and domination did also not start with the recorded conquest of a region, but could be felt decades before, triggering a range of local actions and reactions. These, however, varied from area to area, from community to community, depending on existing socio-economic circumstances, as well as on the pre-existing stability or volatility of local power structures. And Rome's strategy varied accordingly, too. This regionality of responses has become increasingly more complex thanks to new data sets from developer-funded work, especially via large-scale investigations from various peripheral regions of the imperium romanum.

This paper aims to give a critical assessment on the current state of research on local settlement dynamics in light of Rome's power and growing domination from a selection of frontier zones in the Roman West. Key questions to ask concern settlement patterns before and after the construction of the Roman frontier systems and whether any transformations can be related directly to Roman impact. The different chronological and geographical trajectories will then be compared and contrasted to arrive at a new proposal for understanding Roman frontier power-play.

This contribution will act as an introduction to the session and highlight areas for further discussion. It is part of the research project "REASSESSING ROMAN IMPACT – GEOGRAPHIES OF POWER AND DOMINATION IN THE ROMAN WEST AND BEYOND 200 BC – 200AD", funded by the Swiss National Science Foundation (SNSF).

Manuel Fernández-Götz, Dave Cowley, Christoph Rummel:
Roman power in a liminal landscape: Multi-scalar analysis of settlement patterns in SW Scotland

The impact of Rome in northern Britain has been a topic of ongoing research interest since at least the 19th century. The fact that Scotland is one of the few regions in Western Europe that was never fully occupied by the Roman army, and that the frontier line fluctuated over the centuries, makes it a particularly interesting case study for analysing episodes of resistance and collaboration, as well as the wider question of the impact of an empire beyond its actual political border(s). This paper will introduce the preliminary results of a recently completed British Academy funded research project focused on the region around Burnswark hillfort in southwest Scotland. The multi-scalar approach involving the rationalisation of existing information within a common database, analysis of high-resolution LiDAR data, and large-scale application of geophysical surveys has led to the identification of numerous new sites. This creates a more comprehensive picture of the transformation of settlement landscapes in the periods immediately before and during the Roman presence, allowing us to ask new questions and provide some new answers about the nature of interactions in this northernmost frontier of the Empire. Finally, the paper will introduce a new Leverhulme-funded project that will reassess the topic on a larger scale south and north of Hadrian's Wall over the next three years.

Roger White:
Offa-ring a new perspective on the Welsh Marshes in the Roman period

The standard work on Roman military activity in Wales is now in its third edition but its title is problematic. Roman Frontiers in Wales and the Marches suggests a situation similar to that confronting the northern walls of Hadrian and Antonine: a division between 'us' and 'them'. While no case for such a frontier is put forward in the book, it is true that in the public perception there was a hostile marcher zone in the Roman period along what later became the Welsh marches. This is thought to continue the mutual hostility between the Iron Age tribes of the area, a conclusion reached by observing the dense scatter of hillforts in the zone. What was the reality of the situation and what can we learn of the Roman period by looking back into the Iron Age situation, and forward to the Norman marcher lordships?

31. HYBRID ECONOMIC PRACTICES IN THE ROMAN WORLD

Mateo González Vázquez, Universität Trier
Jordi Pérez González, Universitat de Barcelona

One of the paradoxes of globalization is that the development or assimilation of foreign practices, objects or concepts reinforces self-identity at a local level. The concepts of 'glocalization', that is, the simultaneous occurrence of both globalizing and particularizing tendencies, and of cultural hybridity, have both helped to adjust our perception of cross-cultural contact in the ancient Mediterranean. Despite these recent challenges to the acculturation paradigm and the acknowledgement of colonial entanglement and negotiation, the prevailing historical vision tends towards a structural reductionism when it comes to economic practices, in which the catalyst for change lies exclusively in the macrostructures of economic power and the mechanistic

articulation of modes of production (Pitts and Versluys 2015), with colonisation providing something of a tabula rasa for previous economic practices.

This session aims to move beyond dichotomous analytical constraints and reconceptualise the complex interweaving of different cultural and economic phenomena as coeval or contemporary, by incorporating the postcolonial notion of hybridity in the study of economic systems. Zein-Elabdin's (2009) examination of economic patterns in modern Africa has been of particular inspiration. In her study, she argued against what she called a 'double erasure of culture': the conflation of modernity with development (modern/developed, traditional/underdeveloped) and an insistence on the possibility of understanding economic systems outside their cultural context. Building on this basis, we invite papers that try to interrogate not so much how certain forms, patterns or practices persisted beyond the baseline of the Roman invasion, but rather, how disparate economic and cultural phenomena intersect in the Roman world.

Emilia Mataix Ferrándiz:

Legal pluralism in a "glocal" economy: how to deal with diversity in Roman trade?

Roman trade is one clear example of legal pluralism in action, as it was part of a customary and transnational tradition; it constitutes a rich source of experience, which in legal terms implies a system of interaction among actors from different legal backgrounds and with differing access to justice. Trade implied connections among subjects of different legal backgrounds, in a context of imperfect information and sketchy legal enforcement. Thus, some of the rulings composing the Roman trading experience could have been partly inspired by official law, partly by local traditions, and partly by group-based practices or custom.

The aim of this paper is to overlay that approach with the economical conceptualization addressed in the session, in order to appreciate the entanglement of the legal framework in the diverse economies integrated in the Roman Empire. The paper will address concrete case studies, in which the examination of legal sources and material culture associated with these will allow to understand the impact of the Empire's official rulings in local practices and their related economies. In that way, I will be able to challenge the assumption or hybridization of western Roman law in the provinces, as well as with the persistence of local laws and customs in different areas and their reflection in the mosaic of economic practices occurring in the Mediterranean.

Violeta Moreno Megías:

Creating a tradition when the tradition is over. Turdetanian pottery technology as cultural resilience in the Romanization process

During the Romanization process of the SW Iberian Peninsula, the area called Turdetania by the Roman sources underwent major changes in the organization of the economic resources in order to provide substantial benefits to Rome. The reflection of this new economic system can be observed in the pottery production, while the lower Guadalquivir Valley offers a particular situation of continuity for the pre-Roman tradition. Besides the new Roman typologies of transport containers, tableware or common ware, Turdetanian forms can be found until the 1st century BC. The coexistence of two types of amphorae production, sharing the same firing kilns but not the same fabric recipe or technology, has been documented around 15 a.C. in Carmona, while the funerary contexts of the same years show the use of Turdetanian painted ware for the Roman tombs.

However, the previous heterogeneous pottery production of the Turdetanii appears now as a standardized and concentrated production, part of a strong pottery tradition that crystallizes and defines itself only after the arrival of the Romans. This paper explores the role of the Roman intervention as an incentive for the local populations to define their own identity, using pottery production as an expression of their cultural resilience.

Roksana Chowaniec:

Articulating the Roman culture in Hellenistic Sicily: the small finds illustrate the local history of ancient town Akrai, SE Sicily

The presentation presents new multidisciplinary studies of ancient town Akrai, SE Sicily and open an avenue for understanding processes of acculturation and assimilation of introduced Roman elements with local Hellenistic traditions. The relative peace enjoyed by the provincia Sicilia created an exceptional opportunity for tracing such cultural mechanisms. This Greek interior town, after Roman conquest of the Syracusan Kingdom after 212 BC, similarly to many other Sicilian urban centres, became labelled as the stipendiariae civitates. But more than two centuries later, the town being under the Roman administration, expressed the same and continued, Hellenistic tradition. The prevailing number of 'purely' Roman artefacts appeared not before the end of the 1st century BC or the beginning of the 1st century AD, when a new group of settlers - associated with the process of granting Sicilian land to Roman veterans - might have arrived in Akrai, and found the local living conditions and material culture less than satisfactory. The recent excavations show that these new elements tend to appear through peaceful settlement rather than some military conflict. It does not mean that the culture was standardised. This is visible both in material culture and epigraphic traditions

Joan Campmany, Arnau Lario:

Continuity, adaptation and rural landscapes in the beginning of Roman rule: the Laietania region (northeast of Hispania Citerior) as a case study

One of the most important aspects of economic and political research in Roman archaeology is the relationship between the city and its countryside. The northeast of the Iberian Peninsula, one of the earliest areas of Roman colonization, witnesses a series of transformational changes in the material culture and settlement patterns during the late republican and early imperial periods. This evolution has been associated with the initial phases of Roman occupation and to the later foundations of Roman coloniae.

This paper compares and examines the various economic developments of the rural settlement in two targeted areas of the region of Laietania in the conventus Tarraconensis (Hispania Tarraconensis): the Llobregat/Rubricatus river estuary (now a delta) and the hinterland of the Roman town of Iluro (Mataró). We argue that both areas, considered as 'marginalized' from the perspective of the traditional Roman agricultural production system, represent a good case in point for the study of economic hybridization and "glocalisation" in the context of a growing pressure from early centuriations and the implementation of the villa system. Furthermore, according to us, it is the apparent isolation from the main ager of the Roman colonia what allows both regions to develop original agricultural models.

Daniel J. Martín-Arroyo Sánchez:

Economy, religion, and local identities in the making of a Roman colony: the case of Hasta Regia

Hasta Regia was an agrarian center located on the banks of the lacus Ligustinus (current Guadalquivir Marshes, southern Spain), and linked to the Baetis River, main trade route in Baetica. Gades, the neighboring maritime powerhouse and administrative capital, had a remarkable influence in its economic and cultural development. Nevertheless, contrarily to Gades, pre-Roman Hasta needed to overcome several challenges before the city rose back to prosperity as a Roman colony.

Because of its resistance against the Roman conquest, the city had lost control over its territory. The migration of Italians created a juxtaposition of communities, and traditional economic practices met new ones, with a probably stronger trade-orientation (wool, grape-based goods…). In this context, religious syncretism found a new expression under the cult to Juno Regina, probably as a result of the link between local and foreign idiosyncrasies. This cult may be associated with some economic aspects of the local culture (agrarian and navigation calendars, periodic markets…), interweaving Punic and Italian traditions. As hypothesis, the resulting common identitarian symbol allowed elites unifying their communities in an easier way after the Civil Wars. Different archaeological evidences (numismatic, amphorae production, road building…) are regarded in support of the proposed evolution of this hybrid community and its economic features.

Robinson Peter Krämer:

Sanctuaries as cross-cultural contact zones and hybrid economic institutions. A 'glocal' perspective on Rome, Latium vetus and Southern Etruria (7th–5th cent. BCE)

Mediterranean economies increased significantly during a short period in the late 7th/early 6th century BCE. New erected sanctuaries in contact zones could function in this period as emporia, or 'ports of trade', and permit in their role as neutral and secure institutions cross-cultural trade and interactions across the Mediterranean Sea.

In this paper, I focus on the coastal zone of Latium vetus and Southern Etruria during the 7th–early 5th centuries BCE and examine the role of sanctuaries in Archaic South Etruscan, Roman, and Latial societies. A particular emphasis lies on the socio-economic impact of these sanctuaries on trade and exchange on different scales (local, regional, global) and with different actors, such as foreign traders, local craftsmen and merchants, as well as miners, shepherds and pastoralists from the hinterland.

Kaja Stemberger Flegar:

Lanam fecit without tombstones? Expression of status through wool-working items in graves

This paper aims to address one of the groups of female graves that can be recognised at Colonia Iulia Emona (modern day Ljubljana, Slovenia). The graves of this group contain little to no jewellery, but mirors and distaffs are frequent. I argue that these graves convey a similar message as the 'lanam fecit' tombstone inscriptions, and furthermore that such grave arrays are more likely an expression of social status rather than professional occupation. This argument is supported by epigraphic and textual sources as well as art. At Emona, tombstones related to grave units are very much the exception rather than the rule. Nevertheless, traces of different professions can be found in a handful of Emona's graves. I compare the data from this set of graves with the 'distaffs¬ and mirors' group in terms of burial manner, furnishing, and location, to determine the differences and potential similarities in terms of identity. I also compare my findings against graves from other cemeteries of Roman Slovenia.

32. COINAGE, CULTURE AND SOCIETY IN ILLYRICUM AND THE DANUBIAN PROVINCES: NEW THOUGHTS AND PERSPECTIVES

Dario Calomino, Università di Verona, Italy
Andrew Burnett, British Museum, UK
Ivan Mirnik, Croatia

This panel aims to look at the economic and socio-cultural landscape of the eastern European regions that were part of the Roman world through the lens of coinage. The vast area stretches north of peninsular Greece, from the Dalmatian coast of the Adriatic in the west to the Black Sea in the east, encompassed a great array of cultural realities that came together under the aegis of Rome as a unified political entity for the first time. The encounter between Rome and the rich pre-Roman cultural background of this region can be well analysed, among other historical filters, also from the point of view of the coinages that were in use from the end of the Republic to the Late Roman Empire. One of the characteristics of this diversity in monetary terms is the coexistence and interplay between 'foreign' coins, mainly Roman, being introduced especially in the provinces where a civic monetary culture did not exist, and coins produced locally by civic mints, mainly (but not exclusively) in the provinces where Greek culture and institutions were more deeply rooted.

Within this scope, the panel aims to bring together a diverse range of speakers, both from eastern-European 'numismatic schools' (e.g. Croatia, Serbia, Bulgaria) and from other European institutions, to discuss a number of case studies combining old and new data from excavations and museum depositories. Each speaker will be focusing on one sphere of the cultural and social life of these regions in the Roman period to interpret the combined evidence of imperial and provincial coinages in relation to other archaeological materials. These categories can be defined under broad headings as: a) cult/religious traditions; b) festivals/games; c) funerary practice; d) impact of the army; e) local production/imitative coinage.

I Session: Coinage and Society in the Augustan Age (Chair: Dario Calomino)

Evgeni Paunov:
Early imperial coin finds from Serdica as evidence of the Roman army presence

This presentation will focus on the most recent coin evidence from the earliest phase of Roman Serdica in Thrace. It originates from the recent archaeological excavations in central Sofia, Bulgaria, carried out in 2010-2012. The deep trenches at the northern end of the excavations have revealed brick and timber structures as well as typical Roman finds (fibulae, military equipment, imported Italian terra sigillata, etc) of the Julio-Claudian and Flavian periods. The context is interpreted as early timber buildings and possibly-army barracks. Among over 2,500 coins excavated (from an area of approximately 3,200 m2) some 120 specimens date from the late 1st century BC – early 2nd century AD – the early Imperial period. They form a distinct group, comparable with numismatic complexes from other military sites along the Danubian limes. The coin assemblage from Serdica clearly reveals the impact of the Roman army in early Serdica. Details about the Serdica coin assemblage and its structure will be discussed in this presentation.

Tomislav Bilić:
Augustan coins from Sisak and coin circulation in the Augustan period in Siscia

During the first two decades of this century a number of controlled archaeological excavations were conducted in the area of modern Sisak, erected upon the remains of ancient Segesta/Segestica/Siscia. Almost all of these excavations yielded at least some Roman coins, several of them in significant quantities. In particular, Augustan coins were found at several positions, all located on the left bank of the Kupa. These finds represent the first stratified deposits of Augustan coins in Sisak and allow a reappraisal of the hitherto established conclusions on this phenomenon. Numismatists are well aware of the fact that one should distinguish between the Augustan coins from Sisak on the one hand and coin circulation in the Augustan period in Siscia on the other. It remains an open question to what extent, if any, was the former involved in the latter. With the new finds from archaeological excavations we can start formulating answers to this vexed question, at the same time evaluating a number of previously postulated hypotheses. Sisak, in addition, offers a rare example of a relatively large number of coin finds that allow a comparison with a narrative formulated by the analysis of literary sources testifying to potentially contemporary historical events.

II Session: Local Coinage and Civic Life (Chair: Andrew Burnett)

Ulrike Peter:
Die lichtbringenden Gottheiten im römischen Thrakien und Mösien

Anhand der reichen numismatischen Überlieferung sollen in dem Vortrag die in der römischen Kaiserzeit emittierten Münzen thrakischer und mösischer Münzstätten vorgestellt werden, die Abbildungen fackeltragender Gottheiten aufweisen. Es sind Münzen mit Darstellungen vornehmlich der Artemis und der Demeter. Im Vortrag werden vor allem die unterschiedlichen Ikonographien sowie die zeitliche und geographische Verteilung aufgezeigt und interpretiert. Artemis wurde bereits von Herodot als eine der am meisten in Thrakien verehrten Gottheiten herausgestellt. Obwohl speziell der Kult der Artemis Phosphoros in den archäologischen und epigraphischen Quellen in Thrakien im 4.-1. Jh. v. Chr. untersucht wurde, ist ihre Rolle in der Münztypologie sowohl in der autonomen als auch in der römischen Kaiserzeit noch nicht genügend beachtet worden. Hier soll erstmalig ein Überblick über die typologischen Konstanten und die vielfältigen Spielarten der weiblichen Gottheiten, die eine oder zwei Fackeln als Attribut tragen, wie ihn jetzt das Web-Portal www.corpus-nummorum.eu erlaubt, gegeben werden. Somit sollen die religiösen Traditionen in Thrakien und Mösien in römischer Zeit anhand der Münzen vergleichend aufgezeigt werden.

Dario Calomino:
Civic coinage and festival culture in Moesia Inferior and Thrace

Agonistic festivals were a profitable business and a major source of prestige for the communities in the eastern imperial provinces. The visual language adopted on civic coinages, especially in Asia Minor, shows how they were advertised and commemorated, reflecting the economic and political interests of the local elites. While showing the increasing influence of imperial patronage on power relations between provincial cities, these issues also document how festivals remained central in the process of preservation and regeneration of local identity.

In the 3rd century AD, a number of cities in the provinces of Moesia Inferior and Thrace begun to mint coins that advertised local games, too. With the exception of Philippopolis, they all clustered in the eastern part of the Balkan region, on the Black Sea coast and in the Propontis area. This paper will discuss the geographic distribution of this phenomenon to interpret its political and cultural significance within the region. It will then look at the patterns of visual representation of agonistic festivals on these coins to discuss the differences between 'political' games associated with imperial celebrations, like the Philadelpheia at Perinthus, on one hand, and festivals embedded into local and even indigenous traditions, like the Nymphia at Anchialus and the Darzaleia at Odessus, on the other.

III Session: Hoarding in the Local Economy (Chair: Dario Calomino)

Cristian Găzdac:
West meets East! Provincial coinage vs official issues. Coin hoarding patterns in the Balkans (1ST-3RD centuries AD) in the light of the 'Coin Hoards of the Roman Empire Project'

Coin hoarding has considerable potential in the study of Ancient History as it offers a global perspective on economic, financial and historical aspects of human community (communities). In order to extract valid historical conclusions a comparative method involving a large number of hoards, a wide territory and long chronological segments are required. Until now, the research on hoards has been limited by the access to the publications, which in most of the cases, were restricted to a certain territory. At the same time, the large territory and the long duration of the Roman Empire presented challenges for establishing general and specific patterns of coin hoarding.
The project run by the Ashmolean Museum and the Oxford Roman Economy Project, University of Oxford, (http://chre.ashmus.ox.ac.uk), together with a continually growing network of collaborators (http://chre.ashmus.ox.ac.uk/content/collaborations), has created the largest database of coin hoards of the Roman Empire. It has recently has reached a milestone of over 14,000 entries, comprising 3,718,381 coins. Out of 14,000 entries, 10,227 are hoards containing 3,676,996 coins. The present paper presents an initial study of the variety of hoards by denominations discovered on the area of the former provinces of Dalmatia, the Moesiae and Dacia. This is a where imperial coin issues competed with the provincial ones.

On the basis of more than 900 hoards of the 1st-3rd centuries AD the paper will present general and specific patterns of hoarding in these regions. The large database allows a comparison between hoards comprising only issues of imperial mints, only provincial issues and the mixed hoards. Out of over 900 hoards, 189 contained provincial coins. The paper intends to address aspects such as: were provincial coins worth hoarding? the concentration area and chronological patterns of hoarding of provincial coins

Miroslav Nađ:

A hoard of late Roman coins from Crkvišće-Bukovlje (Croatia): Pannonian evidence for the weight of a follis in the dying Empire

The site of Crkvišće-Bukovlje is being systematically excavated from 2013 to the present day by Ana Azinović Bebek of the Croatian Conservation Institute. Multiple cultural layers were recognized at the site, from Eneolithic to Late Middle Ages. The most prominent horizon is the Late Roman fort with a 5th century church. During an archaeological campaign in 2015, a small leather pouch with coins and a single weight was found inside the fort, as well as some scattered coins around it. This paper will present a detailed composition of the hoard as well as its contextual position within the archaeological stratigraphy. It will also tackle the significance of this find in the context of late Roman monetary system and its relation to the deteriorating monetary economy of the Empire, which ended in its complete dissolution.

33. THE ARCHEOLOGY OF ROMAN FORCES. THE CASE OF LEGIO VII CLAUDIA PIA FIDELIS IN TILURIUM AND VIMINACIUM

Domagoj Tončinić, University of Zagreb, Croatia
Nemanja Mrđić, Institute of Archaeology, Belgrade, Serbia

During the Roman Empire, the Seventh Legion spent most of its garrison in the legionary fortresses Tilurium (Dalmatia) and Viminacium (Moesia). The remains of Tilurium are located in modern-day settlement of Gardun, near Trilj in Croatia, and the remains of Viminacium near modern-day Kostolac, Serbia. Both sites are being systematically studied and excavated for decades. Even though archaeological small finds related to these troops include metal, glass, bone and ceramic, as well as glyptic, finds, the most scientific attention was raised by their tombstones. Tombstones of soldiers that served in the Seventh Legion are found in great numbers on both sites. In spite of the scientific interest sparked by these monuments and other finds, which are both published, no comparative analysis was conducted between them. The aim of this section is to comparatively analyze the small finds. This is crucial in understanding the logistic, social and economic changes taking place in the Roman army when relocating units to new provinces and legionary camps. This is indicated by the fact the departure of the Seventh Legion from Dalmatia to the Danube in Moesia leads to significant changes in form, style, and iconography in tombstones.

Tilurium:

Domagoj Tončinić, Domagoj Bužanić:

Roman military tombstones from Tilurium

The Roman fortress Tilurium was built on a plateau overlooking the river Cetina and its wider surrounding area. Its geographical position, which enabled control of routes from the provincial capital in Salona, and utilization of the river as a natural barrier with few key crossings gave it considerable strategic importance. Until sometime in the middle of the 1st century AD, the fortress had a legionary garrison. After the departure of the Seventh Legion to Moesia, Tilurium continued its function auxiliary fort. The last known monument of a military unit in Tilurium was dated to 243 AD. The fact that this site didn't progress into a civilian settlement by the 3rd century, while similar sites in the province did, speaks of its importance as a strictly military site. The aim of this paper is to offer an overview of the forts garrison in the decades and centuries after the Seventh Legion left Tilurium, and a analysis of Roman military tombstones from Tilurium.

Iva Kaić:

Depictions of warriors on engraved gems from Tilurium

At the beginning of the 1st century AD, the Legio VII established the fortress of Tilurium at Gardun near Trilj in Croatia and remained there until the mid-1st century AD. After the legion departed, auxiliary troops stayed in the area of Gardun until into the 3rd century AD. From the site of Gardun a great number of various Roman finds are known, including some 250 engraved gems. Some of these gems are engraved with figures of warriors, equestrians and mythological heroes such as Achilles. Although lacking the archaeological context, the gems bearing depictions of warriors and heroes can be connected with the Roman soldiers from Tilurium as being their possible owners.

Sanja Ivčević:

Roman military equipment from legionary fortress Tilurium

The legionary fortress of VIIth legion – Tilurium (modern day Gardun near Trilj, Croatia) was founded by the Romans in a strategically important position, near the crossing of the Cetina River, on the territory of Dalmatae. It was located on the natural path by which the

Roman legions penetrated inland during the conquest of Illyricum. In addition to the remains of architecture and other immovable finds, further evidence to military presence on the site are the archaeological small finds, those that have come to various collections and museums as accidental finds, as well as the findings from archaeological excavations that have been carried out continuously since 1997. Several hundreds items, mainly fragments, belonging to Roman military equipment were found in Tilurium. Archaeological research has shown that the units of the Roman army were stationed at the site since the time of the Octavian's Illyrian war, but numerous finds of Roman military equipment prove that the most intense period in the fortress has been during the 1st century. While military equipment that appeared during the 1st century largely prevails, the findings of military equipment dated to the 2nd and 3rd c. are almost completely absent. This paper will discuss the chronological frames of the military equipment findings from Tilurium focusing on the time before the legion departure from the site.

Zrinka Šimić-Kanaet, Vinka Matijević, Mirna Vukov:
An overview of the Roman pottery from Tilurium

In the hinterland of ancient Salona, at the territory of the present-day Gardun, a village near Trilj, remains of the Roman legionary fortress Tilurium have been located and systematic archaeological excavations of this site have been ongoing since 1997. As a result, significant parts of the Roman legionary architecture have been documented so far, as well as a great number of small archaeological finds such as pottery, numismatics, mosaics and glass, metal and bone objects. Their selection was successively cataloged and published in the publications Tilurium I – V (the last of which is in print). Most of this finds can be dated to the first half of the 1st century AD, when the VII. Roman Legion resided there. Among such vast archaeological finds, nearly 55,000 fragments of pottery have been recorded, which include fine and coarse wares, as well as lamps and bricks, tiles and other ceramic building material. Since the pottery represents the main source of the information about everyday life in the Roman military camp Tilurium, for the purpose of this paper, we have collected and we will present data of the everyday pottery jars, dishes, bowls, mortaria and amphorae that were used as tableware or for cooking, or the storage and transport of foods and other goods; as well as some fine wares such as terra sigillata or terracotta lamps; and finally bricks and tiles, all produced in enormous quantities, mostly for utilitarian purposes. The analysis of the Roman pottery from Tilurium, included in this paper, has shown that this is a standard ceramic material which has also been used in other military camps.

Viminacium

Ljubomir Jevtović, Bebina Milovanović:
Legionarii VII Claudiae, their origins and careers

The VII Claudian legion was one of the oldest and longest active units of the Roman army. For the best part of the 1st century AD, the legion was stationed in the camp of Tilurium (Dalmatia), and after that, for the next 300 years it was a part of the garrison of the neighbouring province of Moesia. Many previous studies shed light on its history and organization and have shown that during this vast time span, the legion and its soldiers influenced all segments of life in these provinces. The focus of this paper is to analyse the recruiting processes and service in the legion further. Also, the careers of its soldiers, as well as their life after retirement will be examined. To this end, epigraphical analysis of numerous monuments will be studied and the gathered data further analysed to show the main characteristics of their service and life. As a supplementary source of data, specific stamped ceramic building material will be included in the study.

Nemanja Mrđić:
VII Claudia in late antiquity – losing identity, disintegration and rebirth

Identity of the Roman Legions is clear and important throughout antiquity. Tradition and relation to a military force was not important only to emperors and commanders but for every officer and soldier that remains noted in their careers. Military iconography specific for every legion is traceable through its insignia, public monuments, provincial iconography and shield patterns primarily. Presence of bull and lion as emblems of IIII Flavia and VII Claudia legions on Upper Moesian local issued coins and stone monuments represents this practice as best examples. On the other hand, lack of these symbols in Notitia Dignitatum and reorganization of the army left VII Claudia among the limitanei units leads to direct downfall of its quality and disintegration. Tradition built for two centuries led to downfall in several decades. New units that emerged after this reorganization, namely Legio Moesiaca or Moesiaci seniores suggest that vexilation taken from this unit formed new identity. This one is visible in Notitia Dignitatum and funeral stela from Aquileia. New emblem suggests that iconography of the new unit could be based on its origin and formation from multiple units from Moesian provinces.

Mladen Jovičić, Sonja Vuković:
Bread and meat for the legionaries: feeding the legionary fortress of Viminacium

The foundation of the legionary fort in Viminacium required powerful logistics, among other provisioning the soldiers with food. By corroborating the data from ancient texts, archaeological finds and bioarchaeological analyses, its was possible to frame the general

knowledge on Roman military diet, that consisted mostly of bread and animal products with the addition of various foodstaffs (olive oil, vegetables, etc.). Studies suggest that the food might have been produced locally or obtained from distant regions. The new excavations of Viminacium legionary fort provided the starting point for pioneering research on provisioning this camp with food. This paper will discuss evidence related to the production and consumption of the most important military food: bread and meat. The study will bring together analyses of querns and millstones recovered in the camp and surrounding areas and preliminary archaeozoological results from the waste deposit of the Viminacium fort that dates back to the earliest phases of the fort (Flavian period). Other evidence, such as the presence of Roman villas in the vicinity of the camp, i.e facilities where wheat might have been produced, and previous archaeobotanical and archaeozoological studies from different Viminacium areas will be used as indirect evidence of dietary preferences and food provisioning.

Ivan Bogdanović:
Legio VII Claudia and the amphitheatre of Viminacium

This paper deals with the legio VII Claudia and its presence in Viminacium. It is also devoted to the architectural elements and building process of the Viminacium amphitheatre, that direct attention to army construction activities and its military use.

The Viminacium amphitheatre is located 60 m away from the legionary fortress. Its primary wooden structure that was built next to the fortress in the first quarter of the 2nd century is distinguishable from the stone-wooden amphitheatre which replaced it in the course of the 2nd century. The construction of city ramparts in the late 2nd century led to the integration of the amphitheatre into the area defended by the walls, and the building was used until the first half of the 4th century.

Previous investigations on Roman sites within provinces confirmed that amphitheatres were built next to military bases, especially by legionary fortresses. Along the River Danube a few amphitheatres are known, while others are assumed on the basis of remote sensing, geophysical surveys, particular finds and inscriptions, so the example of Viminacium is an important contribution to the study of entertainment buildings and gladiatorial games at the frontiers and their relation to the Roman army.

34. DRESS AND IDENTITY IN ITALY AND THE PROVINCES

Maureen Carroll, University of York, UK
Branka Migotti, Croatian Academy, Croatia

Maureen Carroll:
Dress and identity in southern Italy in the age of Roman expansion

This paper explores the interconnected relationship between dress behaviour, ethnic identity, and social status among indigenous population groups in regions south of Rome in the fourth century B.C. This part of Italy, with its ethnic diversity and populations of Italic, Greek, and Roman origin, is an ideal place for thinking about the complexities of cultural identity and exploring how people in this period expressed their identities not just through language and material culture, but also physically through distinctive clothing. The focus is on the figural wall paintings in the tombs of individuals and families of elite status in Campania and Lucania in southwest Italy. These 'portraits' of people are our window on the dress behaviour of south Italian populations, and the evidence captured in such images makes it clear that these Italic peoples wore clothing that intentionally distinguished them from their close neighbours with whom they might be in competition. The paper also will explore how far Rome's growing aggression might have acted as an impetus for Italic elites to devise powerful ways to visually express and manage their self-image. Soon after Rome gained hegemony over southern Italy and established a new political and social order here in the late fourth and early third century B.C., regional, non-Roman clothing identities disappear from view, and a transformation in identity signalling takes place. In the last figural tomb paintings executed at the end of the fourth century and the beginning of the third century, men appear in the toga, rather than as armed Italic warriors, and women are dressed in Greco-Roman garments that had become common throughout the Mediterranean.

Branka Migotti:
Clothing in Roman southern Pannonia

This paper addresses clothing in Roman southern Pannonia (northern Croatia), concentrating on the aspects of micro- and macro-regionality. The former connects to the observation by Ursula Rothe, that the previously widespread idea of a uniform Norico-Pannonian fashion should be substituted by the knowledge of a variety of micro-reginal fashions. In terms of macro-regionality, this paper will seek to identify similarities and/or differences in dress between southern Pannonia and inner Dalmatia, in an effort to find out whether there is any possibility to look for the border between the two provinces on the base of local dress. The evidence (funerary stones) for southern

Pannonia comprises exclusively female dress, as men nearly always wore official Roman clothes (at least on funerary stones) as a typical badge of their civil and administrative identities. Together with the paper by Gavrilović, the subject-matter of dress in Roman Illyricum is addressed. The former will deal with dress in the hinterland of the province of Dalmatia, while the present one addresses the evidence from Roman southern Pannonia, thus rounding the core area of Roman Illyricum in its initial phase.

Nadežda Gavrilović Vitas:

Women's dress and costume in the central Balkan Roman provinces

During Roman rule in the central Balkan Roman provinces, different parts of the area were under different cultural influences: the northern parts were under stronger Roman influence, while the southern parts were still resisting and staying faithful to the Hellenistic influence that prevailed before the Roman conquest. In this paper we propose to examine the various types of women's dress and costume, mainly known from the funerary monuments, which in some parts of the central Balkans changed through time, due to various reasons like local conservatism and non-acceptance of Roman tradition and particular traits of indigenous cultures and customs. In certain parts of the central Balkan Roman provinces, the indigenous population persisted under Roman rule and influence up to the end of antiquity. In that context, particularly interesting are the inhabitants of the western part of the central Balkan Roman provinces (the eastern part of the former Roman province of Dalmatia), who stayed loyal to their autochthonous ways of expressing their social class and relations through the clothes they wore and attributes presented with them.

Melissa Kays:

Acting Roman, dressing Syrian. Aurelia Paulina of Perge and the creation of a public persona

During my research, I have found few women who intentionally link their indigenous identity with their Roman citizenship in their public persona more than Aurelia Paulina of Perge. This paper seeks to discuss the motivations and cultural precedents which inspired Aurelia to display her status as a native Syrian within her Roman-style donation of an important public building to create connections with the imperial family. Inscriptions, iconography, and benefactions all play a role in deciphering and analysing the unique dress and persona displayed by Aurelia Paulina.

Benefactresses in Italy and the western empire traditionally appear as standard Roman matrons, depicted heavily draped in Roman clothing. Plancia Magna from Perge, an important predecessor of Aurelia Paulina, appears in this guise in statues honouring her benefactions in Perge in the Hadrianic period. However, Aurelia Paulina is clothed in ethnic Syrian or Palmyrene attire, including a headdress and a heavy pectoral on her chest. In this choice of identity markers, Aurelia perhaps is making overt references to the most powerful contemporary Syrian woman in power, the empress Julia Domna. This paper explores similar departures from typical dress in female statues, and dives deep into the reception these women likely received from both the Roman and native populations.

Michael Marshall:

Wearing Romano-British torcs: tracing regional trajectories in the development of new 'native' identities

Torcs are iconic artefacts of the European Iron Age and were closely associated with barbarian dress by classical writers. However, they survived in use within the Roman Empire, featuring within provincial dress traditions and as military awards. Previous work in the UK has largely approached torcs through the lens of insular 'Celtic art', focusing particularly on styles found in the frontier/military zones of western and central Britain. However, a diverse range of understudied material exists, including finds from the urban centres and rural settlements of south-eastern Roman Britain and some which exhibit connections to Continental traditions.

Torcs were not a simple reflection of the survival of pre-Roman British identities or of resistance to Roman power and cultural influence. However, they were potent tools through which people negotiated and expressed their place within a new provincial Roman framework. This paper will situate material from southern Britain within the wider context of torc use, assess the identity of torc wearers using metric analysis and funerary associations and outline different regional trajectories of torc use. It will suggest ways that these objects can be better integrated into our understanding of Roman provincial dress.

Judit Pásztókai-Szeőke:

Dishing the dirt on the archaeological finds (tools and lead tesserae) from a Roman textile refurbishing workshop in Savaria (Upper Pannonia)

The archaeological excavations of a textile refurbishing workshop in the suburb of Roman Savaria (H) yielded an abundant corpus of textile tools and inscribed commercial lead tags. Tools in general are a very useful source for the textile technologies applied locally by the workers. The tags were used as labels for valuable garments entrusted by clients to the care of this workshop for refurbishing (eg. mending, cleaning, redyeing) them.

The archaeological finds both from this workshop and from another similar one in the Roman colony of Siscia allow us not only to study local dress behaviour and help us trace the cultural biography of different garments, but they also enable us to explore the local practice for treating clothes in Pannonian culture.

Based on the recent research on these two workshops, the proposed paper argues for the functionality of some textile colours, in addition to them being socially symbolic. The paper will also emphasize the interdependence and vital importance of corporeal and sartorial hygiene in densely populated regions, such as urban areas or military camps, and to understand the tragic consequences of unsanitary conditions in the past.

36. DALMATIA IN THE LATE REPUBLICAN PERIOD: NEW FINDS AND APPROACHES

Lucijana Šešelj, University of Rijeka, Croatia
Siniša Bilić-Dujmušić, Catholic University of Croatia, Croatia

Siniša Bilić-Dujmušić, Feđa Milivojević:
Cosconius and Pollio: the most important Roman conquerors of Late Republican Dalmatia we know the least about.

The two Roman military interventions in Dalmatia during the Late Republic that had the greatest impact on the final pacification of territory (one because of the scale of operations, the other because of the time in which it took place), are almost completely unknown in modern historiography. On one hand, Gaius Cosconius was sent to the Eastern Adriatic in 78 BC as Rome's response to the instability caused by the activity of the Delmatae. However, during the two years of the campaign, it seems that Cosconius had also fought against the Iapodi. Fragmentary data from Sallust: primam modo Iapydiam ingressus can seemingly be related to the so-called ''Iapodian part'' of Cosconius' campaign in the Eastern Adriatic. Yet although we know nothing directly about the consequences of the successful end of the war and of the occupation of Salona, something can be guessed due to the information dated for the time of Caesar's governorship of Illyricum. On the other hand, although not by his will, Gaius Asinius Pollio's campaign against the Delmatae was anathematized by R. Syme in 1937 and nobody deals with it anymore. In all probability, Pollio's campaign was a consequence of the initial conflict between Octavian and Mark Antony, but there is a lack of modern reconstruction and reflection. Therefore, with a new approach to the issue, this presentation intends to analyse and revise previous reflections on Cosconius' campaign and its aftermath, and by following Pollio's activities in various sources reconstruct what can be done about his campaign against the Delmatae.

Lucijana Šešelj, Mato Ilkić:
Roman Republican coins from Northern Dalmatia and Southeastern Lika

During the last decade, a lot of data regarding the pre-Imperial coinage from the area of Northern Dalmatia and Southeastern Lika has been recorded. Divided by the Velebit Mountain, these areas are traditionally considered as the border regions of the Liburni and the Iapodi. During the Hellenistic period, the same or similar monetary process can be observed. In both of these areas, large sums of North-African coinage has been in circulation, mostly from Carthage and Numidia, in smaller part Ptolemaic, of which the best example is the Mazin hoard. Up to now, 1808 single finds have been recorded. From this total sum, Roman Republican coins consist of 174 pieces, mainly unpublished. Coins are found on the hill fort settlements, 29 in Dalmatia and 11 in Lika. Based on this evidence we can say that Roman Republican coins stopped circulating in the southeastern part of Iapodia during the middle of the 2nd c. B.C., while in Liburnia it circulated by the end of the Roman Republic.

Paolo Visonà:
The coinage of Issa in the Late Republican period

After 200 BCE the bronze coinage of Issa underwent significant metrological and typological changes. Following precedent, the Issaeans continued to overstrike foreign coins (particularly of Dyrrhachium and Corcyra). They also introduced a series of small denominations bearing increasingly simplified types, whose dating remains uncertain. Their weight standard may have been aligned with that of the last bronze issues of Dyrrhachium, which circulated in quantity in the Adriatic region. While the influx of Roman Republican currency at Issa seems to have been modest, these Issaean coins retained a Greek identity and were used across the central Dalmatian Archipelago possibly until the late 1st century BCE.

Igor Borzić:

Hellenistic and Late Republican amphorae from the island of Korčula

Last four centuries before Christ in the central Adriatic area are characterized with the interweaving of indigenous, Greek and, ultimately, Roman interests. Such dynamism in the historical development was manifested in many aspects of everyday life of the local population. Something that can be seen through archaeological material is the increased intensity of trade. In that sense, this occasion will be used to speak about Hellenistic (Corinth B, Greek-Italian, Pharos 2) and late-republican amphorae (Lamboglia 2, etc.) found on the island of Korčula. We speak about an indispensable point on the eastern Adriatic navigation route. On the other hand, the island's natural resources had supported highly strong late-Iron Age local populations repeatedly mentioned in ancient sources and, given the quantity of imported material, apparently actively involved in sea trade. The presented material is the result of collected data from scientific literature, multiple reconnaissances of a number of underwater and inland sites, and finally a systematic archaeological survey of the Kopila hill fort.

Martina Čelhar, Mato Ilkić, Gregory Zaro:

Time of change: North Dalmatia in Late Iron Age

The Late Iron Age in Liburnia is marked by the dynamic and intensive transformation of culture that is still most conspicuous in funerary customs. In that regard distinct indicators of cultural changes are monumentalization of funerary architecture, placing a number of vessels from symposiast repertory in graves and accepting new aesthetic and technological aspects of producing metal jewellery and parts of attire as a consequence of increasingly pronounced penetration of Hellenistic and Roman cultural models into a more locally defined funerary ritual. Due to the poor state of research it is far more difficult to define changes in settlement contexts of the same period. Recent systematic research of two important settlements in the area of North Dalmatia, Gradina in Nadin (Nedinum) and Lergova gradina in Slivnica offered new specific insights into the organization of everyday life in this period. Only Late Iron Age horizon has been recorded in Lergova Gradina whereby stratigraphy was saved from subsequent disturbances. On the other hand research in Gradina in Nadin and the belonging necropolis, despite partially disturbed layers owing to lengthy continuity of life of almost 2000 years enabled a better understanding of the transformation of the urban part of the settlement over the centuries and a clearer recognition of autochthonous and foreign components that contributed therein.

37. ROMAN TOWNS ALONG THE LIMES (1ST – 3RD CENT. AD)

Christian Gugl, Austrian Archaeological Institute (OeAI) (ÖAI), Austria
Tino Leleković, Croatian Academy of Sciences and Arts, Croatia

The predominant perception of the Roman limes is that of a chain of Roman camps, fortlets and watchtowers whose aim was to guard and defend the border of the Roman Empire. Despite the significant research on the economic role of the imperial frontier, the limes is still mostly observed as a domain of the Roman army. Nevertheless, along the limes, Roman emperors founded many civil settlements, out of which many were autonomous towns. Their role within the Roman border system is often overlooked. Rare exceptions are towns that became important regional centres and in some cases imperial headquarters of the defence of the Empire.

The session will not primarily discuss topographical details in the sense of a city walk. The focus should be more on development problems and structural questions. We are aware that there are very different levels of knowledge and research on the individual sites. For this reason, the proposed topics are deliberately broader. From our point of view, exciting questions are marked in yellow.

Eva Thysell:

Lauriacum/Enns – From small settlement to legionary camp and back again

Lauriacum, situated in the area of the present-day town of Enns, became the most important military base of the province of Noricum with the stationing of the legio II italica in the late 2nd century. The settlement flourished for about 120 years until army reforms and migration left a smaller settlement core behind. The changes in the settlement over time are reflected particularly impressively in the area south of the legionary camp, the so-called archaeological zone Stadlgasse – Plochberger Fields. This area, situated on the northern slopes of the Enns city hill, represents an important piece of the puzzle to understanding the development of Lauriacum. Only here can Roman activities from the middle of the 1st century to the beginning/middle of the 6th century be proven. A repeated change of function - from burial ground to civilian settlement area and again to burial ground - can be demonstrated. Detailed investigations show that especially the first change of function from burial zone to settlement area seems to have been strongly influenced by the Roman military. In the course of the stationing of the legion, the former burial zone was abandoned and the area systematically reorganised and built on. The area thus differs fundamentally from the other civilian settlement areas in Lauriacum. Already at the end of the 3rd century, a large-scale abandonment of civilian settlement areas can be detected, such as in the area of Stadlgasse – Plochberger Fields. Relatively quickly afterwards, the fallow areas were again used as burial grounds.

Kristina Adler-Wölfl:
Vindobona

Over the past 20 years, our knowledge of the military site and the civil settlements of Vindobona has grown rapidly. At Rochusmarkt, part of a late La Tène settlement was excavated and - for the first time in Vienna - the presence of Romans, probably Roman traders, was proven there. The settlement could be dated to the second quarter until shortly after the middle of the 1st century BC, therefore over 100 years earlier than the foundation of the auxiliary camp at about 90 AD and the legionary fortress 97/98 AD.

Concerning the legionary fortress, we now know of its detailed building phases. In addition, our knowledge of the canabae legionis, the civil settlement and the cemetery areas has increased. New research was done on water supply, sewers and several types of workshops. During this period, there were projects dealing with street network and raw material supply, especially stones and bricks. Moreover, aspects of environmental history could be identified: it was possible to prove a flood disaster in late antiquity, which destroyed parts of the legionary fortress and the canabae legionis. The latest important insight was the recognition of the inscription on an already 1913 discovered fragment of a bronze plaque as part of an existing municipal law.

Nevertheless, all these new discoveries also raise additional questions: did the civil settlement or the canabae legionis attain the status of a municipium? Where were important civic buildings, such as the Forum, an Amphitheatre or temples, located? Furthermore, precisely why, how and when over the course of the 3rd century was this civil settlement abandoned?

Christian Gugl, Mario Wallner, Michael Doneus, Wolfgang Neubauer:
Carnuntum - new aspects of the (urbanistic) development of the municipium/colonia and the civilian settlement near the legionary camp (canabae legionis)

Thanks to the extensive archaeological prospection of the last two decades, the level of information on the structure and development of Roman Carnuntum has improved enormously. The layout of the civilian settlement located in the front of the legionary camp can now be reconstructed very accurately by air photo interpretation. Especially east and south of the castra legionis the layout principles of the canabae legionis can be documented very clearly. Excavation results and field surveys show for the first time how large areas of this settlement were affected by decay processes that began around the middle of the 3rd century AD. The occurrence of graves in formerly populated areas and the desertification proved by excavations confirm large-scale shrinking process that changed the appearance of the settlement permanently.

With the project "ArchPro Carnuntum" a new chapter in the study of the Roman Danube metropolis was opened in the years 2012 – 2015. The aim of the project was a systematic overall prospection of Roman Carnuntum with a focus on geophysical measurements (geomagnetics, ground penetrating radar). In the course of these investigations, many new topographical details became known, including, for example, the barracks of the governor's guard, which are situated near the praetorium consularis to the west of the legionary camp.

A special focus of the lecture is the presentation of urbanistic phenomena, which could be documented by the new measurement results. These include, for example, settlement dynamics, i.e. processes that include the growth or decay of a settlement. At several main roads in the area of the municipium/colonia as well as the canabae legionis, cemeteries are abandoned during the second half of the 2nd century AD. Subsequently, these left necropolises are built over by the expanding settlement. The survey data also show very clearly how rigorously the construction of the city wall has interfered with existing settlement structures bypassing the route of the wall through existing insulae. On the western edge of the canabae, there is again a residential area, which was planned according to a right-angled grid, but not completely built up. There are also many new results concerning the boundaries of settlement areas, such as the separation of residential and burial areas or of entire settlement zones in the canabae. The large-scale measurements allow for the first time to identify extensive trench systems in the forefield of Carnuntum. Completely different house and settlement forms are encountered in the numerous rural settlements in the periurban area.

Orsolya Láng:
From vicus to colonia: the development of the Aquincum Civil Town

The Aquincum Civil Town - particularly it eastern part - has been in the focus of archaeological research for more than 120 years, shedding light on its history, urban structure and development. However, control excavations, geophysical surveys and revaluation of old excavations revealed new information on the predecessor of the town (namely a civilian vicus), the function of certain quarters (especially in the north – eastern and the south - eastern zone of the settlement) in the 2nd – 3rd c. AD, as well as on the abandonment of the town (which seemed to happen relatively early, at the end of the 3rd c. AD). Also, new results have been gained on the street network, fortifications (particularly on the eastern and southern parts) and layout of the – less known – western part of the town.

The paper will try to give a summary on these latest research results listed above that will hopefully help us to draw a more precise picture of the history and development of the Aquincum Civil Town.

Tino Leleković:

Aelia Mursa - the last colony

This lecture will give an overview on present knowledge on Aelia Mursa, a Roman colony whose remains are situated in present day Osijek, eastern Croatia. Croatian Academy is in charge of a research projects whose aim is to resolve key questions related to urbanism and diachronic development of the colony. Project was established due to the fact that despite its exact position and perimeter is established in the 18th century and numerous excavations executed in Osijek during the 20th century, little was known on appearance and organization of the ancient town. Level of research changed significantly since 2000 with new excavations and change of methodology. Combining new technologies and archive sources it is possible to partially reconstruct contours of the main features of the town. Furthermore, the excavations revealed complex stratigraphy on basis of which it is possible to make outline of diachronical developments in the town. It has been shown that certain parts of Mursa changed significantly through time, chaining its appearance and function.

The new corpus of knowledge on the topography and history of Mursa enabled more precise and profound study of excavated features and collected finds, with final aim of reconstructing social and economic history of this Roman town. More important, acknowledgments gained with study of this site opened new perspectives in interpretation of other sites and archaeological features in the southern part of Pannonia. This lecture will present all these new acknowledgments on Mursa and try to explore its significance for SE Pannonia and the role of Mursa on the limes.

Nemanja Mrđić:

Viminacium as urban center - results of new research and salvage excavations

Viminacium, the capital of Moesia Superior developed from military strategic point to the largest urban and military center in province. At its largest extent archaeological evidence of Roman presence spreads at more than 450 hectares around 100 ha central core zone. Last two decades of systematic research focused on the city surroundings revealed a lot information about the urban evolution and decline. Following back long history of research and analyzing different and sometimes conflicting city plans we managed to develop chronology that could be the real history of Viminacium. After confronting historical sources and breaking myths today we know the real distribution of the cemeteries, suburban areas, villas and industrial zones.

Agnieszka Tomas:

The emergence of the late Roman towns in Lower Moesia. A case of Novae, Oescus and Durostorum

Army camps stimulated the growth of settlements in their vicinity, and indirectly the growth of quasi-municipal communities. The 3rd-century crisis followed by the Tetrarchic reforms resulted in transformation of legionary fortresses and their attached settlements into late Roman towns. This is a phenomenon which could have different origins and different directions, but in many cases was expressed by a change in the internal layout of the former fortresses and in an extension of their size. Three examples of the former legionary fortresses from Lower Moesia are good illustration of various patterns of such transformation.

Linda Dobosi:

The last days of Brigetio. The abandonment of the civil town around the middle of the 3rd century AD

The civil town of Brigetio, c. 2 km west from the legionary fortress, probably came into being at the beginning of the 2nd century AD, soon after the legionary fortress was built. The settlement started to flourish in the second half of the 2nd century AD, but its real heyday can be dated to the Severan era, when it got the rank of municipium. Most of the remains unearthed in the heart of the Roman town at Komárom/Szőny-Vásártér between 1992-2016 belonged to this period. However, based on the find material, life in the municipium came to an abrupt halt at around the 260s, soon after the Severan boom. Monetary circulation thriving until the 250s suddenly stopped, and imported pottery became rare. Finds in the civil town from the end of the 3rd century turned up only sporadically. As there were no signs of attack or violence, the inhabitants must have peacefully moved away and left their houses (some of them still unfinished) to slow decay. What could be the reasons for this phenomenon observed in other settlements of Pannonia as well?

38. THE CAREER OF PYRRHUS OF EPIRUS ON THE 2300TH ANNIVERSARY OF HIS INVASION OF ITALY

Gaius Stern, University of CA, USA

Pyrrhus remains a very curious Diadochos who turned West, while his rivals focused on Greece and the East; he was related to Alexander but never actually met him. The Romans regarded him as a very worthy adversary and greatly took great pride in surviving three battles against him. The Romans also considered him a chivalrous opponent, in strong contrast to Hannibal,

however the mainland Greeks considered him just another power-hungry Diadochos who would use almost any means to capture more territory. For good reason, Hannibal ranked Pyrrhus among the three greatest generals of history in the story (probably apocryphal) in Plutarch and Livy. We will in turn and in combination consider Pyrrhus through the historical tradition of Greek sources, the somewhat romanticized Roman version (smaller than the Alexander Romance, but still significant), art and archeology - especially numismatics, literature and ancient religion. Our international team of scholars will investigate Pyrrhus from a variety of disciplines to re-analyze his role in history and his important role in Graeco-Roman / East-West conflict.

Eran Almagor:

Death in Argos: Plutarch on Pyrrhus' last campaign and death

This paper will address Plutarch's depiction of Pyrrhus' last campaign in Greece (272 BC) and his death scene (Plut. Pyr. 30-34). It will employ literary analysis to explore the source used by the biographer, in relation to the overall narrative, the role of the narrator and his use of irony, the devices of literary closure and literary motifs. It will also compare Plutarch's version with other ancient accounts (Pausanias and others) to arrive at the historical construction of the event, and will turn to external material to elucidate details of the account (e.g., an obverse of an Argive Triobol coin, in order to explain the importance of the reference to Apollo Lykeios [Pyr. 31-32]). Whereas the deaths of some other leaders have been mythologized in glory (for example, Leonidas at Thermopylae), we can be sure this is not the case with Pyrrhus's almost comic demise.

Gabriella De Maria:

Pyrrhus' army in the Greek West

In the military history of the Greek West of the Hellenistic period, the expedition of the epirot king Pyrrhus represents a moment of particular interest, in relation to both the type of forces deployed in the field and the innovations in terms of military strategies and political tactics.

In 280 B.C. Pyrrhus arrived in the Greek West following the pressing requests of the Tarantines, at the time at war with Rome. The first military successes obtained against the rising power of Rome, thanks also to the help of his elephants (until then unknown in the West), induced the Syracusans, threatened by the Carthaginians, to turn to the Epirus king; moreover, they were legitimized in their request by the family ties that united him to basileus Agathocles, of whom he had married the daughter Lanassa.

The military successes and the initial obedience of his allies had nourished in him the hope of reuniting under the crown of Epirus and Macedonia not only the populations of the Mainland, but also those of Magna Graecia and Sicily.

During the military campaigns conducted in the Greek West, Pyrrhus was certainly admired by his allies for his solid training in political practice and military tactics, arts that he had been fortunate enough to learn during his exile from the most important Hellenistic basileis, Demetrius Poliorcetes and Ptolemy I Soter. It will not be useless to recall, in this regard, that Pyrrhus was the author of a "Poliorketikà."

The aim of this article is to investigate the consistency of the forces deployed, with particular regard to the specific military corps; it will also attempt to identify the most innovative features of the military techniques adopted, without neglecting, at the same time, the identification of widespread tactics among the 'conquerors of cities' of the Hellenistic period.

Elena Santagati:

The early career of Pyrrhus between Demetrius and Ptolemy

Since childhood, Pyrrhus stood out amid the exciting events that involved him. As a two year old, Pyrrhus won the sympathy of king Glaucias of Illyria, who had not been inclined to save him. In 307 BC, Glaucias restored to Pyrrhus the kingdom of Epirus. Hostile feelings for Cassander led Demetrius and Pyrrhus to stipulate an alliance, sealed by the marriage of Demetrius to Deidamia, Pyrrhus's sister. Later, having lost the kingdom again, Pyrrhus found shelter with his Demetrius, but after the Battle of Ipsus, the balance of power among the Diadocoi shifted. Pyrrhus's fortunes had a sudden and substantial revival, oddly due to political marriages not his own: Seleucus married Stratonice, the daughter of Demetrius, and later Demetrius married Ptolemais (his fifth wife). And Pyrrhus went as a hostage to Alexandria.

Surviving the heavy, double losses of his own kingdom and his liege at the Battle of Ipsus, Pyrrhus, a complex and controversial character, distinguished himself repeatedly. He was obliged to conquer with the spear a throne that was his by right of succession, he knew how to transform unfavourable conditions into favorable, and he created a network of alliances among competing powers. He was a formidable contender and a dangerous adversary, whose reputation for unreliability merits reconsideration.

Nicholas Sekunda:
A Tarentine victory monument over the Samnites

A sculpture, present whereabouts unknown, emerged on the art market in 1972 in Basel (E. Coleman Carter, 'The Sculptures of Taras' TAPA 65, 1975, 1-196, pl. 64). The equipment and dress (the falcata sword with its wide sheath, the high-hitched tunic, the bronze belt, possibly the greaves and helmet, and even the thureos) identify the defeated warrior shown on it as Samnite. The figure seems to be only part of the original monument, and one assumes that beside him to the left towered the figure of a victorious Tarentine. Uninscribed, we cannot know whether the sculpture formed part of a public or private monument. Pyrrhus crossed over the Adriatic to the aid of the Tarentines against the Romans in the winter of 281/0 BC. Previously, however, the biggest threat to Tarentum was posed not by the Romans, but by the Samnites. This sculpture attests to Tarantine-Samnite hostilities and probably formed part of a private or public victory monument over the Samnites from the late fourth or early third century BC.

Gaius Stern:
Pyrrhus and the Roman prisoners of war

According to Roman tradition, king Pyrrhus of Epirus released to Fabricius Luscinus many Roman POWs on condition that they return after the Saturnalia of 279 BC, and when to his surprise every single POW returned, he sent them all back home to Rome, free. The story engages multiple didactic lessons for the early Roman audience but uses un-real conditions for the later Roman audience to teach the same lessons, while highlighting differences between Greeks and Romans. The story moved from history into the Pyrrhus Romance, along with the stories of how the Romans refused to poison Pyrrhus, how the unflappable Fabricius could not be bribed, and Cineas's suggestion that Pyrrhus not fight the Romans but accept his good fortune. The Romans sources magnified the chivalry both sides in the war to elevate the good name of the Romans, both for matching Pyrrhus (a kinsman of Alexander) on the battlefield and by surpassing him in integritas.

All the same, later Romans were sometimes embarrassed by the story, which admits the existence of Roman POWs, an inconvenient truth they generally obscure, because they maintained that "good Romans never surrender, they fight to the death or escape."

Rolf Strootman:
Pyrrhus, the omens, and sacrilege

Several ominous events characterized Pyrrhus's career and his reaction to them is noteworthy. He famously declared upon leaving Italy, "what a battlefield I leave Rome and Carthage," with great prescience for the First Punic War just eight years later. This and other predictions came true, adding to the Roman image of him as a nearly divinely inspired opponent. Most importantly, he appeared to wage war on the gods when he plundered the Temple of Proserpina, and most believed the goddess took her revenge on him (cf. Liv. 29.8.9). He also rushed to his death after misinterpreting an omen, which the Greeks did not think indicated his prowess in the auspices. While his sacrilege in Locri is better known, he committed many acts in Greece, again affirming the Greek view that he was less than the paladin Roman sources often reason. Only when he could afford to be charitable did he rise above the low standards of his rivals, nor did fear of the gods ever restrain his hunger for obtaining power by any means. One wonders if Pyrrhus really believed in omens, or if he merely took advantage of favorable omens as opportunities and ignored one too many unfavorable omens.

39. DURA-EUROPOS AT 100: CURRENT AND FUTURE RESEARCH ON A CITY OF THE HELLENISTIC, PARTHIAN & ROMAN EMPIRES

Karen B. Stern:
Old data and new frontiers in research of the Dura Europos synagogue

Among the most astounding features of the ancient synagogue discovered in Syrian Dura Europos are its polychromatic murals, which once decorated the four walls of the building assembly hall. Containing seventy narrative scenes from the Old Testament (Hebrew Bible), associated images are visually arresting: they depict high priests preparing to perform animal sacrifices; bones rising from the earth and transforming into fully-formed humans; and images of nude women standing amidst vegetation in the Nile River. Yet the most significant elements in the synagogue are not limited to these dramatic paintings. Indeed, attention to features of the decorated ceiling tiles from the assembly hall, appearances of graffiti and dipinti around its doorways and carved surfaces, and multiple and subterranean deposits of human remains, collectively gesture to additional and otherwise unrecognized dimensions of the ancient space and its use. Relying on methodologies of landscape and spatial theory to interpret neglected features of the excavated remains, this paper ultimately demonstrates how scholars can rethink old data to glean new and more dynamic insights into the religious lives of Jews and their neighbors in ancient Dura Europos.

Emma M. Payne:
Re-examining the Roman plaster sculptures of Dura-Europos

Little attention has been paid to the plaster relief sculptures of Dura-Europos since the notable works of Downey (1969, 1977), perhaps because plaster has been viewed as a second-rate material. Dura is quite unique in its preservation of these objects, yet its relative lack of large-scale and marble works has meant that sculpture has often been considered of little importance to its visual culture, with greater emphasis placed on the lavish wall-paintings discovered.

I will present my current research into these sculptures to consider why the material of plaster was used for these pieces and how this compares to broader use of plaster across the region. I will focus particularly on examining how the sculptures were made and used, and how this intersects with the choice of material. The extent to which the surviving objects were cast in moulds which were reused has been a matter of some scholarly disagreement, which I will address. This work will also help to situate the group into the growing body of new research into the study of plaster as a sculptural material in antiquity from which the objects from Dura have so far been absent.

Sanne Klaver:
Cultural identity in Dura-Europos

In this paper I will discuss the presented cultural identities of women and their families in Dura-Europos by examining two sources: the inscriptions from the so-called salles à gradins and the visual representations of families excavated in this city. I will use other archaeological evidence such has jewellery to support my arguments. My research on women in Dura-Europos shows that the idea of 'Greekness' as the main signifier of social status is too narrow. To some extent my paper will underline that 'Greekness' was used to communicate social status. This appears to be true regarding the inscriptions recording females with their patrilineal descent. However, the desire to 'be Greek' is not found in the visual representations from the same context. Here, neither men nor women followed Greek pictorial traditions. Interestingly, in these portraits other elements of social status and cultural identities are portrayed. My paper demonstrates that multi-disciplinary research is the way forward in better understanding this city along the Euphrates.

Leonardo Gregoratti:
Parthian Dura-Europos

In recent years, our knowledge of the Arsacid Empire has significantly improved since new sources have been made available and a serious discussion regarding the traditional Greco- Roman ones has put into doubt established convictions. However, the richness of findings from later periods of Dura and the fact that most scholars working on the site are more acquainted in the classical world than the Iranic one, have somehow overshadowed the relevance of the Parthian period in the history of the town. Aim of this paper is to spot and discuss the elements that Parthian Dura shared with other Greek cities in the Arsacid world to highlight the bound with the Arsacid Crown. This to demonstrate that Dura was not a unique case in the Parthian world, even if the exceptionality of its findings in comparison with other Parthian cities is beyond doubt. Recent research has put into doubt the length and effectiveness of Arsacid rule on the city, in particular for what concerns the 1st century BC and the decades between Trajan's and Lucius Verus's Parthian Wars and the years following the conflict. The events that occurred in these periods and the possible influence they had on Dura' status well be discussed from the view of Arsacid history and policy.

Jen Baird:
The ruins of local memory: oral histories of Dura-Europos

The history of Salihiyeh, the settlement on the Euphrates immediately beneath the plateau on which Dura-Europos sits, has always been entangled with that of the ruins. People from the village have long provided the labour of the excavations, and yet their contribution has been all but invisible in traditional accounts of the site. Also invisible in most accounts of the site is the relationship between the people of Salihiyeh, the site of Dura, and the archaeologists who have worked there. This talk will present preliminary results of oral history research conducted in partnership with Syrian colleagues which attempts to address these absences and speaks to alternative legacies of archaeology in Syria.

Juliet Samson-Conlon:
The Roman bone dolls from Dura-Europos: embodying childhood experiences

This paper will introduce the corpus of Roman-period carved bone dolls from the site of Dura-Europos, and examine the ways in which the dolls were entangled in the creation of social identities and embodied experiences. These dolls are a particularly valuable primary source for ancient childhood because they form the largest known collection of contextually secure bone dolls from any Roman era site. The dolls, excavated by the Yale-French Academy team but never fully published, as well as the extant records relating to them, are currently

stored at The Yale University Art Gallery in New Haven, Connecticut. A close examination of these dolls and the related contextual records shows that these dolls acted as playthings which could inculcate and construct gender, social and status identities at Dura. Through a detailed examination of their material form, I will discuss the specific ways in which the dolls participated in childhood experience at Dura, and demonstrate how they utilised apotropaic imagery, enlarging our knowledge of the social life at the site.

Viktor Humennyi:

Searching for a new/old-type frontier? Examining the role of Dura Europos in Roman military activity on Euphrates in the late 2nd - early 3rd centuries CE

The discussion on Roman foreign policy after E. Luttwak's work followed by some new approaches to the archaeology and history of Roman frontier in the East raised the interest to the Middle Euphrates region. Examination of the site of Dura during the last decades resulted in the critical approaches to the observations and conclusions of M. Rostovtzeff, F. Gilliam and other researchers that worked on the site during the interwar period and interpreted the material in the 1940-1950-s. The critic was intensified by the latest research over the Dura garrison, the interpretation of the archaeological evidence, the texts of P. Dura and P. Euphr. Was Dura the center of some military organized zone in the region or did the scholars just try to create an imagined military district reading the texts and interpreting the archaeological material to prove the existence of the dux and other controversial real or imagined offices and authorities? The paper provides the overview how the scholars' views on the role of the city in Roman defense-system on Euphrates transformed over the past hundred years and how the existing archaeological evidence was and is interpreted through the light of existing theories of Roman frontier.

Peter Edwell:

Roman civic and provincial coinage at Dura Europos: A reassessment of its historical value

One of the most prolific categories of historical evidence discovered at Dura Europos during the excavations of the 1920s and 1930s are the coins. Of the 14,017 coins from Dura that were published in Alfred Bellinger's final report in 1949, 8,968 were identified from civic and provincial mints of the Roman period. A substantial number of mints operative in the Roman eastern provinces in the second and third centuries AD are represented in this assemblage. Analysis of this coinage and how it might inform us of Dura's connectedness with the cities of Syria, Mesopotamia and beyond in the Roman period of control of the city has been sparing to date. In the final report on the coins, Bellinger 1949, 205-10 dealt with some aspects of this question and Butcher 2004, 162-4 provides a useful table of the Roman provincial mints and numbers of coins from them according to Bellinger's final report. This paper provides some suggestions as to how more detailed analysis of the Roman civic and provincial coinage from Dura might be undertaken, what potential problems there are in doing so and what historical information about Dura and the regions of Syria and Mesopotamia might be gleaned from such an analysis.

Anne Hunnel Chen:

Virtually reassembling and recontextualizating Dura-Europos: the Yale Digital Dura-Europos Archive (YDEA)

Thanks to especially to its unique circumstances of preservation, Dura-Europos is a rare archaeological resource. But physical dispersal of Dura's artifacts, and publication traditions (print and digital) that conventionally publish like with like (i.e. material grouped by type, material, or language) rather than as related assemblages, make it difficult, even for experts, to understand the rich intermingling of ancient cultures to which the site powerfully testifies. Beyond the challenges to comprehensibility presented by the current landscape of scattered data pertaining to Dura-Europos, there is also a pressing linguistic accessibility issue. The role of early 20th century colonialist power dynamics in the relocation of numerous Durene artifacts to the West presents an imperative to assure Arabic-speakers have intellectual access to the site's artifacts and documentation. This talk will introduce the work of the Yale Digital Dura-Europos Archive, a project using the power of Linked Open Data to virtually reassemble and recontextualize the site's archaeological data, while enhancing its discoverability and searchability in a host of world languages.

42. ROMAN BRITAIN

Antony Lee, Durham University, UK

David Walsh:
Military communities and temple patronage

Much has been written on the religious aspects of life in the Roman military community, but the role of soldiers as temple patrons has rarely been discussed. Yet temples and shrines have been found at military settlements across the Roman Empire, and many temples situated in urban areas have produced evidence of financial support from soldiers. Thus, exploring the relationship between military communities and temples is important for our understanding of the religious dimension of these communities and, moreover, wider developments in temple-based worship in the Roman Empire. In this paper, I will demonstrate how the construction and repair of temples connected to the military communities in Britain, one the most militarized provinces, altered between the end of the first century AD and the beginning of the fourth century. I will illustrate how such building work reached its zenith in the Severan period but then subsequently decreased dramatically, why this was, and why certain temples (mithraea and dolichena) did not adhere to this decline. I will also highlight how Britain is not unique in this regard, with similar patterns evident in Pannonia.

Reanna Phillips:
Dead, then buried: new interpretations of funerary evidence in Roman Britain

Many variations within funerary contexts have been traditionally categorized and interpreted as distinct 'types', i.e. 'cremation' and 'inhumation'. However, this typological convention prioritizes the final excavated burial context, encouraging static interpretations of burials as singular events of deposition. Excavated burial contexts represent only the final moment in a series of extended interactions between the living and the dead. New interpretive frameworks must be adopted in order to investigate the archaeological evidence of commemorative performances of mourners and their interactions with the dead for extended periods before, during, and after the final burial (or termination of interaction with human remains).

This paper will analyse evidence of extended funerary performance, interpreting examples of burial contexts of different 'types' as extended processes in order to provide a deeper understanding of Romano-British funerary evidence. The paper will utilize dynamic theoretical approaches of performance, materiality of the body, and social memory to provide new interpretations of excavated burial contexts of different 'types' with selected examples from a wider study of the cemetery sites at Cirencester, Lankhills, York, and London. Ultimately, this paper seeks to demonstrate the importance of challenging research paradigms and typologies, investigating mortuary practices as extended processes, and the need for theoretical approaches of performance and social memory for interpretation of burial practice in Roman Britain.

Peter Guest, Stephen Upex:
The Roman 'Small Town' of Durobrivae (Water Newton)

The 'small towns' of Roman Britain are one of the most enigmatic categories of settlement in the province. Our knowledge of these places, either individually or collectively, is very limited and there is much to discover about them. Often on important communication routes, 'small towns' include a range of sites that exhibit some characteristics of Roman urbanism (i.e. concentrations of population, formal boundaries, industrial production, or religious functions), although they lack certain other important features that we expect from towns and cities in the Roman Empire (notably a planned layout and street grid, and public buildings where administrative, legal and commercial activities took place). Little work has taken place on 'small towns' since the publication by Burnham and Wacher of 'Small Towns of Roman Britain' (1990) and Rodwell and Rowley's volume on 'Roman Small Towns in Eastern England' (1995) and, since the completion of the Rural Settlement of Roman Britain project, more is now known about the Romano-British countryside than these important urban places.

This paper will present the results of two ground-breaking new projects focusing on Durobrivae: the extensive geophysical surveys of the walled town (magnetometer and resistivity), and the evaluation excavations conducted at the site in 2019.

Ian Longhust:
The significance of fig seeds at Bearsden on the Antonine Wall

We can safely infer that fig seeds found in Roman Britain were imported from the continent as dried figs. Found at Bearsden, they were surely imported by the army for militarily rational reasons. The army imported dried figs as a sugar substitute, as they are 50% sugar, for processing meat into salami. It was in salami that the fig seeds were transported by the army to Bearsden. Small pieces of bone found in the sewage at Bearsden confirm that these auxiliary soldiers ate salami as their campaign meat ration, lardum in the texts. Salami production has left archaeology at, at least 4 sites in Britain. Almost certainly all this production was for the army and carried out on a

large scale. (The Romans, at least down to Pliny the elder and probably for the duration of the Western Empire, did not have explicit understanding of saltpetre and therefore of its special role in curing meat.) Salami was normally eaten raw and was part of the cuisine adapted to the high cost and low availability of fuel in Mediterranean towns and cities. The archaeology of a quintana/macellum at Chester and of salami production hints at a number of changes in the soldiers meat supply possibly related to historical changes noted for Domitian, Hadrian, Septimius Severus, Severus Alexander and Diocletian.

POSTERS

María Aidé Gómez Robledo:
Architecture of theatres in Hispania (I B.C - I A.D)

This subject belongs to my doctoral thesis "Architectural decorative elements of Roman theatre in Hispania Citerior I B.C. – I A.D.". Roman architecture of theatres in Hispania has been analysed by different types of specialists (archaeologists, historians, art historians, technicians of patrimony, etc.) and we know this due to the big amount of bibliography that we have. Nonetheless, there are still some areas who has not been elaborated enough in History, as everything related to architectural decorative elements of Roman theatre. The study of those elements in theatres in Hispania, which is unpublished material in almost all cases, will overpass the limits of any doctoral thesis. Thus, we have decided to delimit the study in a chronological and geographical way. We are going to focus specially in Hispania Citerior between the I B.C and the I A.D. Century.

Objectives. The main objective is to realise a systematic study of all the architectural decorative elements of this area. Moreover, other secondary objectives are the following:

- Create a State of the Question by actualising architectural decorative elements and also the general framework of researches that have been made about Roman theatre in the Hispania Citerior.

Alexandra Nagy:
The Roman watchtower no. 5 of Ulcisia

In 1934, archaeologist Lajos Nagy identified the position of some of the tower's walls and reconstructed a rectangular building of 8.2×8.2 m. The stamped bricks that were brought to light from here suggest that the burgus was built during Commodus' reign. Thanks to the rescue excavations in 2016-2017, it was possible to identify not only the burgus, but also an earlier Roman phase, a later landscaping phase dated by the coin of Gordian III, and an even later phase when the watchtower's walls were removed. Most of the finds date to a period between the early reign of the Flavian dynasty and Hadrian, which were unearthed from earlier fills and landscaping layers. In 2016-2017, four ditches were also found which run parallel to each other. The north-south oriented trenches are situated 22-30 m from the tower and date from the late 1st, early 2nd century; early Roman vessels were deposited on their bottom. An earlier construction, perhaps another watchtower, shall be looked for east of the trenches. No 4th-century artifacts were recovered here, and the survival of the watchtower into the late Roman period can be excluded.

Theoretical Roman Archaeology Conference

WORKSHOP 1: EARLY CAREER RESEARCHERS

This workshop will be a Q&A session on different job possibilities that ECRs can pursue, aimed particularly at ECRs in the process of going onto the academic job market. Members of the TRAC standing committee will be available to discuss their different career trajectories, academic job options, and experiences in applying for a wide range of different grants and fellowships.

WORKSHOP 2: MUSEUM REFLEXIVITY AFFECTING ARCHAEOLOGY - THE DANUBIAN HORSEMEN CULT EXHIBITION[1]

Ozren Domiter

Most SE European museum displays, presenting Roman archaeology, are traditionally understood as no more than just the spokesmen of the discipline[2]. As such, displays are formed linearly, following the information transmission line: curator – designer of the display – educational/marketing expert – end user, mirroring the end conclusions or a hypothesis of a sole author. Such a display often communicates no more than a one-sided and biased understanding of a particular topic, making the Roman civilization a passive past-tense of human history deprived of reflexivity and social relevance.

Alternatively, museum displays could be formed through reflexive communication where end and cause are affecting each other in the process of meaning-making[4], where processes of the research and interpretation of results are presented rather than final outcomes only, subsequently making shift from educational to performative[5]. Involving various participants in a cohesive display forming, allowing end-users (archaeologists in this specific case) to actively express their interest, interpretation and understanding of the topic could, surprisingly, change the author's perception and interpretation of the topic investigated. In an ideal final outcome, museum displays could affect the discipline's narrative.

This workshop aims to use a study-exhibition, The Danubian Horsemen Cult[6] (3.-4. c. AD cult fusion phenomena), to practically apply multivocality of reflexive communication in display forming by including Roman archaeologists of various sub-specializations, whether they are museum professionals or not, in exhibition's narrative- and meaning-making.

The Danubian Horsemen Cult phenomena will be discussed through iconographical, technical, typological, nomenclature, spatial, statistical and religious points of view. Expressed ideas, thoughts, opinions, reviews will be used as an integral part of process of the exhibition making.

WORKFLOW (max 120 minutes estimated):

1. Brief introduction presenting reflexive communication in museums
2. Various approaches of studying the Danubian Horsemen Cult
3. Possible interpretations of the Cult
4. Discussion on the meaning of the Cult intertwined with the Exhibition's narrative
5. Final general discussion/varia
6. Filling out the questionnaire – during the workshop

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1 To be opened in the Archaeological Museum in Zagreb, July 21, 2021.
2 Miklošević, Ž. (2015) Museum Exhibition and the meaning-making, Museology 52, (11-162), Zagreb, 11.
3 Hooper-Greenhill, E. (1999): Communication in Theory and Practice. In: Eilean Hooper-Greenhill (ed.), The Educational role of the museum, London: New York: Routledge, 29.
4 Hodge, B. (n.d.). Semiotics. In: Semiotics Encyclopadia Online. E.J. Pratt Library - Victoria University. Retrieved from https://semioticon.com/seo/S/social_semiotics.html, 30. 12. 2019.
5 Gregory, K., Witcomb, A. (2007). Beyond nostalgia: The role of affect in generating historical understanding at heritage sites. In: Knell, S. J., MacLeod, S. and Watson, S. (Eds.). Museum revolutions: How museums change and are changed, London: Routledge, 263 – 275.
6 Antonescu 1889; Nowotny 1896; Hampel 1903; Hoffiller 1904; Iskra-Janošić 1966; Tudor 1969; Ochsenschlager 1971; Tudor 1976; Popović 1986; Ertl 1996; Bendžarević 2011; Crnobrnja, Plemić 2013; Ertl 2014; Crnobrnja, Plemić 2015; Vajzović 2015; Szabo 2017, etc.

TRAC 1. CROSS-CRAFT INTERACTION IN THE ROMAN WORLD

Carlotta Gardner, British School at Athens, Greece

Cross-craft interaction (CCI) is a theoretical framework which allows archaeologists, historians, and classicists to comprehend the social relationships and identities that are shaped and negotiated through people's interactions [1]. CCI, first coined by McGovern [2] and later explored and defined by Brysbaert [1], provides a platform for the investigation of the interplay of different crafts people and the influence of these interactions, as well as socio-economic factors, on specific aspects of their practice. CCI can contribute to our understanding of technological changes, innovations, and the transfer of technical knowledge. The study of CCI can help to develop our understanding of the organisation of a craft/industry and also about potential dependencies of a craft on others.

Unlike in pre-Roman periods where it can be difficult to identify, in the Roman period there are several strands of evidence that indicate CCI was prolific. Yet, this framework is rarely used to investigate crafts and crafts people in the Roman world. Multi-craft workshops, industrial zoning/clustering, and collegia (craft guilds) provided arenas for these interactions, and the material remains are the key to unlocking the social sphere of craftspeople in the Roman world, as well as other aspects listed above.
This session hopes to explore how the use of CCI, as a framework, can benefit the study of Roman crafts and crafts people, how these interactions can inform us on socio-economic factors, and lastly how it can encourage us, as specialist researchers, to interact and fully investigate the multi-dimensional world of Roman crafts and industry.

[1] Brysbaert, A. 2007. "Cross-craft and cross-cultural interactions during the Aegean and Eastern Mediterranean Late Bronze Age," in Antoniadou, S., and Pace, A. (eds) Mediterranean crossroads. Nicosia: Pierides Foundation: 325-359
[2] McGovern, P.E. 1989. "Ceramic and craft interaction: a theoretical framework, with prefatory remarks,' in McGovern, P.E., Notis, M.D., and Kingery, W.D. (eds), Cross-craft and cross-cultural interactions in ceramics. Ceramics and Civilisation 4. Westerville, OH: The American Ceramic Society: 1-11.

Carlotta Gardner:
Cross-craft interactions in the Roman World: evidence from the ceramic, metal and glass industries of Roman Britain

Cross-craft interactions were prolific in the Roman World. The study of these interactions provides a unique opportunity to explore the intimate relationship between crafts and craftspeople. In turn, our understanding of the organisation of a craft/industry is improved and the multi-dimensions of Roman crafts are revealed. After a short introduction to the session, this paper will use a recent study of Roman period crucibles, which inspired this session, to investigate interactions between the ceramic, metal, and glass industries of Roman Britain.

Ceramic objects and structures were integral to metalworking and glassworking processes in archaeological contexts. It has always been assumed that metalworkers and glassworkers made their own ceramic tools and installations (e.g. crucibles and furnaces). However, in the Roman period in Britain, there is a clear and quite sudden move to using wheel-thrown crucibles in secondary metalworking activities and occasionally for glass-melting too. A detailed study of crucibles, as a material expression of cross-craft interaction, has revealed direct links between these industries. The implications of these interactions and how they reflect on socio-economic factors, and the organisations of these industries is explored in this paper.

Maja Miše:
Shaping economies: amphorae production and shipbuilding in the Adriatic during the Roman Republican period

With the emerge of Roman Republic, new sets of economic and political relationships were forged in the Mediterranean trading system. Apart from established long distance trade throughout the Mediterranean and beyond, regional trade was more intensified compare to previous periods. Evidence of these changes can be followed in increase of shipwrecks from the 3rd c BC, and especially in the 2nd and 1st c. BC. This increase was caused by expanding market and high demand of different products. Amphorae, as a packaging for transporting mostly liquid commodities, such as wine and olive oil, started to be produced on much higher scale in numerous ceramic workshops. The link between agricultural surpluses and production of transport amphorae has recently caught the attention of scholars. However, the cross-craft interaction between production of transport amphorae and shipbuilding is yet to be investigated in more details.

Roman merchant ships were built to transport lots of cargo over long distances and at a reasonable cost. Merchant ship's cargo capacity could carry up to 3000 amphorae.

The aim of the paper is to relate Lamboglia 2 amphorae production and their movement with shipbuilding trough linking scientific-based results of production, movement and mechanical performances of amphorae with ancient written sources and archaeological evidences of shipbuilding in the Adriatic region. The cross-examination of both production, amphorae and cargo ships, could be used to understand the regional economy, as well as defining the market and economic interests of Roman Republic.

Christy Schirmer, Jared Benton:
Fuelling an industry: archaeometric approaches to interconnectivity among craftsmen in Volubilis, Morocco

A growing number of scholars are approaching urban economies synthetically, treating them as networks of interrelated processes and workshops. Ancient craftspeople left a light archaeological footprint, making it difficult to identify social interaction or cooperation. This paper presents the preliminary results of work undertaken by the Urban Economy of Volubilis Project, which studies previously excavated workshops to recover overlooked evidence from that city's bakeries and olive presses. We shed light on the relationship between workshops by examining petrological and archaeobotanical material against the backdrop of the city's urban plan. The proximity of bakeries and olive presses, and the occasional overlap of their millstones' morphological features, are suggestive of a relationship between the two industries. By applying archaeometric methods to this inquiry, we can work toward a better understanding of precisely how these craftsmen were coordinating their commercial efforts. Our preliminary results show that a substantial quantity of pomace, the byproduct of crushing olive pits to make oil, was traded with at least one important bakery in the urban center for use as fuel. Furthermore, by using electron microscope and microprobe technology to produce quantitative data about the stones sourced for millstone production, we clarify how olive oil and flour millstone materials graft onto their morphologies. We compare this data between workshops and to known quarries, which can answer bigger questions about the sourcing and movement of technologies over time. These new approaches afford us a clearer picture of inter-craft relationships and the lives of craftspeople in the Roman world.

Simona Perna:
Cross-fertilization, crafts people interaction and knowledge transfer in Greco-Roman stone vase production

Interaction and cross-fertilization are recognised features of ancient crafts. Recent studies have shed much light, both empirically and theoretically, on the dynamics of crafts interaction and their bearing on material culture production, knowledge transfer and technological innovation in Protohistoric societies. Crafts people interaction and interdependence in Classical crafts have long been overlooked and have only just begun to attract scholarly attention. Tools and their role within the operational sequence as well as the human and socio-economic factors behind crafted objects are now being investigated. This paper discusses cross-craft interaction in Classical stone-based crafts using Roman stone vases as a case study.

Early Imperial vases carved from coloured decorative stone present some technical and physical aspects – i.e., skeuomorphism - that hint at both formal and technological cross-referencing, shared production practices, and interacting crafts people. Their production involved technological means, such as the lapidary lathe, combined with diverse ancestral carving techniques converging into one.

Calcite alabaster is the preferred stone type for these vases, something which clearly hints at an Egyptian ethnic origin of the artisans; however, their shapes are Classical, while the carving techniques are not exclusive to Egypt but can be traced back to Greek stone vases, such as the series of 5th-4th c. BC white marble pyxides. This seems to suggest that the makers of stone vases in the Roman period were familiar with all these techniques, possibly because trained and formed in environments where diverse carving traditions circulated.

Drawing upon the latest analytical and theoretical approaches developed within the field of social sciences and archaeology, this paper will discuss knowledge transfer and to evaluate the level of interaction between crafts in the Greco-Roman period.

Elizabeth A. Murphy:
Reconstructing cross-craft in the urban communities of Roman Italy

The Roman economy—perhaps more than any other of the pre-industrial world—has been characterized by the highly specialized occupations of its workers and the diverse contexts in which they appear. Faced with such a rich diversity of contexts, the majority of studies of Roman craft production and trade have focused on intra-industry activities. Single-industry studies—defined in terms of material worked (e.g., glass, ceramic), class of final product (e.g., coopering, jug making), or service performed (e.g., innkeeping, fulling)—have instead predominated. This approach to ancient crafts and trades understandably yet artificially segregates the social contexts of work in the Roman world. Moreover, this treatment is clearly at odds with the spatial and behavioural patterns of work activities identified in Roman cities, patterns which make it increasingly clear that artisans of all types formed part of the same local

economic community. These trades- and craftspeople were often neighbours embedded in a common urban fabric, tied together through shared networks of raw material acquisition and distribution as well as, not infrequently, complementary skillsets. While the concept of cross-craft has been variably applied to investigate issues of technological innovation, skeuomorphism, or production organization, this paper will instead take a community-oriented approach in order to investigate how cross-industry practices were intertwined the quotidian interactions among urban craftspeople in Roman Italy.

Rhodora G. Vennarucci, Gijs W. Tol, Astrid Van Oyen:
Investigating cross-craft interaction at Podere Marzuolo (Tuscany, Italy)

Multiple crafts were commonly practiced contemporaneously in the vicinity of one another in antiquity, but the dynamic cross-craft interactions that sometimes occurred between producers remain poorly understood (e.g. Dobres 2010, Brysbaert 2007, McGovern 1989). In the rural multi-crafting community of Podere Maruzolo (Tuscany, Italy), the spatial integration of different types of production (including pottery production, smithing and carpentry) in the 1st century AD in and around a large opus reticulatum structure allows for the detailed exploration of such cross-craft interaction. By combining intensive open-area excavation of the workshop complex with a multiple chaînes opératoires approach, the Marzuolo Archaeological Project (MAP) aims to reconstruct the technical aspects of production alongside the cognitive and social factors in order to identify potential points of intersections in production processes. The presence of carpentry tools in the blacksmith's workshop discovered on site, for instance, indicates that woodworking was practiced in tandem with metalworking. Marzuolo has gained recognition for being a terra sigillata italica production center (Vaccaro et al. 2017). MAP's excavations situate this ceramic production in close proximity to the blacksmith's workshop, thus revealing the potential for entangled practices, as both crafts required open ground-floor space, access to water and high-quality fuel, and the technical knowledge to build refractory installations that could maintain consistently high temperatures. As such, MAP offers data to challenge assumptions about standardization and cross-craft relations (Rice 1991).

TRAC 2: DARK LANDSCAPES: RESEARCH STRATEGIES IN REMOTE SENSING AND MODELLING

María del Mar Castro García, University of Cádiz, Spain
Daniel J. Martín-Arroyo Sánchez, University of Barcelona, Spain

The Roman sites were closely related to their surrounding areas and resources. The study of the physical structures used for the territorial or urbanistic management and the economic factors that generated the aforementioned interconnections are still a challenge for current research. The resulting issues can be likened to the cases of the dark matter and dark energy in cosmology, as similarly we can barely detect the full evidence and explain the forces beyond the more visible part of the archaeological record. Fortunately, barriers in both spheres of investigation are being removed with the help of new technologies in remote sensing and computational science. We find here a strategical way of better dealing with 'big/messy data' from the archaeological record, within the framework of the Complex systems theory. The study of emerging data properties from a holistic approach offers understanding of the archaeological continuum, as proposed by the 'Empty' Mediterranean Landscape theoretical perspective.

The goal of this session is to bring together researchers in both non-invasive survey as well as economic modelling, in order to call attention to the complementarity of their respective insights. Remote sensing provides evidence of structures (e.g., terraces, roads, pits, channels, etc). Modelling poses relevant questions about the related historical processes (e.g., exploitation of resources, distribution of sites, transport networks, etc.). The combination of both perspectives are expected to ease the selection of study zones and concentrate the focus on finding specific types of structures to test hypotheses on Roman settlement patterns.

María del Mar Castro Garcia:
Evolution of the ancient human landscape in the banks of the Lacus Ligustinus (Lower Guadalquivir River, Southern Spain).

The Ligustinus Project aims to study the ancient urban and rural landscapes of the lacus Ligustinus, the great estuary of the Guadalquivir River. During the Holocene, geomorphological changes occurred in the mouth of the river have totally transformed this landscape. The process involved consequences for the human interaction with the environment. The project analyzes the ancient configuration of the riparian spaces from a diachronic approach. The selected study area includes the site of Ebora (Sanlúcar de Barrameda, Cádiz) and its surroundings. Located in the left part of the Ligustinus watershed, the chronological framework of the studied sites spreads from Protohistoric times to Medieval ages. Special attention is payed to the Roman patterns of settlement. To achieve this objective, different archaeological survey techniques are being applying, particularly geophysical methods and UAV applications. We analyze the sites and the "emptyscape", focus on the banks and its occupation as indicator of economic exploitation.

Lázaro Lagóstena Barrios, Javier Catalán González, Enrique Aragón, Isabel Rondán:
The estuarian canals of the Hastenses (Str, 3.2.5): methodological proposal for their location and study.

According to Strabo, the main turdetanian cities of the lacus Ligustinus built canals to enhance communication and exchanges between rivers and marslands. These works of the turdetanian cities have never been documented. A methodology based on the techniques of Non-Invasive Research is proposed for the identification, location and studies of these hydraulic engineering practices in Turdetania.

José Antonio Ruiz Gil, Lázaro Lagóstena Barrios, Pedro Trapero, Manuel Ruiz Barroso:
The city configuration: topographic modeling of Mesas de Asta as urban based of Hasta Regia.

The Mesas de Asta site offers a geological formation of some stratigraphic and superficial complexity. The Tartessian oppidum was installed on this site, which experienced an extensive urban development, until the establishment of the roman of colony Hasta Regia. The interpretation of the geophysical surveys carried out in the place needs a knowledge of the geographical base on which the city were developed, as well as the conformation and structure. This contribution proposes a methodology based on the techniques of Non-Invasive Research to determine the geological and geographical conformation of the site, which allows the modeling of a quality base topography that allows understanding the anthropic changes performed and the urban evolution of Hasta Regia.

Eleanor Maw:
An integrated approach to remote sensing on the Yorkshire Wolds

The issue of scale is a persistent problem for landscape archaeologists. How do we strike a balance between datasets large enough to illustrate the 'bigger picture' with the need to pursue a detailed and nuanced interpretation of the archaeology they reveal? This paper will present the research strategy adopted for the purposes of my PhD, which seeks to explorecontinuity and change on the Yorkshire Wolds between the Iron Age and Romano-British periods. A large-scale geophysical survey covering c.300 hectares of the Wolds has been combined with a 12km² aerial photographic study in an attempt to provide a detailed yet expansive vision of its ancient landscape. The results reiterate the efficacy of employing remote sensing techniques at complementary scales when approaching whole landscapes, and illustrate the giant leap forward recent developments in technology have enabled in terms of data collection speeds and accuracy - particularly amongst these more traditional remote sensing methods.

Antonio J. Ortiz Villarejo, Luís M. Gutiérrez Soler, María Alejo Armijo:
Remote sensing applied to Early Roman Empire settlement pattern in right side of Guadalén River, (Vilches, Spain)

How can we begin to understand the landscape? Which aspects must we – or can we – take into account in seeking a reliable understanding of the targeted area as a whole? Can existent data and methodologies answer these questions? The inevitable response is no – such things can only be properly investigated by seeking out differing scales and patterns of landscape development. The challenge for actual archaeology lies in determining how these changes in the distant past might still be reflected – and detected – in the landscape of the present day; only new data and new methods of investigation will enable us to achieve a reliable interpretation of the way these developments played out across the landscape. This paper shows the firsts results of a methodological approach in which Remote sensing technologies (SAR and LiDAR) are being tested like tools to overcome locally-based interpretations. Fresh evidence from new holistic initiatives will delve more deeply, more widely and at a variety of different scales into the relation between the twelve selected Early Roman empire sites and the surrounding landscape in the right bank of Guadalén River. It is expected that, in next phases, this methodological approach will allow us to go deeper in analysing spatial distribution, exploitation, and interrelation between different Early Roman empire sites , helping us to fill the aforementioned gaps in our understanding of the archaeological continuum in the region.

Jesús García Sánchez:
Towards a global interpretation of the Ager Segisamonensis landscape (Burgos, Spain)

The intended paper will examine critically the previous research strategies carried out in the so-called Ager Segisamonesis, the hinterland of the Roman city of Segisamo (Sasamón, Spain) and the pre-roman fortified hillfort. The initial modelling based on spatial archaeology techniques lead to a hypothesis about landscape use and culture change from a socio-political point view. Later on, field survey provided empirical information about such landscape use. And eventually, the most recent strategy has focused on remote sensing approaches, including LiDAR, aerial photography, photogrammetry and GPR survey of selected sites. This paper aims to address all these technical approaches and their contribution to the current interpretation of the ancient urban and rural landscape.

Daniel J. Martín-Arroyo Sánchez:
Predictive modelling of the Baetican olive oil production

Ancient writers made some general references to olive cultivation and its inland expansion in Baetica, a phenomenon brought to light by recent archaeological findings. Previous research has been hindered by the large amount of data to be processed. Currently, GIS technologies facilitate overcoming this barrier, by using modelling as a tool to link historical theory with terrain data and archaeological information.

The necessary analysis involve the exploration of how favorable cultivation factors - i.e. type of soil, slopes, and the thermopluviometric conditions- may be combined. In this paper, the accessibility to the network of fluvial and terrestrial infrastructures will also be considered, as well as the size and distribution of the rural buildings associated with the production of olive oil. Settlement patterns will be categorized on this basis. The results inferred from this analysis will later be used in an empirical-inductive model to predict the spread of the Baetican olive groves.

A wider research plan involves epigraphic and remote sensing studies to corroborate or refute the outcome of the model. The resulting data will be analyzed using a cliometric approach. The appropriate methodology will also be discussed in this paper, as well as the search for new relevant types of evidence, where information is expected from apparently empty spaces between sites. The objective is to define the most appropriate dataset and analysis tools, as a single whole and not as the sum of its parts, so as to reach a conclusion based on this complex (and dark) panorama.

TRAC 4: WHAT HAPPENS WHEN WE DIG BIG: RECENT WORK ON HUGE DATASETS IN ROMAN ARCHAEOLOGY

Francesca Mazzilli, Cambridge Archaeological Unit, UK

Often Roman sites produce incredibly rich datasets. For example, the excavations along the A14 and the new town at Longstanton in Cambridgeshire have collected huge amounts of Roman artefacts. Furthermore, synthesis projects such as The Rural Settlement of Roman Britain project, and the Oxford Roman Economy Project have pulled together large datasets from multiple excavations, surveys and research projects. With much of the data accessible online, there are further opportunities for others to assess large-scale trends in the 'data'. In this session we want to explore the impact of large datasets derived from excavations and synthesis projects, and scrutinise what the opportunities and challenges are for archaeology. To do this, for example, we might asses from a theoretical perspective what the issues are related to Roman archaeology, or through theory-practice approaches to determine what analyses of might advance our knowledge of the Roman past. Alternatively we might assess the role of the public and/or field staff in shaping research designs, what we do with theories and methods, in the broadest sense, with respect to the great mass of material culture, animal bone, human bone, and environmental data. Specifically, this session will examine what the strategies and tactics are in dealing with large datasets, and what kinds of opportunities and challenges these have for Roman archaeology? We invite contributions and experiences from across the Roman world, as well as those involved in commercial and/or academic archaeology, and those working in transition periods.

Alex Smith:
From big data research to big data excavations: lessons from the Roman Rural Settlement Project for the A14 mitigation

The Roman Rural Settlement Project conducted by the University of Reading between 2011 and 2017 is the largest and most systematic study of the Romano-British countryside ever undertaken, with data from some 3600 records of rural sites, accounting for c 2500 individual settlements across England and Wales. The excavations along the 21km route of the A14 in Cambridgeshire undertaken by Mola-Headland Infrastructure (MHI) between 2016 and 2018 are among the largest ever carried out in the UK, with Iron Age and Roman settlements, field systems, burials and industrial features identified on over 20 sites across 230 hectares. The scale of these projects brings many practical and theoretical issues relating to the sheer volume of data, but they can also be catalysts pushing us to advance our research focus beyond established models for understanding Roman landscapes and society and to start to address new questions using innovative methods. This paper seeks to explore how the methodological considerations and research questions coming out of the Reading project can be tackled by the A14 excavations and other big infrastructure projects in order to re-invigorate our understanding of provincial Roman rural society.

Eniko Hudak:

New approaches to big pottery data – Mancetter-Hartshill mortaria and the Roman economy

Since the introduction of Planning Policy Guidance 16 in 1990, developer-led archaeology in the UK has enormously increased the amount of available archaeological data. Large-scale excavation projects often have mitigation strategies in place to deal with the scope of the individual project, but we also need to think about big data that does not yet exist in its big data form. This means data that may have been accumulated over a long period of time and is perhaps scattered and disjointed until it is drawn together for the purpose of new research. With the advances of digital and online tools and methods and their retrospective application through digitisation, it has never been easier to access archaeological data.

An excellent example of large-scale synthetic studies drawing together commercially generated data is the Roman Rural Settlement Project (RRSP). It has, however, not engaged with the masses of available Roman pottery data beyond a small number of targeted case studies. My PhD project takes this missed opportunity by focussing on a specific type of Romano-British pottery, Mancetter-Hartshill mortaria, for which disjointed distribution data has been accumulating since the excavation of the kilns during the 1960s and 1970s. By drawing together this data we can not only ask province wide research questions (in this case on the economy), but we are also able to build on the legacy of the RRSP demonstrating its utility beyond its original aims, while setting a precedent for other Romano-British pottery types to be studied in this context.

J. Pérez González, G. Rull Fort, J. Remesal Rodríguez:

Amphorae and epigraphs. Experiences in the development of databases in CEIPAC projects. 30 years of research.

The Roman Empire trade system is generally considered to be the first complex European trade network. It formed an integrated system of interactions and interdependences between the Mediterranean basin and northern Europe. The EPNet project ("Production and distribution of food during the Roman Empire: Economics and Political Dynamics", ERC-2013) was devoted to setting up an innovative framework to investigate the mechanisms and characteristics of the commercial trade system during the Roman Empire. The main objective was to create an interdisciplinary experimental laboratory for the exploration, validation and falsification of existing theories, and for the formulation of new ones. Over the last couple of centuries, scholars have developed a variety of theories to explain the organization of this trade system, but most of them continue to be speculative and difficult to falsify. The project's approach relied on a large dataset of existing empirical data about Roman amphorae and their associated epigraphy (ca. 50.000 entries), which has been created during the last 2 decades by the CEIPAC research group (http://ceipac.ub.edu). In order to make this data available to both project members and the community in general, an effort to represent knowledge was carried out through the romanpendata.eu portal (http://romanopendata.eu)

In this presentation, we want to make known what our experience has been in the development and improvement processes, first of the CEIPAC database and second, in the creation of the romanopendata portal. We believe that it may be of great interest among the assistants, the fact of sharing what our limits have been (incorporation of new data, error assumption, data cleaning processes, etc.) and the advantages of big data analysis (general statistical analysis, creation of complex questions, pattern acquisition, hypothesis validation, etc.).

Eleanor Maw:

An integrated approach to remote sensing on the Yorkshire Wolds

The issue of scale is a persistent problem for landscape archaeologists. How do we strike a balance between datasets large enough to illustrate the 'bigger picture' with the need to pursue a detailed and nuanced interpretation of the archaeology they reveal? This paper will present the research strategy adopted for the purposes of my PhD, which seeks to explorecontinuity and change on the Yorkshire Wolds between the Iron Age and Romano-British periods. A large-scale geophysical survey covering c. 300 hectares of the Wolds has been combined with a 12km² aerial photographic study in an attempt to provide a detailed yet expansive vision of its ancient landscape. The results reiterate the efficacy of employing remote sensing techniques at complementary scales when approaching whole landscapes, and illustrate the giant leap forward recent developments in technology have enabled in terms of data collection speeds and accuracy - particularly amongst these more traditional remote sensing methods.

Katherine A. Crawford:

Using big data to study urban resilience within the Eastern Mediterranean

Despite the existence of a number of rich datasets pertaining to Roman settlements, a challenge remains in both compiling and formatting datasets to answer questions concerning the long durée processes of urban development. This paper discusses the formation of a rich dataset of over 30,000 settlements from Cyprus, the Levant, and the Orontes Valley. This dataset is created as part of the Marie Curie funded project: 'EIDOS of a city: simulating the collapse and resilience of ancient Eastern Mediterranean urban environments via agent-based modelling'. The usefulness of this dataset is demonstrated by considering the extent to which instances of urban resilience can be identified throughout the Roman period within this region.

Philip Smither:
Finds rich: the true scale of the Richborough Collection

The more we dig there more there is to store, and archaeological stores are often bursting at the seams. One reason is the amount of old excavations that have not been fully studied. The late Roman shore fort at Richborough in Kent is one such site. Excavated from 1922-1938 the entirety of the area inside the walls was excavated, producing material from the Roman invasion of Britain up to AD410 and beyond. The publication series comprises of five volumes, but they do not tell the whole story. The excavation notebooks list 5500 small finds, however only c.1000 were published. Through studying the collection, the true number is nearer 9000; not to mention all the other material. So how do we bring such a collection into the 21st century? The aim of the project is to reorganise the collection, to make it easy to access and to research by using modern techniques and data analyses to bring some order to the chaos.

Since the excavation the collection has sat largely dormant through many movements and changes in archaeology. This presents both an interesting challenge and opportunity. The excavation methods are very much a product of the time, as are the conclusions, however, with little synthesis over the past 100 years it provides a great opportunity to almost start from scratch. We can not only test how an old collection stands up to the scrutiny of 21st century archaeology but also begin to place the site into wider theoretical frameworks.

TRAC 5. THE ROMAN FOOD SYSTEM: RETHINKING THE GLOBAL AND THE LOCAL

Kelly Reed, University of Oxford, UK
Lisa Lodwick, University of Oxford, UK

There is a need to study the production and consumption of food in the Roman period in a more holistic way. Current archaeological systems research is both methodologically and theoretically diverse, sharing elements with approaches such as social network analysis and complexity science. These theories have been used to address a broad array of questions about the relationships between actors, activities and outcomes for individuals and larger groups at a range of social scales and there is increasing consensus of the benefits of such integrated research practices within archaeology. However, when examining food production and consumption in the past, few have employed the use of systems methodologies. The complexity of the Roman food system and the fragmentary archaeological record mean that no one source of evidence should be assessed in isolation. Thus, more can be done to explore food from a more holistic perspective bringing together archaeological evidence such as pottery (e.g. serving food, cooking), buildings (e.g. cooking facilities, storage), stone and metal objects (e.g. agricultural and food preparation equipment, coins for trade), and organic matter (e.g. animal bones and plant remains of the food themselves), as well as literary or iconographic sources.

This session aims to evaluate Roman production and consumption as a whole food system to understand the different actors, activities and outcomes of food from production all the way through to consumption and waste disposal. A food system includes all of the processes and infrastructure involved in feeding a population. The network of activities, operating at multiple spatial scales, include the production, processing, transporting, and consumption components connected through complex social, ecological, and economic relationships. This session aims to set the agenda for future integrated, quantitative studies of past food systems, by bringing together participants with a range of different specialisms to enrich our understanding of the ancient Roman food system.

Kelly Reed:
The Roman foodsystem of southern Pannonia

In order to feed its growing population the Roman Empire was dependent on the successful exploitation of agricultural resources and trade. These expanding networks, growing economies and the movement of people fundamentally changed production and consumption patterns in many areas of Roman Europe. Here we explore production and consumption in southern Pannonia (present day eastern Croatia), through the examination of pottery, plant and animal remains and other material culture. The increase in archaeological evidence in this region is allowing us for the first time to examine agriculture and food more holistically, which is an important step in understanding the nature of the food system under study and how food links with the economy, society, culture and the environment. Thus, this presentation will examine the archaeological evidence within a food system framework to explore local food production, global imports and food preferences in southern Pannonia from the 1st to 4th century AD.

Ivana Ožanić Roguljić, Angelina Raičković Savić:
Optimo piscatu, Fish and fish-related finds from Roman Southern Pannonia and Upper Moesia as the evidence of global trade and local customs

Literary, documentary, and archaeological sources for fish preservation and fishing during the Roman period are quite big but the story about fish, fishing and imports of fish products in Pannonia and Moesia is untold. Fishing and fish processing are culturally defined, its

context is complex and aspects of the economic significance are multilayered. A significant number of Roman fishing implements from Siscia, a representative amount of fish remains from Viminacium and evidence gathered from amphorae and pottery from both provinces present the basis for understanding its economic role. The social context of consumption of fish and fish products can be seen in the light of the global trade (e.g. Hispanic garum documented by amphorae) and the local customs (freshwater fish remains within the archaeological context). Analysis of fish and fish-related finds are excellent tool for understanding the long distance trade and local supply, as well as data on the nutrition of different classes within society of Roman provinces.

Erica Rowan:
Hinterland, kitchen, toilet, drain: the late antique food system at Aphrodisias, Turkey

In light of continuous population increase and the current climate crisis, creating sustainable food systems models is at the forefront of interdisciplinary research, spanning the fields of health and life sciences, environmental sciences, climatology and policy studies. The ancient city of Aphrodisias, located in western Anatolia, was a thriving urban centre. Imperial and local euergetism ensured that the city was equipped with large and lavishly decorated public spaces and amenities including baths, entertainment buildings and two large agorae. Despite its evident wealth, and clear connections to the wider Mediterranean world, ceramic, archaeobotanical and regional survey data point to a highly localized and self-sufficient food system. Recent excavations in the South Agora (Place of Palms) have produced the first archaeobotanical evidence from Aphrodisias with material dating to the late 5th and early 7th centuries AD, enabling us to trace changes in diet and land use within the city over time. Created as a result of two earthquakes, these assemblages also allow us to see human responses to environmental disasters. Consequently, as a relatively closed system, with a well surveyed hinterland, Aphrodisias is the ideal place to apply sustainable food systems modelling to a city as it operated in Late Antiquity. Following the creation of a model the paper will then use food system resilience theory to look at the way the cumulative effects of slow socio-political change and sudden environmental disasters forced the people of Aphrodisias and the surrounding hinterland to adapt their food system, focusing in particular on determining which activities and actors underwent the greatest alterations and which were entirely inflexible.

J.W. Hanson:
Some scale-based approaches to food supply

A major effect of the growth of cities is the need to develop new systems for supplying foodstuffs. At the same time, there is now a growing body of both theoretical and empirical evidence in support of the idea that the residents of larger cities are not only generally wealthier than their counterparts in smaller settlements, but also support a larger diversity of lifestyles and activities. In this talk, I will explore the implications of these ideas for our understanding of the supply of foodstuffs to ancient cities, focusing on the cities of the Roman world in the Imperial period, with special reference to urban infrastructure and market facilities.

Christy Schirmer:
Food from the waters: regional models for inland river fishing

The role of marine fishing in antiquity has received well-deserved attention in recent years. Harvesting local rivers and streams for fish and other freshwater fauna must have also been a vital feature of Roman regional economies. However, exactly how this played out is largely unaddressed by ancient literary sources and is difficult to assess in the archaeological record. Understanding how freshwater resources were managed could illuminate how communities adapted local traditions to the demands and opportunities of life in the Imperial period. This paper examines how communities exploited rivers for food on two major, but very different, rivers: the Tiber and the Nile. A survey of legal texts suggests that river fishing was largely unregulated from the top down. However, in practice there were complex networks of fishermen, sellers, buyers, as well as those participating in other riverine occupations, whose respective interests demanded constant negotiation. This becomes partially visible to us via documentary texts that record fishing contracts, activities of fishing collectives, and intervention at the imperial or municipal level. By combining this with recent work on ichthyofaunal material and artefactual remains (e.g., fish hooks, net sinkers), it becomes possible to create a framework for examining fishing in these two well-documented rivers. In doing so, I aim to pave the way for studying smaller and more remote fishing industries in regions that left less literary and epigraphic documentation, but where the archaeological record is of a sufficiently high resolution to allow for future work on this understudied topic.

Jared Benton:
Baking as cultural heritage: the persistence of local and household traditions in Roman commercial baking

Commercial baking – and craft activity more broadly – is often studied as pure production framed as a series of processes that result in a final product, constituting what is frequently referred to as an operational sequence or chaîne opératoire. Such an emphasis on process has detailed our understanding of bread making and allowed us to associate process with space in bakeries, but craft production is also a body of knowledge that is passed down from one individual to the next, informed by familial and cultural habits and traditions. Morphological variation in baking technologies, such as tannūr-style ovens in North Africa and Spain or claychamber ovens in central

Europe, demonstrates the rich diversity of household baking traditions in different regions during pre-Roman periods. Over the last few decades, through the work of Greg Woolf and others, it has become increasingly clear that local, pre-Roman traditions played a greater role in determining regional habits and material culture than previous scholarship has recognized. Viewing the production of bread as something inherited culturally provides a diachronic framework that allows us to explore persisting traditions and homogenization alike. In fact, following the second century BCE, ovens across the western Mediterranean homogenize, moving toward the familiar domed, masonry ovens, but there are also indications that local traditions continued to inform the baking process, such as clay ovens used in Roman forts on the limes or the continued use of tannūr-style ovens in bakeries in parts of Roman North Africa.

TRAC 8. ROMAN SUBALTERN STUDIES: HIGHLIGHTING SUBALTERNS' SIGNS IN THE ARCHAEOLOGICAL RECORD

Mauro Puddu, Independent Researcher, Italy

Roman Subaltern Studies: Highlighting Subalterns' Signs in the Archaeological Record Classical archaeology has traditionally reconstructed the life and death of elites in the Roman empire. But who are the non-elites? Although there have been numerous attempts to shed light on the category of the poor in the Roman world, these are not the only counterparts to elites. This session asks contributors to reflect upon the specific category of 'subalterns' as theorised by Antonio Gramsci. Marxist approaches have had a chequered history in the Anglophone tradition of Roman archaeology but there is a connective thread linking Gramsci's work with the post-colonial scholarship of figures influential in Roman archaeology in the 1990s and early 2000s. While globalisation theory has since moved the field in a more positivist direction, it is time to continue seeking to recover, indeed to properly define, the subaltern voices of the Roman world. Thus, we invite engagement with the way Gramsci discusses subalterns in his Prison Notebook 25. Gramsci created a socio-historical framework in which subalterns are defined by the absence of any direct relationship of ownership with history; they do not make history, but disappear from it. Yet, they are used by the elites to create history, producing an enormous quantity of material signs that we have the opportunity to recognise and the duty to interpret as such. The social location of these people may be expected to vary in time and space within the empire, and indeed might encompass those beyond it, but evidence of their praxis can be recovered and through that, their existence.

Jake Weekes:
Subaltern Roman Canterbury

The concept of the subaltern must be considered in context within Gramsci's more total understanding of hegemony. We argue that the structuration of "common sense" is key to subaltern status, but also that material culture, including the things of everyday life, buildings, and indeed landscapes, is key to that structuration. As such, the structuration of the subaltern is a subject that certainly can be studied in Roman Canterbury, as a case study. This theoretical framework brings new and significant questions and hypotheses that can be tested, and potentially important new understandings. We look at Roman Canterbury as a subaltern of "History"; as subaltern to cultural dominance north of the Thames; and we consider the types of evidence that might speak of shifting subaltern identities within the town itself, from the first to the fifth centuries. The latter area will require much more in-depth study, but the potential is already clear.

Marlee Miller:
Before shadows and dust: recovering the lives within the ludus gladiatorius

In the literal and historiographical shadow of the Colosseum sits the Ludus Magnus, the great gladiatorial training school of Rome. Hidden beneath that shadow are also those who worked and lived in Roman gladiatorial ludi, Republic to Empire, west to east. Within the Roman social hierarchy, they did not register, boasting the ancient designation as infames, and pushed to the margins. But now they also fit into the post-colonial categorization of "subaltern" as theorized by Antonio Gramsci. It would seem that the gladiator were not allowed the opportunity to leave his mark or write his own story, however, this paper argues that that is incorrect. This paper argues but that life and daily training in the ludus provides a counter-narrative and subaltern perspective to the dominant "top-down," often transactional perspective. In some circumstances, gladiators reacted to their surroundings and attempted to leave their mark, literally in the form of graffiti, best known from the House of the Gladiators at Pompeii (V5.3; CIL IV.4280–4427). Although actual social mobility was almost impossible, interaction with their imposed architectural surroundings was an attempt to elevate themselves within their own group. Moreover, funerary inscriptions record their fighting records and status, often noting their ranking in the "palus" hierarchy. They also reveal familial relations, usually adoring wives and children, connecting them to an outside and an important Roman social norm. From their own material records, it is clear that gladiators and those who worked with them, like the lanista or doctor, were not as ephemeral and mysterious as the common narrative indicates.

David Jesús Cebrián Martínez
Gramscian approach to the analysis of Early Iron Age indigenous peoples

The landscape record of the Early Iron Age Catalonia shows, very particularly in graveyards and settlements, signs of the existence of the so-called subalterns and the way in which they were used by the social elite to materialize a social change that will take place with the emergence of the Iberian culture. At the same time, however, the Early Iron Age settlement of Sant Martí d'Empúries makes manifests, in the alternation of round and rectangular dwellings, the possible resilience of subalterns to the ongoing social transformation.

On the one hand, the necropolis of Vilanera, dated 700-650 BC, displays a lay out in which it is feasible to discern a change in the social structure, in particular owing to the various types of burials, among which stands out a burial mound and three varieties of tombs, one of which could be related to the category of the subalterns. The latter appears to point out the relevance of the subalterns in the societal development, for the evolutionary process could not have taken place without the participation of the majority of the community. On the other hand, the appearance of rectangular dwellings in the so-called phase IIA of the village of Sant Martí d'Empúries and the reappearance of roundhouses in the following phase, IIB, seem to underline a phenomenon of resistance to societal transformation that can be attributed to the segment of the collective more affected by the aforementioned changes.

Edoardo Vanni:
Subaltern to whom? Reflecting on Gramsci's categories after the post processual era

According to many scholars the concepts of hegemony and subaltern classes have played a key role in the post-colonial studies in general, as well as in the post-processual archaeology. In particular these categories have brought to light in the Classical archaeological studies, amongst others, the role of the material culture used by masses, or they have help to rethink the life of rural population (the peasant studies vague) or to reconsider the importance of popular art confronting with that of the elites. But which is now the sense to re-read the Prison Notebook 25 in which Gramsci discusses the subalterns? Is its meaning completely spent for us at the end of the post-modern era? Using some examples from the history of archaeology, and retracing the genealogy and penetration of Gramsci's thought, I would suggest how and why those lines of Notebook 25 could be rich in consequences for archaeological theory. If we consider the entire work of Gramsci as a coherent historical narrative we can draw from it strong models and paradigms to interpret, understand and write our archaeological (and finally historical) narratives. If we look beyond the concept of subaltern eminently political, other important theoretical paradigms came to light: some of them concern the heuristic, as the use of comparison and historical analogy, others the epistemology, as the capacity to explain structural crises or multi-variated historical evolution of societies, and finally the logic of transformation of the socio-economic formations. I would argue that taking about subaltern means to face the very core of the historical and archaeological theory, dealing with hard concepts as historical necessity, marginal history, philosophy of praxis or historical tentative laws. In other words re-reading Gramsci means understanding Marx, the historical materialism and at the very end, the logic of the transformation of human society and the role of the different subjects involved. For Gramsci this meant writing history, making philosophy and acting politically, that they are the way to engaged and changed the reality.

TRAC 9. "WE DEMAND RIGIDLY DEFINED AREAS OF DOUBT AND UNCERTAINTY!" HOW TO OPERATIONALISE MARGINALITY IN ROMAN ARCHAEOLOGY

Kala Drewniak, University of Bonn, Germany
Marjolijn Kok, Independent Researcher, Netherlands
Anna-Katharina Rieger, University of Graz, Austria

Within the examination of the Roman World, an imbalance of research interests in favour of popular key aspects connected to social, political, and economic power is still noticeable. Yet, the impact of marginalised people or space is far too often underestimated in both, methodological, and descriptive regards. Shaping histories of the Roman world, we rarely look for alternative mind-sets and are tempted to reproduce habitual narratives from central sources. This session questions the focus on aspects, where economic and political power allowed for an accumulation of "rich" evidence, while "poor" aspects of the past are often neglected. Therefore, this session will examine marginalised people, space and concepts and targets phenomena, such as historiographies of marginalised groups, the impact of border-zones or places "in-between" and alternative approaches to traditional research models, based on a holistic and bottom-up perspective. What we are seeking for are theoretical concepts that provide a framework for the examination of the margins in and of the Roman world and open the discussion on their relevance and applicability. This approach will be vital in order to understand core aspects of Roman history ranging from the utilization of resources, economic behaviour, adaptation, and migration to the spread of ideas, or religious change, as marginal groups and regions can serve as markers for resilience or fragility of larger systems in moments of ecological, political or economic crisis. The challenge for researchers is to question the narratives of their own field. This means to climb over imaginary walls created by research tradition, to move beyond the margins of theory and borders of disciplines, and to establish interdisciplinary frameworks, which allow for creating a complex and dynamic picture of the past. This session aims to provide a first step towards new perspectives on the margins and of the Roman Empire.

Marko A. Janković:

Inglorious bastards of Rome - Gladiators and ambivalent attitudes in Roman provincial societies

Together with some other social groups within Roman societies, gladiators had very specific place. Their social identities were constructed and maintained in constant friction between their popularity and fame on one hand and their status of slaves (for most of them). Furthermore, their enslavement was different in many respects than in most of the groups with similar status, with great amount of evidence showing the presence of families, professional associations, etc. Inscriptions and ancient texts are testifying their popularity among the most of the social groups, so we have their names and achievements, fates and relations with other people, preserved until today. At the same time, gladiators as a group that was "selling" their bodies for entertainment, were perceived as unworthy to be a regular part of society, in life and death. Today, there is just a few necropolises that were archaeologically investigated and where gladiators were attested. Their burial ground is usually either outside of regular necropolises or on their very margins, clustered and separated from the rest.

The marginality of gladiators is mostly unique in the Roman world – they enjoyed some privileges that were not allowed to other similar groups, but at the same time and despite their fame and glory, they were still treated as a group that had no equal rights as the rest of the society. Still, their specific marginality, unlike other similar groups, resulted in certain amount of archaeological evidence which could help us reconstructing their lives and deaths today.

Lisa Duffy:

The people of Roman Canterbury: uncovering ordinary lives through theoretical and scientific storytelling from human bones

The large number of ordinary, non-elite people living in Roman Britain is seemingly invisible in history. However, they leave behind important archaeological traces, including their bodies that store primary evidence of the physical and social environment that shaped their experience in life and death. The relatively recent growth in detailed Roman archaeological datasets from development-related excavations has coincided with major theoretical and methodological advances in contextualised studies of human remains. This has put osteoarchaeological study in a unique position to challenge and broaden research agendas through synthesis of rich biocultural data that becomes entangled in bone and its associated contexts. Yet, human remains are regarded as a 'still largely untapped resource' in studies of the Roman world (Gowland, 2017). From the remains of individuals living in Roman Britain we can construct stories that elucidate everyday life and the dynamic social forces shaping experience in certain regions of the province. Here I will present my PhD research that is focused on constructing osteobiographical narratives from human skeletal remains of over two hundred individuals from three Late Roman cemeteries in Canterbury. I will discuss how this approach provides a compelling framework to present alternative narratives of Roman history and to disseminate information to broad audiences through scientific and theoretical storytelling.

Reference: Gowland, R., 2017. Embodied identities in Roman Britain: a bioarchaeological approach. Britannia, 48, pp.177-194.

Stefano Magnani:
Between marginality and connectivity: The eastern Alps in Roman times

The Eastern Alps fell into the orbit of influence of Rome at the beginning of the second century B.C. and were completely subjugated during the Augustan age, when the entire region was reorganized and distributed between Italy and the province of Noricum. The eastern Alpine territory was transformed into a veritable connectivity system, with the creation of numerous settlements for its administration and management, and a network of roads that was functional to exerting control, to the connection between the settlements, movement of individuals, exploitation of natural resources, and trade on a large scale between Italy and the provinces. However, behind the apparent territorial, political and cultural homogenization – perceived and definitely illustrated by literary and historiographical sources –, the archaeological and epigraphic documentation shows the persistence of a more complex and articulated situation. Alongside the Roman centres, a long-term persistence of the marginal nature of some areas and of the human groups that lived there may be detected. Even in the second century AD, in fact, some of these realities appeared far from being integrated within the nearby civic communities and were marginal to their territory or excluded from participation in common rights.

This paper aims to investigate these realities, which are marginal from several points of view – cultural, economic and political at the same time – in order to contribute to the development of a more complex vision of their articulation and dynamism.

Kseniya Danilochkina:
Between Roman walls: when "nothing" is a thing

There are always many questions when we have to deal with a great amount of information, but when there is nothing concrete, there may be even more. While studying Roman Britain we try to find answers to our questions in those gaps and lacunas and try to apply a theoretical re-thinking, because sometimes a lack of information is also important. There are not many things that we may say about life "in-between" Roman Walls and this concrete lack of knowledge may help us to understand what kind of impact these two borders had and in what way life of people who lived on that territory had been changed and influenced by invaders.

There is also a matter of comparing different levels of involvement in the processes of cross-cultural communications for those tribes who originally lived in the middle of the island and those marginal groups on the border. The way in which Romans influenced on the province was somehow different in those two territories in some ways and the same in others. So, our intention is to define those differences and to look closely at how that worked for both sides.

And finally, this paper is going to discuss how to deal with those gaps and what kind of sources are of most help in such cases. Because one of the problems is a contemporary one and linked to borders of our times and we have to consider them as well.

Csaba Szabó:
World of nymphs and forests: religious communication in Roman rural baths in the Danubian provinces

Marginality is a notion with several spatial aspects, where exclusion and inclusion, borders and inner places are united in a space, which was often interpreted as "spaceless places". The marginal aspects of natural cavities and forests in Roman times were studies in few major works however their role in Roman religious communication needs reconsideration. This paper is focusing on the role of the natural baths and cavities in forests and marginal areas in the Danubian provinces during the Principate, highlighting their emotionally charged role of these in religious communication. By their role in the natural environment, as thirdplaces, natural cavities transformed in public baths represents unique case studies for marginality in Roman religious space sacralisation. The paper will focus on baths from Roman Dacia (Germisara, Ad Mediam), Pannoniae Dacia (Aqua Iasae) and Moesia Superior (Mediana, Osmakovo and Krupac), analyzing them through a new methodological approach, where the marginality of space plays an important role in space sacralisation and religious communication.

Philipp Margreiter:
Unbowed, unbent, unbroken? Romans and nomads in late antique North Africa – an archaeological perspective from the margins

The history of ancient North Africa was affected by the conflict between the settled Punic, Roman, and later Arab communities and the nomadic organised ethnic and military groups in the hinterland. Older research assumed that Roman presence stopped at the margins of the mountains, facing a nomadic and tribal. as well as hostile population. The encirclement of the montainous regions with Roman garrisons seemed to corroborate this view. Recent archaeological studies, however, revealed a much more differentiated situation and dissolved the Roman/Barbarian antagonism. New research shows that the cooperating nomadic tribal confederations, which came in conflict with imperial Rome, were not simply pastoralists but mainly armed gentes. Similar to the Franks, Langobards, or Alamanni those tribal confederations in Northern Africa were formed, recruited, and created in a long process by Roman policy and new local frontier zone communities organized themselves during the Vandal period. Barbarian gentes like the Garamantes, Gaetuli, or the Frexes have been important foederati, trading partners, and enemies from Roman until early Arabian times. But how did the Byzantine administration deal with these mobile groups? The distribution of Justinianic fortifications does show that the chain of mountains surrounding the Hodna, Belezema, Aurés, and Nemetcharange was flanked by fortifications in the North and South. The position at strategic routes and valleys inside these mountainous regions suggests that one purpose of the garrisons could have been to control the seasonal movement of nomadic or transhumant people. This movement to the spring and summer grazing lands would have constituted a threat or at least a possible dangerous situation to the settlements of the Roman provinces. This paper will focus on the question how and in which contact zones such mobile groups could be made "visible" for modern research. Therefore, fortification systems, streets, drift ways, and markets - so called nundinae - will be analysed and discussed. The paper will combine archaeological, epigraphic, and historical sources and material to understand the changes of frontier organisation between the 3rd and 6th century AD.

Marjolijn Kok:
Queering the margins: a critique of using ethnic names written down by the Roman oppressor

In this paper I want to critique the unnecessary use of ethnic names by archaeologists when referring to a local native context in the Roman Period. Ethnic names are often used as shorthand that invokes a sense of, we know who we are talking about. This general use of ethic names, however, can be viewed as problematic on different levels. Most of these names we use, especially at the margins of the Roman Empire, are written down by the Roman invader. Colonizers have the tendency to simplify local social structures as it makes them easier to deal with. It homogenizes diverse cultural practices into larger manageable groups. Moreover, for political purposes these named groups are given characteristics - on which to base policies - that have often little to do with reality. When archaeologists perpetuate the use of ethnic names given by Romans, they are following the oppressor's lead.

In a field of study that has become more competitive over the years for funding, ethnic names are often considered more marketable than descriptions. The results can be that archaeological narratives loose their detail and diversity and confirm stereotypical ideas. By using a queer perspective I want to show that if we look closely at the data a more diverse and complex story can be told about the peoples living at the margins of the Roman Empire.

Kala Drewniak:
Anarchist theory as an expedient of Roman Iron Age archaeology

Although the interest in anarchic traits of societies and anarchist theory has risen during the last years, anarchist theory has rarely been applied in Roman or Roman Iron Age archaeology. So to say, anarchist approaches are a marginalized aspect within these disciplines. The common idea about anarchy is very often affected by the preconception of violence and disorder. In fact, anarchist theory is driven by the question how societies accomplish self-governance and how acephalous or decentralized communities are organized. Furthermore, anarchist theory benefits from feminist and post-colonial theory, which support the idea of leveled power relations and the critique of unilinear approaches. Therefore, anarchist theory forms a promising framework for inclusive and interdisciplinary archaeological research.

This paper aims to present the characteristics of anarchist theory and to point out, why and how it can support the gain of new insights in Roman Iron Age interactions. The idea of self-governed and decentralized social dynamics can form adjuvant frameworks for the examination of societies in the central European Barbaricum, which directly borders the Roman Empire. Some of them do not seem to be organized hierarchically, wherefore we need to adjust our approaches of social inquiry. Another core aspect of anarchist theory is the resistance to conquest and imbalanced power dynamics. Roman Iron Age archaeology can benefit from anarchist theory in terms of contact and conflict between the Empire and the Barbaricum communities. Therefore, this paper pleads for the application of anarchist theory in certain aspects of Roman and Roman Iron Age archaeology.

TRAC 10. FROM TRENCH TO PRESS

Alessandra Esposito, King's College London, UK
Kaja Stemberger Flegar

The Roman world has been a focus of fascination and research for several centuries. It is at the centre of countless collections as well as studies, reports, and publications. This research outpour has become an object of research in itself, as archaeologists working on ancient sites have to often engage with older publications produced when the standards of archaeological investigations and associated publications were different from the ones expected today.

This session focuses primarily on studying material from old(er) excavations using new methodological approaches to the reinterpretation of old reports with the aim of bridging the gaps between modern archaeology and pre-WWI archaeology. A second key issue covered in this session is how to approach an excavation in areas that were already excavated in the past and consequently, how to address the problems posed by old documentation in such cases. Finally, the session is concerned with how to deal with material from sites with missing documentation, also accounting for geographical biases resulting from different historical traditions of archaeological analyses.

By exploring past and modern approaches to old methodologies, this session addresses the manifold obstacles that are encountered on the way from initial discovery and excavation to analysis and final publication of a site and its finds, while assessing the significance of past archaeological endeavours for the advancement of the general scientific knowledge of the Roman period.

Leah Hewerdine:
I can't get no satisfaction...in site reports and publications

Public outreach with developer-funded sites is not standard practice and, as a result, the only information potentially available to the interested onlooker is the final site report or publication. UK Government policy on the Historic Environment prescribes that preservation by record is the agreed alternative to preservation in situ for developer-funded archaeology and prescribes that these records be made publicly accessible (DCLG 2018, p.56.199). These unpublished client reports, commonly referred to as 'grey literature', certainly fulfil government policy requirements but are not written with a wider audience in mind. Grey literature is freely available, however, online and via the Archaeology Data Service. These reports may be too technical in language and presentation for multiple publics and published material, such as monographs, propose similar issues. This can further sever the public from engaging with their local historical landscape. Research conducted twenty years ago found that there were obstacles within grey literature reports and publications that caused widespread dissatisfaction among archaeologists (Jones et al., 1999). These obstacles may still exist today. There has also been little research into how the public engage with this material. Therefore, I conducted focus groups with multiple publics, and archaeologists, to investigate if there are barriers that exist within grey literature and publications that effect understanding, engagement and enjoyment. This paper will discuss the findings of this research and, in its conclusions, will suggest what measures can be taken to remove these barriers and improve accessibility for all.

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Philip Smither:

Reinvigorating Richborough

The challenges encountered by Ljubuški Archaeological Project in the region Ljubuški in Bosnia and Herzegovina, part of ancient Narona's hinterland, required specific methodological responses to complicated interrelations of legacy data and recent non-invasive prospection . Due to the history of the region, archaeological research developed unusually: after initial works of Austro-Hungarian pioneers there was only limited research in the Yugoslav period, and then no fieldwork until second decade of the 21st century. This means that non-stratigraphic excavations "100 paces south of the stream" are almost directly followed by modern non-destructive prospection with GPS locations.

Dračevica site presents a perfect case study, excavated and published in the 90s of 19th century, followed by rich second life of information as they were repeated, interpreted, omitted and/or exaggerated in later scholarship. The recent prospection includes geophysical methods, UAV-made orthophotos and DEMs, and other data, all with precise GPS locations and integrated in GIS; but research takes place in a much more anthropogenically altered situation. Due to changes that happened in last 120 years and partial destruction of evidence, a special methodology for the inclusion of legacy data is crucial. The new and legacy data interrelate in a complex manner, allowing a two-way reinterpretation of both sets. Only through this dialogue, the character of the site and its role in Narona's hinterland are finally understood.

Anna H. Walas:

Telling stories of the desert: The potential of material held in European archives to overcome lack of modern excavation with the example of Roman military base and garrison town at Bu Njem, Libya

The Roman military base and settlement at Bu Njem, Libya, excavated by René Rebuffat in 1960s earned a lasting legacy through its exceptional ostraca and inscriptions. At the time of its excavation Bu Njem was among some of the best-preserved Roman military sites in North Africa. However, the work of the expedition only published in the form of incomplete preliminary reports with a large dossier od visual data, of now damaged archaeology remaining unpublished, the archaeology of the site remains largely known to the scholarly community. With the evidence for military base still to be studied in the context of recent advances in our knowledge of the neighbouring Garamantes, the flow of trade in the Sahara and post-colonial revisions to the understanding of Rome's African frontiers, the site offers a unique glimpse into military civilian relations and an opportunity to overcome a global bias towards European frontier archaeology.

The paper will focus on exploring practical, visual approaches to excavation data, reconciling old methodologies in the digital era and working with scattered documentation whilst reflecting on how targeted research can support the work of heritage agencies, such as UNESCO World Heritage through systematic archival appraisal of documentation held at archives at Maison méditerranéenne des sciences de l'homme and at Archives Nationales d'Outre Mer in Aix-en-Provence, France. The inaccessibility of the site and its destruction underline the value of working with old excavation data in archives.

Alessandra Esposito:

Beyond the press. Working with digital archaeological data from Jordan in the MaDiH (مديح project)

The proliferation of archaeological projects with a digital input in the last 20 years has had the advantage of putting archaeology at the forefront of experimentation and application of digital methods. From collecting and analysing big databases to working with geographic and visualisation software, digital applications in archaeology have allowed for mapping and prediction of geographical patterns as well as visual reconstructions of ancient sites strengthening the efforts for public engagements which have spread to the videogame industry.

However, this same proliferation has generated, as a downside, a difficulty for researchers in keeping track of the complex landscape of archaeological digital inputs produced internationally, sometimes resulting in a duplication of projects. This ends up slowing down the general advancement not only of archaeology but also of other disciplines that rely on archaeological data.

An interesting case-study in this sense is Jordan, characterised by a complex terrain of national and, mostly, international archaeological missions: following these projects closely has become challenging for the local Department of Antiquities and Ministry of Tourism. The MaDiH (مديح): Mapping the Digital cultural Heritage of Jordan project is currently building an online, open source, repository where researchers, professionals working in the cultural heritage, and the public will be able to look up datasets related to the heritage of Jordan of any period and of any kind. This paper discusses the methodological approaches used by MaDiH (مديح) to build its repository and present the advantages of this project focusing on finds related to Roman and Nabatean archaeology.

TRAC 12. FROM GLOBALIZATION TO GLOCALIZATION: EXPLORING PROVINCIAL IDENTITIES UNDER ROME'S GLOBALISING EMPIRE

Dustin McKenzie, Macquarie University, Australia
Rubén Montoya González, University of Leicester, UK
Luca Mazzini, University of Leicester, UK

In recent decades, the existence of global, homogeneous, interconnected, flows across different types of material culture, social groups and geographies all over the Roman world has been rethought beyond the existence of conceptual and physical boundaries (see e.g. Witcher 2018; Egri and Jackes 2016; Scott and Webster 2003).

One of the most promising frameworks that has developed out of the focus on diversity and unity in a globalizing network is the theoretical concept of glocalization, or 'the refraction of a global phenomenon through local entities' (Roudometof 2015). However, the glocalization framework as applied to archaeological studies remains overlooked (Barrett et al. 2018: 11-32) and, in many cases, un-theorized. With this in mind, this panel will explore how within the globalising Roman world, identity was differently manifested and material culture was discretely present in the provinces; particularly as it pertains to the realities of glocal identities as the result of the interconnectivity of peoples, ideas, technologies and the diverse and uniting nature of the Roman world. Each paper investigates the impact Rome's globalising presence had on the formation, negotiation, and continuation of glocal identities through material evidence. Some of the questions to be discussed are: How the glocalization framework can help us to further understand processes of cultural contact and change in the Roman world? To what extent the glocalization framework can throw new light on the study of local and regional practices within a seemingly globalized world? We welcome papers dealing with different types of evidence, from different chronologies, related to glocalization.

Luca Mazzini:

The sacred Senate and the "double ethnics" on coins and inscriptions: patterns of local identities and "regionalization" in the province of Asia under the Roman imperial power

In Asia Minor, the cult of the emperor seems strictly connected with the cult of the Roman Senate. There is no evidence for this cult, either epigraphic, literary or numismatic, during the Republican period. The evidence of the worship of this Roman institution is dated to the Imperial period and comes almost exclusively from the province of Asia. The present paper investigates why several Greek cities have the personification of the Roman Senate depicted on their civic coinages. This could be a sign of the Roman penetration in the life of the local communities and it shows how the latter integrated Roman symbols and responded locally to an external form of power. Moreover, the analysis focuses on the relation between the presence of double ethnics on coins issued by these civic communities and the depiction of the personification of the Roman Senate. How widespread was the representation of the Roman Senate on civic coins among these cities? Was it perhaps connected to the affirmation of local identities? Were the double ethnics used by the civic communities to claim different aspects of their identity in relation with the Roman Imperial Power?

Francisco Machuca Prieto:

Phoenician memories in Hispania: local pasts, global present

Traditionally, Spanish historiography has tended to consider the victory of Scipio over the Carthaginians in 206 BCE the end of the deep and long Phoenician presence in Iberia. The result of this interpretation, with exceptions, is a view of the Phoenician past as a slowly changing history truncated suddenly by Rome. However, nowdays we know that the Phoenician communities of the Iberian Peninsula do not disappear after the Roman conquest. The Phoenicians of what is today the southern coasts of Spain continued to shape their own cultural and political destiny despite the powerful impact of the Roman rule. Roman imperialism in Hispania clearly resulted in struggles over territory, sovereignty and cultural identity, but the archaeological and literary evidences points to a reality different than that underlying much of modern narratives of opposition. Usually, those struggles have been conceptualized as Roman versus local identities, but not as a generational choices involving old and new practices. In the case of Phoenician communities, the survival of cultural elements rooted in traditions prior to the arrival of Rome certainly does not indicate an active and hostile resistance to Roman customs. On the contrary, this continuity is seen as a renovation, a way of giving free rein to integration without renouncing the particularities. This phenomenon could be linked to the need for legitimation of the local elites, immersed in a complex game of identitary oppositions and aggregations that held the ideological structures of the rather accommodating imperium romanum concerning the integration of the conquered peoples.

Alessandra Esposito:
Global or glocal? Considering the role of collegia in shaping identities in the Roman north-west

The application of globalisation theory to the interpretation of the Roman world has had the advantage of moving the debate forward from the Romanisation paradigm, where, being part of the Roman empire would provide the individuals living inside and engaging with the border areas of the Roman world with a somewhat standardised experience.

However, the advancement of the debate on the suitability of the globalisation theoretical framework has highlighted different degrees of comparability between the contemporary modern world, for which the term globalisation was originally created, and the ancient world to which it has been applied. Reflecting on this aspect has now opened a testing phase for the glocalisation approach, where Roman 'global' inputs are reviewed through the evidence of localised identity engagements.

This paper discusses the evidence for members of collegial associations in Roman Britain to assess the aptness of considering collegia as a terrain for assessing glocalisation theories. Collegial associations have been considered a globalised Roman phenomenon which facilitated the integration of local individuals in the imperial political and economic organisation. Based on the epigraphic and archaeological evidence for collegia active in Britain and between Britain and Northern Gaul, this paper considers collegia in light of individual 'glocal' experiences, where the subprovincial structure of collegia intersects interprovinicial trends of the associative phenomenon.

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Eleonora Gasparini, Patrizio Pensabene, Monika Rekowska:
Domestic architecture and expressions of identity in Roman Cyrenaica and Cyprus: further reflections on glocalisation in two imperial provinces

The concept of glocal seems to adapt to Roman Cyrenaica and Cyprus, when one attempts to explain both continuity and transformation of housing regional traditions. Likewise, glocalization is a valid theory in order to explain the responses that followed the entrance of these regions in the imperial dominion.

Different from Egypt, under domination of which they were both, proudly descendent from a past of political autonomy, they ended up diluting with the territorial and historical rivulets that flowed across the centuries. Therefore, the two regions have always put scholars before the question of their identity.

If one looks at the main domestic complexes of Cyrenaican and Cypriot cities, dated from the end of the 2nd BC to the 6th century AD, their architecture, intended as planimetric arrangements and elevations, can be interpreted as the expression of a glocal phenomenon.
In Cyrenaica and Cyprus we can, in fact, recognize the fusion of components of various space-time origin, but also specific styles that are characteristics of the two regions.

With this contribution, that is a part of the research project "Residence as a self-presentation of urban élites. Architecture and decoration of the House of Orpheus in Nea Paphos, the ancient capital of Cyprus" (National Science Centre Poland 2017/27/B/HS3/01131), we intend to emphasize the relationship between the ways of living and the house owners, who modify and adapt residential spaces to their needs and tastes.

The analysed houses constitute the representation of an élite, whose traits and whose differences across time and across urban contexts are the starting and the ending points of these observations.

Monika Rekowska, Demetrios Michaelides, Eleonora Gasparini, Patrizio Pensabene:
House of Orpheus in Nea Paphos, a capital of Roman Cyprus: Local phenomenon in global empire?

The House of Orpheus is a conventional name coined to describe a sequence of buildings within the insula in the centre of Nea Paphos, the capital of Hellenistic and Roman Cyprus. This complex of several houses has a long history dating back to the Hellenistic period (or the time of early urbanization of the city) up to the late Antiquity. Such longevity, subsequent reconstructions, layout's changes as well as complex decorations (mosaic, painting and architectural) allow observing both global and local aspects of housing in historical perspective , as well as how the local identity was expressed within global frameworks. The project 'Residence as a Self-Presentation of Urban Elites.

Architecture and Decoration of the House of Orpheus in Nea Paphos, the Ancient Capital of Cyprus' aims at examining ways of expressions of identity through the analysis of houses that were uncovered few decades ago but had never been entirely published. Obviously, the built-up area clearly presents some global aspects of the layout and organization of space while local aspects should be sought in the architectural decoration, mosaics and paintings responding to the owners' individual taste and needs. A subject of special interest is the houses' peak of development during the Severan floruit period when the mosaic depicting Orpheus with, possibly, the name of the owner (and founder) was laid. Nevertheless, when discussing the globalization and glocalization in the contexts of urban and social transformations in Late Roman cities, the last phase of houses occupation during which the coexistence of workshops and residential part is attested, seems particularly intriguing.

Julius Roch:

How to integrate an emperor: the relationship between the Roman emperor and Apollo Didymeus as represented in the provincial coinage of Miletus

After some introductory remarks I will address the question of whether and to what extent the depiction of Apollo Didymeus could refer to the emperor and his family. These will be discussed on the basis of two examples:

- An imperial cult of Caligula was established in Miletus during his reign, possibly within the sanctuary of Didyma. We find a coin type with the bust of Apollo Didymeus on the reverse dating from this period. I will stress the idea of understanding this as a reference to the joint worshipping of Caligula and Apollo in Didyma.
- The second example is from the early reign of Trajan and shows the cult statue of Apollo Didymeus accompanied by tripod and snake on the reverse. I examine whether this unique motif can be linked to an oracle that was given Trajan when he visited Didyma in AD 80.

At the end I will present some conclusions about the meaning of local motifs and the usage in changed political conditions. Especially I focus on the question of how the motif of Apollo Didymeus was used to integrate the Roman authority into the civic identity of Miletus.

Fernando Moreno Navarro:

Peasant settlements' networks: The North Carpetania region during the Roman Empire

Before the last economic crisis of 2008, due to the rapid growth of larger cities, there were a great amount of archaeological interventions in the metropolitan area of Madrid (Spain). Many of them are peasant settlements such as farmsteads and hamlets from the Roman Period (I BC – IV AD). As a result, we can analyse many archaeological artefacts often overlooked by the traditional academy.

In this project we applied Social Network Analysis (SNA) in order to study of the connections among the peasant settlement of the North Carpetania region. As connectivity is the basis for globalization, the use of Network Analysis can provide us a better understanding of the hidden patterns and structures of whole complex networks, and what position each peasant settlement had in the system in terms of hierarchy.

For this case study I calculated the network of more than 20 excavated archaeological sites. The network is generated taking into account the regions where archaeological evidence was produced and discovered, as well as its typology. The result is a multi-scale network where we can infer connections on various different levels. The network's pattern can show us if isolation and segregation of particular communities is due to the globalization, generating inequalities within Roman society.

Łukasz Sokołowski:

Vocabulary and directions of glocalisation in Roman Syria. The narrations of local funerary monuments and epitaphs since late-Antonines until Zenobia

The ancient definitions of Syrianess and Palmyreness mentioned by ancient sources are as vast as the number of funerary reliefs preserved from the province which survived until now. The sculptural and funerary landscape of Roman Syria was highly abundant and diversified, the main local centres of production being Palmyra, Zeugma and Southern rural areas. Therefore they provide excellent material for studies of regional but also Roman identities in the province from the time of Augustus until the crisis of the third century. From the very beginning the funerary reliefs from Syria transferred diverse and temporarily varied patterns which reflected the localisation of the external impacts and simultaneously the expression of the local identities in relation to these impacts. Yet, whilst firstly the local identities were expressed in a restrained manner under Antonines they partly reflected the imperial visual programme of unifying Greek values and the ideal of paideia. It is the end of second century when the local identities have begun to be fully expressed in the funerary narrations operating by the variety of cultural idioms which reflected the interaction between the local and global imageries of transforming Empire. The shifts in the style, composition and iconography illustrate the vigorous affirmation of local identities constructed amidst the homogenising and fracturing external visual trends. The case studies from Palmyra but also from the other sites of the province as well as other locations clearly demonstrate the process of cultural interpretation and adaptation of the global messages but also the de-location of the local ones. And thus, the concept of glocalization provides a very promising frame of their interpretation.

Sadi Maréchal:

Washing away a native background? 'Divergent' baths and bathing habits in north-western Gaul

This paper will examine a small and basic type of bathhouse found near villas and road stations in north-western Gaul. These baths only consist of a heated section and one heated pool, and seem to date mainly to the early stages of the Roman period (mid 1st to early 2nd c.). The absence of a cold section, by this time a prerequisite for completing the traditional Roman bathing habit (strengthening the body after the softening heat), could point to a deliberate choice of omitting this specific part of the bath. A lack of funds or problems with water supply can be ruled out as prime reasons for these omissions. The cold climate and possibly a divergence from Roman bathing habits by local commissioners can offer an explanation. Indeed, the villas and road stations to which these baths belong are characterized by strong links witch native vernacular architecture and display a material culture of mainly local items. Furthermore, evidence for pre-Roman settlement has been identified on some of these sites. If we assume that the architecture and material culture of these sites reflect the background of its inhabitants, we could argue that these were natives who had accumulated a certain amount of wealth and invested in a fashionable Roman convenience such as a bathhouse, without fully adopting the underlying bathing culture. An empire-wide and culturally embedded phenomenon was thus recontextualized in a local framework, resulting in a new adaptation that existed alongside straightforward accommodation of and resistance to the same phenomenon.

André Carneiro, Cláudia Teixeira:

Moving identities: resilience, change and adaptation in the Lusitanian territory during the Roman process

The Roman province of Lusitania is integrated in the Roman Empire in the end of the first century b.C. (25 a.C. estimated for the foundation of Augusta Emerita, the provincial capital). However, the processes of change began earlier, with the first Mediterranean globalization all along the Ist millenium b.C., due to interactions with the Phoenicians, Greeks and Punics. These contacts motivate severe processes of change in the indigenous communities.

The process is increased by the contacts and subsequent integration in the Roman Empire, promoting phenomena of hybridizations, assimilations, but also peripheries or exclusions. Literary references gives us a "black and white" version of the local societies: nomadic communities uncivilized and causing problems, versus organized and proto-urban societies that in a friendly and civilized way have diplomatic contacts and accept the Roman power. How is this paradoxical vision contrasted with the epigraphic and archaeological record? According to the archaeological data or literary references, we try to overview the diversity of processes. Case studies will be discussed using the material record and settlement patterns in the area. In particular, we present results obtained in the Fronteira Landscape Project, based in the North Alentejo region, where a systematic field survey in the area brought interesting results. The data allows the contrast between indigenous sites and the fortified small and medium-sized establishments belonging to the Roman settlers in the area.

Rubén Montoya González:

From the 'Roman villa' model to the 'Baetian villa model': glocalization, villa spaces and architecture in Hispania Baetica (1st BC-5th AD)

In recent years, the glocalizatoin framework has been use as a solution to the limitations observed in globalization approaches and as a better response to the global-local dichotomy. This framework has been used as an analytical tool to further understand how global transformations (i.e. material, symbolic and visual) happened differently in discrete regions within the Roman world. In this paper, I aim to reflect on how the 'Roman villa model' – or the historiographic construct we have of it through the combination of literary, epigraphic and archaeological evidence – happened in Hispania Baetica between the 1st century BC and the 5th century AD. Towards achieving my objective, I characterise Baetican villa spaces and associated architectural features through which I am able to define a model of Baetican villa. Afterwards, I interpret such a model, with regional and local variations, through the lenses of the glocalization framework. Previously, Baetican villa evidence had been compared with the 'Roman villa model', disregarding the Baetican character and nature of the phenomenon analysed. Instead, my paper identifies and acknowledges the Baetican character of archaeological evidence and presents a 'Baetican villa model' resulting from a refraction process of the 'Roman villa model' in such a provincial territory.

TRAC 14. TRADE AND CONNECTIVITY IN THE ADRIATIC AND ITS HINTERLANDS

Andrew McLean, University of Edinburgh, UK

The Adriatic and its hinterlands occupied a central place in the geography of the Roman world. The sea provided north-south connections between Northern Italy and the rest of the Mediterranean, east-west connections between the Italian peninsula and Illyricum, and acted as a gateway into the economies of Northern Italy and the north-eastern provinces. Indeed, the Adriatic can act as a microcosm for connections across the Roman Mediterranean world. Despite this, studies rarely consider the entire region, and new theoretical approaches to modelling these connections and their impact have yet to be applied here. Advances in network analysis and more complex GIS based connectivity models can be clearly noted in disciplines such as ecology, but many of these new theoretical perspectives have yet to be widely adopted or discussed in this Roman archaeological context. This session aims to address this imbalance and lack of quantitative methods by bringing together researchers to think about the Adriatic as a distinct regional entity, and to demonstrate how a modern theoretical framework, focusing on improving models of trade and connectivity, can be incorporated into studies of the region. We invite speakers to address questions such as: How did Adriatic trade networks manifest themselves? How can ancient connectivity or mobility be more meaningfully modelled? To what extent did the Adriatic afford closer trade connections between opposing coasts than between coast and hinterland? We welcome papers that seek to answer such questions, focusing on ancient history and archaeology, through the application of GIS, statistical, or other, especially quantitative, approaches.

Katarina Šprem:
Roman roads in Istria, Croatia - an example of a Least Cost Path analysis

Roads on the Istrian peninsula, Croatia, depend largely on geomorphology of the terrain. Istria is surrounded on two sides by the sea, while in the north it is separated by Ćićarija which can be crossed only in two or three places. Also, wetland valleys and rivers in the north of Istria present obstacles to the establishment of road routes. On the other hand, the southern part of the Istrian peninsula is flatter and without rivers.

The position of the Roman roads connecting important urban settlements in ancient Istria are known only in basic directions since the knowledge of the roads mainly depends on random finds of road traces. However, surface road signs are mostly unrecognizable. The western Istrian part of the road that connected Aquileia with Pola was called Via Flavia, which we know thanks to two milestones from the time of Vespasian found in Pula and Vodnjan. Some authors also call the eastern part of the road, the one that connects Pola with Tarsatica Via Flavia, ie they consider it an extension, but there is no documented confirmation of that name. We will discuss several authors' suggestions on the position of Roman roads in Istria, as well as hypothesised directions of the ancient roads which we obtained using the Least Cost Path analysis in QGIS.

Nefeli Pirée Iliou:
Modelling the economic activities of Varro's Synepirotae across the Adriatic Sea in Roman Epirus (modern-day southwestern Albania and northwestern Greece)

The second book of Varro's On Agriculture centred on a dialogue about animal husbandry that was voiced by illustrious pastoralists of his time, chiefly Roman aristocrats who had estates across the Adriatic in Epirus and called themselves the Synepirotae. Secondary scholarship has focused on the direct effects of these individuals on the Epirote agricultural economy, unquestioningly associating their activities with excavated fortified farms, dubbed "villas"; these farms were constructed in the Hellenistic period and renovated in Roman times. While the activities of Rome's business elite would certainly have affected existing land-management systems in Epirus, as they did in North Africa, however, the direct association between them and archaeological remains of farms, which also predated the conquest, is less secure. Instead, I argue, these farms on the basis of their archaeology, such as table ware and cooking vessels, can be more straightforwardly associated with members of the local elite. These locals would have been crucial nodes connecting the Synepirotae with the Epirote countryside and its exploitation. Contrary to past approaches, this paper investigates how the Synepirotae may have fit into the wider network of early Roman economic interactions between Epirus and Italy, composed of diverse individuals acting on both sides of and across the Adriatic and Ionian seas. I suggest that it is through envisioning models encompassing different actors that such Roman economic developments as the activities of Roman aristocrats abroad can be best understood and related to the archaeology in the Adriatic and beyond it.

Carlo De Mitri:
The shared sea: goods, trade and culture in the Ionian-Adriatic basin

From the Bronze Age onwards, the Adriatic Sea functioned as a 'corridor' linking the central Mediterranean with northern Europe. It was also a place of interaction between Italy, the Balkans and the Aegean. In this area of multiple connections, goods circulated together with knowledge and techniques that inexorably evolved into manufacturing skills with which to create products for export. The study of some particular objects and the application of methodologies taken from Social Network Analysis allow us to advance interesting hypotheses on trade routes in the Ionian-Adriatic basin in selected chronological phases and to verify their change or continuity in historical diachronic phases.

The analysis starts from selected contexts located on both sides of the Strait of Otranto - in the Salento peninsula and in Albania - and considers the main sites that, in the different chronological phases, have provided data on material culture, especially ceramics.

Maja Miše:
Defining the market: reconstruction of trade patterns in Late Republican Period in the Adriatic

The Roman presence in the Adriatic significantly shifted trade connections. Although some maritime trade routes across the Adriatic Sea have continued since the Hellenistic period, from the 3rd c. BC henceforth new trade links began to emerge. In the reconstruction of trade contacts and maritime routes, the traditional approach of typological classification of amphorae found in shipwrecks and terrestrial sites is often applied, as well as mapping the distribution of amphorae with a stamp found at places of consumption. However, both shape and epigraphic information are not always available from small fragmented sherds, and not all amphora have been stamped. Luckily, modern scientific methods of inorganic analsysis of ceramic material provide a means of characterising the microstructural and elemental composition of ceramics and detecting patterning in terms of their technology of clay paste preparation. Such data can be informative in terms of the production location or provenance of pottery, but also to track their movements. This approach has been applied to the study of amphorae, a ceramic transport container, in the Mediterranean, but not on the multiple sites in the Adriatic.

Intensive commercial activity is recorded by numerous shipwrecks loaded with transport amphorae along the eastern Adriatic coast. However, the debate over where the amphorae were produced and where the ports of departure were is still ongoing. To unravel the dense trade network in the Adriatic, we applied modern scientific analysis of more than 300 transport amphorae from 15 archaeological sites. These include amphorae from possible production sites, shipwrecks sank mid voyage and consumption places along the eastern Adriatic coast and hinterland. This approach has enabled a detailed reconstruction of the production and trade of amphorae within the Adriatic area, giving new insights into trade and the connection between the Adriatic coast and the hinterland.

Andrew McLean:
A connecting sea: circuit theory and maritime mobility in the Roman Adriatic

Attempts to model connections and trade across the ancient world have been numerous and diverse. Recent scholarship has trended towards more quantitative approaches employing network analysis, statistics and GIS. Least Cost Path analysis has provided insight into the routes and journey times, but is limited in the data it can provide beyond optimal routes between two fixed points. Furthermore, applying such analyses to combined maritime and terrestrial contexts is an arduous undertaking.

In this paper, I seek to outline developments in approaches to modelling mobility across the sea, and specifically, the potential of circuit theory for archaeologists attempting to understand the connected past. Based on historic wind patterns and sailing speeds, a dynamic proxy for mobility is produced. Rather than being limited to optimal routes, with circuit theory we can begin to identify entire regions of high potential mobility and connectivity within wider landscapes. By moving beyond the two fixed points of Least Cost Path Analysis, we can model mobility independent of known sites, and the archaeological biases inherent within such approaches.

Comparison of these circuit theory outputs with archaeological data provides quantitative and readily comparable results. It is shown that potential mobility has an impact of site distribution and that the Northern Adriatic is a clear focal point for potential mobility across the wider region.

TRAC 15. SUSTAINABLE URBANISM IN THE ROMAN WORLD: SETTLEMENT, ENVIRONMENT AND ECONOMY

Paolo Maranzana, Koç University, Turkey
Brandon McDonald, University of Oxford, UK

The recent debate around K. Harper's Fate of Rome has underlined the need to include environmental data within the study of the Roman world. Such evidence, however, has been mostly applied to the investigation of broad historical themes, such as pan-Mediterranean economic development and environmental over-exploitation. This panel aims to extend the use of environmental data to a narrower focus: the examination of the development of Roman settlement pattern. In particular, the panel interrogates the framework of "urban metabolism" in the study of Roman settlements, a concept that defines cities as "the sum total of the technical and socio-economic processes that occur in cities, resulting in growth, production of energy, and elimination of waste" (Kennedy et al., 2007). Papers in this panel will consider the extent of the ecological and economic footprint of the Roman city as well as to what extent Roman settlement patterns were economically and environmentally sustainable. Since relationships between settlements, the natural environment and economic networks are not static, papers will examine how these relationships change over time as well as the ability of Roman settlements to respond to external and internal stress.

Andrea L. Brock:
Landscape transformation and communal adaptation in Archaic Rome

This paper presents recent results from the Forum Boarium Project, an ongoing geoarchaeological investigation of Rome's river valley. The Project employs coring survey in order to access archaeological and geological stratigraphy buried more than 15m beneath the modern street level. Among other things, this survey is collecting new information on the pre-urban environment of the Tiber river valley and changes that occurred alongside urbanization at the site of Rome.

Preliminary results suggest that the riverine landscape underwent significant transformations in the sixth century BCE, including: 1) a sizable shift in the course of the river; 2) a staggering amount—nearly 6m—of sedimentation in the river valley; and 3) the possible formation of the Tiber Island. This new environmental data must be interpreted alongside an extensive corpus of archaeological and literary evidence that signals Archaic Rome as one of substantial urban development.

The causes of this transformation are argued to be, in part, a result of human interventions on the landscape, including deforestation and construction related to urban growth. The effects, moreover, have significant implications for understanding the challenges of building the Eternal City in a flood-prone region. It is ultimately argued that a communal response and large-scale adaptive efforts were required for the early inhabitants of Rome to build and sustain both religious and commercial activities in a kinetic river valley. Thus, the Romans' proactive approach to riverine—and more generally landscape—management across their Empire has roots in the city's very beginnings.

Alexander Chiu Smit:
A computational model of grain production and trade for the Roman world

The Imperial period experienced high levels of urbanisation, with growing settlements heavily reliant on stable remote grain production and supply to ensure food security. As an agrarian society in the water-limited region of the Mediterranean, Romans were especially sensitive to the effect that variations in the climate could have on food production. This paper explores how settlements may have responded to climatic variability, the extent to which they were resilient to changes in interannual regional yields, and how the challenge of supplying food to growing urban demand centres may have pushed grain production and trade systems to their limits. Using a purpose-built computational simulation, this paper applies formal modelling approaches to examine the interplay between modes of agricultural production, demand, interannual climate variability, and trade networks. The model uses a PC Raster Global Water Balance Model based on HYDE landcover reconstructions and proxy daily climate data to capture biophysical constraints, establishing potential yield output and the effect of interannual climate variability on production. Using an agent-based model (NetLogo) and ORBIS (The Stanford Geospatial Network of the Roman World), the paper explores the Imperial trade network and grain flows. It argues that stable irrigated agricultural output, regional grain surpluses, and effective grain trade within and between provinces facilitated the Empire's urbanisation and resilience to interannual climate variability. The paper further proposes how this physically-based model can explore the effects of long-term climatic changes on Roman settlements, production, and trade systems.

Linda R. Gosner:

The lure of the mines: resources, industry, and economy in Carthago Nova (Cartagena, Spain)

The rapid expansion of the mining industry following the Roman conquest of the Iberian Peninsula often had profound impacts on local ecologies, economic networks, and settlement patterns. Taking Carthago Nova (Cartagena, Spain) as a case study, this paper examines the effects of mining on other types of resource exploitation for related industries and the impact of mining on the local economy in southeast Spain. This territory was rich in argentiferous galena—mined for silver and lead in antiquity, and it also boasted fertile agricultural land and a multitude of marine resources. These natural resources were exploited by indigenous communities from early on and they drew Phoenician and Carthaginian merchants to trade and eventually settle on the Mediterranean coast over the course of the first millennium B.C.E. When the Romans conquered Carthago Nova in 209 B.C.E., they inherited not only this important port city of Carthaginian foundation but also its surrounding rural territory. Mining intensified across the rural landscape, as silver was extracted for Roman coinage and lead ingots were shipped for use in Roman urban infrastructure across the western Mediterranean. In this paper, I examine connections between the mining and other local industries, focusing my discussion around esparto grass weaving and the marine exploitation of the pinna nobilis bivalve. I show to show how Roman mining altered economic and social ties between the urban center at Carthago Nova, its surrounding rural and maritime landscapes, and the wider economies of the Roman Mediterranean.

Irene Soto Marín:

Wine cities: vineyard investment and urban development in late antique Egypt

This paper explores the relationship between urbanization and the rise of the wine industry in Late Antique Egypt by analyzing ceramic and archaeological evidence from well-known wine producing settlements, which experienced varying degrees of economic growth. Whether located by the Nile or in a remote Oasis, substantial capital was invested in vineyards and their irrigation systems, as well as in the development of cities during the Late Antique period, pointing to a new era of environmental and economic adaptation.

The paper will focus on four environmentally different wine production centers that experienced urban development during the fourth century: the oasis city of Amheida (Bagnall et al. 2015), the pilgrimage center of Abu Mena in the Nile Delta (Grossman and Engemann 1989), and the well-known Middle Egyptian cities of Antinoopolis (Guidotti and Pesi 2004) and Hermopolis Magna (Bailey et al. 1991).

Rising production of wine during the late third and early fourth centuries (Soto Marín 2018) appears in tandem with changes in civic development, but the growth of the industry has not yet been studied alongside archaeological evidence assessing changes in settlement patterns. The expansion of Roman baths, the construction of new Roman villas with luxurious paintings, the building of new churches, and the institution of public buildings point to private and civic economic development in the aforementioned major centers.

By analyzing the archaeological evidence of settlement patterns in tandem with the quantified amphorae corpus, we begin to see a holistic picture of the adaptation of the environment into a new provincial economic system for Late Antique Egypt.

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Gabriele Soranna:

Reshaping Roman food supply during late antique period (4th-6th cent. AD): faunal evidence as proxy to track urban evolution

A research project carried out for several years onto the Palatine hill NE slope in Rome has provided a large faunal assemblage that sheds light on food consumption and supply in the monumental city centre, the Colosseum valley and surroundings, between 4th and 6th centuries AD. Such an evidence shows somewhat a change around mid-5th century AD in the traditional urban meat supply, dominated since Late Republic (1st cent. BC) by pork, thus responding to crucial political and military transformations occurring in the city at those times. Shifting to a more diverse meat provision and the gradual disappearance of exotic taxa from the record, as the last shows took place inside the Flavian Amphitheatre, seem to confirm a significant reshaping of city requirements and patterns: more sustainable needs were sought as effect of an altered economic and productive background and of a changing supply network along with a major drop in urban population, hygienic conditions and different burial practices.

Brandon T. McDonald:

Urban decay from the Late Antique Little Ice Age and the Justinianic Plague: to what extent were eastern Roman cities affected by these so-called catastrophes?

This paper explores the degree to which urban centres of the eastern Empire were affected by the Late Antique Little Ice Age (LALIA) and the Justinianic Plague; that is, what observable decline can actually be attributed to LALIA and the Plague? It has been contested, quite recently for the latter (Mordechai and Eisenberg 2019), that these ecological disturbances did not have the damaging impact that some have proposed on the sustainability of urban centres (i.e. citing resilience). This paper takes a closer look at this theme through the lens of the Levant and Anatolia, with a peripheral focus on the role of connectivity, and how connectivity, or lack thereof, might have dictated the vulnerability of cities to severe climatic change and the spread of disease. Using Elusa, Petra, Sardis, Aphrodisias, and Balboura as case-study cities, the paper will first seek to identify specific periods of climatic variability and subsequent environmental degradation, as well as locate evidence for the Justinianic Plague, at or near the urban centres – the former two via scientific evidence and the latter through written evidence – and pinpoint correlations with historical and archaeological evidence of decline. Subsequently, I will assess whether or not we can attribute observable decline to the above ecological shocks. If yes, I will in each case work to measure the consequences of such trauma for each urban centre, the surrounding region, and for the imperial Roman economy.

Paolo Maranzana:

Urban survival in a regional network: Late Roman cities in western-central Anatolia

This paper investigates the response of Late Roman cities (4th-7th c. AD) in western-central Anatolia to globalized political, economic, and environmental changes. Recent archaeological research conducted by the author demonstrates that three Roman cities (Pessinus, Amorium, and Ankara) in the Province of Galatia (greater Ankara region) and their rural settings experienced their maximum expansion in the 6th-7th c. AD. Rural and urban prosperity was guaranteed by the development of a regional economic network, which emerged from the reorganization of the state-line of supply occurred after the loss of the Western Province in the 4th-5th c. AD. Expansion in regional production is visible in the palynological record extracted in Central Anatolia as well as in local specialized industry. In particular, my recent work on fine ware production revealed that locally manufactured Red Slip Ware took over the entire market, contrary to what observed in the previous centuries, when imports were common. The uptick of agricultural production in this region also does not seem to be affected by the dramatic fluctuations in climate recorded by modern scholars; on the contrary, production seems to be at its highest in the least favorable climatic conditions (between the 5th and 6th c. AD). Recent archaeological work carried out in the Konya Plain, however, suggests that changes in climate may have led an intensification in water management.

The unraveling of the regional settlement pattern and economic network happened only in the later 7th c. AD, when yearly raids conducted by the Arabs devastated the region. In western-central Anatolia, only state-supported provincial capitals (Amorium and Ankara) and important religious centers (Germia) survived into the Middle Ages.

TRAC GENERAL SESSION

Lisa A. Hughes, John Aycock, Brittany DeMone, David Keizer:
Modelling our past, creating our future: interdisciplinary collaboration in Roman studies

This paper focuses on some interdisciplinary collaborative work by faculty and students in two disparate departments at the University of Calgary: Classics and Religion, and Computer Science. We demonstrate a new way to explore Roman theatrical performances in domestic garden settings (Hughes 2014) through our 3D Unity model of Pompeii's House of the Golden Cupids, funded thanks to a SSHRC Insight Grant. Our approach both renders a novel way of examining a little-explored area of the past and offers extensive student learning and training outcomes. Such an approach, however, does not come without challenges in terms of faculty career success and traditional Humanities-based research dissemination.

Roman studies fall under the Humanities-based disciplinary aegis of Classical Studies. As a result, the monograph and sole-authored high-profile journal publications constitute the "gold standards" for tenure and promotion (Estabrook and Warne 2007, 2). While faculty do not necessarily support these traditional approaches, administrators still view them as demonstrating scholarly acumen and merit (Ibid). This, however, contradicts criteria outlined by major Canadian funding agencies (e.g., SSHRC) that support collaboration and student training (Government of Canada/SSHRC 2019); nor does it allow research that must by necessity draw upon expertise from multiple disciplines. We argue that steps should be taken to bridge and support creative, interdisciplinary forms of research in Roman studies particularly, and Classical Studies broadly (Chambers 2001, preface). Doing so will create more educational and professional opportunities for students, as well as more opportunities for faculty to generate research that builds on their interests and strengths.

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Lindsay Banfield:
Making flour the German way: imported lava querns and millstones in Roman Britain

Processing grain is an activity fundamental to agrarian societies, and often imbued not just with economic but also social and ritual significance. Imported lava was one of the most popular choices for querns and millstones in many parts of the Roman world, and it is thought that most milling tools of lava in Roman Britain were sourced from the Mayen region of Germany. However, their use and distribution in Britain has never been systematically studied and assumed associations with military supply and use prevail. My paper scrutinises this neglected body of material to enhance our understanding of Romano-British food production, the rural economy, and the social, cultural, and religious identities of the people who used them. This has been achieved using data collated from ca. 3,000 lava milling tools from Romano-British contexts. Investigations were conducted using a theoretically informed contextual analysis, adopting an object biography approach to the different stages of the object lifecycle, from initial production to final deposition. Using both micro and macro scales of analysis, data from individual objects and sites were considered in correlation with the wider provincial dataset.

Outcomes of this research have shown that the exchange of lava milling tools was more intensive and extensive than once thought, and that supply and use was not restricted to military sites. Differences in use are identifiable between different site types and mode of deposition is also seen to vary. Chronological changes in supply and distribution have also been recognised, and this has wider implications for how we understand the economy of the stone trade during the Roman era.

Lisa A. Hughes:
3D staging of theatrical performances in Pompeii's House of the Golden Cupids (VI. 16,7, 39)

How were small-scale theatrical performances carried out in Roman domestic peristyle gardens situated near dining areas? This question stems from Della Corte's (1965) suggestion that Roman houses displayed architectural features (e.g., raised stages) suitable for presenting theatrical productions. We often think specifically of a "dining room" for such performances. However, literary texts and material remains suggest that other areas of the Roman house were well-suited for this purpose. These other spaces indicate that small-scale performances are not restricted solely to rooms reserved for dining, as is usually thought (Dunbabin 1996, Marshall 2000), but extend venues for these highly social interactions into other contexts.

Our collaborative project, the first of its kind, takes up this intriguing possibility to demonstrate how both actors and performers engaged in performative spaces beyond the dining room proper.

We highlight the preliminary work of our Social Sciences and Humanities Research Council of Canada Insight Grant funded project. Using Unity, we have created a generic 3D Roman house model fashioned after Pompeii's House of the Golden Cupids – the best-documented example of an excavated house with artifacts in situ (Seiler 1992). The model incorporates suggestive placements of both spectators and actors using scripted prompts from ancient literary sources known to have been part of a theatrical repertoire. This presentation, for example, will provide possible stagings for a translated version of Ovid's, 'Hermaphroditus and Salmacis' (Met. 4. 346-88).

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Rhiannon Pare:
My god must look like me: religion, memory, and identity in the Roman Empire

Religious images can be a particularly effective tool for the examination and analysis of cultural memory and identity-fashioning in the ancient world. Through the purposeful and concerted efforts of ancient peoples to merge foreign deities with their own discrete motifs, religion, and symbolism into a unique amalgamation of culture, religion, and memory, religious monuments provide insight into the interactions of cultures and the ways in which memory or identity is made visibly manifest in the ancient world.

Epona, an indigenous goddess adopted by the Romans, is contrasted with Jupiter Optimus Maximus, a Roman deity indoctrinated into the cult of the northern tribes. Both underwent visual transformations dependent on their geographical and cultural context; providing stunning examples of the way in which Roman deities are adopted to suit the religious or cultural needs of a colonized region or, conversely, how indigenous gods are altered to fit within the conventions of Roman religious practice and cultural norms. In these gods, we can explore the merging of disparate cultures and religions in a visually meaningful way - one that recognizes the conquerors while preserving the heritage of the conquered. This paper will examine extant representations to explore how cultural memory and identity expression can be preserved through visual markers in gods both foreign and domestic. It will further postulate a model to explain how the shift in these markers over time and space, incorporating approaches from social anthropology, postcolonialism, and lived religion, might address questions of religion, memory, and identity in the Roman empire.

Stefanie Ulrich:
Memory sanctions of condemned emperors: A political construct as a result of the globalisation in the 3rd century AD

The size and the structure of the Roman Empire in the 3rd century AD permitted different groups within – the Senate, the soldiers and the population itself – to build separate power holding units opposing the ruling emperor. This allowed them to influence who would be the next emperor by either proclaiming a counter emperor whilst the old one is still alive or disposing of the current ruler to put their candidate in place instead.

These political showdowns resulted in over fifty emperors, out of which seventeen – not counting usurpers from Gaul and Britannia – were condemned to have their memory sanctioned in one way or another.

My hypothesis is that the globalisation of the Roman Empire in the 3rd century AD is at least partly – if not mostly - responsible for the unstable political situation and the related condemnation and memory sanctions against the emperors. With the examples of two emperors, Elagabalus and Maximinus Thrax, who were both eliminated and posthumously condemned, I want to show how the globalisation of the Empire provided the different parties -Senate, soldiers and population - with influence and power to remove the reigning emperor at their own will and that the memory sanctions against them were used as a political move to dispose of an unwanted ruler.

Dragos Mitrofan:
Big data in funerary archaeology – A novel method to determine funerary activity using mixture distribution modelling of burial date ranges

The rapid growth of developer-led archaeology in the past decades unveiled countless burial areas and cemeteries ranging in age from prehistoric to post-medieval. Subsequently, researchers concerned with regional or grand scale meta-analyses of burial customs and activity patterns were posed with several issues.

One of the crucial problems of modern funerary archaeology in the age of Big Data is the need to calculate the relative chronology of activity. Although attempted (Barber & Bowsher 2000, after Hinge 1996) the determination and comparative study of chronological patterns for extensive cemeteries is still beyond our grasp. Summing uniform probabilities has been the preferred approach, though this method is deeply flawed, both mathematically and archaeologically.

Instead, this paper proposes a novel model which employs Gaussian/normal distributions to calculate the probability of a specific burial to date to a specific decade. In addition, the model considers stratigraphic sequences as continuous probability functions (mixture distributions) giving equal weighting to each burial event. Due to the specific rules that define mixture distributions, individual burials can thus be isolated from the sequence and assigned mathematical TAQs and TPQs.

The proposed model has been successfully tested on several examples from the Roman cemeteries of Dorchester (Poundbury Camp), London (Western cemetery) and Alba-Iulia (Dealul Furcilor) in Romania. The aims of this method are two-fold. Firstly, it will be instrumental in assessing and obtaining finer chronologies for my PhD project studying the spatial and temporal distribution of Roman 'plaster burials'. Secondly, it aims to be a cheap, fast and replicable solution yielding valuable results for burial activity, principally for periods where absolute chronology analysis (i.e. C14) would produce significant errors.

Penelope J. E. Davies:
Adaptive reuse: on transforming buildings in ancient Rome

First coined in 1973, the term 'adaptive reuse' denotes the conversion of an un(der)used building into one that serves a new purpose. Practiced to differing degrees, it ranges from repurposing materials to transforming entire buildings. Best is an intact structure, convertible inside and out, but when all that survives is a shell, the interior can still be repurposed, often with lightweight structural interventions. When engaged in such a transformation, an architect has somehow to address a building's essential quality or characteristic features, and may suppress them in the service of its new image (inserting floors into a church for condominiums, for instance) or acknowledge and emphasize them by retaining traces of a past life. Through these 'ghosts' (architect Liliane Wong's term) a host building becomes a palimpsest, its past co-existing with its present, reflected without being imitated.
The adaptive reuse of Roman buildings after antiquity accounts for the preservation of some of the city's most iconic structures (such as the Pantheon, turned into a church in 609). This type of adaptive reuse, resulting from significant cultural (and often religious) change, is copiously documented. What has not been explored is the practice of adaptive reuse of Roman buildings during Roman times, which is the subject of this paper. After assessing challenges in discerning adaptive reuse, I explore factors that militate for and against the practice, before focusing on two specific instances to argue that it could offer advantages over new construction, rooted precisely in the palimpsests that resulted.

Jonathan M. Quiery:
Monuments, memory, and place: the tropaea of the Augustan period

Greco-Roman military trophies — monuments to commemorate battles or campaigns — represent a unique form of ancient architecture and artwork. The Greeks erected tropaia as early as the fifth century BCE and marked the turning-point on a battlefield at which the victor routed the vanquished. The Romans adopted this tradition ca. the late-third or early-second century BCE and reformed it to accommodate their own cultural ideologies. The political and military leaders of the Republic initially used tropaea in a manner similar to their Greek counterparts, but gradually they modified the pre-existing model to suit the dynamic geopolitical state in the late Republican and early Imperial periods; in so doing, they introduced a variety of new forms and functions unique to the ancient world, features which engaged with both Romano-native geographies and identities.

The research here employs a transdisciplinary approach to investigate the place-making effects of two Augustan era tropaea — the tropaeum at Nikopolis and the Tropaeum Alpium. The concept of place-making assesses how Roman political and military leaders used tropaea to (re)design selected areas of the empire, and furthermore how ancient peoples related to the placed they inhabited; to do so, each monument is studied within its respective landscape as well as in connection with other humanmade features — i.e. pre-Roman and Roman settlements, extra-urban religious or funerary structures, and harbour installations. The premise of this research contends that the Emperor Augustus commissioned these provincial tropaea under certain conditions and these monuments connoted more than simply military strength, they also performed a variety of cultural functions respective to their location which underlined the relationship between the peoples and place.

Rob Collins:
The fabric of Hadrian's Wall: From geological genesis to post-Roman repurposing

Hadrian's Wall has been the subject of extensive and intensive investigation for centuries, though the majority of research has focused on the monument itself, not least its construction and chronology. The fabric that composed the Wall, however, has received far less attention, though there has been a notable surge of new research in research years.

The Hadrian's Wall Community Archaeology Project (WallCAP) has initiated research that adopts an object biography approach to the monument's fabric, training citizen scientists in the knowledge and skills to advance our understanding of the Wall in new ways. Directly examining the Wall's fabric in detail, WallCAP volunteers have been able to identify the geological diversity within the built material, and to attempt to identify new quarry locations. Furthermore, metric and geological approaches to the fabric are supporting recognition of Wall fabric that has been repurposed in Roman centuries, and further understand the processes and chronologies by which Roman material has been 'foundational' to post-Roman communities in the Wall corridor of northern England. Research is on-going, but this paper presents important work to date.

Nicola Hurt:

Looking sharp: the significance of folding knife handles in grave good assemblages

This paper presents a part of my PhD research on figural folding knife handles in the northwest provinces. These objects have historically been treated as miniature art objects rather than archaeological finds, and over one quarter of my current data set has no find spot. Of the handles which do have secure contexts, 26 come from burials, the largest single group of known context type. These burials span a wide geographic and chronological range, and so do not form a coherent group, rather a disparate data set of graves containing an unusual grave good.

Over the next month I will be analysing these 26 burials, in particular investigating their relationship to other grave goods. As the exact function of folding knives is still uncertain, association with other objects may illuminate which functional categories the Roman considered them to belong to. The funerary context also provides a unique opportunity to associate folding knives with physical bodies, the gender, age, and status of the deceased will form a significant part of my analysis. I will also consider how the varied iconographies depicted on the handles may have impacted the affordances which made these object in particular suitable grave goods. Unlike settlement assemblages, burials present a very specific set of rules and practices which reflect religious beliefs and community ideals more than lived experience. This paper considers the role of folding knives and their figural handles in this highly ritualised context, and how this may illuminate further study of these objects.

Margaret L. Woodhull:

Womanhood abstracted: empresses, divae, and female agency in Trajo-Antonine Empire

For Rome's early second-century empresses, motherhood was not a strong suit. In fact, its absence is the defining characteristic of what Roman scholarship refers to as the era of the adoptive emperors, that period of imperial history spanning the reigns of Nerva to Marcus Aurelius (96-176 CE). In the early decades of the era, imperial women are notable for having eschewed public life. Relative to the fiery personalities of their first-century counterparts—the likes of Livia or the Agrippinas for example, Trajo-Antonine women were praised (by men) for embodying the virtues of uxorial obedience, chastity, and modesty, code, in effect, for not interfering in politics of state.

This recession from public view finds correlation in the visual record. Distinctly absent is the monumental patronage of porticoes or shrines familiar from an earlier era paralleled by a decline in portraits produced during their lifetimes. Scholars associate this state with the failure of the imperial women to produce a male heir, from the nulliparity of the female body. Yet if in life Trajo-Antonine women were somewhat invisible, in death they were aggrandized more than any imperial women before them, paradoxically, as idealized mothers. This paper argues that an increasingly abstract image of imperial womanhood evolved as political dependence on the female body diminished; yet even as monarchy's dependence on female fecundity lessened, centrality of the female principle remained critical to dynastic ideology, necessitating, thereby, ever-grander posthumous monumentalization and visual representations. By examining key monuments of the era, namely the divae temples of Matidia and Marciana and the elder Faustina in the Forum Romanum, this study offers a gendered reading of the evolving politics of the role of the empress whose absence through death made her larger than life.

Maxime Jay Cotham Ratcliffe:

'The Reach of Rome': copying and imitating material culture and practices in the Roman-period provinces – Imitation or something much more? Parallels between Romano-British and Pannonian Late Roman lead tanks

Fourth century lead tanks from Roman Britain were believed to be an 'insular' development by many archaeologists writing until recently when examples in areas such as Roman Pannonia were discovered. In 2008 an article was released about a lead tank discovered in 1974 at Peter-Bankut near the River Sarviz in Hungary. Parallels can be made to the British material through its shape, construction methods and apparent function. Both sets of examples are large and highly decorated artefacts with the British material being constructed of three large sheets of lead whilst the Hungarian example was created from two lead sheets. Notable contrasts are visible through the decoration since the British examples are frequently decorated with 'Christian' symbols whilst the Hungarian examples depict a mixture of hunting scenes and examples of domestic life. The decoration on the Peter-Bankut matches features seen on other examples across Hungary. Both sets of tanks were dated to the fourth century through decoration and associated finds, such as late fourth century coins. This paper would look at the value of these objects to their communities through this apparent imitation through design but selective choice in decorative features. This paper will investigate how the similarities and notable variations between the two sets of examples suggests a potentially wider engagement with material culture that extends beyond simple imitation and suggests a need for reclassification.

Sue Stallibrass:

Hunting the ambiguous roles of wild animals in the military psyche: a case study from Central Britain

Most people have mixed feelings about wild animals and this was equally true for the inhabitants of the Roman military zone of Central Britain. The military and other elite groups regarded the hunting of wild animals as a sport, a display of status or an expression of military prowess and practice for combat. Philosophically, wild and domestic animals, and wild people (barbarians) and domestic slaves were all regarded as 'non-people' in terms of their political and human rights. The more powerful and dangerous wild animals were often regarded with awe and respect at the same time as being legitimate prey for human hunters, and a few were adopted as mascots or military symbols by legionary and auxiliary troops. Several species were associated with deities, and yet some of these same animals could be paraded or slaughtered in spectacular games in amphitheatres. The establishment of Christianity does not seem to have substantially altered this situation, although it did elaborate some aspects such as regeneration. Christian iconography perpetuates a Roman pagan trope based on the soldier saints. This paper discusses a range of types of evidence: animal bones, artefacts, literature and iconography. It highlights the complexities of people's beliefs and attitudes towards wild animals in a frontier zone that was, itself, only partially tamed.

Alice Wolff:

Eating locally in imperial Rome

This paper looks at 2nd Style Roman garden rooms, household gardens, and notions of Roman 'productivity' through the lens of the 21st century locavore movement. Scholars have previously discussed the link between frescos depicting bountiful production and Roman discourse on morality and agricultural labor (Kuttner 1999). When considering images such as the ones decorating the walls of Livia's Garden Room in the context of both Augustan grain imports and later Roman recipes in which Apicius instructs the cook to use petals "fresh from the flower bed," the question must be asked: who, exactly, was this Roman agricultural bounty for? Starting with questions from modern food studies about access to fresh food and the infrastructure of home cooking, this paper asks whether modern discourse about "eating locally" is reflected in the structures and systems that fed Rome in the late 1st century B.C.E. Was there a moral value attached to serving and consuming the products of the Italian countryside? What links existed between social status and the origins of one's food? Which households would have had access to fresh food and the ability to cook said food, and might scholarly work on modern food systems and urban food access provide a helpful framework for thinking about differences in diet across class boundaries in antiquity?

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Norman Wetzig:

Sustainable urbanism in the Roman World: settlement, environment and economy - No more wild guesses? Stackmodelling Roman microeconomies and their sustainability: Roman Beirut (Lebanon) as a test case

Modern economic theories have but slowly found their way into archaeological research in the past years. This is mostly due to the inherent problem of archaeologists usually not being trained in economics and economists rarely being interested in archaeological research, since it is not regarded helpful with current economic questions. Recent studies have shown a much wider interest in questions regarding the context of Roman urbanity, economics, urban peripheral land use, resilience and sustainability, but have usually taken an approach that considers either one or two of these factors or all of them over a huge time span. A microeconomic approach to the Roman economy and its (regional) sustainability has yet to be taken. In modern economics economic forecasts are based on so-called latent variable models, a statistical model that relates a set of observable variables to a set of latent variables, to estimate future GDPs. It is exactly that kind of variables archaeology has at hand when trying to quantify Roman economic performance and its (im-)possible sustainability. Given the fact that archaeological data tends to be fragmentary at best and thus can easily mislead the interpretation, it seems more than appropriate to treat the lack of archaeological data as latent variables. This paper proposes using archaeological data in a hierarchical mixture of latent variable models, whose parameters are estimated using the expectation-maximization algorithm, combined with the concept of ecological carrying capacity to evaluate the economic performance and sustainability of Late Roman Beirut and its environs and their possible meaning and applications for modern Beirut.

Sergio España-Chamorro:

Looking for a provincial identity in Roman Baetica

In the '90 studies about identity generated the idea of provincial identities in the Roman Empire. Can we track the traces of local identities in the provinces? What are provincial cultural identities? And how can we detect them archaeologically? In historiography, a 'Roman provincial culture' has been defined as a mixture between the canonical cultural model and the so-called 'survivals' of former local traditions that were still observable. However, this approach has criticised as reductionist in the last years. New approaches as glocalisation allow us to redefine these concepts.

In this paper, I examine the idea of Baetican identity in the general term and in the official sources. Through the public mentions in epigraphu, the iconography of coins and statues and the information in the Classical authors, we can have a good idea of public self-definition of peoples of Baetica. No evidences of a general Baetican identity can be traced, but we can observe the idea of the Ciceronian concept of duae patriae in which the Baetican people is self-defined as Hispani and the sense of belonging to a civic community through the origo.

Philip Smither:
The legacy of the 'Saxon' Shore Forts

The sites known as the Saxon Shore Forts along the east and south coasts of Britain can be interpreted as a product of the 3rd century crisis. Either conceived by the Gallic Empire or the usurper Carausius, each interpretation puts a different slant on how they fit into the 3rd century narrative. I will briefly consider these positions and the reasons for their construction; however, this paper is primarily concerned with the legacy of these sites coming out of the 3rd century crisis.

Built for a specific purpose during the mid-late 3rd century these sites remained occupied for a century or more. The question is how did they fit back into the newly 'reconnected' Roman Empire: if there was such a thing? This study is primarily concerned with Richborough, a shore fort on the east coast of Kent and how it was (or wasn't) connected to the local and global landscape of the Roman Empire. Shifting patterns in trade and the reoccupation of the site in the very late 3rd – 4th century shows that Richborough was not only largely cut off from the continental Empire but also very different from other similar sites in Britain.

Daniël van Helden, Dominik Maschek, Sarah Scoppie:
De-colonising and diversifying Roman archaeology: a continental response

In the wake of the 'postcolonial turn', many academic disciplines in the anglophone world are currently going through the formative stages of 'de-colonising' and 'diversifying' their curriculum. Universities and other institutions of research and higher education are actively involved in pushing this agenda through the introduction of quality standards and the statistical analysis of large datasets. In line with this wider trend, calls for greater diversity within Roman archaeology, both with respect to its practitioners and its subject matter, have been growing louder over the last few years. TRAC has been a forum for such discussions, Zena Kamash's rally cry in her keynote at last year's conference being a prime example. It is unclear whether this question is more keenly felt in the Anglo-Saxon world, but the solutions that are being proposed in the debate have a distinct flavour of social engineering, with the underlying implicit, but also explicit, assumption that measures like the introduction of reading lists balanced by gender and ethnic background will automatically lead to a more diverse student body. In this paper the authors, all three of them working in British universities as EU citizens from the continent, aim to give a (sympathetic!) continental response. We depart from the position that equality of outcome must be our primary aim and would strongly argue in favour of working towards fairness and equality of opportunity. However, it is also clear that not all roads leading towards this goal are equally desirable. We do not believe the standard reactionary reply that everything will turn out fine if we just 'give it a little more time' and we agree that immediate action is needed. We will, however, argue that the answer lies in getting students and teachers alike to make a concerted effort towards our common goal of understanding the Roman world, rather than in making it easier or more desirable for them to produce the same outcome within a more or less 'de-colonised' and 'diversified' academy.

Bence Simon:
Local and regional economy in North-Eastern Pannonia and the impact of natural environment on the settlement pattern around Aquincum and Brigetio (1-3rd c. AD)

Roman cities were sustained by their agricultural hinterlands, therefore their economic well-being cannot be examined apart from their adjoining rural landscape which is in focus of my paper. Soon after the Roman conquest of Pannonia, cities emerged as administrative and economic local centres, through which the state raised taxes to cover its expanses and secure the local supply of the stationed military. In this paper I present how this economic pressure manifests in the archaeological record, especially by examining the role of physical space, natural environmental factors, and the socio-economic system in the evolution and forming of the settlement pattern in the hinterlands of Aquincum (Óbuda, Hungary) and Brigetio (Komárom-Szőny, Hungary). How did the hinterlands' settlement pattern change throughout the 1-3rd century? Why did certain places survive, while others reorganized after crises and what part did the natural environment play in this? These questions will be answered with the assistance of a GIS-based agricultural potential model. In addition to the natural environmental factors, when a city was closer to a rural settlement the more it had shaped its social and economic life. Based on the economic geography works of T. Bekker-Nielsen (1989) and J. Bintliff (2002), the epigraphic material, and the examined rural settlement pattern the immediate hinterland of Aquincum can be precisely determined, which is the grand-scale economic footprint of this important Pannonian city. The determined area had a primary role in the economic sustainment of the city and the legionary camp on the Danubian ripa.

Tais Pagoto Bélo:

The institutionalization of the Roman woman through Livia

This presentation will be about Livia, wife of Augustus, mother of Tiberius. She received the title of Augusta, was a priestess of her husband's cult, had Vestal privileges, such as a lictor, sacrosanctity, was allowed to use the carpentum and exclusive chairs, besides gained the privilege of using the law, ius (trium) liberorum. Her image was linked to goddesses such as Vesta / Hestia, Ceres / Demeter, Juno / Hera, what denoted a character linked to fertility that will be demonstrated through coins. However, she was only deified by Claudius in AD 41, when she was already honored as a goddess in Eastern provinces.

Power and gender tensions were strong during Tiberius' rule because she took the lead in public activities that were men's monopolies. In this way, Livia's institutionalization was linked to religion, camouflaging the "female politician" through sacredness, obtaining the highest status a woman could have at that time and opening the way for the agency of other imperial women in these new spaces. Nevertheless, male opposition was still existing, demonstrating a continuation of a habitus previously established by male dominance in such a society. In this context, through written and materials sources, the presentation will involve themes such as the public and the private, patronage, myths of Roman origin, legal laws for women and structural Roman patriarchy.

Lindsey A. Mazurek:

Portraits in the sacred landscapes of Roman Thessaloniki's Sacred Quarter

This paper considers how portrait sculptures inflect the meanings of sacred spaces. In Statues and Cities (2013), Ma sees portraits as an instantiation of relationships (civic, political, religious, societal, and familial) within a spatial context. My paper extends these approaches to the provincial capital of Thessaloniki. Scholars have identified a series of religious buildings in northwest Thessaloniki as the Sacred Quarter (Adam-Veleni 2003). Among these are a sanctuary to the Egyptian gods and an Ionic temple on Roman foundations, both of which contained lavish sculptural programs. While their architecture and ideal sculpture has been studied (Steimle 2008; Koester 2010; Mazurek 2022), the portraiture has not been considered. Incorporating epigraphic and archaeological evidence with art historical approaches to portraiture, I examine how portraits informs the ways that users moved through and experienced these temple spaces as a sacred and socio-political landscape (Cole 2004; Mylonopoulos 2008; Scott 2013).

I begin with an overview of the two sites. At the Egyptian sanctuary, a wide range of portraits were displayed, from specialized images of devotees participating in local rites to standard types produced around the empire. Many depict young men, suggesting that the site had a particular resonance for this group. In the Ionic temple, which served the imperial cult, portraits of emperors in military cuirass stood next to civic portraits of administrators. These portraits highlighted imperial rule, but a version based in military conquest yet effected through local bureaucracy. Integrating portraiture into these sanctuary landscapes allows us to access new registers of experience and meaning that clarify how these spaces were interpreted in the Roman period.

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POSTERS

Martina Cecilia Parini:
Hellenistic and Roman landscapes of South Italy: the significance of 'off-site' assemblages

I recently started a PhD project aiming to analyze the socio-economic structure of South Italian landscapes during the Hellenistic and the Roman period. It is based on a comparative interregional perspective, using both legacy survey data and data from recently completed field survey projects. The aims of this poster are twofold: firstly, to present the project outline and the proposed methodology, based on the merging of different datasets in a unique database; secondly, to discuss the ongoing research on the information that can be drawn from those pottery assemblages that seem to not correspond to sites.

Low-density scatter distributions, recorded by non-site oriented field survey projects and classified as 'off-site' data, have been interpreted as important indicators of temporal activities, long-term agricultural practices or post-depositional actions. Therefore, they can help to reconstruct land-use strategies over the centuries, to better understand the human occupation of the landscapes and to contextualise identified sites. Various projects have stressed the importance of this 'background noise', but fewer studies have compared 'off-site' data on a regional or interregional level. In this poster, case studies from the Sibaritide region (Northern Calabria, Italy) are presented, and the possibility of their comparison is discussed.

Adam Hussey:
Decoration, space and society in the South West Villa: an analysis of Roman villas in Devon and Dorset

The concept of identity has become common a theme in Roman archaeology. Of particular interest has been the role played by the built environment in the formation and expression of identity by specific individuals and groups within Roman society; most notably the use of the town house and villa by the Roman elite. Here they displayed their wealth and power though both building design and decoration.
Our current understanding of Roman decoration, and theoretical approaches towards it, is skewed towards Italian examples, especially those found around the Bay of Naples. Interior decoration in Romano-British villas has, in comparison, received limited attention; where study has taken place, the approach has been disjointed, with the components (mosaics, architecture and painted wall plaster) looked at in isolation. No attempt has been made to understand decorative schemes as a whole. My study attempts to see if similar or different concepts behind the uses and application of decoration - as identified in Italy - are present in Roman Britain. Specifically, I will analysis, by looking at all decorative components together and the relationship between them, the role decoration played in the formation of space within the villa and the impacts this had on the villas users and their expression of identity. It is only once this has been carried that these similarities or differences can be identified.

My study focuses on a reassessment of the villas found in Devon and Dorset (South West Britain), which, despite offering a wealth of evidence, have been understudied.

Matthew Previto:
The agency of the marginalized: the relief of the Genii Cucullati at Housesteads

One of the most persistent problems in the course of archaeological research is the difficulty in effectively representing and interpreting the material culture of marginalized peoples, especially those in imperial and colonial contexts such as the Roman Empire. Burdened by their constrained places in the asymmetrical power relationships that are inherent to such systems, the colonized are forced to adopt and adapt the material traditions of the dominant society while abandoning or altering their own. The marginalized, however, still possesses a vital degree of agency in that they can exploit certain practices to assert their own identities in ways both understandable to the colonizers and beneficial to themselves. In order to better understand these processes, this poster presents a detailed visual examination of the relief of the Genii Cucullati found in the civilian settlement of the fort at Housesteads. Particular attention is paid to the choice of religious content, the execution of the relief itself, and the wider context of the cultural contact zone that is civilian settlement. Such an analysis supports the conclusion that this relief of the Genii Cucullati represents a conscious choice by its maker to represent local deities in a manner consistent with Roman religious material culture and is an index of the larger engagements in which hybrid identities were formed. As a result, this recognition of the agency of the marginalized allows for a theoretical framework by which archaeologists may perceive them and their identities even through the distortions and obfuscations of Roman imperialism.

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Yuliya S. Veselova, Polina Yu. Fadeeva:

"Vision of the future": considering the socio-psychological reasons for imitation of Roman culture in Roman Britain

The paper aims to discuss the following question: why did the native population of Britain imitate elements of Roman culture? It's worth considering certain socio-psychological mechanisms that allow communities to accept and reproduce elements of another culture.
For understanding these processes one should look at conceptual framework proposed by sociologists and social psychologists (e.g. the classical works by M. Weber as well as research by A.N. Leontyev, D.N. Leontyev, S.L. Rubinstein who consider the motives and needs, 'vision of the future', relations between consciousness and activity).

Every community forms a vision of the desired future for itself and builds a group identity on its basis. In certain circumstances (in our case — the arrival of the Romans in Britain) native population involved in a social and cultural exchange, it borrows elements from the other culture. On the socio-psychological level, their task is not just to copy, but to «appropriate» sociocultural forms, to produce on the borrowed material's basis something of their own, corresponding to the accepted vision of the future. The concept of «reproduction» affects a wider range of phenomena than «imitation», from ceramic production (e.g., a Romano-British beaker decorated with a chariot-racing scene) to town buildings (the Togidubnus' reconstruction of Calleva according to the Roman model).
The reasons for the reproduction of Roman culture and practices in Britain lie in the psychological mechanisms of formation of group identity, where the elements of the macro-level of identity (according to the scheme of A. Gardner) dominated over the elements of the micro-level.

Flavia Benfante:

Rediscovering the Sette Sale domus in Rome. A new reading through archive materials

This contribution aims to illustrate the methodological approach that, through an accurate revision of old excavations and archive materials, allowed to conduct a global re-examination of the Sette Sale domus in Rome, leading to a new reading of masonries, floorings and of the transformations palimpsest and ultimately to a more conscious interpretation of its architectural solutions.
The archeological remains of the domus, reinterred in 2003 and currently completely covered in thick vegetation, are located on the top of the homonymous water reservoir of the Trajan Baths, and have been declared not accessible for security reasons at the moment. Despite the great importance that the domus holds – being one of the most complete senatorial residence of late-antique period in Rome and having one of finest architectural plan, result of complex transformations – its remains have been only approached with partial studies, maybe also because of the impossibility to lead a first-hand study on the field.

The domus, discovered in 1966-67 by Lucos Cozza while consolidating the cistern vaults, was completely excavated in '74-75. The top of the cistern was roughly divided in 6 sectors of 12 quadrants each, to which the extremely concise excavation diary approximately refers.
In the impossibility of carrying out new surveys, the study has involved the cross-referenced use of 1975 survey and 2003 photo-plan, carefully verified by comparisons with archive photos that portray the structures over several years (from 1975 to 2014) and with 1992 Stratigraphic Units records. Each element (wall, mosaic, columns etc.) has been provided with a data sheet that collects all the informations gathered from different sources so that transformations, restaurations, degradations through the years can be traced and recomposed in a synthetic micro-history of the ruins. The results, which made it possible to achieve an overall re-reading of the phases and architectural design, were ultimately systematized through 2D phase plans and 3D reconstructions.

LIST OF PARTICIPANTS AND SESSION ORGANISERS:

Name	Affiliation	Email address	Session(s)
Abdy, Richard	British Museum, UK	rabdy@britishmuseum.org	8
Adler-Wölfl, Kristina	Vienna Museum/ Stadtarchäologie Vienna, Austria	kristina.adler-woelfl@wien.gv.at	37
Alberti, Lucia	Italian National Research Council, Rome (CNR), Italy	rabdy@britishmuseum.org	12
Alcock, Sue	Michigan	salcock@umich.edu	10
Alejo Armijo, María	Universidad de Jaén, Spain	malejo@ujaen.es	TRAC 2
Allison, Penelope	University of Leicester	pma9@le.ac.uk	2
Almagor, Eran	Beit Hakerem, Israel	eranalmagor@gmail.com	38
Androić Gračanin, Paula	University of Zadar, Croatia		1
Aragón, Enrique	Flinders University, Australia	enrique.aragon@flinders.edu.au	TRAC 2
Aspöck, Edeltraud	Austrian Centre for Digital Humanities and Cultural Heritage / Austrian Archaeological Institute	edeltraud.aspoeck@oeaw.ac.at	28
Atki, Mustapha	Site Archeologique de Volubilis, Morocco	musatki@yahoo.fr	15
Aycock, John	University of Calgary, Canada	aycock@ucalgary.ca	TRAC Gen
Baird, Jen	Birkbeck College, UK	j.baird@bbk.ac.uk	39
Banfield, Lindsay	University of Reading	l.banfield@pgr.reading.ac.uk	TRAC Gen
Barrett, Caitlin	Cornell University, USA	ceb329@cornell.edu	12
Bartus, Dávid	ELTE Eötvös Loránd University, Hungary	bartus.david@btk.elte.hu	8
Basso, Patrizia	University of Verona, Italy	Patrizia.basso@univr.it	1
Beach, Tim	University of Texas at Austin, USA	beacht@austin.utexas.edu	9
Benfante, Flavia	Università di Roma, Italy	flavia.benfante@gmail.com	TRAC Poster
Benton, Jared T.	Old Dominion University, USA	jtbenton@odu.edu	TRAC 5
Bermejo Tirado, Jesús	Universidad Carlos III de Madrid, Spain	jbtirado@hum.uc3m.es	2
Bes, Philip		philipmbes@gmail.com	2
Biddulph, Edward	Oxford Archaeology, UK	edward.biddulph@oxfordarchaeology.com	2
Bilić, Tomislav	Archaeological museum in Zagreb, Croatia	tbilic@amz.hr	32
Bilić-Dujmušić, Siniša	Catholic University of Croatia, Croatia	sinisa.bilic-dujmusic@unicath.hr	36
Birley, Andrew	The Vindolanda Trust, UK	andrewbirley@vindolanda.com	15
Bogdanović, Ivan	Institute of Archaeology, Belgrade, Serbia	leshicka@gmail.com	33
Borzić, Igor	University of Zadar, Croatia	igorborzic@net.hr	36
Brajković, Toni		Toni.brajkovic@gmail.com	1
Brent, Liana	Kenyon College, USA	brent1@kenyon.edu	28
Brock, Andrea L.	University of St Andrews, UK	abh1@st-andrews.ac.uk	TRAC 15
Burnett, Andrew	British Museum, UK	anewmburnett@hotmail.com	32
Bužanić, Domagoj	University of Zagreb, Croatia	dbuzanic@ffzg.hr	33
Calomino, Dario	Università di Verona, Italy	dario.calomino@univr.it	32
Campbell, Peter	Cranfield University, UK	P.Campbell@cranfield.ac.uk	11
Campmany, Joan	Aarhus University, Denmark	joan.campmany@cas.au.dk	31
Campus, Antonio	University of Pisa, Italy	antonio.campus@phd.unipi.it	TRAC 2
Carneiro, André		ampc@uevora.pt	TRAC 12
Carroll, Maureen	University of York, UK	maureen.carroll@york.ac.uk	22, 34

Catalán González, Javier	Universidad de Cádiz, Spain		TRAC 2
Cebrián Martínez, David Jesús	University of Barcelona, Spain	david.cebrianmartinez@cantab.net	TRAC 8
Čelhar, Martina	University of Zadar, Croatia	celhar.martina@gmail.com	36
Chiu Smit, Alexander	University of Oxford, UK	alexander.chiusmit@lincoln.ox.ac.uk	TRAC 15
Chowaniec, Roksana	University of Warsaw, Poland	roksana.chowaniec@uw.edu.pl	9, 31
Cleary, Simon Esmonde	University of Birmingham, UK	a.s.esmonde_cleary@bham.ac.uk	21
Collins, Rob	Newcastle University, UK	robert.collins@newcastle.ac.uk	15, TRAC Gen
Colosi, Francesca	CNR, Istituto di Scienze del Patrimonio Culturale (ISPC), Italy	francesca.colosi@cnr.it	14
Coutsinas, Nadia	Institute for Mediterranean Studies (IMS), Greece	nadia.coutsinas@ims.forth.gr	24
Cowley, Dave	Historic Environment Scotland, UK		30
Crawford, Katherine A.	The Cyprus Institute, Cyprus	kathacrawford@gmail.com	TRAC 4
Crow, Jim	University of Edinburgh, UK	jim.crow@ed.ac.uk	14
Czapski, Maciej	University of Warsaw, Poland	maciej.czapski@student.uw.edu.pl	15
D'Eredità, Antonio	CNR – Rome, Italy		14
Danilochkina, Kseniya		d.white.march@gmail.com	TRAC 9
Davidovic, Jasmina	Museum of Srem, Poland	jasnadavidovic@gmail.com	11
Davies, Penelope J. E.	University of Texas at Austin, USA	pjedavies@austin.utexas.edu	TRAC Gen
de Frutos Manzanares, Laia	University of Barcelona, Spain	ubics@ub.edu	12
de Haas, Tymon	Leiden University, Netherlands	t.c.a.de.haas@arch.leidenuniv.nl	9
de Ligt, Luuc	University of Leiden, Netherlands	l.de.ligt@hum.leidenuniv.nl	10
De Maria, Gabriella			38
De Mitri, Carlo	Vrije Universiteit Amsterdam, Netherlands	carlo_demitri@yahoo.com	TRAC 14
del Mar Castro García, María	University of Cádiz / University of Siena	mariadel.castro@unisi.it	TRAC 2
Delfino, Massimo	Università di Torino, Italy	massimo.delfino@unito.it	28
DeMone, Brittany	University of Calgary, Canada	Brittany.demone@ucalgary.ca	TRAC Gen
Demicheli , Dino			27
Dobosi, Linda	Hungarian Academy of Sciences (MTA) / Eötvös Loránd University, Hungary	dobosi.linda@btk.elte.hu	37
Dodd, Emlyn	British School at Rome, Italy	ADarchaeology@bsrome.it	22
Ozren Domiter	Archaeological Museum in Zagreb, Croatia	odomiter@amz.hr	TRAC workshop
Doneus, Michael	University of Vienna, Austria	michael.doneus@univie.ac.at	37
Drewniak, Kala	University of Bonn, Germany	kaladrewniak@yahoo.de	TRAC 9
Duffy, Lisa	Canterbury Christ Church University, UK	e.s.duffy333@canterbury.ac.uk	TRAC 9
Dugonjić, Anita	Archaeological Museum in Zagreb, Croatia	adugonjic@amz.hr	1
Duret, Marc			26
Dzino, Danijel	Macquarie University, Australia	danijel.dzino@mq.edu.au	27
Dziurdzik, Tomasz	University of Warsaw, Poland	t.dziurdzik@gmail.com	TRAC 10
Eckardt, Hella	University of Reading, UK	h.eckardt@reading.ac.uk	11
Edwell, Peter	Macquarie University, Australia	peter.edwell@mq.edu.au	39
España-Chamorro, Sergio	CNRS-Universite Bordeaux-Montaigne, France	sergio.espana-chamorro@u-bordeaux-montaigne.fr	TRAC Gen

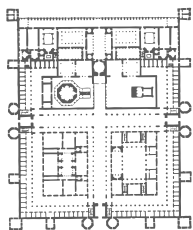|			
Esposito, Alessandra	King's College London, UK	alessandra.g.esposito@kcl.ac.uk	TRAC 10
Etleva, Nallbani	CNRS, France		14
Fernández-Götz, Manuel	University of Edinburgh, UK	M.Fernandez-Gotz@ed.ac.uk	30
Fetner, Rafał	University of Warsaw, Poland	rafetner@uw.edu.pl	9
Fiorentino, Girolamo	University of Salento, Italy	girolamo.fiorentino@unisalento.it	9
Florenzano, Assunta	Università di Modena e Reggio Emilia, Italy	assunta.florenzano@unimore.it.	9
Flood, Jonathan	Frostburg State University, USA		9
Fumić, Tea	University of Zagreb, Croatia		27
Garcia-Molsosa, Arnau	University of Cambridge, UK	ag2023@cam.ac.uk	9
García Sánchez, Jesús	Instituto de Arqueología de Mérida, Spain	j.garcia@csic.iam.es	TRAC 2
Gardner, Carlotta	British School at Athens, Greece	C.gardner@bsa.ac.uk	TRAC 1
Gasparini, Eleonora	National Science Centre Poland	elegasparinini@hotmail.com	TRAC 12
Gavrilović Vitas, Nadežda	Institute of Archaeology, Belgrade, Serbia	N.Gavrilovic@ai.ac.rs	34
Găzdac, Cristian	University of Cluj, Romania	cristian.gazdac@ubbcluj.ro cgazdac2000@yahoo.co.uk	32
Gilmour, Alasdair			2
Gleason, Kathryn	Cornell University, USA	klg16@cornell.edu	12
Goddard, Christophe J.	CNRS / AOrOc–UMR 8546 Research Centre, France	christophe.goddard@ens.fr	14
Gómez Robledo, María Aidé	University of Barcelona, Spain		Poster
González Vázquez, Mateo	Universität Trier, Germany	gonzalezvaz@uni-trier.de	26, 31
Gosner, Linda R.	University of Michigan, USA	lgosner@umich.edu	TRAC 15
Grainger, Sally		sallygrain@aol.com,	2
Granados, Isabel			TRAC 2
Greene, Elizabeth	University of Western Ontario, Canada	egreene2@uwo.ca	15
Gregoratti, Leonardo		DerGrego@gmail.com	39
Gręzak, Anna	University of Warsaw, Poland	abgrezak@uw.edu.pl	9
Griffiths, David	University of Oxford	david.griffiths@conted.ox.ac.uk	2
Grocock, Christopher	Bedales School, UK		12
Guest, Peter	Vianova Archaeology & Heritage Services, UK	peter@vianovaarchaeology.com	42
Gugl, Christian	Austrian Archaeological Institute (OeAI) (ÖAI, Austria	christian.gugl@oeaw.ac.at	37
Guimaraes, Silvia	CIBIO-InBIO/Consejo Superior de Investigaciones Científicas (CISC) / University of Porto, Portugal	biguimaraes@hotmail.com	9
Gutiérrez Soler, Luís M.	Universidad de Jaén, Spain	lmsoler@ujaen.es	TRAC 2
Hanson, J. W.	University of Reading, UK	j.w.hanson@reading.ac.uk	TRAC 5
Hewerdine, Leah	Royal Holloway Univ of London, UK	Leah.Hewerdine.2013@live.rhul.ac.uk	TRAC 10
Hobbs, Richard	The British Museum, UK	rhobbs@britishmuseum.org	8
Holleran, Claire	University of Exeter, UK	C.Holleran@exeter.ac.uk	12
Hoss, Stefanie	University of Cologne, Germany	Stefanie.hoss@unikoeln.de	11
Hudak, Eniko	Newcastle University, UK	e.hudak2@newcastle.ac.uk	TRAC 4
Hughes, Lisa A.	University of Calgary, Canada	lahughes@ucalgary.ca	TRAC Gen
Humennyi, Viktor	Ukraine		39
Hunnell Chen, Anne	Yale University, USA	anne.h.chen@yale.edu	39

Hurt, Nicola	King's College London, USA	Nicola.hurt@kcl.ac.uk	TRAC Gen
Hussey, Adam	University of Southampton, UK	adh2v07@soton.ac.uk	TRAC poster
Ilkić, Mato	University of Zadar, Croatia	milkic@unizd.hr	36
Istenič, Janka	National Museum of Ljubljana, Slovenia	janka.istenic@nms.si,	11
Ivčević, Sanja	Archaeological Museum in Split, Croatia	sanja.ivcevic@armus.hr	33
Ivleva, Tatiana	Newcastle University, UK	Tatiana.Ivleva@newcastle.ac.uk	15
Janković, Marko A.	University of Belgrade, Serbia	markojankovicc@gmail.com	TRAC 9
Jaworska, Maria	University of Warsaw, Poland	mm.jaworska7@uw.edu.pl	
Jevtović, Ljubomir	Institute of Archaeology, Belgrade, Serbia	jevtoviclj@gmail.com	33
Jovičić, Mladen	Institute of Archaeology, Belgrade, Serbia	mladen_jovicic@yahoo.com	33
Kafetzaki, Danai	KU Leuven, Belgium	danai.kafetzaki@kuleuven.be	2
Kaić, Iva	University of Zagreb, Croatia	ikaic@ffzg.hr	33
Dimitris Karampas	University of Oxford, UK		24
Karo, Špela	Institute for the Protection of Cultural Heritage of Slovenia	spela.karo@zvkds.si	28
Kays, Melissa	University of York, UK	mak612@york.ac.uk	34
Keizer, David	University of Calgary, Canada	David.keizer@ucalgary.ca	TRAC Gen
Kerschbaum, Saskia	Johann Wolfgang Goethe-Universität Frankfurt am Main, Germany	kerschbaum@em.uni-frankfurt.de	26
Klaver, Sanne	University of Amsterdam, Netherlands	s.f.klaver@uva.nl	39
Klevnäs, Alison	Stockholm University, Sweden	alison.klevnas@ark.su.se	28
Kok, Marjolijn	Bureau Archeologie en Toekomst, Netherlands	marjolijnkok@gmail.com	TRAC 9
Konestra, Ana	Archaeological Institute, Croatia	ana.konestra@iarh.hr	1
Kootker, Lisette M.	VU Amsterdam, Netherlands		12
Koprivica, Tatjana	University of Montenegro	tkoprivica@yahoo.com	14
Krämer, Robinson Peter	Universität Rostock, Germany	robinson.kraemer@uni-rostock.de	31
Kukela, Agnese	University of Latvia	agnese.kukela@gmail.com	1
Kurilić, Anamarija	University of Zadar, Croatia	akurilic2011@unizd.hr	1
La Rosa, Lorenza	University of Oslo, Norway	l.l.rosa@iakh.uio.no	TRAC 2
Lagóstena Barrios, Lázaro	University of Cadiz, Spain	Lazaro.lagostena@uca.es	TRAC 2
Láng, Orsolya	Aquincum Museum, Hungary	lang.orsolya@aquincum.hu	37
Lario Devesa, Arnau	Consejo Superior de Investigaciones Científicas, Spain	arnaulario@gmail.com	26, 31
Launaro, Alessandro	University of Cambridge, UK	al506@cam.ac.uk	10
Lawrence, Andrew	Universität Bern / University of Bern, Switzerland	Andrew.lawrence@iaw.unibe.ch	30
Lee, Antony	Durham University, UK	antony.m.lee@durham.ac.uk	42
Leleković, Tino	Croatian Academy of Sciences and Arts, Croatia	tilelek@hazu.hr	37
Leppard, Tom	Florida State University, USA	tleppard@fsu.edu	9
Lipovac Vrkljan, Goranka	Institute of Archaeology, Croatia	gorankalv@gmail.com	1
Kris Lockyear	University College London, UK	k.lockyear@ucl.ac.uk	12
Lodwick, Lisa	University of Oxford, UK	lisa.lodwick@all-souls.ox.ac.uk	9, TRAC 5
Longhust, Ian		ianlonghurst@outlook.com	42

Luzzadder Beach, Sheryl	University of Texas at Austin, USA	slbeach@austin.utexas.edu	9
Machuca Prieto, Francisco	Malaga University, Spain	machucaprieto@uma.es	26, TRAC 12
Magnani, Stefano	University of Udine, Italy	stefano.magnani@uniud.it	TRAC 9
Maréchal, Sadi			TRAC 12
Maranzana, Paolo	Boğaziçi University, Turkey	maranzap@umich.edu	TRAC 15
Margreiter, Philipp			TRAC 9
Marshall, Michael	Museum of London Archaeology, UK	mmarshall@mola.org.uk	34
Martín i Oliveras, Antoni	Universitat de Barcelona, Spain	amartinol@gencat.cat	22
Martín-Arroyo Sánchez, Daniel J.	University of Barcelona and Granada, Spain	danielmartin@ugr.es martin-arroyo@ub.edu	31, TRAC 2
Martins, Ana	University of Lisbon, Portugal		2
Marzano, Annalisa	University of Reading, UK	a.marzano@reading.ac.uk	12
Maschek, Dominik	University of Oxford, UK	dominik.maschek@ox.ac.uk	TRAC Gen
Mataix Ferrándiz, Emilia	Helsinki Collegium for Advanced Studies, Finland	emilia.mataixferrandiz@helsinki.fi	31
Matés Porcel, Josep			22
Matijević, Vinka	University of Zagreb, Croatia	vibubic@ffzg.hr	33
Maw, Eleanor	University of Cambridge, UK	ejm76@cam.ac.uk	TRAC 2
Lindsey A. Mazurek		linmazur@indiana.edu	TRAC Gen
Mazzilli, Francesca	Cambridge Archaeological Unit, UK		TRAC 4
Mazzini, Luca	University of Exeter, UK	lm527@exeter.ac.uk	26, TRAC 12
McDonald, Brandon	University of Oxford, UK	brandon.mcdonald@lincoln.ox.ac.uk	TRAC 15
McKenzie, Dustin	Macquarie University, Australia	dustin.mckenzie@hdr.mq.edu.au	26, TRAC 12
McLean, Andrew	University of Edinburgh, UK	Andrew.McLean@ed.ac.uk	TRAC 14
Mech, Anna	University of Warsaw, Poland		27
Mercuri, Anna Maria	Università di Modena e Reggio Emilia, Italy	annamaria.mercuri@unimore.it	9
Mesihović, Salmedin	University of Sarajevo, Bosnia and Herzegovina	salmedin.mesihovic@ff.unsa.ba	27
Michaelides, Demetrios	University of Cyprus	d.michaelides@ucy.ac.cy	TRAC 12
Migotti, Branka		branka.migotti@gmail.com	34
Mileto, Simone			2
Milivojević, Feđa	University of Rijeka, Croatia	feda.milivojevic@uniri.hr	33
Millar, Jane	Cornell University, USA	jem535@cornell.edu	9
Miller, Marlee	New York University, USA	mhm319@nyu.edu	TRAC 8
Millett, Martin	University of Cambridge, UK	mjm62@cam.ac.uk	10
Milovanović, Bebina	Institute of Archaeology, Belgrade, Serbia	bebina27@yahoo.com	33
Mirkes, Evgeny	University of Leicester, UK	em322@le.ac.uk	2
Mirnik, Ivan	Archaeological museum Zagreb, Croatia	i.a.d.mirnik@gmail.com	32
Miše, Maja	UCL / University of Cambridge, UK	mm2591@cam.ac.uk m.mise@ucl.ac.uk	TRAC 1, TRAC 14
Miškec, Alenka	National Museum of Slovenia	alenka.miskec@nms.si	28
Mitrofan, Dragos	University of Exeter, UK	Dm703@exeter.ac.uk	TRAC Gen
Moderato, Marco	Università degli Studi "G. d'Annunzio" Chieti Pescara, Italy	marco.moderato@unich.it	1

Moles, Anna	University of Groningen, Netherlands	a.c.moles@rug.nl	24
Montagnetti, Roberto	Border Archaeology, UK	robertomontagnetti@gmail.com	12
Montoya González, Rubén	University of Leicester, UK	rm503@leicester.ac.uk	TRAC 12
Moreau, Dominic	University of Lille, France	dominic.moreau@univ-lille.fr	14
Moreno Megías, Violeta	Universidad de Sevilla, Spain	vmoreno1@us.es	31
Moreno Navarro, Fernando	Universidad Carlos III de Madrid, Spain	fernmore@hum.uc3m.es	TRAC 12
Mrđić, Nemanja	Institute of Archaeology, Belgrade, Serbia	nemanjamrdjic@gmail.com	33, 37
Murphy, Elizabeth A.	Florida State University, USA	eamurphy@fsu.edu	9, TRAC 1
Muslin, Jennifer L.	University of Texas at Austin, USA	jlmuslin@utexas.edu	22
Nađ, Miroslav	Archaeological Museum, Zagreb, Croatia	mnad@amz.hr	32
Nagy, Alexandra	Aquincum Museum, Hungary	nagy.alexandra@iif.hu	Poster
Neubauer, Wolfgang	University of Vienna, Austria	Wolfgang.Neubauer@archpro.lbg.ac.at	37
Nieto-Espinet, Ariadna	Consejo Superior de Investigaciones Científicas (CISC), Spain	arinietoespinet@gmail.com	9
Noterman, Astrid	Stockholm University, Sweden	astrid.noterman@ark.su.se	28
Nowacki, Bartosz	University of Warsaw		1
Orengo, Hector	Catalan Institute of Classical Archaeology, Spain	horengo@icac.cat	9
Ortiz Villarejo, Antonio J.	Universidad de Jaén, Spain	ajvillar@ujaen.es	TRAC 2
Ožanić Roguljić, Ivana	Institute of Archaeology, Croatia	iozanic@iarh.hr	TRAC 5
Pagoto Bélo, Tais	Museum of Archaeology and Ethnology (MAE), University of São Paulo (USP), Brazil	taispbelo@gmail.com, taispbelo@usp.br	TRAC Gen
Palacín Copado, Carlos	University of Barcelona, Spain		22
Pallag, Zoltan	University of Leicester, UK	zp56@leicester.ac.uk	8
Papworth, Martin	National Trust, UK		21
Pare, Rhiannon	Princeton University, USA	rpare@princeton.edu	TRAC Gen
Parés Sansano, Bruno			22
Parini, Martina Cecilia	University of Groningen, Netherlands	m.c.parini@rug.nl	TRAC poster
Pásztókai-Szeőke, Judit		pszeoke23@gmail.com	34
Paunov, Evgeni			32
Payne, Emma	King's College London, UK	emma.payne@kcl.ac.uk	39
Pecci, Alessandra	University of Barcelona, Spain	alepecci@gmail.com	2
Pegurri, Alessandra	University of Leicester		2
Pelcer-Vujačić, Olga	University of Montenegro	olgapelcer@gmail.com	14
Pensabene, Patrizio	La Sapienza, Università di Roma, Italy	patrizio.pensabene@uniroma1.it	TRAC 12
Pérez González, Jordi	Universitat de Barcelona, Spain	jperezg@ub.edu	31, TRAC 4
Perinić, Ljubica	Croatian Academy of Sciences and Arts		27
Perna, Roberto	University of Macerata, Italy	roberto.perna@unimc.it	1
Perna, Simona	Institut Català d'Arqueologia Clàssica, Spain	simona.perna8@gmail.com	TRAC 1
Peter, Ulrike	Corpus Nummorum, BBAW (Berlin), Germany	peter@bbaw.de	32
Phillips, Reanna S.	University of Chester, UK	reanna.phillips@chester.ac.uk	28, 42
Piccinini, Jessica	University of Macerata, Italy	jessica.piccinini@unimc.it	1

Pickel, David Gerald	Stanford University, USA	dpickel@stanford.edu	12
Pirée Iliou, Nefeli	University of Oxford, UK	nefeli.pireeiliou@arch.ox.ac.uk	TRAC 14
Poblome, Jeroen	KU Leuven, Belgium	jeroen.poblome@kuleuven.be	2
Previto, Matthew	Stanford University, USA	mjp6853@stanford.edu	TRAC poster
Puddu, Mauro	University of Cambridge, UK	mauro483@hotmail.it	TRAC 8
Pudney, Caroline	University of Chester, UK	c.pudney@chester.ac.uk	15
Quiery, Jonathan M.	Durham University, UK		TRAC Gen
Rabiega, Kamil	University of Warsaw, Poland		1
Radman-Livaja, Ivan	Archaeological Museum in Zagreb, Croatia	iradman@amz.hr	11, 27
Ragolič, Anja	University of Zaragoza, Spain	anja.ragolic@gmail.com	1
Raičković Savić, Angelina	Archaeological Institute Belgrade, Serbia	araickovic@yahoo.com	TRAC 5
Raptis, Konstantinos T.	Ephorate of Antiquities of Thessaloniki, Greece		14
Ratcliffe, Maxime Jay	University of Durham, UK	Maxime.J.Ratcliffe@durham.ac.uk	TRAC Gen
Reed, Kelly	University of Oxford, UK	kelly.reed@zoo.ox.ac.uk	TRAC 5
Rekowska, Monika	University of Warsaw, Poland	mrekowska@uw.edu.pl	TRAC 12
Remesal Rodríguez, J.	Universitat de Barcelona, Spain	remesal@ub.edu	TRAC 4
Reynolds, Julie			21
Rice, Candace M.	Brown University, USA	candace_rice@brown.edu	22
Rieger, Anna-Katharina	University of Graz, Austria	anna.rieger@uni-graz.at	TRAC 9
Roch, Julius	Martin-Luther-Universität Halle-Wittenberg, Germany	roch@eth.mpg.de	TRAC 12
Rolo, Mónica		monicasrolo@gmail.com	2
Romankiewicz, Tanja	University of Edinburgh, UK	T.Romankiewicz@ed.ac.uk	30
Rondán, Isabel			TRAC 2
Roppa, Andrea	University of Padova, Italy		9
Rowan, Erica	Royal Holloway, University of London, UK	Erica.rowan@rhul.ac.uk	TRAC 5
Ruiz Barroso, Manuel	University of Cadiz, Spain		TRAC 2
Ruiz Gil, José Antonio	University of Cadiz, Spain	jantonio.ruiz@uca.es	TRAC 2
Rull Fort, Guillem	SIRISlab, Spain	guillem.rull@sirisacademic.com	TRAC 4
Rummel, Christoph	Römisch-Germanische Kommission des DAI, Germany	christoph.rummel@dainst.de	30
Samson-Conlon, Juliet	Birkbeck College, UK	jsamso01@mail.bbk.ac.uk	39
Santagati, Elena	Università degli Studi di Messina, Italy	elena.santagati@unime.it	38
Sassu, Rita	Unitelma Sapienza, Italy	rita.sassu@unitelmasapienza.it	24
Schirmer, Christy	University of Texas at Austin, USA	schirmerc@utexas.edu	TRAC 1, TRAC 5
Schöne, Christian A.	University of Cologne, Germany	c.a.schoene@uni-koeln.de christian.a.schoene@gmail.com	9
Scoppie, Sarah	University of Leicester, UK	ss1173@le.ac.uk	TRAC Gen
Sekunda, Nicholas	Wydział Historyczny Uniwersytetu Gdańskiego, Poland	sekunda@ug.edu.pl	38
Serpetti, Matteo	Università degli Studi della Tuscia, Italy		12
Serventi, Zrinka	University of Zadar, Croatia		1
Šešelj, Lucijana	University of Rijeka, Croatia		36
Sfameni, Carla	CNR – Rome, Italy	carla.sfameni@cnr.it	14

van der Meulen, Berber	Cardiff University, UK	vandermeulenbs@cardiff.ac.uk	12
van der Velde, Henk	ADC ArcheoProjecten, Netherlands		12
Van Helden, Daniël	University of Leicester, UK	dpv2@le.ac.uk	2, TRAC Gen
Van Oyen, Astrid	Cornell University, USA	av475@cornell.edu	TRAC 1
Van Limbergen, Dimitri	Ghent University, Belgium	Dimitri.VanLimbergen@UGent.be	9
Vanni, Edoardo	University of Siena, Italy	edoardo.vanni@unisi.it	TRAC 8
Vannucci Giulia	Staatliche Museen zu Berlin, Germany		24
Veledar, Amela	University of Vienna, Austria		27
Vennarucci, Rhodora G.	University of Arkansas, USA	rhodorav@uark.edu	TRAC 1
Verdonk, Lieven	Ghent University, Belgium	lieven.verdonck@ugent.be	10
Vermeulen, Frank	Ghent University, Belgium	Frank.Vermeulen@UGent.be	10
Veselova, Yuliya S.		yuliya.veselova.95@mail.ru	TRAC poster
Vilogorac Brčić, Inga	Faculty of Humanities and Social Sciences, Zagreb, Croatia	ivbrcic@ffzg.hr	27
Visonà, Paolo	University of Kentucky, USA	Paolo.Visona@uky.edu	36
Vukov, Mirna	University of Zagreb, Croatia	mvukov@ffzg.hr	33
Vuković, Kresimir	Catholic University of Croatia / University of Munich, Germany	K.Vukovic@klassphil.uni-muenchen.de	11
Vuković, Morana	Archaeological Museum Zadar, Croatia	mvukovic@amzd.hr	1
Vuković, Sonja	University of Belgrade, Serbia	sonja.vukovic@f.bg.ac.rs	33
Vulić, Hrvoje	Gradski muzej Vinkovci, Croatia	hrvoje@muzejvk.hr	8
Walas, Anna H.	University of Nottingham, UK	Anna.Walas@nottingham.ac.uk	TRAC 10
Walker, Don	MOLA (Museum of London Archaeology), UK	dwalker@mola.org.uk	28
Wallner, Mario	Zentralanstalt für Meteorologie und Geodynamik, Austria		37
Walsh, David	University of Kent, UK	D.J.Walsh-43@kent.ac.uk	42
Walthall, Alex	University of Texas at Austin, USA	dwalthall@austin.utexas.edu	9
Walton, Philippa	University of Reading, UK	p.j.walton@reading.ac.uk	11
Weekes, Jake	Canterbury Archaeology Trust, UK	Jake.Weekes@canterburytrust.co.uk	TRAC 8
Welc, Fabian	University of Warsaw	f.welc@uksw.edu.pl	1
Wetzig, Norman	Georg-August Universität zu Göttingen, Germany		TRAC Gen
White, Roger	University of Birmingham, UK	r.h.white@bham.ac.uk	30
Willet, Rinse	Koç University, Turkey		2
Wilson, Jordan	University of Arizona	jkrummel@email.arizona.edu	12
Wolff, Alice	Cornell University, USA	acw262@cornell.edu	TRAC Gen
Wood, Jason	Heritage Consultancy Services UK	jwhcs@yahoo.co.uk	21
Woodhull, Margaret L.	University of Colorado Denver, USA	Margaret.woodhull@ucdenver.edu	TRAC Gen
Zaro, Gregory	University of Maine, USA	gregory.zaro@maine.edu	36
Županek, Bernarda	Museum and Galleries of Ljubljana, Slovenia	bernarda.zupanek@mgml.si bernarda.zupanek@gmail.com	14, 28

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