## WINE & INSTITUTIONS IN THE ANCIENT WORLD

International conference and book project, organized and edited by Dimitri Van Limbergen and Paulina Komar

### GHENT, DECEMBER 7-8, 2023

### Thursday, December 7<sup>th</sup> (Blandijn, room 2.21)

13h15 – Registration & coffee

13h30 – Introduction to the conference (*Dimitri Van Limbergen and Paulina Komar*)

#### Session 1 – Wine and Society

13h50 – Consuming the Past/Drinking history: Modern Vines & Ancient Wines (*Emily Hanscam and Vladimir Stissi*)

14h10 – Sipping the Mediterranean. Wine amphorae, politics, urban planning and kapeleia in Ancient Greece (Antonio Saez Romero, Penélope I. Martínez de los Reyes, Ramón Díaz de Mayorga Arias, Carmen Ramírez Cañas)

14h30 – From the Triumph of Dionysos to the Blood of Christ - Wine Production and the Early Christianity in the Eastern Adriatic (Jana Kopackova)

14h50 – A Semantic Analysis of Wine in Greek Literature (*Rachel Dubit & Annie Lamar*) **O** 

15h10 – Q&A, followed by a coffee break

#### Session 2 – Wine and Law

16h00 – Revisiting the Roman wine trade through the use of Samples (*Emilia Mataix Ferrándiz*)

16h20 – Wine as seen by Roman jurists (Francesco Bono)

16h40 – Q&A, end of first day

#### **Evening program**

17h00 – Book presentations: 'Vine-growing and Winemaking in the Roman World' & 'Methods in Ancient Wine Archaeology' (*Dimitri Van Limbergen*) 17h30 – Keynote lecture: The wine presses and kilns of Yavne – technology, quantification and the terroir of Gaza and Ashqelon (*Jon Seligman, with Elie Haddad and Liat Nadav-Ziv*) **O** 

20h00 – Historical Food & Wine dinner (only for speakers) Location: Goûts & Couleurs, Groentenmarkt 15, 9000, Gent

A culinary tour through historical recipes paired with wines that are reminiscent of ancient vintages (guided by Dimitri Van Limbergen, Paulina Komar and Annelies Van Wittenberghe)

#### Friday, December 8<sup>th</sup> (Blandijn, room 2.24)

#### Session 3 – Wine and Religion

10h00 – Towards an atlas of Syro-Phoenician and Palestinian wines - merging data from multiple sources (*Tomasz Waliszewski, Urszula Wicenciak-Núñez, Mariusz Gwiazda, Monika Badura*)

10h20 – "We are all brothers": Social capital and monastic wine production in the late antique Levant (online) (*Tamara Lewit*) **O** 

10h40 – Efficiency, Arbitrage, and Exchange: Egyptian Monasteries in the Late Antique Wine Economy (*Thomas Laver*)

11h00 – Coffee break

11h20 – Christian winemaking in the early Islamic period: two examples from Palestina Secunda and Arabia *(Sofia Thatharopoulou)* 

11h40 – The Grapes of Wrath: Women, wine and the discourse of male power in Augustan Rome (*Lily Moore*) **O** 

12h00 – Q&A, followed by sandwich lunch

#### Session 4 – Wine and War

13h30 – Wine for the Roman army (Paulina Komar)

13h50 – Multum vini ullamcorper suscipit dolor et cornu: Wine consumption at Castra ad Fluvium Frigidum (Ana Kovačič, Kaja Stemberger Flegar)

14h10 – Wine for the Army of Byzantium: Late Antique and Early Medieval Realities (Nikos Tsivikis, Thanasis Sotiriou, Olga Karagiorgou, Ilias Anagnostakis)

14h30 – Q&A, followed by a coffee break

#### Session 5 – Wine and Power

15h10 – Centuriation and Roman wine terroirs in northern Adriatic Italy: piecing together the puzzle (*Dimitri Van Limbergen*) 15h30 – On the origin of the Ti. Claudii mentioned on Cretan Amphoras (Daniel J. Martín-Arroyo Sánchez) O

15h50 – Wine production in the Lusitanian hinterland: Large villa without a clear market (online) (Pedro Trapero, André Carneiro) O

16h10 – Wine production in Roman Dalmatia: onset, actors, and commercialization (Ana Konestra, Maja Grisonic)

16h30 – Q&A, conclusion of the conference

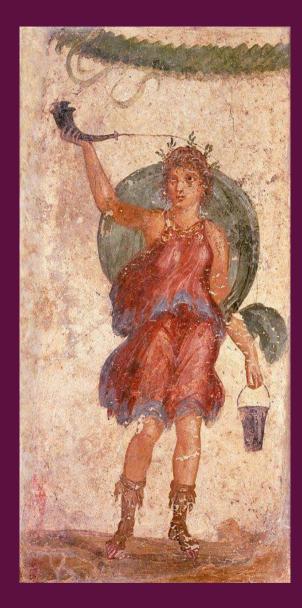
#### O = on-line

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This conference is generously funded by the Faculty Research Fund of Ghent University (Faculty of Arts and Philosophy), the Ghent Institute for Classical Studies (GICS) and the University of Warsaw. The event is also supported by the Roman Society Research Center, a joint research center by Ghent and the Free University of Brussels.

GRENT INSTITUTE FOR CLASSICAL STUDIES





#### **BOOK OF ABSTRACTS**

## **Consuming the Past/Drinking history: Modern Vines & Ancient Wines** (*Emily Hanscam - Linnaeus University; Vladimir Stissi - University of Amsterdam*)

What does it mean to drink the past? Many Greek wine producers use names and images of ancient gods on their labels, and some claim pedigrees of thousands of years, even in areas with no evidence of ancient production. Across the lands of the former Roman Empire in Europe, from Spain and France to Serbia and Romania, local vineyards are marketing their wines on a perceived connection to the Roman past. Even though these places often had pre-Roman local wine traditions, it is the Roman wine that sells. At the same time, archaeologists are using the latest scientific techniques to research the origins of these vines, producing narratives that lend themselves to claims of vines being 'the first' or 'the oldest'. Classicism also abounds, as researchers frequently reinforce tropes of wine belonging solely to the Athenian symposium or to Roman imperial banquets, rather than acknowledging the universal presence of wine in Antiquity. The production and consumption of wine in Antiquity was embedded within institutional power structures. Some, we argue, are replicated today through the uncritical perpetuation of wine as a marker of civilization. It is thus vital that we develop a critical understanding of ancient wine drinking cultures in connection to modern claims of 'consuming' the past that accounts for the ways research, marketing and government-driven heritage policies are intertwined. This paper reflects on these issues to rethink scholarly and popular engagements with ancient wines and their modern counterparts.

Sipping the Mediterranean. Wine amphorae, politics, urban planning and kapeleia in Ancient Greece (Antonio Sáez Romero, Penélope I. Martínez de los Reyes, Ramón Díaz de Mayorga Arias, Carmen Ramírez Cañas - University of Seville)

Wine was one of the most important cultural elements in the daily life of Ancient Greece. Some of the most famous aromatic wines were those from Chios, Lesbos, Samos, Chalcidice, Mende, Naxos or Thasos, making this beverage one of the most prestigious foods in the Aegean. Only few had the means to drink them in the privacy of their homes. However, these wines were not only consumed in the oikos, on occasions such as symposia, or in religious spaces, but also in the public banquets celebrated in certain commercial spaces. Still, the kapeleia (taverns) of the Classical period were probably where ancient Greeks would have experienced more frequently entertainment and drinking wine in the company of friends and/or family. The storerooms of those buildings would have been loaded with different types of wines for their diverse clientele. The so-called Punic Amphora Building excavated at Corinth can be identified as one of the rare examples of *kapeleia* known from the 5<sup>th</sup> century BC. thousands of ceramic items, in combination with Its bioarchaeological data, allow to examine the evolution of the consumption patterns at the site. Most of the amphorae found are Greek wine containers from Chios, Samos, Mende, Lesbos, Magna Graecia and other areas.

This paper offers a first typological and quantitative assessment of these wine amphorae, next to an analysis of both local and imported tableware related to wine consumption. These are compared with several ceramic assemblages from other spaces identified as taverns, such as those excavated at Athens and Krania, to examine key social aspects, such as the economic status of the customers and the possible existence of similar consumption patterns in this type of establishments throughout the classical Greek world.

The Grapes of Wrath: Women, wine and the discourse of male power in Augustan Rome (Lily Moore - University of Melbourne)

In the year 2 BCE, Julia, daughter of Augustus, was convicted of adultery and subsequently exiled from Rome. Interestingly, there was an addendum to this banishment: one of Augustus 'prohibitions placed upon his exiled adulterous daughter was the denial of "the use of wine" (Suet. Aug. 65), a somewhat remarkable restriction noticeable enough to merit attention in the ancient testimony. However, this disallowance of drink exacted by the paterfamilias upon his female dependent was not without precedent. When examining the ancient literary sources, it becomes clear that the specific restriction against drinking wine placed on women was itself a well attested legal, moral, and social manifestation supposedly tracing back to the foundations of Roman society and ultimately rationalized under the Augustan regime. This paper will examine the interconnected relationship between women and wine, its connection to adultery and immorality, and both the legally defined ban and/or socially accepted allowance for punishment exacted upon women by men for engaging in the consumption of wine.

In direct correlation to this, the relationship between the power of the husband over his wife will be explored. I aim to focus on the gendered terms and distinctions that so clearly permeated this power imbalance indoctrinated through the early Roman marriage system, as exemplified through the legal conception of *patria potestas* and the accompanying value system of the *mos maiorum*, which allowed for the husband to systematically punish, or perhaps murder, his wife for the very act of drinking wine. I aim to examine how such brutal consequences were both justified and narrativized in the Roman male mindset to explain the phenomenon of the male use of power over women and their social autonomy as a form of gendered dominance through the focalization of their consumption of wine. I will examine how it informed the governing power structures pertaining to male social and cultural systems of dignitas and honor, and the concurrent diminishment of female autonomy in direct relation to gendered perceptions of virtue.

# A Semantic Analysis of Wine in Greek Literature (Rachel Dubit, Annie Lamar – Stanford University)

In this transdisciplinary Greek philology project, we investigate the shifting semantic relationship between wine and socio-political institutions. We train neural world embeddings for clusters of texts across a range of literary time periods – from Homer to Hellenistic poets – and measure the embedding distance between the lemmas related to wine and those related to socio-political life. To achieve the most representative results we will include works of both prose and poetry from a variety of regions and authors. We will start with oũvoç (and linguistic relations) and include both poetic metonyms for wine and terms relevant to its trade and consumption (including the most common wine vessels). We will then compare embedding distance between these terms and lemmas relevant to socio-political life, such as trade (e.g., ἕμπορος), homeland (πατρίς), and stranger,

foreigner or guest ( $\xi \pm vo \varsigma$ ). While neural world embeddings are well established in the world of natural language processing, research of this sort is underdeveloped in Greek literature and has never been undertaken with a focus on wine. Through this novel experiment, we hope to improve our understanding of how the Greeks conceived of wine as a cultural object, and how such conceptions changed over time in response to shifting political, social, and economic trends. We will situate in our findings within a nuanced philological and historical framework to demonstrate how literary perceptions of wine measure up against what we know of the production, transport and consumption of wine in the ancient Greek world.

**Revisiting the Roman wine trade through the use of Samples** (Emilia Mataix Ferrándiz - University of the Basque country)

Samples and sampling were key artefacts for Roman trade, even if unfortunately, only very few material examples have survived until our days. No direct mention of their use in jurist's works compiled in codes such as Justinian's Digest has been preserved, and there is only one reference to them in one imperial constitution compiled in the Theodosian Code (5<sup>th</sup> century AD), referring to grain. Samples are rarely brought up in inscriptions, but profusely mentioned in literary works or papyri, which indeed represent the practical use of these objects in trade, especially in what concerns commerce of wine or grain. However, there are many elements of the contracts employed in trade described by jurists that can be connected to the use of samples as attested by preserved objects, inscriptions, and papyri. Practices and formalities such as the need to taste the product before acquiring it (*degustatio*) for the case of the sale of wine, the need to identify a cargo sold in bulk, or the possibility of contracting the acquisition of a product sold in a distant place after tasting it bear witness of the importance of samples in roman trade.

The purpose of this contribution is to assess the significance of samples and sampling in the context of the Roman wine trade. As a peculiar commodity given its changing nature even after being bottled, wine has been the subject of many legal texts regarding the different ways by which it can be sold and the different liabilities established among the parties. In addition, wine sales have been widely studied regarding the papyrological evidence, underlying the particularities of the wine cycles in Egypt versus the west of the Empire. For this contribution, I will focus on the role of samples in the sale of wine and will concentrate my contribution on five examples coming from different parts of the western Roman Empire, that witness different ways of selling and distributing wine.

# **Wine as seen by Roman jurists** (Francesco Bono - University of Parma)

Already Marcus Porcius Cato recommended the cultivation of vines in the 2<sup>nd</sup> century BC. The importance of this cultivation in the Italic peninsula is also attested in the accounts of Varro and Columella. The picture that emerges from historical sources is confirmed by the numerous attestations concerning wine in the texts of Roman jurists. Indeed, wine is the subject of economic transactions and contracts. Jurists therefore deal in numerous passages of the Digest with what rules should be followed in a wine sale.

But this is not the only aspect. In fact, in addition to the sale, wine can be left by will to heirs. Once again, jurists need to understand what to do when the testator disposes of a bequest of wine. In my paper, I intend to take a look at these aspects of Roman private law, to show how legal texts can also provide elements for understanding the trade and use of wine in Roman society.

Towards an atlas of Syro-Phoenician and Palestinian wines - merging data from multiple sources (Tomasz Waliszewski, Urszula Wicenciak-Núñez, Mariusz Gwiazda -University of Warsaw, Monika Badura - University of Gdańsk)

If written accounts are to be believed, Syria, Phoenicia and Palestine during the Roman and Late Antique periods were famous for wines known beyond its borders. Archaeological data confirm these accounts only to a minor extent. Environmental and epigraphic data are useful but not decisive in this respect. Only by correlating all the available information with our knowledge of wine containers (amphorae) produced locally mainly on the coast does it become possible to build models indicating the existence of the wine centers mentioned by ancient authors.

We propose to undertake a preliminary review of our existing knowledge of the traces of wine production in an area reaching from

Cilicia and Antioch in the north, through the Syrian-Phoenician and Palestinian coasts, to the borders of Egypt. Records ranging from the 1<sup>st</sup> century BC to the 7<sup>th</sup>-8<sup>th</sup> centuries AD will be taken into account: amphorae production centers, wine presses, archaeobotanical traces of vine cultivation, traces of the wine storage and distribution system. The launch of this research is expected to lead to a systematic review of the issue of wine production in the Levant in the 1<sup>st</sup> millennium BC and 1<sup>st</sup> millennium AD. The project can help to understand the extent of this production, the institutions involved in the process, the fluctuations in production and the little-studied phenomenon of the presence of wine in the early Islamic Levant.

"We are all brothers": Social capital and monastic wine production in the late antique Levant (Tamara Lewit -University of Melbourne)

An outstanding phenomenon of the 4<sup>th</sup> to 6<sup>th</sup> centuries AD was the growth and flourishing of monasteries in the provinces of *Syria & Syria Salutaris, Phoenice & Phoenice Libanensis, Palaestina* I, II & III. Recent archaeological investigations have revealed widespread

monastic building, with many of these monasteries producing wine on a large scale, far more than what they needed, using innovative technology. In examining these archaeological remains of wine making in monasteries, we often focus on their material characteristics – their buildings, technology, and bioarchaeology. Yet wine production in a monastic community also took place in the context of vital non-material elements. Our understanding of these elements can perhaps be enhanced by using the idea of "social capital", a concept developed within sociology, political science and economics. Social capital has been defined as relationships between people or communities that form resources analogous to financial or material resources, and the concept has recently become prominent in discussions about agricultural communities, innovation and development. Such studies have distinguished different forms of social capital: bonding, bridging, and linking. In this paper, I hope to explore how by using an interdisciplinary approach we might be able to discern all these three forms of social capital within monastic communities of the late antique Levant, and their impact on patterns of wine production. Within this interdisciplinary framework, I will draw on evidence from documentary sources, isotopic analysis of

human remains, remains of wine processing equipment, shipwrecks and amphorae. It will be argued that monasteries were able to draw on abundant bonding social capital: close bonds of trust and reciprocity within the community, based on shared norms and a doctrine of "brotherhood in Christ". These bonds existed not only within the monastery itself, but also with the nearby villagers who often provided labour for vineyards and wine making processes and shared technical ideas - or even the wine presses themselves. Monasteries also possessed bridging social capital: networks which bridged geographic, cultural and class divides, enabling access to external resources such as information, dissemination of innovations, and commercial opportunities. Wide networks of pilgrimage and migration drew people of all ranks and from many regions to Levantine monasteries, sometimes bringing new pressing technologies. Finally, monasteries possessed linking social capital: connections to higher authorities and larger institutions providing support or advantages. The Mediterranean-wide Church structures and its links to state and military authorities resulted in tax concessions for monasteries and possibly a role in producing and transporting wine for the state. It is proposed that all these three

forms of social capital would have enhanced the productive, trading, and technological capacities of late antique Levantine monasteries.

## Efficiency, Arbitrage, and Exchange: Egyptian Monasteries in the Late Antique Wine Economy (Thomas Laver, University of Cambridge)

This paper uses papyri, ostraca, and material remains to re-examine the key economic role that wine played in Egyptian monasteries AD 400-800, a period when a number of these institutions manipulated their newfound wealth and market power in local and regional markets for wine both to generate commercial profit as well as to limit their expenses. They also used wine as an exchange good to facilitate this, helping to maintain a sufficiently plentiful stock of gold coin for meeting fiscal needs. Throughout this paper, I will stress that wine was at the center of a deliberate financial strategy directed by monastic institutions (rather than individual monks), with the aim of generating, preserving, and manipulating institutional stocks of gold coin, which was an important and relatively scarce resource in the rural Egyptian economy. In doing so, I will focus on three aspects: 1) Efficiency, as monasteries sought to acquire wine in the most efficient ways possible. Papyri document their acquisition and cultivation of significant vineland, showing them investing heavily in irrigation, hiring workers, and building production facilities for making wine to avoid purchasing it on the open market. However, they also acquired a large volume of wine through credit agreements. Some monasteries were able to leverage their economic scale and naval resources to trade beyond the local economy, and so access better-quality and/or more cost-efficient wine elsewhere.

2) Arbitrage, as monastic papyri suggest that monasteries possessed naval resources used to run an arbitrage and/or facilitation business for wine, whereby wine purchased in one location was sold hundreds of kilometres away, for profit. This generated an influx of gold coin for the monasteries, which they likely reinvested in acquiring wine through the above credit agreements, ensuring that this profitable wine business could sustain itself long-term.

3) Exchange, as recent analysis has shown that monasteries appear to have acquired more wine than they had the ability to

consume, with this surplus used as an exchange good to pay servants and artisans for goods and services. Wine was also used to meet tax obligations, thus allowing the monastery to preserve their available stock of gold coin, which could instead be used on the incomegenerating activities mentioned above.

Christian winemaking in the early Islamic period: two examples from Palestina Secunda and Arabia (Sofia Thatharopoulou - Aristotle University of Thessaloniki)

The impact of the Arab conquest in byzantine Palestine the fourth decade of 7<sup>th</sup> century AD has attracted considerable interest among scholars, with several studies addressing questions on urbanism, settlement patterns, social change and coexistence. Today it is widely accepted that Christian communities remained more or less unaffected by the change in regime at least until the 8<sup>th</sup> century, as indicated by continuous use of their religious buildings where religious practice e.g. service, veneration, burial is attested. Within such complexes though, apart from religious practice during the

early Islamic period, industrial and commercial activities demonstrated by wine press installations took place too.

While our knowledge on wine production and commerce during the early byzantine period (until the early 7<sup>th</sup> century AD) is expanded, we know little on wine production in the early Islamic period. Wine presses linked to early byzantine religious complexes have been recorded e.g., in Horvat Beth Loya and in Ain el-Jedide in Palestina Prima, but usually we know nothing about their fate during the 7<sup>th</sup> and 8<sup>th</sup> centuries. When such information exists, they comprise unique cases, testifying to wine production in this period. With this in mind, this addresses two specific cases of Christian religious organizations/churches, where the continuous functioning of wine presses in the early Islamic period is archaeologically confirmed: Hippos-Sussita in Palestina Secunda and Umm ar-Rasas in Arabia.

By examining wine production installations within two Christian religious institutions, we aim to highlight the continuity of wine production under Mulsim rule, to explore how wine was produced in Palestine during the 7<sup>th</sup> and 8<sup>th</sup> century, to describe modifications through time in these installations and to trace indications of decline of wine production.

From the Triumph of Dionysos to the Blood of Christ -Wine Production and the Early Christianity in the Eastern Adriatic (Jana Kopáčková - Archaeological Museum in Zagreb)

Late Antiquity was a period of fundamental changes in Roman society. Most aspects of everyday life were affected by the political and economic instability that lasted almost the entire 3<sup>rd</sup> century, caused by frequent changes on the throne, combined with the peril of barbarian incursions and the growing popularity of Christianity. The cultivation, production and trade of wine and olive oil also started undergoing significant changes during that period. With the rapid spread of Christianity to all regions of the Empire and its establishment as the state religion, both the perception and the consumption of wine were transformed. The wine was given a new symbolic meaning in the context of the Holy Mass, as the blood of Christ. As far as purely practical matters are concerned, the increasing danger of barbarian raids forced wine/oil producers in quite a few provinces to move their pressing facilities from *villae rusticae* in the countryside to the relative safety of the fortified cities, a phenomenon also known as the *rustification* of urban contexts.

Of the 200 archaeological sites associated with the production of wine and olive oil in the territories of *Histria* and *Dalmatia*, almost 50 can be dated to Late Antiquity. Most of those late Roman sites are found in urban contexts and/or within the structures of ecclesiastical institutions. A comparison of the surviving presses has revealed common technological features, which differ in some important respects from previously used devices. The innovations include a pair of stone *stipites* used as counterweights, a press-bed (*area*) made of multiple stone slabs and, typically, the widespread secondary use of older stone monuments for the fabrication of pressing devices components.

This paper discusses the particular position of wine (and olive oil) production within the ecclesiastical economy. Current research clearly shows that this type of production kept a very important position, while being controlled by the Church, which became a major political and social player in the later Roman world. In fact, it seems that pressing installations were a frequent feature in the churches and monasteries built during this period.

**Wine for the Roman army** (Paulina Komar - Cardinal Stefan Wyszynsky University in Warsaw)

Feeding the Roman army was never an easy task, due in part to the massive amounts of foodstuffs needed by the soldiers, but also because of complicated logistical issues. This task was particularly difficult in the border areas of the Empire, such as the Black Sea region, which remained isolated from the main Mediterranean trade routes. This paper analyzes the wine supply of a Roman camp in ancient Colchis – Apsaros, today's Gonio in Georgia.

Apsaros was situated at the crossroads of sea and land routes connecting Trapezus and Sebastopolis, thanks to which it was an important political and economic center in the Black Sea region. It was one of the principal Roman forts situated at the Pontus-Caucasian frontier during the first three centuries AD. It was abandoned in the second half of the 3<sup>rd</sup> century AD as a result of the Gothic Wars, but around the mid-6<sup>th</sup> century AD the fort was restored and continued to be used in the Byzantine and Ottoman periods. Since 2014 it has been studied by the Gonio–Apsaros Polish– Georgian Expedition, which unearthed Roman baths and a praetorium with the oldest geometric mosaic in Transcaucasia. Furthermore, more than 1,500 diagnostic fragments of amphoras have been discovered in the fortress, including wine containers, samples of which have been taken for organic residue analyses (ORA). This study will show recent ORA results and will analyze the share of different types of wines in the supply of Apsaros. These results will be compared with published amphora material from three camps in the Limes Germanicus.

Multum vini ullamcorper suscipit dolor et cornu: Wine consumption at *Castra ad Fluvium Frigidum* (Ana Kovačič -University of Primorska; Kaja Stemberger Flegar - PJP d.o.o.)

This paper addresses wine consumption in the fort *Castra ad Fluvium Frigidum* (modern day Ajdovščina, Slovenia). The fort was part of *Claustra Alpium Iuliarum* and was strategically built in the direct vicinity of the section of Via Gemina between Aquileia and Colonia Iulia Emona, and protected by the confluence of the Hubelj river and Lokavšček creek. The area is probably best known as the supposed location of the battle of Roman emperor Theodosius the Great and the army of Augustus Eugenius in AD 394, but it was settled much earlier. In the last phase of the Republic or at the start of the Empire, the Romans turned their focus to the territory of modern Slovenia. After its annexation and the construction of the road in the Augustan period, a road station was built between Aquileia and Emona, next to which a settlement gradually developed. They were initially known as *Fluvio Frigido* and later as *Mutatio Castra*, as indicated in several Roman itineraries and ancient texts. Around AD 270-290, the settlement was partially demolished and the fortress Castra was built.

The settlement and later the fort were strongly connected to the commerce of Foodstuffs, including wine, oil and cereals. This is evident from sherds of amphorae, which have been found in all layers from the 1<sup>st</sup> century AD onwards. The Late Antique fort was no exception, as Castra was the second largest fort in the entire Claustra *Alpium Iuliarum*, second only to the Rijeka fort, which also served as a port. As the largest northern outpost, perhaps manned full-time, it likely oversaw the supply for a large part of the Claustra as well, especially considering its proximity to Aquileia. Numerous shards of glass drinking cups found inside the fort, as well as many lead fragments, also point towards wine consumption in Late Antiquity. Lead was likely predominantly used for the construction of the fortresses walls but could also have been used occasionally to sweeten wine. Finally, Castra sits in the Vipava valley, which is a renowned wine producing region of modern Slovenia. Considering all this, it could hardly be questioned that wine must have been drunk in *Castra ad Fluvium Frigidum* since its foundation. In this paper, we focus on the small finds that confirm this, contextualizing them within trade routes and, in Late Antiquity, army movements in the area.

### Wine for the army of Byzantium: Late Antiquity and

**Early Medieval realities** (Nikos Tsivikis - Foundation for Research and Technology, Thanasis Sotiriou - University of Crete, Olga Karagiorgou - Academy of Athens, Ilias Anagnostakis - Institute of Historical Research) The role of wine and its derivatives in the service of the Roman army has been a common theme of scholarly discussion for long. Many different aspects of this relationship have been highlighted, like e.g., production and consumption of wine, or its many military and ideological uses. This has not been the case for wine and the army of the Eastern Roman Empire, commonly named the Byzantine Empire, that continues many of the traditional Roman practices but also introduces substantial innovations.

The connection of Byzantine army and wine has been mostly seen as a logistics issue connected with rations and quantities distributed. A vast number of evidence from material culture and textual sources exist that can be used to nuance the realities of securing and distributing wine to the Byzantine army from the 4<sup>th</sup> to the 6<sup>th</sup> century: narrative sources, papyri documents from Egypt, a vast network of wine-producing installations in Syria, Palestine and Egypt, specialized transport vessels reaching even the furthest military base up the Danube frontier.

Recently, we have argued for a possible relationship of specific wine production and extensive viticulture with the needs of both stationed troops and armies on campaign, especially in the period between the 7<sup>th</sup> and 10<sup>th</sup> centuries. Early Medieval Amorium in central Asia Minor offers a good example of many wine-making installations introduced inside the city walls in the 7<sup>th</sup> century to service the needs for wine of the newly relocated armies of the East.

The aim of this paper is to offer a first synthesis and examine heuristically the evidence regarding the connection between the Byzantine army and wine on different levels, from military logistics to economies of consumption and production. Additionally, we will be examining the breaks and continuities of the Byzantine economy of military wine between Late Antiquity and the Early Middle Ages.

# **Centuriation and wine terroirs in Roman Italy** (Dimitri Van Limbergen - Ghent University)

Centuriation was one of the most canonical ways of Roman land organization, applied to efficiently organize and manage agricultural fields in the low-lying, flat, and often watery lands of colonial territories in the Late Republic and the Early Empire. Roman land cadaster systems have since long been studied in Italy, and while earlier studies much focused on the alleged political and identical connotations of these grids, recent contributions have rightly stressed their practical assets, in particular drainage- and irrigationlinked properties. However, much less attention has been spent on how the implementation of such long straight lines in the landscape influenced the configuration of agricultural fields, and especially the layout of vine plantations. By combining archaeological, textual and comparative data, this paper scrutinizes how the use of centuriation alignments in Italy went hand in hand with the introduction and expansion of vine-growing in the wet and fertile, but often difficult to master lowlands of Roman Italy. The focus lies hereby on the role of the arbustum, a plantation with vines trained high on rows of trees, intersected by cereal growing. In doing so, I argue that both these land grids and the practice of tree-wedded vines were not Roman inventions, but rather systematic adaptations of longstanding traditions molded into new agricultural realities.

On the origin of the Ti. Claudii mentioned on Cretan Amphoras (Daniel J. Martín-Arroyo Sánchez - University of Granada) The Pompeii 8 amphora shape, which is currently classified as Cretan type 2, appears in the most significant number among the amphoras with painted inscriptions from the Vesuvian region. The aim of this paper is to describe a framework for the study of the Ti. Claudii, a familial group frequently attested on the Pompeii 8. In this way, connections between imperial power, the Annona, and the large (and presumably wealthy) business of Cretan wine, are explored. The Ti. Claudii have been considered to be a family of imperial freedmen. However, other possible ways of collective elevation to Roman citizenship could be proposed. Cretan amphorae must have been involved in different historical contexts, where the *tituli* would have been used for one or more different purposes. Three types of contexts are proposed here: production, distribution, and consumption of Cretan wine.

Regarding production, new prosopographic needs to be carried out. It has been proposed that the Ti. Claudii were Greeks that had obtained Roman citizenship, some of whom were probably Cretans, but only two Ti. Claudii are attested in Cretan inscriptions from the 1<sup>st</sup> century AD. An important family of Ti. Claudii was elevated to Roman citizenship during the 1<sup>st</sup> century in Cyrene, within the senatorial province of Creta et Cirenayca. The payment of taxes for these lands could have encouraged viticulture and wine export.

Regarding distribution, the role of private enterprises needs to be explored, in addition to studying the role of public distribution. The annonary supply from Alexandria to Rome must have required many ships, in which Cretan wine was a secondary product to the main cargo of grain. Beyond the Alexandrine route, some Eastern amphora types, including Cretan ones, also reached the frontiers of the Roman Empire, perhaps related to military supply.

Finally, regarding consumption, case studies of some Ti. Claudii as receivers of the amphorae are examined, as they were then inhabitants of Pompeii. However, homonymy is a frequent problem when dealing with Roman epigraphy, even in such a chronologically limited context as Pompeii.

Wine production in the Lusitanian hinterland: Large villa without a clear market (Pedro Trapero Fernández - Cádiz University; André Carneiro - Évora University) Wine production in Hispania is well contextualized through literature (as in the case of Baetica) and surveys and excavations of winemaking facilities (as in Tarraconensis). Lusitania, in part, lacks both studies. However, in the Alentejo region (Portugal), we have evidence of important production centers, mostly highlighted by the study of large villas, such as São Cucufate. Despite this, the existence of these wine or oil producing centers is not properly recognized and studied in the context of wine exports. This paper discusses the current state of the art and analyses the main sites to start proposing some working hypotheses and contextualization.

### Wine production in Roman Dalmatia: onset, actors, and commercialization (Ana Konestra - Institute of Archaeology, Zagreb, Maja Grisonic - University of Zadar)

Wine production on the eastern Adriatic likely started in the Greek colonies in the southern part of the region after the 4<sup>th</sup> century BC, as attested by both local variants of Corinth B and perhaps Greco-Italic amphorae, and by slightly later written sources (Athen., *Deip*. 1.28d; Strab., 7.5.10). Large scale Roman wine production, supposed

on the basis of Lamboglia 2 and possibly Dressel 6A amphorae of possible regional production, is still tentatively proposed, as data remain scant and highly contested. Starting from the foundation of the province of Illyricum (later Dalmatia) in 27 BC and following the widespread implantation of Roman *villae*, archaeological evidence of wine and olive presses can be found all along the coast and the hinterland, though their dating and often the actual crop processed remain often somewhat unclear.

Here, we would like to present two case studies that might shed more light on the actual onset of Roman wine production in the north-western part of the province (Liburnia), and that allow to study both the setup of wine-producing estates, the actors involved in production and evidence for the commercialization of the produce. The first site is Caska in the northern part of the island of Pag, where a large *villa maritima* had a *cella vinaria* with five *dolia* and presses for winemaking. There is also evidence for locally produced amphorae, and data on the ownership by Lucius Calpurnius Piso Augur (cos. 1 BC) and later his daughter Calpurnia. The second case study concerns the coastal site of Crikvenica, where an array of wine amphorae hints to a substantial 1<sup>st</sup> – early 2<sup>nd</sup> century AD production of the commodity within a property linked to a certain *Sextus* M(e/u) *tillius Maximus*, of probable higher-status north Italian origin.

Finally, a discussion about the individuals involved in the production and trade of wine in Dalmatia is proposed, which seem to have included members of the senatorial élite from Rome, Italy and perhaps the emperor himself. At the same time, the production of wine in smaller *villae* also implicates that various actors were involved in smaller scale production.