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MANIFESTO FOR THE ROMANIAN PUBLIC ARCHAEOLOGY

Abstract: In this paper I shall only discuss a few of the problems of archaeology in Romania from the perspective of my one-year experience as member and vice-president of the National Commission of Archaeology. My goal here is to attempt to systematize the discussions during the meetings and round tables of the year that has just passed. The meetings were held in Bucharest, in the building of the Ministry of Culture, and some, in Cluj-Napoca, Caransebeș, and Iași. The meetings of the commission were completed with three round tables meant to facilitate dialogue with the local communities interested in patrimony issues. Thus, I shall speak of the manner in which archaeology is publicly perceived and the manner in which the National Commission of Archaeology is perceived inside the community of archaeologists.

Keywords: *Public archaeology, monuments, patrimony, legislation*

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I shall only discuss today a few of the problems of archaeology in Romania from the perspective of my one-year experience as member and vice-president of the National Commission of Archaeology. I do not claim that my observations are generally true, that my diagnostics for the identified problems are correct, or that I am the one to suggest solutions that would in any way improve the legislative chaos governing our work or allow us to overcome the blockages that plague Romanian archaeology. My goal here is more modest and my intention is but to attempt to systematize the endless discussions during the meetings and round tables of the year that has just passed. Thus, I shall speak of the manner in which archaeology is publicly perceived and the manner in which the National Commission of Archaeology is perceived inside the community of archaeologists.

A novelty in the activity of the commission last year was the fact that its members have traveled to different centers in the country in order to become acquainted with the local archaeological realities and to establish direct contacts with the archaeologists in those respective regions of the country. While in the past the meetings of the commission were always held in Bucharest, in the building of the Ministry of Culture, now some were held, at the initiative of the commission's president, in Cluj-Napoca, Caransebeș, and Iași. The meetings of the commission were completed with three round tables meant to facilitate dialogue with the local communities interested in patrimony issues (including archaeologists, museographers, teachers, employees of the County Directions for Culture, and police officers involved in patrimony protection).

THE ARCHEOLOGISTS AND THE MONUMENTS

The meeting held at the National History Museum of Transylvania in Cluj-Napoca included a round table entitled *Archaeology and restoration. The temptation of reconstructing the monuments*, Cluj-Napoca, 28 October 2016. It brought together the members of the commission and several local specialists in the field of patrimony protection, including architects (though the latter were not very numerous). One should note the presence of Mrs. Oana Bogdan, secretary of state. Several main ideas should be mentioned: the general tone of the speakers was public lamentation and the blaming of anonymous culpables, deploring the sad fate of the monuments that become ruined because the state does not protect and valorize them, due to the lack of funds and the low interest of local authorities in the matter. On the other hand, as previously mentioned, few architects were present despite the fact that a round table on the same topic had been organized by them the day before, attended by few archaeologists. The case is symptomatic for the lack of dialogue between these two professional groups, i.e. architects and archaeologists, who still meet in the field of research, protection, conservation, restoration, and valorization of monuments.

Returning to the relation between archaeologists and monuments, one can note two perfectly opposite attitudes: the archaeologists' lack of interest in and lack of responsibility for the discovered edifices and walls on the one hand and the local authorities' joyful abandonment of the same elements, though they wish to construct kitsch archaeological parks through megalomaniac projects. Any person performing archaeological excavations in a classical or medieval site should be aware from the very beginning of the fact that he/she will almost certainly discover masonry structures and thus must take into account if not a project at least solutions for the primary conservation of such vestiges. Due to the sub-financing of this field of study, I do not know what these solutions are: covering the finds with soil, their conservation in situ with slabs of cement or actual reconstruction. Local authorities seem to prefer reconstruction, as they wish to build antiquity-themed Disneylands in their back yards, to populate with reenactors and thus increase the tourist attractiveness of the area. I only wish to remind my colleague archaeologists who perform researches on sites revealing masonry structures that we are the ones who uncover them and are thus responsible for their future. Such patrimony goods cannot be abandoned to wild nature, nor can they be transformed into the motherland's kitsch monuments. We must open dialogue with the local authorities that decide in such matters and explain to them that these monuments are valuable as they are, why they must not be reconstructed as they once stood and why they should not be drowned in stage props.

TOO FEW ARCHAEOLOGISTS

The meeting held on 22 February 2017 in Caransebeş, at the Museum of Ethnography and the Border Regiments included the round table entitled *How many are we? An initiative of the National Commission for Archaeology for public archaeology*. Discussions revolved round answers to the question in the title, namely if the number of practicing archaeologists recorded in the National Registry

of Archaeologists is sufficient for covering the demands of a market opened by the needs of preventive archaeology. I have noted the incapacity of the participants of discussing the topic in a structured and meaningful manner, a trait that was characteristic to all three round tables and that is, I believe, a shared trait of the meetings of several professional groups in Romania (not only of archaeologists). Each person turns strictly to his own work, to his particular case and tends to generalize starting from there. Thus, it is not general issues, concepts, and solutions under discussion, but case studies of the type «look what happened to me on that occasion...». A related issue was that of how archaeologists become attested and how they are recorded in the registry. In my opinion, access should be made easier for junior archaeologists and one's subsequent evolution towards the titles of specialist and, especially, expert, should be conditioned by the publication of the results of their researches. It is unacceptable that materials should pile up in museums and field documentation in the offices and current regulations should be followed in that those who do not publish the results of their researches in five years should lose the right of intellectual property over those materials. To my knowledge, nowhere in the world do archaeologists have eternal intellectual property rights over the discovered goods. In Romania, one even finds ridiculous cases when archaeologists still hold scientific rights until pension, sometimes even after, and even more, they transmit those rights to their followers or heirs.

I thus believe that one solution is to enlarge the base of the pyramid of attested archaeologists and, in fact, to build this pyramid to a proportion of 3/2/1 among junior archaeologists, specialists, and experts in the field. In order to reach these proportions, it is not enough to enlarge the base, but access should also be restricted to the upper levels, and this can only be done based on scientific criteria. Presence on archaeological sites is important, decisive even for field archaeologists, but they must also prove that they understand what is excavated there. Archaeologists understand their own excavations and translate them to their colleagues only through scientific publications. One is not a specialist or, even less so, an expert otherwise, no matter how many thousands of field work hours one accumulates.

Application files and quantitative criteria are insufficient and these criteria can be bent, as I have exemplified before. I suggest that access to the category of expert should rely on the candidate presenting an extended study of one of his/her own excavations (not necessarily published, but like the portfolio of architects) and defending it publicly in front of the National Commission of Archaeology. We shall thus restrict the number of experts who have reached that title having published just «one book».

ARCHEOLOGISTS AND THE UNRECORDED PATRIMONY

The most recent commission meeting took place in Iaşi on April 28th 2017, at the Al. I. Cuza University and the Iaşi Institute of Archaeology of the Romanian Academy. The round table entitled *Archaeology in the eastern-Carpathian region. A necessary SWOT analysis: the area of Moldavia in the national and European archaeological environments*. The

discussion started from an observation made while releasing authorizations for systematic and preventive archaeological researches, namely the fact that archaeologists are rather few in Moldavia compared to the national context. What is the origin of this abstention of the archeological community from Moldavia? Why are there so few systematic researches applying for financing from the Ministry of Culture? The speakers, many off topic, have contributed to the general idea that the archaeological patrimony in the counties of Moldavia is poorly identified and catalogued. The main consequence of this is the absence of archaeological supervision of works requiring in depth interventions and the absence of preventive archaeological researches. As the sites are not identified and protected through their inclusion in the List of Historical Monuments and the National Archaeological Repertory, the county culture departments and the Regional Commissions of Historical Monuments have no instruments to protect them or provide for their preventive research. A secondary consequence is the decrease of field activity for archaeologists. Naturally, the problem is not so simple as I have abstracted it here: the lack of excavations is also caused by the fact that the beneficiaries do not follow the patrimony protection laws, the patrimony police are incapable of monitoring all these disorders and of enforcing the regulations, maybe also by the lethargy and lack of involvement of some of the members of the archaeological community.

CONCLUSIONS

This abstract of the National Commission of Archaeology excursions and associated round tables aims at

showing, on the one hand, how this young and de-legitimized commission has opened up to the restricted public of the community of archaeologists and people interested in patrimony protection.

The most important conclusion after all of these debates is that the specialized legislation is obsolete, both the «organic law» governing our activity, i.e. OG 43 of 2000 and the other regulations and procedures.

Why can the laws in other specialties be adapted to actual situations but in archaeology they cannot? In 2000 our society's current need for preventive archaeology did not exist. Hundreds of authorizations were not applied for each month. In the context in which preventive researches develop progressively, the reflex reaction of the centralized state has been to control them to the maximum and thus a totalitarian logic has been reached, leading to excessive bureaucratization. A sentence of everyone's lips is that the authorization release procedure must be simplified, though nobody can suggest an acceptable solution. «Solving the issue of authorization» must not be done in an amateurish fashion or in a hurry. I believe that the archaeologists must meet with jurists and find a way to amend OG 43 of 2000 in accord with existing legislation and with the real needs of our profession. In Romania, the laws cannot anticipate social developments, but they must at least regulate after they take place, to match these developments retrospectively. My conclusion is that we have a series of laws of yesterday for the archaeology of today. I know that this is a platitude, that I have discovered that the grass is green, but now we must measure in order to make things work.

THE POWER STRUGGLE BETWEEN GOVERNMENT OFFICIALS AND CLERGYMEN IN THE ANCIENT HISTORY

Abstract: People, who shifted their lifestyles from hunter-gatherer societies to settled lives dominated by agricultural activities, first began to live in villages and then in cities. The concepts 'to govern' and 'to be governed' began to appear in time among the crowded population settled in cities. Clergy members became administrators in the Mesopotamian city-states where the urbanization first started. The clergy members having a hierarchy in their own merits, owing to the organized structure brought about by the religious belief in the first periods of humanity, formed a temple-centered administration system. When secular governors supported by the armies appeared in cities, the clergy members had been ruling, struggles began between these two social classes. In this paper, it will discuss the struggle between secular governors and clergy members who had taken over in the first Mesopotamian city-states, focusing on the Urukagina and Akhenaton samples.

Keywords: *Mesopotamia, city-states, urbanization, Ancient Egypt, Urukagina*

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1. INTRODUCTION

According to recent research, the last glacial period ended 11.711 years ago¹. As the world's middle latitude climate zone had become appropriate for agricultural activities, the first agricultural societies of the world began to flourish around the world's major rivers. The Nile in Egypt, the Tigris and Euphrates in Mesopotamia, the Indus River in Harappa and the Yellow River in China had all given life to civilization². As the climate turned out to be suitable, people who had survived on hunting and gathering and created a culture suited to this lifestyle during the millennia until the last glacial period began to change lifestyles to engage in agriculture and livestock³. In the transition to an agricultural society process, people broke with all their experience and habits they had on hunting, they began to invent new tools and shape their life considering the planting and harvest seasons for the crops they grow⁴.

Groups of people consisting of just a few families due to the facts that being in groups was an essentiality and the food provided was limited

¹ ZEBROWSKI 2011, 90 - 91.

² KEMP 2005, 7 - 34; SMITH 2007, 22 - 36; MCINTOSH 2007, 54 - 90; CHINNERY 2012, 6 - 13.

³ POSTGATE 1992, 7 - 21; GATES 2003, 31 - 33; WILDWOOD 2010, 36 - 37.

⁴ SIMMONS 2007, 10 - 17; KUIPER 2010, 11 - 12.

in hunting-gathering era started to establish dwellings, we might call 'agricultural villages or towns', in which a few hundred families can live together in crop farming and cultivation period called "Neolithic era", thanks to a sense of security depending on being in groups and abundance of food resources⁵.

Neolithic farmers strived to meet their own needs all by themselves at the beginning of the Neolithic period; however, they organized as the population got crowded and witnessed the emergence of professions organized in various fields such as in pottery, stone and wood tools production and textile⁶. In the fourth millennium, Mesopotamian and Egyptian cities were settlements classified according to occupations and financial strength, and surrounded by walls all created with the support of the people in the city. These cities were places which could exchange raw materials required with neighboring cities in return for excessive product they produced and develop their own city culture different from the common culture of humanity. People who did coexist with others developed a sense of belonging to their city⁷.

One of the most fundamental reasons for the formation of the city, namely the coexistence of people, to become mandatory is their need for irrigation canals. Despite the floods that occurred in the land of Egypt created a permanent irrigation system without human labor, irrigation canal construction work which required planning, collaboration and cooperation of all people in the city accelerated the formation of cities in Mesopotamia. Opening irrigation canals and keeping them open constantly was one of the most important things the city administrators had to do, and the necessity of joint efforts and collaboration brought about social communication and governance phenomenon⁸.

Phenomena 'to govern' and 'to be governed' emerged in cities which began to create an advanced social organization. In the first periods, the religious figures, that we will here use the definition "clergymen" to indicate their classification, who were more prestigious and organized when compared to the rest of the community since they came together to serve gods commenced to govern cities as temple-based by making use of worldly powers such as land in their hands, slaves, donations, prophecy and the people's trust⁹.

2. DEVELOPMENT OF THE PHENOMENA 'TO GOVERN' AND 'TO BE GOVERNED'

In the middle of the 4th millennium, both Egyptian and Mesopotamian civilizations were identified as a city state. It was centuries before the unification of Lower and Upper Egypt, and the establishment of an Akkadian Empire in Mesopotamia. However, the cities, we may call "City States", independent from each other began to develop in parallel in

⁵ BREWER / TEETE 2007, 58 - 60; BODLEY 2011, 230 - 234; STARR 1991, 51 - 60.

⁶ EASTON 1970, 23 - 25; SCHWAB 1982, 93 - 102.

⁷ BERTMAN 2003, 274; LEECH 2007, 8.

⁸ POTTS 1997, 13 - 21; POLLOCK 1999, 31 - 34; MICHAEL 2008, 17 - 19; BERTMAN 2003, 204 - 205.

⁹ MIEROOP 1999, 118 - 121; MCINTOSH 2005, 129 - 130; BODLEY 2011, 236 - 238; LEICK 2002, 41 - 47.

terms of both administration and religious organization¹⁰. When the documents in the archives of the city states in Mesopotamia regarding this period are examined, we learn that the administration was temple-based and the clergymen were dominant over the community. In addition, we infer that clergymen did not regard their responsibilities as a distinct part of their everyday lives, they acquired their tasks a special profession no matter what duty they were on and they worked full-time¹¹. In order to ensure their livelihood and to meet the needs of the temple, clergy members used to cultivate the lands they owned either by means of temple or directly using the religious power of the temple by slaves and workers and store products they harvested. In addition, they used to undertake the responsibility to store products produced by the public and exchange among the inhabitants of the city. Except those, clergy members might have traded some goods they had such as pots, cereals, textile, and animal products, which all had a commercial value¹². It was necessary for clergymen who governed the cities according to Gods' or their own interests to do this by creating a perception as if people need the temple, not the temple needs people. Otherwise, the city dwellers could show disobedience towards the temple. An obligation for the clergymen to systematize activities regarding product storage, consignment and records of the decisions made, in order not to lose the people's trust, has resulted in record keeping and contributed to the invention of writing¹³.

The most fundamental and complex question to be answered at this point is why a temple-based administrative organization which was in the leadership of the clergymen emerged instead of a government organization around the palace and the king in the early stages of the establishment of city states. First of all, there must be a human-centered social organization to explain and understand divinity. Owing to the fact that they led the social organization since the very early stages of urbanization to make the people confess their religious beliefs, clergy members imposed the idea that Gods should be served and led the communities according to Gods' demands or their own necessities¹⁴.

Additionally, since the decisions made by clergy members were regarded as either the gods' demands or something very vital for the community, their decisions in administration had become 'unquestionable' and been accepted. Community members obeyed and followed these orders without any disobey. Apart from all these, gods cannot survive without being institutionalized. In other words, since the gods would be erased from people's minds without clergy members who praised them, offered victims and built temples, clergy members were constrained to Gods and the temple in order to sustain their lives. To be able to continue this mutual relationship, the temples had to be institutionalized in terms of political, social and economic aspects. Because the struggle between the cities had not turned into an entire military conflict during this period yet,

¹⁰ PARSONS 1966, 63 - 67; FAGAN 2004, 367 - 369; JOHNSTON 2004, 531 - 536.

¹¹ BERTMAN 2003, 127 - 128; SOMERVILL 2009, 22 - 23; SCHNEIDER 2011, 66 - 68.

¹² NEMET-NEJAT 1998, 263 - 268; BULLIET / CROSSLEY 2009, 32.

¹³ GOODY 1986, 49 - 57; MIEROOP 1999, 27 - 30.

¹⁴ BODLEY 2011, 238 - 239; SNELL 2005, 5 - 6.

city administration could be continued depending on an oral tradition developed by clergy members¹⁵.

3. THE EMERGENCE OF THE MONARCHY

In Mesopotamia, the concept of 'an administrator' or 'administration' independent from the temple cannot be mentioned until the Early Dynastic Period (2900 BC). In the Uruk Period (BC 3500 – 3100), Uruk, the biggest representative of the Mesopotamian civilization, had also a temple-centered administration. The number of people increased in parallel with the abundance of food production in the Early Dynastic Period, and new cities were erected in a territory which can be considered very small and the present ones were developed as a result of this fact. This situation increased the value of lands that could be cultivated and triggered struggles between cities to control larger territories¹⁶. Although the city administrative system developed by clergy members was specialized to carry out tasks, which we may call "internal affairs", such as sharing of the urban land, cultivation and harvest of those land, resolution of problems among people living in the city, trade with neighboring territories, storing the excessive products obtained, opening the water channels and keeping them open and collecting taxes required for the city and temple works, that system was not capable to make decisions instant enough to maintain military and political conflicts with another city and sustain itself by making use of imperia.

Under these circumstances, a monarchic system or rather a powerful king was needed. Thus, a new ruling class under the leadership of a single king, along with the temple administrators, began to be institutionalized in the Early Dynastic Period¹⁷. When compared to the clergy members who took strength from the temple of gods and had an obligation to base their decisions on the city's religious beliefs, the kings could make decisions often independently of religious beliefs by claiming that they defended the interests of the city. Common deities were also worshipped in city states which were in constant war with each other in the Early Dynastic Period. For that reason, in disputes between different city communities which believed in the same deities, it seemed unconvincing and sounded unbelievable when clergy members asked people to fight against those who lived in other cities, in which the gods they represented were worshipped; however, for kings, it was not very important which gods/deities were worshipped in cities they fought against. It was enough to convince the people they ruled that they will ensure their happiness and welfare¹⁸.

Although clergy members had a hierarchical order inter se, more than one person could be on duty in the same positions or the same posts. In the same way, there were also disputes among themselves since it could not be mundanely determined which of the clergy members on duty in the same positions was superior. In addition, even if they wanted to choose one as the highest, one of the problems

¹⁵ LEICK 2002, 54; HOLLAND 2009, 112 - 128; RISTVET 2014, 194 - 202; JOHNSTON 2004, 292 - 293.

¹⁶ LLOYD 2010, 53 - 55; SELTZER 1989, 5 - 10; BODLEY 2011, 200 - 201.

¹⁷ CABRERA 2010, 64 - 65; ADAMS 2005, 136 - 138; CRAWFORD 2013, 160 - 161; LIVERANI 2014, 97 - 106; GRIFFETH 1981, 7 - 28.

¹⁸ FARMER 1977, 20 - 37; SNELL 2005, 7 - 12; FAGAN 2004, 369 - 373.

to be solved was how to elect 'this person' and ensure obedience of others¹⁹. However, since kings took over reign either through inheritance regarded as their natural right or the use of military force to eliminate their opponents, there was no one to be considered their counterpart. Because they did not accede after an election, the kings had no sense of gratitude to anyone as long as they were in power. This provided them with total independence while making and performing decisions²⁰.

In addition to the advantages of clergy members' and king's reign together mentioned above, there emerged some administrative strategies which kings did, but clergy members could not. Among these was kings' ability to offer their followers and supporters various mundane promises. While clergy members were expected to behave equally to every individual in the society because of their position by the community, kings could reward people who availed their own power as they wished and they were not expected to treat everyone equally and fairly. Additionally, as the destiny of the king was the destiny of the people living in the city and the more powerful the king was the better welfare the community could live in, the people agreed king's hegemony unconditionally because they believed that could continue their lives more comfortably²¹. Although the kings of city-states in Mesopotamia in the Early Dynastic Period began to take the governing rule of the clergy members, the power of the temples and religious belief on people never disappeared and remained as an alternative power. Kings did not underestimate the power of the temple and its employees during their reign, and they tried to make use of this power by either assigning themselves as the highest administrator of the temple or God's proxy on the earth²².

Despite the fact that it is possible to follow how the administrative mentality developed by referring to the documents in the state archives in Mesopotamia, it does not seem possible to understand how this development occurred in cities, called "Nom", founded around the Nile River in Egypt. Yet, the first rulers who unified Upper and Lower Egypt to create a central government did not even concede being the highest religious figure or the position of caliphate of deities so they declared themselves gods directly. As the reasons why Kings of Egypt –who used the title "Pharaoh" afterwards– declared themselves gods, it can be thought that they strived to ward off the clergy members in Egypt to come against a ruler, a person like themselves, and intended that the people should not have regarded their rulers as normal individuals as they were²³.

4. STRUGGLES FOR THE POWER DOMAIN

When the city states began to have more complex social and economic organizations in the Early Dynastic Period, the temple-centered administrative approach was

¹⁹ BERTMAN 2003, 127 - 128; MCINTOSH 2005, 129 - 130; HINNELLS 2007, 192 - 195.

²⁰ DIAKONOFF 1991, 84 - 95; BODLEY 2011, 239 - 240; MAISELS 2001, 163 - 172.

²¹ YOFFEE 2005, 100 - 103; SOMERVILL 2009, 24 - 28.

²² MARCHESI / MARCHETTI 2011, 129 - 149; ADAMS 2005, 139 - 143; LIVERANI 2014, 107; MIEROOP 1999, 118 - 121.

²³ GARCÍA 2013, 1 - 14; SILVERMAN 2003, 199 - 201; BRIER / HOBBS 2008, 72 - 77; SAUNERON 2000, 54 - 57.

not sufficient enough to rule the people and it could not meet relations to other cities. Thereupon, kingship regime which began to develop in the previous periods came to the forefront and appeared to be more decisive to make the decisions essential to maintain the lives of the people in the city. In the process of time, a struggle for power between the temple-centered religious administration comprised of many clergy administrators and benefited from the impressiveness gods had and the palace-centered kingship regime depending on the strength of a temporary or permanent military force constituted by soldiers under the command of the king²⁴.

In Mesopotamian cities, it is observed that kings procured acceptance for their dominance to the clergy members and the community, although it is not very obvious and clear how both the temple and the king ruled at the same time and how they maintained that system. Given the early Sumerian laws, it is inferred that kings had placed themselves a central position that resolved social inequalities, acted modestly towards the neediest classes of the community such as widows and orphans, helped people and limited taxes collected by the temple. Even if it seems unclear about whether such behavior was based on humanitarian reasons or intended to reduce the power of the temple, and whether the kings wanted to ensure the support of the people to justify themselves as their rulers; we can infer that this preference eventually prevented people to question 'What was the king for?'²⁵.

Kings always agreed they were under the right command of the gods, just like any individual in the society. While making their decisions and finding solutions to the problems between people, they attributed source of their sovereignty directly to gods, not the people, and they did not hesitate to mention this in laws they legislated. Owing to the powerful belief in god or gods in Egyptian and Mesopotamian societies had in common, it does not seem possible to talk about 'a secular king' approach almost no time²⁶.

Kings was never directly up against gods which were the largest source of power in the hands of clergy members. Instead, they regarded themselves as god' agent and servant; thus, they both used the power of the temple and made the community have much more respect for themselves. Because of the fact that they regarded and introduced themselves as 'the protector of the community' against internal and external problems as their first objective, kings were required to listen to the complaints of their people about the temple and find solutions. High taxes collected the temple for worldly and religious affairs might be one of the prominent complaints. The way or ways kings, the protectors of the community, followed to resolve tax and payment questions without reducing the temple's income or impoverishing people must have been regarded as an indicator about how a king they were. As looking after the community's rights guaranteed and strengthened their power, kings were also required to fulfill the wishes of clergy members. Against kings in such a dilemma, clergy members exerted pressure for more power and wealth from time to time and even threatened kings'

²⁴ KAGAN 1966, 19 - 21; MULLER 1961, 54 - 58; MAYER / BUCKLEY 1969, 22 - 26.

²⁵ MAISELS 1993, 162 - 168; MANN 2012, 73 - 79; MAISELS 2001, 79 - 82.

²⁶ MIEROOP 1999, 33 - 34; JOPPKE 2015, 8 - 10; POTTS 2012, 544 - 545; KASER 2011, 99 - 100.

administration²⁷. Although there exist many examples in this regard in both Egypt and Mesopotamia, we strive to explain the developments occurred in the periods of Urukagina and Akhenaton by this research's nature and limitations, and provide a live commentary on the subject.

A. URUKAGINA'S REFORMS

Urukagina, alternately referred as "Uruinimgina" or "Irikagina", was the king of the city-state Lagash ca. 2400 BC in Mesopotamia. He is known as 'the first lawmaker and social reforms' in recorded history by historians. Urukagina seized power after his predecessor Lugalanda, made decisions to restore the order in his city having social problems and made both clergy members and the community to obey these rules²⁸. The presence of free economic approach and absence of a social security system conducted by the state in Mesopotamian cities had resulted in that the rich got richer while the poor get poorer. As far as Urukagina's reformations indicate, the clergy members who were supposed to support social structure and help widows, orphans and poor which all constitute the 'weakest groups' in communities prioritized their own interests over those of the weakest and destitute. Clergy members who were already fulfilling religious obligations collected fees they set for funerals, feast celebrations, fortunetelling and consultancy on religious matters regardless of the person's financial situation²⁹.

If economic sharing in a community provides inequalities when it is compared with population distribution; namely, if the majority of the city's financial wealth is in the hands of a very small portion of society while the vast majority of the people in that society fight hunger to sustain their lives, although they make sacrifice for it, this will bring about a social explosion. However, clergy members in the Mesopotamian city states continued to live in a social order they established. Because they claimed to be using the economic power in their hands on behalf of the gods since they made people accept that any objection and obstruction against them meant objection to gods and deities, they used to accuse people of coming against the gods and ostracized them, if any individual resistance they faced. As compared with clergy members who believed they were accountable to gods, kings were also accountable to people they ruled; so they might have thought that they should not have remained indifferent to the current unjust situation. It is highly probable that these dynamics were on the basis of Urukagina's reforms³⁰.

Despite of the fact that Urukagina made his arrangements inscribed, the document was found to be broken. On the readable parts, Urukagina begins with a description of the community: "Since time immemorial, since the seed corn (first) sprouted forth, the head boatman had the boats in charge for his own benefit, the head

²⁷ MCINTOSH 2005, 173 - 174; SHORTLAND 2012, 37 - 39; LOCKARD 2010, 35 - 36; OLSEN 1994, 161 - 166.

²⁸ KRAMER 1971, 58 - 80; CRAWFORD 2013, 119 - 120; EHRlich 2011, 70; VISICATO 2000, 6 - 7.

²⁹ LIVERANI 2014, 112 - 114; THOMSON 2011, 71 - 73; KING 2012, 182 - 187; KRAMER 1988, 104 - 105; STARR 1991, 44.

³⁰ BURG 2003, 9 - 10; KRAMER 1971, 81 - 84; FALKENSTEIN 1974, 7 - 11; KAGAN 1966, 16 - 18; GOFF 1963, 230 - 236.

shepherd had the asses in charge for his own benefit, the head shepherd had the sheep in charge for his own benefit; the head fisherman had the fishing places in charge for his own benefit. The incantation-priest measured out the barley rent (to his own advantage)...”After telling that some people responsible for using facilities of the community used these resources for their own interests and they prospered, Urukagina describes the status of clergy members: “The [temple] oxen of the gods plowed the gardens of the ensi; the gardens and the cucumber fields of the ensi were in the best fields of the gods; the asses and oxen of the priests were taken away (by the ensi). The barley rations [income] of the priests were administered by the men of the ensi.... In the garden of a humble person a priest could cut a tree or carry away its fruit. When a dead man was placed in the tomb, it was necessary to deliver in his name seven jars of beer and 420 loaves of bread. The uh-mush priest received one-half gur [about fourteen gallons] of barley, one garment, one turban, and one bed. ne priest’s assistant received one-fourth gur of barley...” Later in the text, after he describes and tells about workers begging for bread and income injustice in the city, it is said the former days were like that³¹.

Afterwards, Urukagina talks about how he was granted the lugal-ship of his city, what he did for his people and how he eradicated social inequality before his reign: “When the god Ningirsu, the warrior of the god Enlil, granted the lugal-ship of Lagash to Urukagina, picking him out of the entire population, he [Ningirsu] enjoined upon him (the restoration of) the divinely decreed way of life of former days. He removed the head boatman in charge of the boats. He removed the head shepherd in charge of the asses and sheep. He removed the head fisherman from the fishing places. He removed the head of the storehouse from his responsibility of measuring out the barley ration to the incantation-priests....”Later on, he mentions what he did for the city of the en.si³².

Urukagina prevented people who were using the city resources for the sake of their own interests and cut the fees clergy members received from the public: “When a dead man was placed in the tomb, (only) three jars of beer and eighty loaves of bread were delivered in his name. The uh-mush priest received one bed and one turban. The priest’s assistant received one-eighth gur of barley...” In addition, he describes he relieved the people in the city of poverty and the oppression of the clergy members: “The youth was not required to work in the a-zar-la; the workingman was not forced to beg for his bread. The priest no longer invaded the garden of a humble person.” Except those, new laws he enacted to prevent clergy members to gain dominion over the people of the city are announced to all the public: “He (also) decreed: If a good ass is born to a client and his overseer says to him, “I will buy if from you,” then if he wishes to sell it he will say, “Pay me what pleases me”; but if he does not wish to sell, the overseer must not force him. If the house of a powerful man is next to the house of a client, and if the powerful man says to him, “I wish to buy it,” then if he wishes to sell he will say, “Pay me in silver as much as suits me,” or “Reimburse me with an

equivalent amount of barley”; but if he does not wish to sell, the powerful man must not force him.” This arrangement might have weakened clergy members’ and other powerful individuals’ dominance on other people. Nonetheless, it is inevitable that people who used to derive benefits from the temple and deities strived to establish dominance over the people and the king by depending on the power of gods, in case they had any opportunity³³.

Even if he attributes to Ningirsu, one of his gods, Urukagina glorified his ruler ship by attributing social welfare and development he realized to himself and vitiated the power of the clergy members; thus, it seems to have strengthened his administration: “He [Urukagina] freed the inhabitants of Lagash from usury, burdensome controls, hunger, theft, murder, and seizure (of their property and persons). He established freedom. The widow and orphan were no longer at the mercy of the powerful: it was for them that Urukagina made his covenant with Ningirsu.” Urukagina reforms or laws both saved the people of Lagash from the relentlessness of clergy members and other powerful people in the society and helped the kingdom, state administration, get stronger against the temple. This law indicates that gods were not only in the monopoly of the clergy members and the king could also make people obey his administration approach depending on the power of the gods³⁴.

B. AKHENATON AND HIS GOD

Although he was given the name ‘Amenhotep³⁵’ at birth and the title ‘Nefer-kheperu-re³⁶’ later, the tenth pharaoh of the XVIIIth dynasty changed his name to ‘Akhenaton³⁷’ after adopting the Aton religion. Despite the facts that Akhenaton takes place at an important turning point in humanity’s faith development and asserts the idea of only one eternal and everlasting god which was neither begetteth nor begotten, we remain within the boundaries of our study and discuss about the struggle between him and clergy members who had a wide sovereignty over Egyptian society believing in various gods for millenniums, instead of focusing on his announcement of a monotheistic belief system and his religious policies³⁸.

Although it is not clear and still remains a mystery why he gave up the religious understanding and creed system accepted by the Egyptian community for millenniums and started to believe in only one god in an unprecedented way, Akhenaton should have known that he would take clergy members which constituted the most active and best organized part of the social organization having a hierarchy in itself. As soon as Akhenaton began explaining his new god and religion to people he ruled, clergy members might have thought that the gods they represented and therefore they would be discredited and fall into disfavor³⁹.

³¹ BAILKEY 1976, 18 - 19; LIVERANI 2014, 113.

³² KRAMER 1971, 317 - 318; LANSING 1971, 117 - 119; MOSCATI 2001, 23 - 24.

³³ BAILKEY 1976, 19; SAMHABER 1964, 35 - 37.

³⁴ WALLBANK 1992, 11 - 12; BAUMANN 1969, 127 - 128.

³⁵ Amenhotep means “Amun is Satisfied” and sometimes given in its Greek form, Amenophis.

³⁶ Nefer-kheperu-re means “Beautiful are the Forms of Re”.

³⁷ Akhenaton means “Beneficial for Aton” or “Effective for Aten” and it is also spelled Khuenaten, Echnaton and Ikhnaton.

³⁸ HARI 1997, 7 - 11; ALDRED 1969, 94; LEPROHON 2013, 105; ARNOLD 1996, 4 - 5.

³⁹ FRANKFORT 2011, 17 - 26; HOFFMEIER 2015, 91 - 101; WHITE 1970, 171 - 173; RUIZ 2001, 182 - 183.

Polytheistic religions could be regarded as religions of rituals, rather than a religion of belief. Often, requests from individuals in the community used to be conveyed to gods by clergy members in the temple. Similarly, bureaucracy related to some issues such as marriage, divorce, funerals and inheritance in the Ancient Egypt were in the hands of clergy members. Individuals in the community used to do many important works in their daily life by obtaining approval of the temple and were determined to make a donation or pay a fee for it. In this case, the temple seemed as an indispensable part of daily life for the community⁴⁰.

Many continuous activities of not only people in the society but also the palace itself were managed by clergy members. Festivals, mummification procedures, funerals and wedding ceremonies were all held by the clergy members. This situation used to guarantee the maintenance of the mutual operation between the palace having military forces and the temple having social power. Kings had established a relationship based on a "mutual benefit" principle with the clergy members, who were always informed about what happened in the palace and directed the community. This relationship was committed on a regular basis until Akhenaton started his reign. However, the King who believed in only one god appeared to be the greatest threat and an enemy to be destroyed for the clergy members⁴¹.

One of the differences between the polytheistic religions and monotheistic religions is that it is absolutely required a religious functionary to be present to fulfill the faith rituals in polytheistic approaches. In monotheistic religions, people are regarded as individuals and so they can perform worship without clergy members. In polytheistic religions in the Ancient History, however, the practitioners of the faith are people who were loyal to the temple and asserted that they were appointed for that, rather than the individuals. Depending on the power of the gods they represented, these people were able to obtain wealth and prestige. This understanding lasted for thousands of years until Akhenaton. For the 'joe public', it was quite challenging to defy and disobey gods in the protection of clergy members since they would be ostracized from the community or insulted by people around. Even so, if someone, who himself is a God directly, begins to talk about only one God by abandoning his deity and the other gods, this is a situation that cannot be stayed indifferent⁴².

New understanding of religion declared by Akhenaton can be considered as a continuation of the "personal belief teachings" which found themselves support in the Egyptian society in earlier periods. While worshipping, people had begun to prefer calling directly to gods or deities who were the resource of the peace filled in their hearts, not the clergymen who presented themselves as "the chosen group". Owing to the fact that this belief system emphasizing that people should show their belief through behaviors in their own lives, not the extent of their loyalty and commitment to the temple, as gods asks them to be good believers, would lessen

⁴⁰ TEETER 2011, 19 - 35; DAVID 2003, 79 - 81; LORTON 2000, 29 - 36; CHRISTENSEN 2007, 74 - 87.

⁴¹ BAKER / BAKER 2001, 123 - 124; AFRICA 1969, 24 - 27; CASSON 2001, 83 - 94.

⁴² MONTERRAT 2003, 93 - 122; MCLAUGHLIN 2012, 34; RUIZ 2001, 153; ASSMANN 2014, 63- 69; MIEROOP 2010, 209 - 211.

the need for clergy members, it might have been faced with great opposition by clergy members. The clergy members who realized they would lose not only their prestige in the community but also the privileges and influence they had on government officials might have responded this belief system by increasing their threats and pressure on⁴³.

As soon as Akhenaton, together with his wife, Nefertiti, began to introduce and spread his new doctrine, the clergy members serving other gods believed in Egypt for centuries began to repaginate the king, their old god, directly or indirectly. Although Akhenaton held all military power as a pharaoh, social power was in the hands of clergy members. Since he could not realize a direct military intervention against his own people, Akhenaton left Thebes, the capital city, along with his devoted followers. He moved to "Akhetaten", a city specifically planned for God Aton, though it is of debates whether he left Thebes due to a possible uprising against him or he wanted to be free of the oppression and influence of the clergy members. Akhenaton moved in the city along with his army, servants and followers of his new religion; however, servants of the gods in magnificent temples of the city of Thebes did not go with him⁴⁴.

The life span of Akhenaton's new religion was limited to his own reign. The main reasons for this situation are believed to be that Aton religion was only accepted by the upper strata of the society and it could not reach the masses under the influence of clergy members. Furthermore, the successors ascended the throne after Akhenaton either did not believe in Aton religion or tried to prevent a social resistance and returned to the old gods, by not revealing determination as Akhenaton did. For any reasons whatsoever, clergy members in Ancient Egypt maintained the power they had, their dignity in the community and their impact on the state administration⁴⁵.

5. CONCLUSION

Since the early periods in the history, clergy members who claimed to be serving the god or god tried to provide themselves with a more comfortable life by using their power and requests as if they were gods' requests. While the clergy members were organized over the temple and had a full control over the inhabitants in cities during the formation periods of the city states, they contended for a power struggle with the kings emerged in time. The conflict between kings and clergy members, who were trying to protect what they had in hand, has taken place throughout the history. People's beliefs were at the center of their everyday life in Egyptian and Mesopotamian civilizations, which both have an important place among the ancient civilizations. People used to learn 'how they should have lived' from their gods; in other words, clergy members. So, they had to accept the demands of the temple without questioning.

When any individual in the society, from a worker in the lowest segment of society to the king at the highest level of administration, put up resistance against the temple's

⁴³ BAKER / BAKER 2001, 125 - 129; BUNSON 2012, 18 - 19; MURRAY 2013, 40.

⁴⁴ THOMAS 2003, 67 - 77; HORNUNG 2001, 61 - 67; CHRISTENSEN 2007, 50; WILKINSON 2013, 285 - 296.

⁴⁵ RUIZ 2001, 183 - 185; SILVERMAN / WEGNER 2006, 161 - 177; HOFFMEIER 2015, 118 - 131.

requests, clergy members used to charge him/her with disobey against the gods and strengthen their indestructible social status as they guaranteed their incontestability regarding their decisions. The clergy members specialized in managing people by means of their beliefs had also succeeded in providing themselves with a comfortable life and a respectable status in the society, without any effort. However; the fact that clergy members used the religious beliefs of society for the sake of their own interests did not result in the lack of religious beliefs in community or a thought that religion is something unnecessary in no circumstances. It was thought that the fallaciousness was due to wrong persons.

The governors in Mesopotamia and the kings appeared after the unification of Lower and Upper countries in Egypt soon realized that the easiest way to rule a society was to make use of the power of the gods on account of their authorities. In Egypt and Mesopotamia, the easiest and effective management system, valid even today, was based on intimidating people to make them not to disobey authorities. This oppressive approach was realized on the most valid values in society, namely belief, and the administrators declared themselves 'gods' representatives' or 'gods in person'. Additionally, they claimed that when they were disobeyed, the gods would be disobeyed as well. Even though kings and the clergy members who succeeded in controlling gods and their most valuable capital, i. e. the temple, seemed to serve the same gods, they did not hesitate to struggle against each other for the sake of worldly interests.

Although this struggle in Ancient History, especially in the Middle East, has been active without any interruption up to now, we have tried to provide Urukagina and Akhenaton cases within the limitations of our study. When Urukagina came into power, clergy members had already created a great pressure on people and they used to wrench their goods from their followers and demand very high fees in religious affairs. Maintaining his authority depending on the support of the people he ruled, Urukagina made efforts to diminish the effectiveness of clergy members and to legitimize his power. Although not included in the resources we have today, it can be inferred that clergy members were not satisfied with his arrangements. Even though there was not an overt conflict, we can suppose that clergy members had no good intentions against Urukagina's power and authority. Although resources regarding Urukagina's reign do not provide direct information about the conflict between the clergy members and the government officials, the struggle between the members of the temple and Akhenaton is seen clearly.

As clergy members which could reach all segments of the Ancient Egyptian society by means of the hierarchical structure they were organized and had become an integral part of the society directed society according to their own needs, they were also active in important tasks such as ceremonies, celebrations and funerals in the palace where the highest representatives of the Egyptian religion met. Kings who held military power in their hands and clergy members who had social power were included in an order spontaneously occurred during millennia, and the kings avoided to do something which would undermine the

interests of the clergy members.

Akhenaton was an exceptional case regarding this situation. Two classes mutually benefiting from the current situation before Akhenaton began to conflict and struggle as soon as the concept of 'one god' emerged. Even if this conflict did not turn into an uprising against Akhenaton who had the military power in his hands, clergy members who could not benefit from the government's blessing hindered the society to confess his teachings. The winners of this power struggle limited to life of Akhenaton were the clergy members.

In conclusion, clergy members having social power and kings having military power in their hands had been in a struggle—*sometimes active/obvious and sometimes latent*—regarding the use of economic and political power in Egyptian and Mesopotamian societies in the ancient history. In this struggle, none of these two parties were able to win all the time. Although the winning parties changed depending on the conditions by the time, the public was the loser of this struggle because they had to share their economic wealth both with the king and clergy members.

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A MEDICAL-HISTORICAL EXAMINATION OF THE DEATH OF ALEXANDER THE GREAT

Abstract: Alexander the Great's cause of death has been contentious since antiquity. Historians and physicians alike have proposed a multitude of hypotheses. However, neither party is without their analytical flaws. The historians often neglect obvious medical refutations. Meanwhile, the physicians often err by forsaking disciplined historical methodology. Therefore, the authors of this paper subject these prior hypotheses to both medical and historical criticism, in order to provide a multidisciplinary approach to a longstanding mystery. Some hypotheses have more weight than others, as is discussed. The most probable of the poisoning hypotheses, which aligns with the Vulgate tradition of Alexander's death, cites the use of *Veratrum album*, a plant derived bane. When the Court tradition is considered, *i.e.* that no foul play occurred, acute pancreatitis induced by alcohol abuse holds greatest credence as a hypothesis. It is hoped that the approach used will not only increase clarity regarding Alexander's death and challenge weak ideas but also provide an approach by which speculation about other medical diagnoses in history may be tempered and critiqued.

Keywords: *Alexander the Great, Retrospective Diagnosis, Regicide, Murder, Death*

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INTRODUCTION

Alexander the Great's cause of death has long been contentious. The secondary sources describing his death are divergent. Diodorus claims that Alexander collapsed after consuming a bowl of wine and died eleven days later. Plutarch contends that he was struck by fever during a feast, succumbing almost two weeks later. Justin – a dubious historian – avers that poison claimed Alexander. Plutarch and Arrian reject poison.¹

Modern medical experts uphold pathologies relating to both of these storylines with equal fervour. A search of the medical literature database PubMed was conducted using the term “Alexander the Great” and found fifty-five articles. The twenty articles that explored his death posited causes ranging from arsenic, to typhoid fever, to malaria, to even grief. Alexander must either have been history's most extreme example of multi-morbidity or many of the proposed *causae mortis* are wrong.²

The uncontested fact is that Alexander died on June 10, 323 BC in

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¹ BOSWORTH 2008; WELLS 1963; PERRIN 1919; BRUNT 1983

² OLDACH/RICHARD/BORZA/BENITEZ 1998

Babylon, when he was only thirty-two. However, unlike Richard III – another historical character whose cause of death and physical health have attracted attention – Alexander’s pathologists lack a body. The primary evidence pertinent to Alexander is generally sparse. This lack of physical evidence makes a conclusive cause of death virtually impossible to determine. This paper will thus not seek to conclusively identify a single cause. It will instead examine the merits of already proposed causes of death using a framework that could be useful when critiquing retrospective diagnoses of historical figures. This examination is needed for three reasons. Firstly, conclusions based on weak premises should not go unchallenged, especially when they are published in reputable academic journals. Secondly, there is historical value in narrowing the options for Alexander’s death and refining knowledge, as much of the proceeding literature of the topic has increased uncertainty with an expansive list of hypotheses with uneven merit. Finally, the approach of this paper may provide a systematic way of approaching historical medical cases, which seem to continually invite curiosity and speculation.

This paper will first consider the textual accounts associated with the ‘Vulgate’ (the Romance) and ‘Court’ narratives of Alexander’s death – regicide by poison and a febrile illness, respectively. A discussion and critique of the medical diagnoses proffered for each account will follow, using patient history, current medical literature, and epidemiology.³

Before such an analysis can be undertaken, crucial assumptions need to be identified to provide a framework for approaching long-dead patients as if they arrived in a contemporary hospital. First, it will be assumed that all diseases acted in Alexander’s day as they do today. Second, only a disease’s typical symptoms, not its rare ones, will be considered admissible as evidence for the disease. Third, details will not be proposed beyond what the secondary histories provide. Fourth, this paper will assume that climatic conditions have not substantively changed since Alexander’s day. Fifth, the world during the reign of Alexander will be considered to be geographically identical to that of today. Any of these assumptions can be overruled only if the most chronologically proximal (to Alexander) documentation that is reliable provides evidence to the contrary. These assumptions are almost inevitably inaccurate to some degree. Rivers move, lakes disappear, regions warm and cool, and pathogens constantly evolve in response to their environment. However, the assumptions are necessary. If variables are arbitrarily changed, a multitude of diseases can become possible without any evidentiary basis. Additionally, change is far from guaranteed; many infectious disease, for instance, demonstrate relatively little evolution (even on a genetic level) from the ancient world until the present day, as will be demonstrated in the infectious diseases examined herein.⁴

PATIENT HISTORY

“Alexander was born early in the month Hecatombaeon, the Macedonian name for which is Lou̅s, on

³ BOSWORTH 2008; APPLEBY *et alii* 2014

⁴ ROSEN 1995

the sixth day of the month” in the year 356 BC, according to Plutarch. He was an apparently healthy child with a ruddy complexion. Plutarch notes that the “temperature of his body...was a very warm and fiery one”, possibly suggesting fever. However, the accuracy of this observation might be questioned as it formed the basis of a physiological explanation – using the four humours – for the pleasant aroma that exuded from the child. Maple Syrup Urine Disease – a genetically inherited enzyme deficiency – can cause infants to smell sweet. Alexander almost certainly did not have this disease. The condition almost uniformly results in severe neurological problems and death. If the reported smell is more than a literary device, there is a more plausible explanation. The body odour emitted by babies triggers a neural reward mechanism in mothers that emulates the reward mechanism produced by food, possibly causing the observer to liken an infant’s odour to sweet-smelling bread.⁵

Plutarch provides a possible indication of a congenital spinal deformity – “the poise of the neck, which was bent slightly to the left.” If accurate, it did not seriously limit the young Alexander. For instance, he tamed an intractable horse, was invited to compete in the Olympian games, and helped lead an army into battle at age sixteen. Alexander demonstrated an above average intelligence. Plutarch alleges that Aristotle educated Alexander in philosophy, metaphysics, ethics, politics, and medicine.⁶

Aside from the invitation to the Olympian games, Alexander displayed superior physical fitness throughout early adulthood, scaling a supposedly insurmountable cliff face with three hundred elite soldiers, ten percent of whom failed in the endeavour. He also personally led his troops up ladders into a besieged city, fighting off the enemy soldiers single-handedly for a time.⁷

Alexander received notable wounds on several occasions. At the battle of the Granicus in 334 BC, an enemy soldier struck a powerful blow with a scimitar or battle-axe to Alexander’s helmeted head. He received another violent blow to his head and neck from a stone during the assault on Cyropolis in 329 BC. Another enemy hit Alexander’s neck with a stone, resulting in a temporary blurring of vision. Arrows twice struck Alexander. The first, during the Parthian campaign of 331 BC, broke a bone in his lower leg and required surgery to have the bone fragments removed. The second instance occurred six years later in the battle at Malli. The arrow pierced Alexander’s armour above the nipple and resulted in profuse blood loss and potential lung damage.⁸

Alexander once suffered a febrile illness that resulted in coma and temporary speech loss. He also experienced prolonged dehydration during his pursuit of Darius and, far more severely, during the crossing of the Gedrosian desert. The geographical locations where Alexander received his wounds testify to his extensive travels throughout the Middle East and the western portion of India (using modern geographical terms).⁹

There is debate over the extent to which Alexander consumed alcohol. However, even accepting Plutarch’s more

⁵ PERRIN 1919; ZINNANTI/LAZOVIC 2012; LUNDSTRÖM *et alii* 2013

⁶ PERRIN 1919

⁷ BRUNT 1983; WELLS 1963

⁸ BRUNT 1983; PERRIN 1919

⁹ BRUNT 1983; PERRIN 1919

moderate assessment of Alexander's drinking patterns, which on one occasion resulted in the death of a close friend, Alexander's alcohol consumption still would have fallen outside the limits of what current experts consider safe.¹⁰

The few surviving primary sources (e.g. inscriptions and coins) pertinent to Alexander the Great provide scant

information. Reconstructions of Alexander's life derive primarily from the secondary literary sources that were written almost exclusively after his death. The credibility of these sources is briefly summarized in the following table, which gives the authors in approximate chronological order.¹¹

HISTORIAN	DATE OF ACCOUNT	CREDIBILITY
CONTEMPORARY WITH ALEXANDER		
<i>Deeds of Alexander</i> by Callisthenes of Olynthus	c. 329 BC	Callisthenes' unctuous account exists only in fragments and received criticism from Polybius – a Greek historian of the Second Century BC – for its amateurish military descriptions. In 327 BC, Alexander imprisoned Callisthenes for objecting to his leadership style. Shortly thereafter, Callisthenes either died in prison or was executed.
Onesicritus	c. 315 BC	Onesicritus accompanied Alexander for at least large portions of his exploits. His primary account is lost and is known exclusively through other ancient sources, which portray him as a liar who embellished his own importance.
Nearchus	c. 315 BC	The account of Nearchus, Alexander's fleet-commander, appears to begin in the latter half of Alexander's campaign, including India (a section that Arrian cites), the crossing of the Gedrosian, and his ocean voyage, which he glowingly relates. His account displays obvious disdain for Onesicritus and may have been written in response to him.
Cleitarchus	c. 310 BC	Cleitarchus' account forms the beginning of the romantic and rhetorical Alexander Vulgate and derives from Callisthenes as well as the memoirs of Onesicritus and Nearchus. Although lost itself, Cleitarchus's <i>History</i> is featured, potentially verbatim, in certain portions of Diodorus and Curtius Rufus's accounts.
<i>Histories</i> of Ptolemy I Soter	c. 305 BC	Ptolemy gives a highly accurate account based on his experience as one of Alexander's generals and on the <i>Ephemerides</i> (<i>Royal Ephemerides</i>). Arrian relies heavily on Ptolemy for his <i>Anabasis</i> . Ptolemy's <i>Histories</i> survive by reconstruction, largely through Arrian. Some more modern scholars approach Ptolemy sceptically.
Aristobulus	c. 300 BC	Aristobulus accompanied Alexander on his conquests and gives versions of events that present Alexander in highly favourable terms, sometimes sycophantically so. Aristobulus' history is known primarily through quotes and citations from Arrian and Plutarch.
Ephippus	c. 320-300 BC	Ephippus, a contemporary and possible official of Alexander, is thought to be somewhat unreliable and speaks disdainfully of Alexander, attributing his death to over-drinking, among other critiques. Only some of his account exists in extant. Diodorus (among others) cites him.
NON-CONTEMPORARY WITH ALEXANDER		
<i>Library of the History of the World History</i> by Diodorus of Sicily	c. 50 BC	Diodorus bases his account of Alexander on that of Cleitarchus, to whom his reliability is thus married. He is not particularly critical of his sources. The account forms part of a larger history of how Mediterranean civilization came to be united under Rome – his audience.
<i>The History of Alexander the Great</i> by Quintus Curtius Rufus	Disputed – c. 50 or 75 AD	Curtius' account exists only in part. The account is written in a highly theatrical manner and, while highly readable, should be treated cautiously.
<i>Life of Alexander</i> by Plutarch of Chaeronea	First Century AD	Plutarch provides not a historical account but a biography of Alexander, designed to compare and contrast with that of Julius Caesar, and the information Plutarch presents needs to be treated accordingly. Plutarch often provides anecdotes that are unsubstantiated by other sources.
<i>Anabasis of Alexander</i> by Flavius Arrianus (Arrian)	c. 120-150 AD	Arrian himself proved an adept governor of Cappadocia and held a firm grasp of history, natural science, and ethnography, giving him a distinct competence. Arrian's <i>Anabasis</i> provides an excellent history of Alexander, critically cleaving the apocryphal and the authentic histories of his predecessors.
<i>Epitome of the Philippic History of Pompeius Trogus</i> by Marcus Justinus (Justin)	3rd C AD	Justin's history was written approximately six hundred tumultuous years after Alexander and is likely an abridged version of another account, featuring its most interesting aspects. It should be treated accordingly.

¹⁰ RETIEF/CILLIERS 2006; PERRIN 1919; DAWSON/GRANT/LI 2005

¹¹ BOSWORTH 2008; PEARSON 1952; BENGSTON 1997; HAMMOND 1993

THE ACCOUNT OF ARRIAN

While in Ectbatana (a city in contemporary western Iran), Alexander received word that Hephaestion, whom he “valued equally with [his] own head,” was dying after seven days of fever. Alexander hurried to Hephaestion but arrived too late. Alexander grieved deeply, refusing food and lying on the ground mourning for three days. He also dedicated a cavalry brigade in Hephaestion’s honour and ordered a lavish funeral, complete with athletic games. Grief dominated Alexander for many more days before he was diverted to do battle in the winter (of 323 BC). Alexander then marched towards Babylon, receiving embassies from around the known world as he went.¹²

While on the way, Alexander was met by Chaldean philosophers who indicated that entering Babylon “at that time would not be for his good,” citing an oracle of the god Belus. Alexander, suspecting that the Chaldeans’ “courtesy” was inspired by self-interest, quoted the poet Euripides in response, “The best prophet is he that guesses well.” Nevertheless, the Chaldeans did persuade Alexander to try leading his army through the east entrance and not the west. Owing to marshes and shoals that blocked his eastern approach, Alexander ultimately reassumed a western approach.¹³

In mid-spring, Alexander took a cruise through the swamps outside of Babylon, where his headdress was blown from his head into the water near the tombs of the Assyrian kings, supposedly an omen of what was to come. Upon re-entering the city, Alexander began planning two extravagant temples in honour of Hephaestion. Some days later, Alexander was at a drinking party and about to retire, when Medius, described by Arrian as “the most influential of the Companions [at that time],” invited him to continue the revelry at his house.¹⁴

It seems clinically useful to cite at length what Arrian presents as the most accurate account, in his view, which comes from the Royal Ephemerides. He says that this record is generally consistent with the accounts of Ptolemy and Aristobulus.¹⁵

[Day 1] He revelled and drank at the dwelling of Medius; then rose up, took a bath, and slept; then again supped at the house of Medius and again drank till far into the night. After retiring from the drinking party he took a bath; after which he took a little food and slept there, because he already felt feverish. [Day 2] He was carried out upon a couch to the sacrifices... After performing the sacred rites he lay down in the banqueting hall until dusk. In the meantime he gave instructions to the officers about the expedition and voyage, ordering those who were going on foot to be ready on the fourth day, and those who were going to sail with him to be ready to sail on the fifth day. From this place he was carried upon the couch to the river, where he embarked in a boat and sailed across the river to the park. There he again took a bath and went to rest. [Day 3]... he took another bath and offered the customary sacrifices. He then entered a tester bed, lay down, and chatted with Medius. He also ordered his

officers to meet him at daybreak. Having done this he ate a little supper and was again conveyed into the tester bed. The fever now raged the whole night without intermission. [Day 4]... He took a bath; after which he offered sacrifice, and gave orders to Nearchus and the other officers that the voyage should begin on the third day. [Day 5]... He bathed again and offered the prescribed sacrifices. After performing the sacred rites, he did not yet cease to suffer from the fever. Notwithstanding this, he summoned the officers and gave them instructions to have all things ready for the starting of the fleet. In the evening he took a bath, after which he was very ill. [Day 6]...He was transferred to the house near the swimming-bath... Though he was now very dangerously ill, he summoned the most responsible of his officers and gave them fresh instructions about the voyage. [Day 7]... he was with difficulty carried out to the sacrifices, which he offered; and nonetheless gave other orders to the officers about the voyage. [Day 8]... Though he was now very ill, he offered the prescribed sacrifices. He now gave orders that the generals should remain in attendance in the hall, and that the colonels and captains should remain before the gates. But being now altogether in a dangerous state, he was conveyed from the park into the palace. When his officers entered the room, he knew them indeed, but could no longer utter a word... During the ensuing night and day [Day 9] and the next night and day [Day 10] he was in a very high fever... It is said that when his soldiers passed by him he was unable to speak; yet he greeted each of them with his right hand, raising his head with difficulty and making a sign with his eyes...soon after Alexander died.

Arrian then acknowledges, but dismisses for lack of credence, what he considered a theory of regicide. In this plot, Antipater – the regent of Greece and whose position was in question – acquired a poison from Aristotle. Antipater gave the poison to his son Cassander, who conveyed it to his younger brother Iolaus, Alexander’s cup-bearer. Medius, being the one who invited Alexander to drink, was also alleged to be involved. Arrian also repudiates a story in which Alexander attempted to drown himself in the Euphrates after realizing that death was upon him but was restrained by his wife.¹⁶

THE ACCOUNT OF PLUTARCH

In Ecbatana, Hephaestion contracted a fever, to which he succumbed after failing to listen to the advice of his physician. Alexander’s grief upon hearing of his friend’s death “knew no bounds.” Alexander proceeded to crucify the physician, ordered the cessation of music, sheared the tail of all horses and mules, and removed the battlements of neighbouring cities. Then, to alleviate his suffering, he went to war against a nation, slaughtered every male from youth upwards, and spent 10,000 talents on Hephaestion’s tomb and funeral.¹⁷

As Alexander neared Babylon, his admiral Nearchus informed him that Chaldean sorcerers counselled against entering the city, to which Alexander paid no heed. Arriving at the walls, Alexander noticed a flock of ravens clawing at each other above him. Several of the birds fell dead at his feet.

¹² BRUNT 1983

¹³ BRUNT 1983

¹⁴ BRUNT 1983

¹⁵ BRUNT 1983

¹⁶ BRUNT 1983

¹⁷ PERRIN 1919

Shaken by what he interpreted to be a bad omen, Alexander refused to enter the city and camped outside, spending his time in his tent, engaging in athletics, and sailing on the Euphrates.¹⁸

The numerous omens [the clinically irrelevant ones have been omitted from this summary] made Alexander exceedingly sensitive to the divine, paranoid, and suspicious of his friends, particularly Antipater and his sons. Alexander even violently assaulted Cassander.¹⁹

Alexander, persuaded by an earlier oracle that advised celebrations and sacrifices in Hephaestion's name, began feasting and drinking. After one evening of entertainment, he acquiesced to the supplications of Medius to continue the revelry at his house. After a day of drinking at Medius', he began to have a fever. Plutarch, citing Aristobulus, says that as the fever intensified Alexander consumed more wine to assuage his thirst, became delirious, and died. Plutarch goes on to provide a nearly identical version of the Royal Ephemerides entries quoted by Arrian.²⁰

Some accounts, according to Plutarch, alleged that Alexander fell ill while drinking a "bowl of Heracles" and that Alexander felt pain as though he were stuck in the back by a spear. Plutarch contends that these were invented theatrically to adorn the story. Plutarch reports that accusations of poison did not emerge for five years, when Alexander's mother, Olympias, "put many men to death, and scattered abroad the ashes of Iolaus, alleging that Iolaus had administered the poison." Plutarch relates the conspiracy as follows: Aristotle counselled Antipater to regicide; the ice cold droplets of poison water were collected from a waterfall in Nonacris and stored in an ass' hoof – the only container capable of holding water of such "coldness and pungency". Plutarch notes that most writers dismiss the poison theory. He himself strongly repudiates it on the basis that "[Alexander's] body, although it lay without special care in places that were moist and stifling [for many days], showed no sign of such a destructive influence, but remained pure and fresh."²¹

THE ACCOUNT OF DIODORUS

Chaldean astrologers communicated to Alexander through Nearchus that only by avoiding Babylon and rebuilding the temple of Belus (destroyed by the Persians) will he avoid imminent death. Although initially concerned, philosophers assuaged Alexander's fears. He entered the city and where he conducted numerous diplomatic meetings with various foreign emissaries. Alexander also held a funeral for Hephaestion – his dearest friend and adviser (and perhaps sexual partner) – who had recently suffered a sudden death from fever. He began preparation to deify Hephaestion and erect a colossal and costly monument in his honour. Shortly thereafter, while on a boat tour of the great swamp of Babylon, Alexander's diadem was caught from his head by a reed, causing the king great concern as to the event's meaning. Before he could alleviate his concern with sacrifice, he was summoned to engage in a *comus*, a festival involving

alcohol consumption to the point of collapse. As Alexander drank a huge beaker of unmixed wine, he suddenly "shrieked aloud as if smitten by a violent blow" and was hastily led by the hand to his chamber. The abdominal pain grew more acute; the physicians were unable to bring relief. Alexander, realizing that death was upon him, took off his ring, declared that "the strongest" should have his empire, and died. Diodorus adds that some historians hold that it was poison, insinuating that Alexander's death resulted from the alcohol consumption itself.²²

THE ACCOUNT OF JUSTIN

The course of events leading up to Alexander's arrival at Babylon closely resembles that presented by Diodorus. From the perspective of medical evidence, the only critical difference seems to be the omission of the boat cruise.

Upon entering the city, Alexander gave himself to entertainment and incessant drinking. While returning from one banquet, Medius – a friend – invited Alexander and his attendants to continue their revelry at his home. Alexander acquiesced. In mid-drink Alexander uttered groans "as if he had been stabbed with a dagger" and was carried away "half-dead" from the table. Alexander was "excruciated with such torture that he called for a sword to put an end to it, and felt pain at the touch of his attendants as if he were all over wounds." Four days later, Alexander perceived his pending death, allowed his soldiers to bid farewell, gave burial instructions to his generals, and bequeathed his kingdom to "the most worthy." On day six, Alexander lost the ability to speak and gave his ring to Perdikkas, one of his generals. Justin then proceeds to eulogize about Alexander but does not provide the day of his demise, which Justin claims was caused by poison, though alleged by the conspirators to be from drink.²³

THE ACCOUNT OF QUINTUS CURTIUS RUFUS

A significant portion of Curtius' Chapter Ten has been lost. The preserved section begins as Alexander's soldiers visit him as he lay dying.

Alexander assumed an alert posture in his bed as the entire mourning army filed past and saluted him. Alexander asked, "After my death will you find a king who deserves such men?" After the soldiers had left, Alexander collapsed. His voice growing weak, he gave his ring to Perdikkas, conveyed his kingdom "to the most worthy," and with his dying words asked that he only be paid divine honours "when they themselves [his friends] were happy." Alexander died moments later.²⁴

Curtius asserts that many believed that Alexander died of poison, slipped into his drink by Iolaus, the son of Antipater, a general. The poison was supposed to have been concocted in Macedonia from the "Styx". The poison was said to be capable of consuming iron and only "an ass' hoof" could carry it. Curtius explains that the weight and credence of this account was lost amidst gossip as Antipater assumed the throne of Macedon and Greece and murdered all of

¹⁸ PERRIN 1919

¹⁹ PERRIN 1919

²⁰ PERRIN 1919

²¹ PERRIN 1919

²² WELLS 1963

²³ YARDLEY 1997

²⁴ ROLFE 1946

Alexander's even distant relatives.²⁵

HISTORICAL ANALYSIS OF THE ACCOUNTS

Until the mid 1950s, historical scholarship viewed the 'Court' tradition of Alexander's natural death to be unimpeachable. Since then, a number of scholars have contended for the verisimilitude of the 'Vulgate' poisoning account, perhaps none better than Bosworth.²⁶

Many empires have employed propaganda to camouflage events that give an unfavourable veneer (e.g. Soviet Russia). The rulers who succeeded Alexander were likely no different. Propaganda becomes difficult to discern from truth in secondary accounts. Modern scholars know Alexander almost exclusively through sources that date 300 or more years after his death.

Within a year of his death, rumours of conspiracy had already emerged. All five of the secondary sources agree upon their existence and there is no argument about the general nature of alleged conspiracy, as already presented. Alexander's symptoms almost assuredly saw their onset at Medius' house, as sources on both sides of the poison theory claim that Alexander fell ill there. The differences centre on what happened at Medius' house.²⁷

Antipater had a motive for instigating the killing. He had begun to fall out of favour with Alexander and potentially stood to lose his position, if not his life. Though not sufficient to convict, a motive is certainly necessary. The other members of Alexander's inner circle may also have begun to harbour ill-will against their regent and his growing megalomania, demonstrated by his superfluous funeral arrangements for Hephaestion and almost addictive inclination towards conquest, manifesting in plans for a virgin western campaign. Epheppus states that Alexander assumed the guise of the god Ammon at banquets, dressing with purple robes and a horned headdress – a detail corroborated by coinage and the Alexander Sarcophagus. Alexander also seemed to associate himself with the persona of other gods and had incense burned to his deity. The accounts provide information to suggest that Antipater capitalized on the growing dissent and went on the offensive to protect his position. Antipater, Bosworth argues, recognized patterns in Alexander's behaviour that foreshadowed earlier purges of officials. Hence, he sent his son Cassander to broker an arrangement of power among the generals, who would be executed after Alexander's death. Cassander then supplied his brother, Iolaus the cupbearer, with the necessary means to enact the scheme. Conspiracy would explain why peace reigned for an unexpectedly long period after the death of a ruler with no ready heir. It would have been relatively easy to manipulate documents to hide the conspiracy; and once the tenuous truce broke among the all-too-human generals, it would have been equally easy to spread incriminating evidence against a rival faction. Notwithstanding, it is important to recognize that the Vulgate accounts of Alexander's death were propagated extensively by the mother of Alexander, Olympias, who viewed Antipater and his sons as the murderers. One might question the objectivity of

Olympias, who was not a witness and whose maternal desire for justice may have clouded her reason. If Alexander's death was natural, fortune shone brightly upon the arguably over-extended army and Antipater's family.²⁸

MEDICAL ANALYSIS OF THE VULGATE NARRATIVE

Several basic assumptions can be made based upon the contents of the Vulgate accounts. First, if there was something abnormal about Alexander's wine, he is not recorded as having tasted it. He made no comments to this effect at Medius' house or in the following (at minimum four) days when he was still lucid and capable of speech. Accordingly, the poison was likely completely or almost completely tasteless. Second, the conspirators would have required knowledge of the poison – the poisonous nerve-agent sarin, for instance, synthesized in 1938 AD, is not a possibility. Third, the poison needed to have been relatively available to the conspirators. Fourth, the method of administration needed to have been discrete, regardless of whether it was in the wine. No one saw it administered.²⁹

Diodorus' intimation is unlikely to be true, based on his account. The classic symptoms of alcohol intoxication are slurred speech, nystagmus (involuntary eye movement), impaired judgement, incoordination, unsteady gait, memory impairment, stupor, or coma – not sudden pain. Moreover, because intoxicated patients will likely be oblivious to the pain accompanying abdominal injuries, the medical literature recommends that physicians conduct assessment for such injuries. Alcoholic ketoacidosis may cause abdominal pain. However, this condition requires the patient to be malnourished, which seems highly unlikely for a young, fit, and apparently healthy ruler of the known world. According to Diodorus' account, non-alcoholic poison is more likely.³⁰

Forensically, there are three obvious objections to Curtius' "Styx" poison theory. First, if the chemical (likely an acid or strong base) was powerful enough to erode steel readily, Alexander should have noticed, particularly as he is said to have been lucid until at least the fourth day after the incident. Second, Alexander is unlikely to have been able to speak four days after consuming the poison if he was exposed to a powerful corrosive. Third, while conspirators might have taken steps to cover up and suppress the evidence, a corrosive poison would likely damage the cup from which Alexander was drinking. He probably dropped, or at least spilled, the cup when he was seized by pain. The fabrics and flooring upon which the wine fell would assuredly have been stained (burned?) in ways uncharacteristic of wine. The historians record no such observations.

Notwithstanding, Mayor, a Stanford folklorist and science historian, and Hayes, a toxicologist, sought to identify the poison residing in the Styx – a waterfall in north central Peloponnese, Greece. According to their research, individuals – ranging from ancient scholars to locals in 1920s – held that the water from the Styx destroys clay and metal vessels and refused to drink from it. However, sporadic

²⁵ ROLFE 1946

²⁶ BOSWORTH 2008; BOSWORTH 1971

²⁷ BOSWORTH 1971

²⁸ BOSWORTH 1971; HAMILTON 1953; BOSWORTH 2008

²⁹ VISWANATH/GHOSH 2009; SCHEP/SLAUGHTER/VALE/WHEATLEY 2014

³⁰ YOST 2002; ALLISON/MCCURDY 2014

chemical analyses starting in 1815 AD failed to identify any irregularities. Mayor and Hayes note that while ancient mining techniques might have released lethal minerals such as arsenic, zinc, cadmium, and selenium, they found no evidence of local mining in antiquity. Mayor and Hayes thus propose that a natural source was responsible.³¹

Mayor and Hayes dismiss the highly corrosive but rare hydrofluoric acid. It has been known to naturally rise to lethal levels only as the result of volcanic activity, which is incongruous with the area's geology. Perhaps a superior refutation lies in the fact that hydrofluoric acid results in serious, deep local burns and critical circulatory and vascular problems – even when exposure is relatively limited and topical. Alexander exhibited no burns.³²

Mayor and Hayes, inspired by accounts of “black water” at the Styx, propose that the stream might have had a significant amount of dissolved organic matter that could culture “soil-derived bacterium of exceptional lethality.” They settled upon the relatively recently discovered *Micromonospora echinospora*, which resides in limestone-derived caliche and produces the secondary metabolite calicheamicin – a substance more toxic than ricin. According to Sheridan *et al.*, the massive organ damage caused by the poison would cause symptoms resembling those of Alexander – weakness and fatigue, swelling of mouth and throat, severe pain, and fever.

However, calicheamicin, which is used as a chemotherapeutic, acts by causing irreparable double-strand breaks in DNA. Poisons that damage DNA, as opposed to those like botulinum toxin that target neuromuscular communication, are relatively slow acting. They work by impairing protein production and cell division. The cell will die after it no longer possesses the proteins required to maintain life. If too few cells can replicate to repair the damage in an organized manner, organs fail. If Alexander died of calicheamicin, it would have required administration well before Alexander emptied Heracles' cup at the house of Medius. Moreover, Mayor and Hayes only find matches for the symptoms of calicheamicin by an ostensibly arbitrary synthesis of the accounts of Alexander's demise (*e.g.* fever does not appear in the Vulgate accounts of Diodorus, Curtius, or Justin). Such a synthesis might have merit, but it needs justification.³³

The corrosive properties of the Styx might merely be a hyperbolic adornment in keeping with the rest of Curtius's history of Alexander. It should be noted, however, that calicheamicin requires no special storage and should merely be handled in accordance with standard industrial hygiene protocols. It is not even structurally stable in highly acidic or basic environments. Finally, the apparently recent discovery of calicheamicin suggests that it is an implausible contrivance for a nearly 2500-year-old regicide.³⁴

Milns proposes strychnine poisoning. Theophrastus – a philosopher, botanist, and contemporary of Alexander – described the substance in his *Enquiry into Plants*. One publication notes, however, that unlike the reported

timeframe of Alexander's death, a typical lethal dose of strychnine will kill its victim within three to five hours. An acute non-lethal dose administered repeatedly, as Milns suggests, is also impossible, as this would induce muscle fasciculation, difficulty walking, mild to moderate muscle spasms along the spine, and tremors. The accounts of Alexander's death only suggest that he had difficulty walking without help.³⁵

Aconite and hemlock, plant-derived poisons available in the Fourth Century BC, were ruled out because death results rapidly. The symptoms also do not match Alexander's: aconite induces gastrointestinal, cardiac, and neurological problems (*e.g.* nausea, heart arrhythmias, and numbness); hemlock triggers a dramatic parasympathetic response (*e.g.* salivation and respiratory paralysis). Schlep *et al.* also dismiss oil of wormwood, another ancient plant derivative, because Alexander did not suffer delirium, mania, and visual disturbances. Schlep *et al.* eliminate colchicine, contained in *Colchicum autumnale*. Its typical gastroenteritis-like symptoms only begin to appear after ten hours. Severe symptoms emerge after seven days. Once significant symptoms appear, death results from sepsis and organ failure within thirty-six hours. Arsenic is dismissed because its central features – diarrhoea, vomiting, and intestinal perforation – do not correspond to Alexander's symptoms.³⁶

Veratrum album (false hellebore) poisoning appears plausible given this paper's assumptions, Alexander's symptoms, and the progression of the illness. Alexander's contemporaries knew of *Veratrum album*. Theophrastus documents the plant and its effects in his *Enquiry into Plants*. It was readily available, growing in alpine pastures in Europe and Western Asia. The plant contains alkaloids that can be easily extracted with alcohol during fermentation. Administration would have been virtually undetectable – the poison existing in an alcohol solution. Moreover, its taste would likely have escaped Alexander's notice, especially if he was slightly intoxicated. Accidental consumption in food and alcoholic beverages has been repeatedly documented.³⁷

The poison binds to the type-2 sodium voltage-gated channels of nerves, increasing permeability to sodium and calcium and delaying depolarization along the neuronal axon. Neuromuscular communication becomes uncoordinated. Victims will likely experience sudden epigastric and substernal pain and vomiting fifteen minutes after ingestion. Excepting the vomiting (which may fail to present), this corresponds to what Alexander suffered before he finished his wine. Slow heart rate, low blood pressure, and pronounced muscular weakness soon follow. This could explain why Alexander's required assistance to reach his chamber. With modern medical treatment, patients rarely deteriorate further. However, if untreated, further symptoms generally emerge over the next week or two, including an inability to move or communicate, coma, and death. This would be especially true if additional doses were administered. Alexander's case bore many of these features:

³⁵ MAYOR/HAYES 2011; HORT 1916; SCHEP/SLAUGHTER/VALE/WHEATLEY 2014; MILNS 1968

³⁶ SCHEP/SLAUGHTER/VALE/WHEATLEY 2014

³⁷ SCHEP/SLAUGHTER/VALE/WHEATLEY 2014; HORT 1916; SCHEP/SCHMIERER/FOUNTAIN 2006; ZAGLER *et alii* 2005; GILOTTA/BRVAR 2010

³¹ MAYOR/HAYES 2011

³² MAYOR/HAYES 2011; SHERIDAN *et alii* 1995

³³ LODE *et alii* 1998

³⁴ PFIZER 2011; LODE *et alii* 1998

silently saluting his troops from bed, gradual weakening and loss of speech, coma, and death within days (assuming Bosworth's synthesis of the accounts).³⁸

The absence of nausea and vomiting, which are generally noted symptoms, does diminish the possibility of *Veratrum album* poisoning. The inability of *Veratrum album* to guarantee death also creates a practical objection. If Antipater wanted to kill Alexander, he may have opted for a poison that assured Alexander's demise and alleviated his tenuous situation. Conversely, by sharing the attributes of an illness, *Veratrum album* would have provided deniability for Antipater should Alexander survive. Furthermore, extra doses could be easily administered. Finally, Theophrastus describes in his *Enquiry into Plants* how an individual could build up tolerance to *Veratrum album*. Researchers also noted increasing drug tolerance when *Veratrum* alkaloids were investigated as a treatment for high blood pressure circa 1950. If Iolaus followed Theophrastus' instructions, he may have been able to sample the wine and prove its 'safety'.³⁹

The long time course of *Veratrum album* poisoning presents a textual problem. It requires that Alexander's conspirators edited the Court Ephemerides to avert accusations of poison but left the length of Alexander's illness as it actually happened. A slow death might have been the best scrap of truth to leave intact. Most poisons kill quickly.

MEDICAL ANALYSIS OF THE COURT TRADITION

The court tradition holds that Alexander's final illness resulted from natural causes. Ashrafiyan notes that statues and coins of Alexander – some of the only surviving primary witnesses of Alexander – portray him with horns and a slight leftward tilt of the head. He believes that these features testify to congenital scoliosis or epidermal nevus syndrome and that Alexander died of associated organ pathologies.⁴⁰

This hypothesis is highly problematic. The articles that Ashrafiyan cites as evidence for pathologies arising from congenital scoliosis describe patients dramatically more incapacitated than Alexander could possibly have been. Alexander died after having just completed a harrowing westward march from India to Babylon on foot and horseback without displaying extraordinary discomfort or difficulty (excluding thirst and hunger). If Alexander's spine was seriously compromised by neurofibrosis, the Gedrosian desert or the recent hand-to-hand combat at the battle of Malli would surely have eliminated Alexander.⁴¹

Epidermal nevus syndrome and its related cardiopulmonary and neurological problems seem equally unlikely. In patients with chronic renal failure, proper hydration is critical. If Alexander's kidneys and/or circulatory system were so compromised as to immobilize him for ten days until his death, they would likely have been problematic in the Gedrosian, where Alexander was regularly dehydrated and over-exerted.⁴²

Finally, the theory's premise relies on a questionable

interpretation of the primary artefacts. As Russell notes, figures in classical art regularly feature a head-tilt. If they were not stylistic but instead meant to depict actual physical features, there was an epidemic of spinal problems that preferentially targeted athletes, poets, and even Apollo. The horns on Alexander's head on coins were almost certainly used to deify him. By Ashrafiyan's logic, Christian saints, frequently depicted in works of art with halos and floating crowns of stars, suffered from head trauma and concussions. With the exception of St. Stephen, this seems rather dubious.⁴³

If an environmental contaminant (such as lead, which the ancient Romans and Greeks used to coat wine vessels) had poisoned Alexander, the dose would have needed to be acute given the sudden onset. Other individuals should have exhibited symptoms. This was not reported. Additionally, Alexander's fever makes lead poisoning in particular unlikely.⁴⁴

Marr and Calisher propose West Nile virus (WNV). Alexander's symptoms resemble those of WNV: abrupt onset of fever, headache, malaise, back pain, muscle pain, and a lack of appetite. Severe muscle weakness and change in consciousness typically precede death in WNV. The accounts describe a similar deterioration in Alexander. In an outbreak in Ontario, Canada, 40% of deaths occurred within 30 days of onset. If Alexander had contracted WNV, his recorded death ten days after clinical onset is reasonable, especially since he did not receive modern supportive care. It should be noted, though, that Alexander was almost thirty-three, whereas the median age of death from WNV is seventy-two.⁴⁵

WNV was first detected in humans in 1937 in Uganda and samples of human sera from modern Iraq (which includes ancient Babylon) have tested positive for WNV antibodies. As Marr and Calisher suggest, discovering the disease in 1937 does not preclude its prior existence in humans. However, since birds are the natural reservoir for WNV, the virus could have spread broadly without the aid of globalization. The relatively rapid expansion of WNV out of Africa after 1937 seems to indicate a non-ancient genesis.⁴⁶

In subtropical climates, such as modern Iraq, human infections generally occur in summer or early fall. Seasonal cases in Israel, which has a similar climate and the same latitude as Iraq, typically start appearing in humans in August. Marr and Calisher note that this militates against the WNV hypothesis since Alexander became sick in late May. The Marr and Calisher suggest that summer may have come sooner in Babylon in Alexander's era. This contests our assumption that climatic variables cannot arbitrarily be changed. Moreover, a study of harvest records in the Neo-Babylonian Period indicates the opposite: the Babylonian climate was cooler than in the present day and summer came 10-20 days later. The authors cite Plutarch for possible avian cases of WNV in the Fourth Century BC: "When [Alexander]

⁴³ RUSSELL 2004; BOSWORTH 2008; St. Stephen

⁴⁴ WALDRON 1973; OLDACH/RICHARD/BORZA/BENITEZ 1998; NEEDLEMAN 2004

⁴⁵ ORTON/STRAMER/DODD 2006; MARR/CALISHER 2003; PETERSEN/MARFIN 2002; PEPPERELL *et alii* 2003; MARR/CALISHER 2003

⁴⁶ HUBÁLEK/HALOUZKA 1999; CAMPBELL/MARFIN/LANCIOTTI/GUBLER 2002; MARR/CALISHER 2003

³⁸ SCHEP/SCHMIERER/FOUNTAIN 2006; SCHEP/SLAUGHTER/VALE/WHEATLEY 2014

³⁹ HORT 1916; FREIS/STANTON 1948

⁴⁰ ASHRAFIAN 2004

⁴¹ CRAIG/GOVENDER 1992; BRUNT 1983; PERRIN 1919

⁴² LIGTENBERG 1999; BRUNT 1983

arrived at the walls [of Babylon], he saw many ravens flying about and clawing one another, and some of them fell dead at his feet." If this is not an added literary device, "clawing" seems to be a more likely explanation for the ravens' deaths. Given the epidemiological evidence, Alexander almost certainly did not die of WNV.⁴⁷

Williams and Arnott propose that a carotid dissection killed Alexander. A carotid dissection occurs when blood separates the inner and outer layers of a blood vessel, occluding the vessel. More seriously, a blood clot may form in a relatively unimportant vessel, break off, and travel to the brain, where it can block key vessels. Carotid dissections are often caused by trauma to a blood vessel. The authors argue that the blow to the neck that Alexander suffered at Cyropolis in 329 BC may have resulted in a carotid dissection. They hold that Alexander's loss of speech and coma before death support this possibility.⁴⁸

However, this fails to explain any of the remaining symptoms in both the Court and Vulgate narratives. Loss of speech and coma can be ascribed to multiple fatal conditions. Furthermore, Alexander did not present with the most common symptom of the pathology, head and neck pain on one side of the body. The probability of sequelae of a carotid dissection appearing six years after Alexander's neck trauma is also exceptionally unlikely.⁴⁹

Some have focused on Alexander's drinking habits. Plutarch defensively maintains that the young Alexander, "[I]n spite of his vehement and impulsive nature, showed little interest in the pleasures of the senses and indulged in them only with great moderation," and publicly despised his father's drinking habits. However, it has recently been pointed out that exposure to parental substance use disorder (SUD) during adolescence increases the odds of developing SUD by 3.61 times. In his mid-twenties Alexander appears to have adopted his father's habits. Curtius reports that Alexander's attributes "were marred by his inexcusable fondness for drink." This cannot simply be attributed to Curtius' theatrical style. The fastidious Arrian – while defending Alexander's alcohol-induced murder of Clitus – remarks, "On that occasion he showed himself the slave of two vices, anger and drunkenness." Liappas *et al.* has lately advanced a thorough clinical case for Alexander's alcohol abuse. But Alexander was unlikely at thirty-two to suffer from alcoholic liver disease, although alcohol abuse may have suppressed his immune system and made him vulnerable to infections.⁵⁰

Alexander almost certainly did not die of alcohol poisoning. Acute alcohol poisoning happens over a period of hours, with a gradual loss of psychomotor and cognitive capacities and mood variations until consciousness is lost. Vomiting and nausea often emerge as an individual's blood-alcohol concentration increases. Diodorus and Justin – who allege that Alexander's problem manifested during Medius' party – claim that the problem presented as a sudden, sharp

pain. Plutarch and Arrian say that Alexander became ill with fever the day after the party. Neither fever nor late onset accords with alcohol poisoning.⁵¹

The Vulgate tradition has been the focus of three hypotheses that do not require the hand of an assassin – acute pancreatitis, perforated peptic ulcer, and spontaneous perforation of the oesophagus. Chronic alcohol abuse accounts for 30% of acute pancreatitis cases; 5% of alcohol abusers will suffer from acute pancreatitis. In severe acute alcoholic pancreatitis, alcohol – working through an undefined mechanism with another initiating factor – causes a build-up of digestive enzymes in the pancreas. This often results in the pancreas digesting itself, necrosis, multi-organ failure, sepsis, and death.⁵²

Acute pancreatitis typically presents with epigastric abdominal pain and fever. Sepsis often follows and accounts for 80% of deaths in severe acute pancreatitis. Severe sepsis is characterized by organ dysfunction, bacterial infection, and the presence of two of four criteria, of which only a fast heart rate, fever, and rapid breathing would have been detectable in Alexander's day. The remaining surgical events – perforated peptic ulcer and oesophageal perforation – feature similar symptoms and may result in sepsis, but are only weakly associated with the apparent causative agent – alcohol – and thus contest our second assumption that rare aetiologies and symptoms will not be admitted.⁵³

According to Diodorus and Justin, Alexander presented with pancreatitis' characteristic epigastric pains. The gradually worsening fever, weakness, ultimately diminished mental capacity, coma, and death are consistent with sepsis. Finally, as the author of the pancreatitis theory notes, the ten-day course of Alexander's illness is consistent with acute pancreatitis.⁵⁴

The theory's plausibility, however, loses some of its force by the fact that abdominal pain in alcohol-induced pancreatitis has a more gradual onset than in other pancreatitis aetiologies – unlike the "dagger stab" or "sudden blow" reported by Diodorus and Justin respectively. The theory also requires a plausible synthesis of the narratives of Diodorus and Justin (who describe the abdominal pain) with those of Plutarch and Arrian (who describe the fever and detail Alexander's deterioration).⁵⁵

Several studies point to *Anopheles* mosquitoes as Alexander's 'murderers.' Malaria, the feared payload of the *Anopheles*, possesses an instinctive appeal. It plagued much of the ancient world. Babylon bordered a swamp, a favourite breeding ground of mosquitoes, which Alexander toured. A recent analysis of teeth from Imperial Period cemeteries in Italy demonstrate that the deadly *Plasmodium falciparum* strain of malaria likely claimed thousands of lives. With complications, untreated malaria may kill in less than two weeks. Furthermore, malaria is the clinical assumption if someone presents with fever in a malarial area. However, fever and fatigue are almost the only clinical features that

⁴⁷ CAMPBELL/MARFIN/LANCIOTTI/GUBLER 2002; MARR/CALISHER 2003; NEUMANN/SIGRIST 1978; PERRIN 1919

⁴⁸ WILLIAMS/ARNOTT 2004

⁴⁹ BOUSSER 2004

⁵⁰ PERRIN 1919; YULE *et alii* 2013; ROLFE 1946; BRUNT 1983; LIAPPAS/LASCARATOS/FAFOUTI/CHRISTODOULOU 2003; NAVEAU *et alii* 2005; PAULA *et alii* 2010; ROMEO *et alii* 2007

⁵¹ KRESHAK 2012

⁵² BATTERSBY 2007; YANG/VADHAVKAR/SINGH/OMARY 2008; LANKISCH/APTE/BANKS 2015

⁵³ BATTERSBY 2007; VONLAUFEN/SPAHR/APTE/FROSSARD 2014; FELNER/SMITH 2012

⁵⁴ BATTERSBY 2007

⁵⁵ LANKISCH/BANKS 1998

align with malaria in the accounts of Alexander's death. The headaches, violent bursts of emotion caused by fever, and sweats typical of malaria were not present. Thus, while possible, malaria is not the most likely cause of death.⁵⁶

Typhoid fever provides an ostensibly superior reckoning of the febrile pattern. It features a gradually worsening fever without sweats. Propagated by poor hygienic practices, typhoid has been the scourge of many armies throughout history and DNA evidence from dental pulp suggests that it was responsible for the Fifth Century BC Plague of Athens. Abdominal pain may also appear, though not until the second week of infection. However, typhoid rarely claims its victims in less than three weeks. Alexander died within ten days of the illness' onset. Additionally, the Court accounts do not allude to gastrointestinal symptoms or headaches, which often present as typhoid progresses. If Alexander did experience abdominal pain, Diodorus and Justin state that it occurred from the onset.⁵⁷

CONCLUSION

We shall probably never know with absolute confidence how Alexander the Great died. Yet based on the accounts of his last days, we can eliminate most of the proposed hypotheses with reasonable confidence.

Lethal poisons are particularly conducive for evaluation. Options for poisoning in antiquity were relatively limited compared to today. Even fewer of the available poisons could produce the course of Alexander's symptoms. *Veratrum album*, the near tasteless plant poison extracted by an alcohol solution, seems the most plausible. It aligns with Alexander's symptoms, was known in antiquity, was likely available to the conspirators, could be gradually re-administered in wine to give the appearance of illness, and might even be consumed by Alexander's cupbearer and alleged poisoner Iolais if he had built up tolerance to the drug.

If Alexander died of natural causes, determining the precise pathology proves a more difficult challenge. Unlike intentionally administered poison, Alexander's contemporaries did not need to know of the disease for it to kill. We, as his modern coroners, do not stand in a vastly more enlightened position. He may have died of an infection that has since mutated into passivity, as did the devastating Spanish Flu of 1918. One cannot even begin to speculate about such infections.⁵⁸

None of the proposed infectious diseases – as they exist today – align well with the course of Alexander's illness. Acute pancreatitis, a non-infectious pathology, which is unlikely to have changed dramatically since the days of Alexander's conquest, fits remarkably well with the accounts of Alexander's death. The chief argument against this hypothesis is that it requires an onset described in the Vulgate tradition but a disease course described in the Court tradition. There is a plausible way of reconciling the two. Alexander's sudden pain while consuming wine, as described in the Vulgate tradition, would have given any witness

⁵⁶ CUNHA 2004; SVENSON/MACLEAN/GYORKOS/KEYSTONE 1995; MARCINIAK *et alii* 2016

⁵⁷ CUNHA 2004; HOFFMAN *et alii* 1984; PAPAGRIGORAKIS/YAPIJAKIS/SYNODINOS/BAZIOTOPOULOU-VALAVANI 2006

⁵⁸ CHANDRA/KASSENS-NOOR 2014

the immediate impression of poisoning. Consequently, if someone had modified the Court Ephemerides, as Bosworth proposes, they may have done so to avert questions, realizing that an innocent conscience is a poor counter-argument to any vigilantes who recognized their motive and opportunity. Bosworth himself alludes to the possibility that Eumenes, one of Alexander's generals who attended the ill-fated banquet, may have done just this. Diodorus may correctly conclude that Alexander died of drink, albeit through a different pathological mechanism. However, time has likely claimed any confident diagnosis as it claimed what remained of Alexander.⁵⁹

If anything in the ultimate sense is worth remembering about the tracing of Alexander's death, it is the words of Prince Hamlet: "Why may not imagination trace the noble dust of / Alexander, till he find it stopping a bung-hole?" (5.1.210-211) ... "O, that that earth, which kept the world in awe / Should patch a wall t' expel the [winter's] flaw!" (5.1.222-223)⁶⁰

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⁵⁹ BOSWORTH 2008

⁶⁰ SHAKESPEARE 2012

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FORM OR FUNCTION? TOWARDS A TYPOLOGY OF AUGUSTAN CITY WALLS IN ROMAN ITALY

Abstract: During the Augustan period, some 18 cities in Roman Italy constructed city walls around their urban centres – the last cluster of city walls to be built here until the late third century AD. There was no defensive imperative for walls at this time, as the heart of the empire was relatively peaceful, so what motivated urban communities to undertake such a time-consuming and expensive project? This article notes the superficial similarities in the physical form of Augustan city walls and their towers and gateways, but downplays the notion of a shared design model. Rather, it argues that a more important theme which links this group of city walls was their symbolic and ideological meaning. The common ways in which Augustan city walls engaged with their physical and cultural environment are examined, and shared characteristics such as the visual prominence and imposing display of city walls and gateways, connections with pre-Roman sanctuaries and foundation rituals, and imperial involvement and patronage are explored. The article concludes that in terms of typology, Augustan city walls are surprisingly diverse in their physical form despite apparent congruencies, but that they share important political and social themes. In summary, Augustan city walls were built to impress – icons of visual dominance and cultural manipulation of the landscape, promoting the status and prestige of the city they surrounded.

Keywords: *city walls, urbanism, Augustus, Roman Italy, defences*

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INTRODUCTION

n 1932, Richmond assessed that the principal gateways of Hispellum and Augusta Taurinorum were so similar that they may have been designed by the same architect. Taking into account parallels with other contemporary gateways, he argued for the existence of a “school of Augustan town-builders”, working to a common scheme with minor local variances. For Fontaine,¹ it was “indisputable” that a school of architects reproducing similar designs was involved, and this point of view has found considerable support.² In this article, I argue that the superficial similarities in the design of the urban walls, towers and gateways of Augustan cities in Roman Italy mask important differences. It is suggested that there was no blueprint for the physical form of Augustan city walls; rather than searching for a school of urban planners or military engineers, we should look instead for common themes in how Augustan walled circuits engage with their political and geographic environment.

¹ FONTAINE 1990: 256.

² See, for example, DELPLACE 1993, SACCHI 2012: 57-62, PERNA 2012a: 386.

WHERE ARE THE CITIES WITH AUGUSTAN CITY WALLS?

Based on a combination of available archaeological, material and epigraphic evidence, literary sources and historical context, I assess that 18 cities in Roman Italy constructed city walls during the Augustan period.³ These cities are Alba Pompeia, Augusta Praetoria, Augusta Taurinorum, Brixia, Concordia Iulia, Emona, Fanum Fortunae, Florentia, Hispellum, Laus Pompeia, Mediolanum, Peltuinum, Saepinum, Tergeste, Ticinum, Tridentum, Urbs Salvia and Venafrum. Their location is shown on the map at Fig. 1 and key information about their circuit walls is in the Appendix. A further four towns (Augusta Bagiennorum, Carsulae, Libarna and Pollentia) did not build a complete circuit of walls around their urban area during the Augustan period but constructed monumental gateways or entrances into their town as a way of delineating their boundary; the location of these towns is also shown on the map at Fig. 1.

The map shows that, while city walls were built across northern and central Italy in the Augustan period, none is known to have been constructed in Italy south of Saepinum (in Samnium). This is perhaps not surprising, given the later spread of Roman influence and growth of urbanisation in the north of Italy, and the founding in northern or central Italy of triumviral or Augustan colonies at locations which were either greenfield sites or unwalled settlements. To the south, most cities were by the Augustan period already furnished with walls.⁴

Because of the difficulties involved in assigning precise chronologies, "Augustan" city walls are defined as covering the approximate period 35 BC to AD 20. Some of the city walls, for example Tergeste, Saepinum and Fanum Fortunae, can be dated with reasonable confidence through inscriptions recording their construction.⁵ Others, such as the city walls of Augusta Praetoria and Augusta Taurinorum, can be dated with reference to the known foundation date of the colony

³ There are a number of difficult unresolved issues in identifying cities with Augustan walls, particularly in terms of chronology. Ultimately, it is a matter of judgement rather than an exact science and new information may cause chronologies to be re-evaluated. The issues are discussed in full in PINDER 2015. However, my assessment of the number of cities with Augustan walls is broadly similar to other commentators, although the list may differ at the margins. For example, JOUFFROY 1986 identified 20 walls as belonging to the Augustan or Julio-Claudian periods while LOMAS 2000 counted 21 walls built between 30 BC and AD 100, all of which date to the early part of the period (Lomas did not identify the individual cities).

⁴ The prevalence of pre-Augustan walled settlements in central and southern Italy is well documented by Sewell in his database of some 600 urban ("higher-order") settlements in Italy south of the River Po (SEWELL, 2015). Sewell assessed that 451 of these sites had or are suspected to have had fortifications. However, it is not possible to cross-refer easily between Sewell's database and the group of Augustan city walls presented here, partly because his geographic coverage is different and partly because Sewell recorded a wide chronological range for the construction of walls at each site, from the earliest possible date to the latest possible date.

⁵ For Tergeste, *Corpus Inscriptionum Latinarum* (CIL) 05, 00525 (33 BC); for Saepinum, CIL 09, 02443 (2 BC – AD 4); for Fanum Fortunae, CIL 11, 06218 (AD 9-10). The use of inscriptions to date city walls is not necessarily straightforward. For example, the inscription placed above the principal gateway to Fanum Fortunae refers only to the construction of walls, although archaeological evidence demonstrates that the walls, towers and gateways were undertaken as an integrated whole. At Saepinum, the walls, gates and towers are conventionally dated to 2 BC – AD 4 by reference to identical inscriptions placed above the four gateways, but this has not been universally accepted, principally because the construction technique of *opus quasi-reticulatum* used in building the walls does not sit well with a mid-Augustan date.

which they enclosed. However, we should not assume that the foundation date of a colony and the construction of its city walls were necessarily contemporaneous. Some colonies with Augustan walls were probably founded in the Caesarian period: both Florentia and Tergeste, for example, are now held to be Caesarian rather than triumviral or Augustan foundations.⁶ At Emona, an inscription probably refers to an imperial donation of city walls and gates in AD 14-15 although the foundation of the colony is currently thought to have taken place around 31-27 BC.⁷

There is also growing evidence that the walled circuits of some Augustan cities may not have been finally completed until some considerable time after their commencement (the lack of urgency to complete the walls, even in places as distant from the heart of the empire as Emona and Augusta Taurinorum, indicates that defence was not a prime consideration in building city walls in this period).⁸ Moreover, different components of a walled circuit may have been started and/or completed at different times. There is evidence, for example, from Tridentum that the towers were built earlier than the walls and from Urbs Salvia where at least four of the towers postdate the walled circuit.⁹ At Florentia, the construction of the gateways may have preceded the construction of the city walls by several decades.¹⁰

Finally, in the absence of other more compelling evidence, some city walls can be dated only by comparing their construction style and technique to other similar walled circuits: the walls of Mediolanum are considered to be Augustan in date chiefly by reason of their construction in *opus testaceum* and their narrow width.¹¹ This method of dating is problematic, however; several different construction techniques are evidenced within the group of Augustan city walls, even within those of relatively close geographic proximity.¹² Nevertheless, taking all relevant information into account, a good case can be made for identifying the walled circuits around these 18 cities in Roman Italy as Augustan in date. This was the last cluster of new city walls constructed in Roman Italy until the third century AD.

MAGNA MUNIT MOENIA:¹³ THE PHYSICAL CHARACTERISTICS OF AUGUSTAN CITY WALLS

The circuit

Augustan walled circuits were not homogenous in appearance: their shape and physical form varied considerably. Their footprints ranged from the precisely rectangular form of Augusta Praetoria to the imperfect rhombus of Saepinum and the very elongated form of Hispellum (Fig. 2). There are some patterns within this *mélange*, however. Most, but not all, of Augustan city walls

⁶ For Florentia, see SCAMPOLI 2010: 9-14. Both Scampoli and CIANFERONI 2015: 55 date the city walls to the early Augustan period following recent excavations. For Tergeste, see BERNARDINI *et alii* 2015.

⁷ CIL 03, 10768. See ŠAŠEL KOS 2012, GASPARI 2010.

⁸ Archaeological evidence at Augusta Taurinorum, for example, shows that the city walls were not completed until the third quarter of the first century AD. See BRECCIAROLI TABORELLI/GABUCCI 2007: 246.

⁹ For Tridentum, see BASSI 2007: 58; for Urbs Salvia, PERNA 2006: 14-45.

¹⁰ PAGNI 2010: 125-128.

¹¹ See SACCHI 2012: 57-62, CONVENTI 2004: 108.

¹² See below and the Appendix for details.

¹³ Titus Maccius Plautus *Miles Gloriosus* 228.



Fig. 1: map showing location of Augustan city walls. Cities without complete circuits of walls are labelled in italics.

built round colonial foundations newly or recently settled on greenfield or non-urban sites had a regular footprint enclosing a regular street grid (Tergeste was an exception).¹⁴ Most, but not all, of the city walls built in the Augustan period around pre-existing urban settlements followed an irregular pattern (Venafrum, Alba Pompeia and Tridentum were exceptions).¹⁵ At two cities, Fanum Fortunae and Tridentum, the Augustan walls were not continuous, the Adriatic coast and the River Adige respectively forming part

of their urban boundary.¹⁶

The walled circuit and towers of Augusta Praetoria were perfectly aligned with the orthogonal street grid, as were those of Augusta Taurinorum and Emona. Saepinum and Hispellum, however, are not known to have had a planned grid in the urban centre, in Saepinum's case because the layout of the urban area was predicated on the irregular course of the pre-Roman roads which formed the *cardo maximus* and *decumanus maximus* through the town, and in Hispellum's case because the steepness of the site is likely to have made a regular pattern of *insulae* impossible.

The size of the enclosed area of Augustan walled cities also varied significantly, ranging from 72 hectares (ha) at Mediolanum to Saepinum's 12ha, with an average in the group of 18 walled cities of 32.5ha. The walled circuit of Mediolanum was significantly larger in area than all other Augustan circuits and its perimeter at 3.5 kilometres (km) nearly three times the length of the smallest circuit (Tridentum at 1.2km). The average perimeter of an Augustan walled circuit was 2.3km.

¹⁴ Colonies with a regular urban plan enclosed by a rectangular walled circuit of Augustan date include Augusta Praetoria (founded 25 BC), Augusta Taurinorum (founded 28-27 BC), Emona (probably founded 31-27 BC), Venafrum (probably a Caesarian or triumviral colony) and Concordia Iulia (probably a triumviral colony, 42-40 BC). The date of the foundation of the colony of Tergeste is disputed, and, according to Santangelo, "unsolvable" on current evidence (2016).

¹⁵ Saepinum, a *municipium*, Fanum Fortunae, probably originally a *conciliabulum*, Hispellum, originally a *municipium*, and Peltuinum, a *praefectura*, built city walls in the Augustan period which followed an irregular line around pre-existing urban settlements. None of these urban areas is known to have had walls previously. For Saepinum, see PINDER 2016; for Fanum Fortunae, see MIGNANI/POZZI 2012; for Hispellum, see FONTAINE 1990: 263-301; for Peltuinum, see MIGLIORATI 2011.

¹⁶ De Sanctis convincingly challenged the conventional view that the city walls of Fanum Fortunae continued along the sea front (2012).

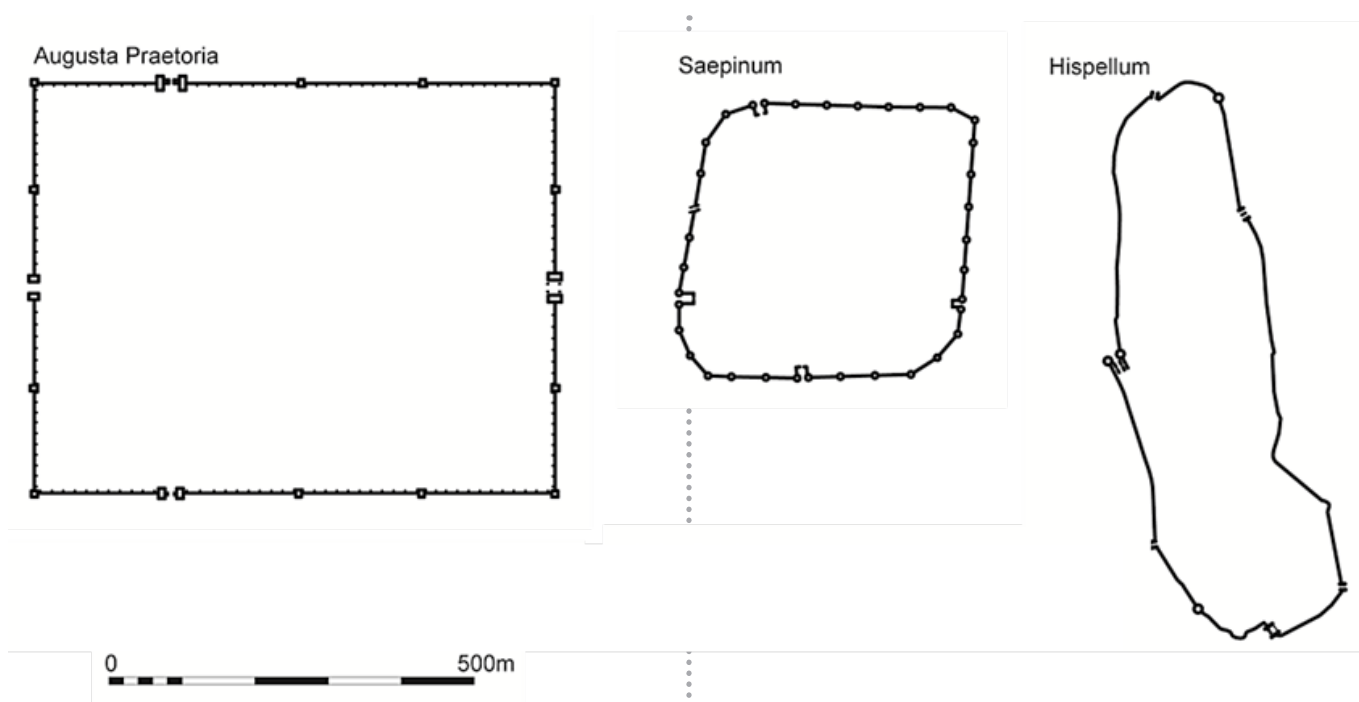


Fig. 2: footprints of selected Augustan circuits, to scale. © author.

The walls

The construction technique employed in building city walls was likely to be influenced by the availability of materials locally, but it is noticeable that a number of different techniques are evidenced among the group of Augustan walls. Five walls were built in *opus vittatum* (Alba Pompeia, Augusta Taurinorum, Brixia, Fanum Fortunae and Hispellum), three in *opus quadratum* (Augusta Praetoria, Emona and Tergeste) and three in *opus testaceum* (Concordia Iulia, Florentia and Urbs Salvia). As is clear from the map at Fig. 1, there is no correlation between geographic proximity and construction technique. The techniques of *opus incertum* and *opus mixtum* are also found, as well as the problematic *opus quasi-reticulatum* at Saepinum. The internal and external facings of Fanum Fortunae, Hispellum, Saepinum and Urbs Salvia were constructed with the same technique and with similar care.¹⁷ This is relatively unusual,¹⁸ and hints that the design of Augustan city walls was aimed as much internally to a city’s inhabitants as externally to visitors or travellers.

Augustan city walls were typically narrow in width, reinforcing the point that defence was not a key consideration in their construction. It is not possible to verify the width of all Augustan city walls (the available data are presented in the Appendix), but where known, the width of Augustan walls ranges from 1.25m (at Tridentum) to 2.5m (at Emona and Tergeste), with an average of 1.85m. A wall less than 2.5m wide was unlikely to be fit for purpose in defensive

terms;¹⁹ it is notable that the average width of city walls in Roman Italy as set out in comparative catalogues such as those compiled by Conventi and Bonetto declines steadily from the mid-republican into the Augustan period and then increases again.²⁰ Latimer noted that the late antique walls of northern Italy averaged 3m-4m in width, compared to the 1m-2m of their Augustan predecessors.²¹

Information about the original height of Augustan city walls is both scarcer and less reliable than data on their width (see the Appendix). In some cases the presumed height of the walls has been deduced from comparisons with other city walls and/or extrapolated from the known width of the wall.²² However, there is reasonable confidence that the highest walls of the Augustan period (Hispellum at 13m, or possibly Fanum Fortunae at 14m)²³ were about three times the height of the lowest walls (Tridentum at 4.5m). Moreover, a comparison of sections through a small number of Augustan walls reveals their very different proportions (Fig. 3) and provides an insight into their purpose. It might be thought that the colony of Augusta Praetoria needed strong defensive walls, being founded in recently pacified Alpine territory in the far northwest of Roman Italy. Yet the city walls of Augusta Praetoria were one of the least robust of Augustan walls, only 1.9m wide at the base, tapering to 1.5m

¹⁷ For Fanum Fortunae, LUNI/GALLO/VALLETTA 2000: 79-81; for Hispellum, FONTAINE 1990: 263-301; for Saepinum, PINDER 2016; for Urbs Salvia, PINDER 2017.

¹⁸ BONETTO 1998: 58. The inner facing of the town walls of Tridentum, for example, was built in stone and pebbles, while the outer façade was more carefully constructed with small slabs of horizontally placed stone (CIURLETTI 2003: 37).

¹⁹ Goodman argued that walls less than 2.5m in width were as likely to be ornamental as military (2007: 86). A width of less than 2.5m would not provide sufficient room for sentries to patrol the walls (Vitruvius *De Architectura* I,5,3).

²⁰ CONVENTI 2004, BONETTO 1998.

²¹ LATIMER 2010: 35-36. I judge Augustan walls to be somewhat wider on average, but certainly less wide than mid-republican or late antique walls.

²² Sacchi, for example, calculated the height of the walls of Mediolanum on this basis (2012: 57-62).

²³ I assess that the Augustan walls of Fanum Fortunae were 12m high, somewhat lower than the 14m estimated by a number of commentators (PINDER 2015: 249-251). In places the walls of Fanum Fortunae still stand to 9m high.

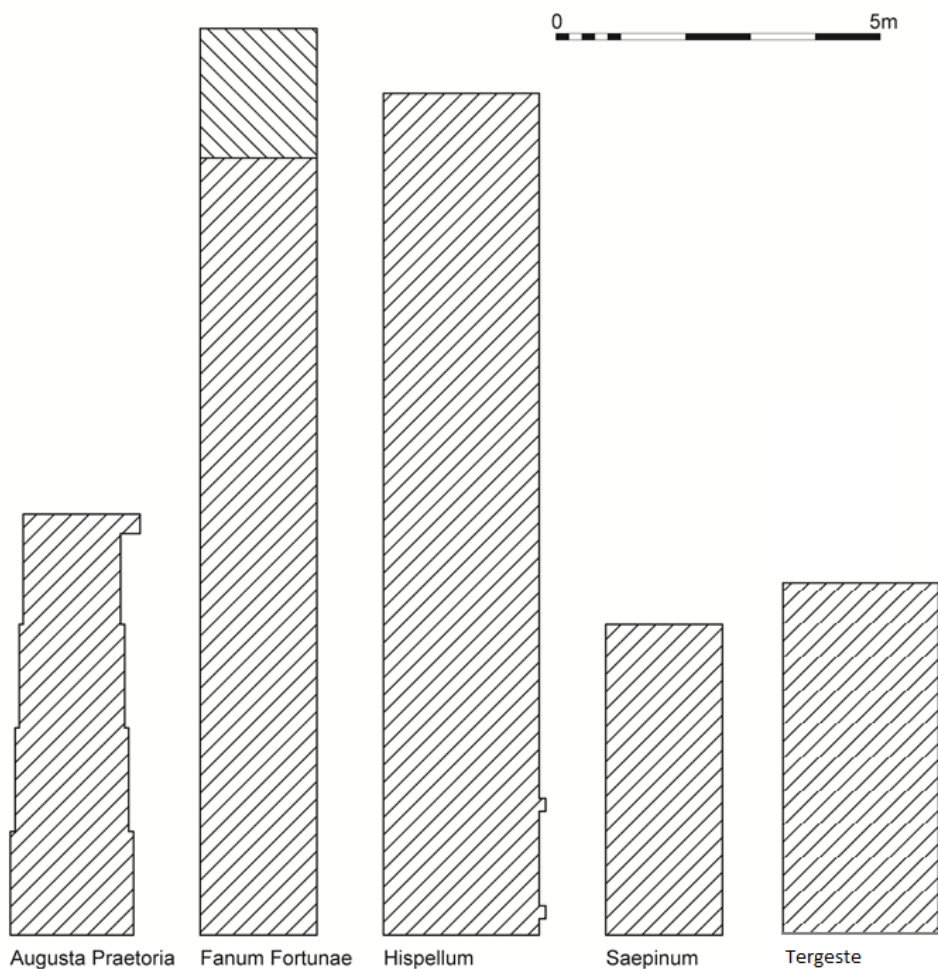


Fig. 3: sections of selected Augustan walls, to scale. © author.

wide at the top, and only 6.5m high. This was half the height of the walls of Hispellum, which at 2.4m wide and (probably) 13m high were much more solidly built than those of Augusta Praetoria. Hispellum's walls surrounded a colony which did not need protection from external threat but which did want to assert its dominance over rival cities and colonies in the Valle Umbra. Given their relatively narrow width, the walls of Fanum Fortunae seem unfeasibly high (12m, possibly 14m) to the point of instability

Although the data are limited, there does seem to be a discernible difference between the scale of the Augustan walls of colonies compared to the Augustan walls of *municipia*. The walls of the *municipium* of Tridentum at 4.5m high and 1.25m wide, for example, seem almost miniature in scale compared to those of the colony of Hispellum. Based on the available evidence, the town walls of *municipia* are slighter in terms of both width and height: the average width of the Augustan walls of *municipia* was 1.5m and that of colonies 2m; the average height of the Augustan walls of *municipia* was 6.5m compared to 8.7m for colonies.

The towers

There is considerable variation among Augustan walled circuits in the use of towers. As well as indicating that there was no blueprint for an Augustan design, this

diversity undermines the case of those who argue that Augustan city walls followed Vitruvian norms for maximum defensive capability.²⁴

The towers of Augusta Praetoria, for example, are regularly spaced but the distances between them are quite considerable (170m-180m on the long sides of the circuit, much further apart than was mandated by Vitruvius).²⁵ The towers themselves had large arched windows on all four sides, designed more for visual impact than security.²⁶ Conversely, only two towers have been identified in Hispellum's walled circuit. Both these towers had postern gates on the outer wall to provide easy access to outside the city. Saepinum had the most elaborate system of towers – 36 in a circuit only 1.27km long – but the defensive integrity of the circuit was broken when one of the towers was dismantled shortly after construction and the

wall breached to provide direct access through the walls to the theatre.²⁷ The 1.8km walled circuit of Florentia had circular towers every 50m but, as at Saepinum, the walls were compromised almost immediately after their construction when the theatre was built up against the elevation of the wall.²⁸ The towers of Augusta Praetoria, Fanum Fortunae and Augusta Taurinorum are all different from each other but internally consistent: excluding the towers flanking the gateways and the square corner towers, the towers of Augusta Praetoria are all rectangular and the same size, the 24 towers of Fanum Fortunae are all circular and the same size (except for two rather larger towers framing the secondary gateway into the city), and the 36 towers of Augusta Taurinorum are all square and regularly spaced at 70m intervals.²⁹

²⁴ See, for example, TAUS 2012, PERNA 2006, FERRARATO 1982 for Fanum Fortunae, Urbs Salvia and Saepinum respectively.

²⁵ Vitruvius prescribed that towers should be no more than a bowshot apart (Vitruvius *De Architectura* I,5,4). The range of a Roman archer is disputed (URECHE 2013: 189) but the maximum distance between towers advised by Philo of Byzantium, on whose work Vitruvius draws, was 46m (ROWLAND/HOWE 2001: 156).

²⁶ BONETTO 1998: 63-65.

²⁷ PINDER 2016.

²⁸ SCAMPOLI 2010: 26-29.

²⁹ For Augusta Praetoria, FAZARI 2005: 11-12; for Fanum Fortunae, LUNI *et alii* 2000: 83-89; for Augusta Taurinorum, ROSSIGNANI/BARATTO/BONZANO 2009: 152. Vitruvius *De Architectura* I,5,5 allowed round or

At most of the circuits, the towers clearly form part of the original concept for the city walls, being carefully tied in even to the extent of aligning the brickwork. The towers of Urbs Salvia are a major exception. Here, archaeological evidence demonstrates that at least four of the towers postdate the walled circuit, and shows that some of the towers sat astride the wall while others abutted it. In addition, the 14 identified towers are far from uniform – rectangular, pentagonal, hexagonal and octagonal towers have all been found and many are irregular in plan – and they are not situated at regular intervals along the circuit.³⁰

Of the four towns which built monumental gateways in the Augustan period but not a complete circuit of walls, Augusta Bagiennorum chose in addition to mark the trapezoidal plot of the town by constructing square towers on the four corners of the urban area. As these towers were not integrated into a walled circuit, their purpose cannot have been defensive, and their role as visual guides to the urban area was negated as the built-up area of the town soon extended beyond their footprint.³¹

The gateways

Superficially, the principal gateways in many of the Augustan walled circuits appear to follow the same pattern. For example, Porta Venere and Porta Consolare at Hispellum, Porta Praetoria and Porta Decumana at Augusta Praetoria and Porta di Augusto at Fanum Fortunae were all triple-arched gateways, with inner and outer archways comprising a central arch between two smaller arches and framing an internal courtyard (*cavaedium*). Porta Palatina, the north gate into Augusta Taurinorum, had four arches rather than three, and was flanked by 16-sided towers which reached 30m high.³² The four gates at Saepinum were single-arched, but like the others they had a *cavaedium* between the outer and inner archways. All these gates except for Porta Palatina were built in *opus quadratum*, contrasting with the polygonal towers, but warned against square towers.

³⁰ PINDER 2017.

³¹ PREACCO 2014.

³² ROSSIGNANI *et alii* 2009:153. A four-arched gateway has also been identified in the walled circuit of Concordia Iulia (CROCE DA VILLA 1998: 498).

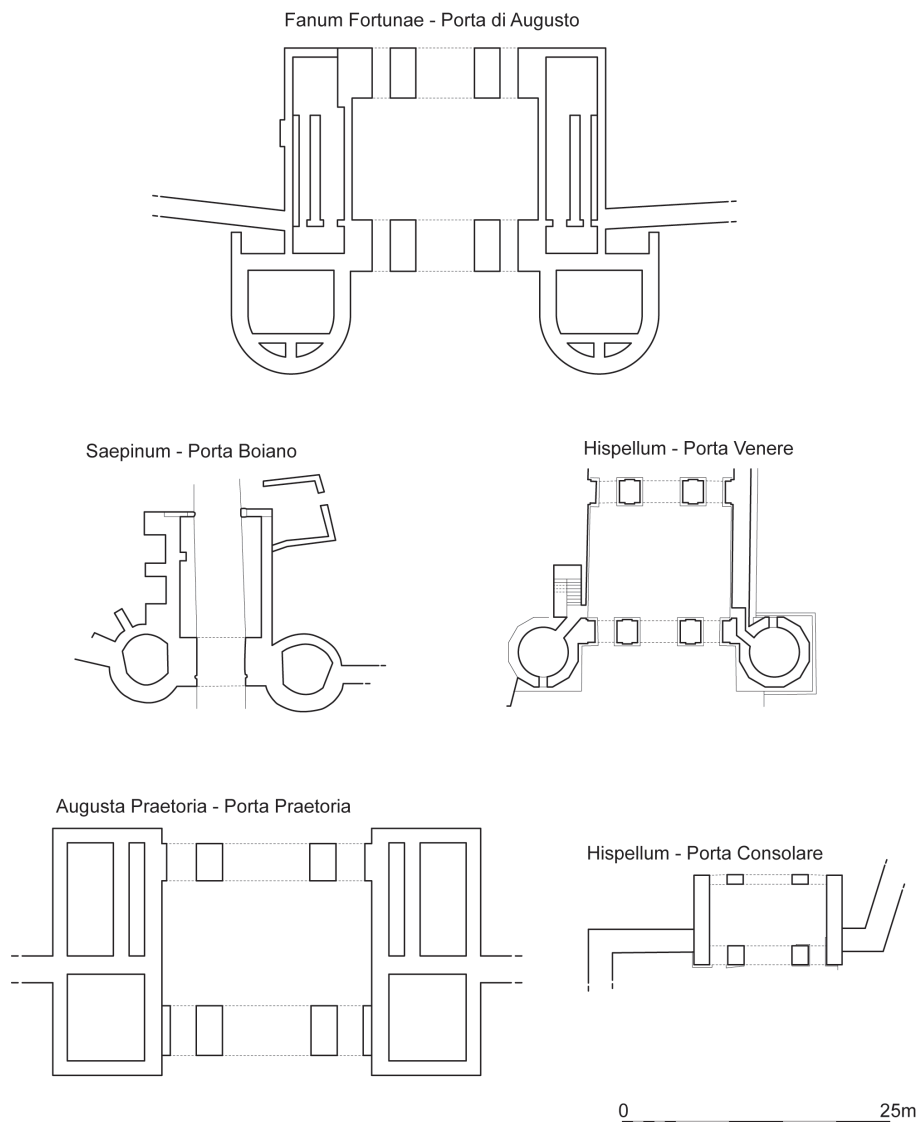


Fig. 4: comparison of gateways of selected cities, to scale. © author.

construction technique used for the walled circuit itself.³³ We know that Porta Venere, Porta Consolare, Porta Praetoria, Porta di Augusto and Porta Palatina all had a galleried arcade or arcades above the outer archway.

But it would be a mistake to view these triple-arched gateways as coming from the same template (Fig. 4). The size of the gateways varies greatly, from the vast 21m span of Augusta Praetoria’s Porta Praetoria to the diminutive 4.5m width of Porta Boiano at Saepinum. The flanking towers are round at Saepinum, 12-sided on plinths – one of which was a massive 10m high – at Hispellum’s Porta Venere, rectangular at Augusta Praetoria and U-shaped at Porta di Augusto in Fanum Fortunae. Most of the gateways were closed with *catractae* but the inner gates at Saepinum were closed by double doors and there is no evidence for means of closing Hispellum’s Porta Consolare at all.³⁴

³³ The walled circuit at Augusta Praetoria was built in *opus quadratum* like Porta Praetoria, but because the blocks used in the gateway are much larger there is a clear contrast between the gate and the walls.

³⁴ For Porta Venere in Hispellum, see MARRONI 2005; for Porta Consolare in Hispellum, see FONTAINE 1990: 263-269; for the gateways of Saepinum,

Oddly, perhaps, in view of its almost miniature status when compared with the walled circuit and gateways of, say, Augusta Praetoria, the embellishment and sculptural detail on the four gateways of Saepinum are more significant than those of the other gateways. The archways of Fanum Fortunae, Augusta Praetoria, Augusta Taurinorum and Hispellum are architecturally magnificent and visually impressive, but they are not ornate. Saepinum, on the other hand, not only has its dedicatory inscription prominently displayed above each archway but it also has an identical ideologically driven sculptural composition carefully framing each archway and the bust of a different deity on each keystone.³⁵ The busy town gateways are being used to make a very clear statement of propaganda and imperial power. This elaborate ornamentation is all the more striking because of the relative paucity of marble and decorative effects elsewhere in the town, which was much less showy in its use of fine materials than, say, Urbs Salvia or Carsulae.³⁶

Double-arched gateways, often with *cavaedia*, are also commonly found in Augustan walled circuits. These are known at Hispellum (Arco di Augusto), Alba Pompeia, Concordia Iulia, Peltuinum, Tridentum and (probably) Mediolanum.³⁷ Porta Veronensis, for example, in the southern side of Tridentum's walled circuit, was a monumental double-arched gateway with a *cavaedium* measuring some 8m by 4m, roughly similar to the size of the *cavaedia* at Saepinum but much smaller than those of Augusta Praetoria or Augusta Taurinorum. It was constructed from white limestone and was flanked by polygonal 16-sided brick towers on a large base in contrasting red Trento stone.³⁸ Free-standing double-arched gateways with *cavaedia* and flanking towers of the Augustan period are also found at Augusta Bagiennorum and Libarna, but they were not integrated into a walled circuit.³⁹

In a discussion of Augustan gateways, those of Urbs Salvia are again the outliers. There are two gateways at Urbs Salvia whose plans are reasonably well understood and both are very different from other Augustan gateways in Roman Italy. Urbs Salvia's north gate was of an unusual concave design, unique among gateways in Augustan walled circuits in Roman Italy. Similar gates in southern Gaul are known from the Augustan period,⁴⁰ but the only known gateway of

see PINDER 2016; for Porta Praetoria in Augusta Praetoria, see PERINETTI 2005; for Porta di Augusto in Fanum Fortunae, see PURCARO 2012.

³⁵ CIL 09, 02443. The sculpted images at Saepinum are of bearded prisoners who are half-naked with their hands tied behind them. Although the depiction of barbarian captives is a relatively common theme in Roman art (FERRIS 2000), it is generally accepted that these statues relate to the military campaigns of Tiberius and Drusus in Germany and their victory of 11 BC. The ensemble of inscription and sculpture is discussed in PINDER 2016.

³⁶ For Saepinum, BARKER 1995: 218. For the widespread use of decorative and rare stone and marble at Urbs Salvia, ANTONELLI/LAZZARINI 2013, at Carsulae, SISANI 2006: 184-189.

³⁷ For Hispellum, FONTAINE 1990: 275-277; for Alba Pompeia, FILIPPI 1997: 55-56; for Concordia Iulia, TREVISANATO 1999: 86-95; for Peltuinum, MIGLIORATI 2011; for Tridentum, BAGGIO BERNARDONI 2000: 347-361; for Mediolanum, CHRZANOVSKI 2006: 186.

³⁸ BONETTO 1998. In this form, the gateway may be Claudian in date and thus a little later than the town walls (BAGGIO BERNARDONI 2000: 356).

³⁹ For Augusta Bagiennorum, PREACCO 2006; for Libarna, GAMBARI 2014.

⁴⁰ Sometimes known as "Fréjus-type" gates (JOHNSON 1983: 15), these gateways have been identified in southern Gaul at Forum Iulii, Arelate and Aquae Sextiae in the Augustan period (REBECCHI 1987: 134). The gateway

a similar design in central Italy, at Septempeda only 25km from Urbs Salvia, is not securely dated and may belong to the earlier part of the first century BC.⁴¹ The east gate at Urbs Salvia, Porta Gemina, was double-arched but dissimilar in design to other Augustan double archways. The gateway had no inner courtyard or flanking towers and was characterised by an abnormally long spine (11.5m deep). Also, unusually, the double arches were not quite parallel, so that the overall width of the gateway was 20m on the exterior side and 23m on the interior side. Porta Gemina's unusual form has led some commentators to question whether it is Augustan in date; pending further archaeological investigation, however, the balance of evidence suggests that the walls and gateways of Urbs Salvia should probably be dated to the Augustan period.⁴²

PULCHERRIMA MOENIA:⁴³ THE IDEOLOGICAL AND SYMBOLIC SIGNIFICANCE OF AUGUSTAN CITY WALLS

The physical nature of Augustan city walls, therefore, was the product of careful but not uniform design. City walls of this period varied considerably in size and form and superficial similarities, such as in the plan of gateways, are not strong enough to support a theory that there was a blueprint for city walls or that one school of architects was responsible for their construction. However, a closer examination of the physical and cultural environment in which Augustan city walls were placed reveals some notable common threads which knit together the city walls of this period as a coherent group. There were important ways in which the physical appearance and positioning of city walls could be deliberately engineered to reinforce their symbolic and ideological meaning,⁴⁴ and this found its highest expression in the Augustan period.

Visual prominence

Augustan city walls were designed to make a statement. Built to impress more than to protect, these city walls were a potent assertion of urban identity, projecting a deliberate statement of power and status. They formed a massive and imposing visual point of reference both for approaching visitors and travellers passing by and for inhabitants of the urban area which they enclosed.⁴⁵ Especially in the Augustan period, the positioning of city walls and their gateways was carefully determined, based on much more than function and practicality.

Several Augustan city walls demonstrate a deliberate

was set back from the line of the walled circuit but, unlike the gates in southern Gaul, the flanking walls at Urbs Salvia connecting the gateway to the walled circuit were straight rather than curved.

⁴¹ PERNA 2012b: 80-84.

⁴² Perna considered that Porta Gemina resembled fortified cities and military camps of the second and third centuries AD on the northern frontiers of the empire (2006: 34-37). See DELPLACE 1993: 265 and PINDER 2017 for the view that the gateway (and the walls) are Augustan in date.

⁴³ *Moenia dum colimus dominae pulcherrima Romae*: Martial *Epigrammata* 10,103.

⁴⁴ GROS 1992: 220-221, ZANKER 1988: 328-329.

⁴⁵ This was a phenomenon apparent to ancient sources, as is indicated for example in Aristides' comment on Rhodes in the mid second century AD that "the circuit of the walls and the height and beauty of the interspersed towers ... were like beacons" (Aelius Aristides *Orationes* 25,7).



Fig. 5: colour banding on the central archway of Porta Consolare, Hispellum. © author

desire to be noticed, including through the use of positioning, materials and colour. Perched on the hillside above the Valle Umbra, Hispellum's massive walls and magnificent gateways dominate not only an Italic sanctuary on the plain immediately below but also the view from many kilometres away. They hold in their line of sight several important Roman cities, including Perugia and Asisium. The position and appearance of Hispellum's Porta Venere underlines this emphasis on visual prominence. Topographically, Porta Venere is located in a very steep and difficult place where construction required considerable engineering effort (the plinth on which one of the flanking towers rests is 10m deep). It is set at an angle to the line of the city walls and to the contours of the hill, dominating the view towards Hispellum's rival Asisium. The city walls themselves are carefully built in *opus vittatum* from small blocks of local limestone with its distinctive pinkish tinge, forming a real contrast with the intense white of Porta Venere's travertine *opus quadratum* blocks. Like Porta Venere, Hispellum's other main gateway, Porta Consolare, also shows signs of the careful juxtaposition of contrasting colours to produce a decorative effect (Fig. 5). The gateway was constructed of large white differently sized limestone blocks interspersed with some pinkish coloured limestone blocks, producing what appears



Fig. 6: colour contrast on Porta di Augusto, Fanum Fortunae. © author

to be a deliberate contrasting decorative scheme.⁴⁶ Some sections of the external façade of Hispellum's wall, on the east where passers-by were few, are noticeably less carefully built than the sections facing the valley and visible to travellers on the nearby Via Flaminia.⁴⁷

A similar effect is achieved in the Augustan city walls of Fanum Fortunae, where the bright white limestone of Porta di Augusto's outer façade stands in deliberate contrast to, but perfect alignment with, the yellow sandstone of the inner gateway and the walls (Fig. 6).⁴⁸ There is some evidence that the Augustan gateways of Saepinum, Augusta Praetoria's Porta Praetoria and Augusta Taurinorum's Porta Palatina were painted or coated in whitewashed plaster, which would transform our understanding of how they were meant to be perceived.⁴⁹ This was an effect known to our ancient sources:

⁴⁶ MANCONI/CAMERIERI/CRUCIANI 1996: 379, however, argued that this was because the gateway reused stones from an existing building but in my view the patterns created by the stonework are too purposefully designed for this.

⁴⁷ FONTAINE 1990: 273.

⁴⁸ It is now thought that the striking two-tone coloured effect on the outer façade of Porta Praetoria at Augusta Praetoria was implemented a few decades after its construction in the Augustan period. See PERINETTI 2005.

⁴⁹ For Saepinum, BRACONI 1979: 56, FERRARATO 1982: 65; for Porta Praetoria, PERINETTI 2005; for Porta Palatina, THOMAS 2007: 110. It should be acknowledged that rendering and whitewashing had the practical

Aelius Aristides, for example, wrote metaphorically of the military cordon round the Roman empire, “these walls have not been built of bitumen or baked brick, nor do they stand gleaming with stucco” and went on to comment that such walls do exist in great number, “gleaming more brilliantly than bronze”.⁵⁰

A number of other cities with Augustan walls exhibit similar characteristics and a conscious intent to emphasise status and symbolism by visual means. At Urbs Salvia, for example, there is a hint that the city walls were deliberately landscaped to provide an impressive introduction to the city. At the northeast corner of Urbs Salvia, where the city wall turns to run parallel to the River Fiastra in the valley bottom, there is a significant difference of some 10m in ground level between the exterior and interior of the wall. This is at the lowest point of the city, which is built on a sloping site. Possibly, the change in level may have been purposively engineered to enhance the visual impression of the city walls.⁵¹ Also built in the Augustan period, it is clear that the Arco di San Damiano at Carsulae was carefully located to create maximum impact for travellers arriving on the Via Flaminia. The archway is placed at the northernmost point of the urban area just before the Via Flaminia drops steeply. Travellers arriving from the north would look up to see the archway, whose purpose appears to have been symbolic rather than functional, dominating the horizon.⁵²

The builders of Augustan city walls were on occasion prepared to source material from some distance away, even when adequate but unremarkable material was available locally. A limited amount of material in the outer facing of the Augustan walls of Mediolanum was sourced from some 70km away and may have been incorporated into the walls for decorative purposes.⁵³ The outer facing of the city walls of Augusta Praetoria was constructed from high quality, neatly cut travertine blocks which were not local; as Goodman commented, this would not have improved the defensive efficacy of the walls but would have increased the conspicuousness of the walls in the landscape.⁵⁴ By contrast, the inner facing of the wall was notably less impressive, being clad in *opus incertum* using stones from the rivers nearby.

The use of different colours and contrasting material in city walls to create a deliberate visual impact was not solely an Augustan phenomenon, of course. One of the most impressive surviving examples of the use of

purpose of protecting masonry from the elements, as well as more aesthetic or decorative meaning (BIDWELL 1996: 19).

⁵⁰ Aelius Aristides *Orationes* 26,83.

⁵¹ The height differential is clearly visible on site. Perna suggested that this might have been to improve the defensive features of the city wall (2006: 27) but in my view it is very difficult to interpret the walls of Urbs Salvia as a predominantly defensive asset (PINDER 2017). Fabrini, who led excavations at Urbs Salvia over several decades, thought that terracing, or perhaps the accumulation of soil over time, might be the explanation (*pers. comm.*), but the ground drops away from the outside of the wall rather than being built up from the inside.

⁵² It is generally held that Roman Carsulae was not surrounded by a walled circuit (see, for example, CIOTTI 1976, PINDER 2015: 343-348, although CIUCHINI 2004 disagreed); Arco di San Damiano was a free-standing liminal structure providing a monumental and symbolic entrance into the town. There is no evidence that the archway could be closed, nor that it had an associated *cavaedium* or was attached to perimeter walls.

⁵³ SACCHI 2012: 57-62.

⁵⁴ GOODMAN 2007: 60.

polychrome patterned masonry is at Colonia Claudia Ara Agrippinensium, whose city walls were built around the middle of the first century AD. One of the watch towers employs different coloured bricks and natural stones not just from the local area but from further afield. The stones were carefully laid in mosaic patterning to form roundels, lunettes and triangles. There was no functional advantage in this choice of materials, so the use of colours appears to be designed for effect and to be as elaborate and visually striking as possible.⁵⁵

Foundation rites, ritual deposits and symbols

Throughout the republic and into the imperial period, a symbolically important part of the process for establishing a new colony was the foundation ritual, which bound the city closely to Rome and imparted a “metaphysical identity” alongside the physical reality.⁵⁶ These rites, during which the boundary of the new settlement was fixed and thereby (usually) the trajectory of the city walls, normally included the *sulcus primigenius* (ploughing the perimeter of the new colony) and burying the “first fruits” in a ceremonial pit, the *mundus*.⁵⁷ Their ephemeral nature makes tracing such rites difficult in the archaeological record, although there is plenty of literary and numismatic evidence.⁵⁸

At least two of the cities which constructed walls in the Augustan period have revealed evidence for foundation rites and ritual deposits. The most significant is at Augusta Praetoria, where archaeological investigations uncovered a sculpted block on the external face of one of the corner towers in the walled circuit.⁵⁹ The carvings on the corner block, which would originally have been in full view, are thought to represent erect phalluses, a spade, a plough and a badly eroded figure which may be a bull or a Capricorn. If the identification of a plough is correct, it should probably be associated with the colony’s foundation and the rite of the *sulcus primigenius*. The bull or Capricorn is likely to be a reference to Augustus.⁶⁰ Phallus symbols are more commonly found, and probably had a more general apotropaic function: there is a phallus carved on Porta Tammara at Saepinum and possibly another near Hispellum’s Porta San Ventura, both of Augustan date.⁶¹ Further evidence for ritual deposits

⁵⁵ BIDWELL 1996: 24.

⁵⁶ REVELL 2009: 48. Religious practice associated with new cities is described in detail by RYKWERT 1988: 44-71. The relationship between the *pomerium*, the *sulcus primigenius* and city walls is discussed by, among others, ANDREUSSI 1999, DE SANCTIS 2007 and STEVENS 2017.

⁵⁷ During the ritual of the *sulcus primigenius*, the founder of the colony ploughed a sacred furrow (*sulcus primigenius*) around the perimeter of the future urban centre, thus forming the *pomerium* (Varro *De Lingua Latina* 5.143). The furrow was held to determine the future line of the city walls. The boundary thus formed was considered to be sacrosanct and inviolable (Gaius *Digest* I.8.1) and it was deemed an act of sacrilege to cross or violate it. Since a city’s boundary was often (though not always) demarcated by a wall, the symbolic significance of the foundation was invested in the walls’ physical manifestation.

⁵⁸ See, for example, a silver *denarius* of 29-27 BC depicting a veiled Octavian driving a yoke of oxen in the *sulcus primigenius* ritual (Roman Imperial Coinage P 272).

⁵⁹ BERTARIONE/JORIS 2012. Bertarione and Joris were confident that the carved block highlighted the sacred value attached to city walls and their role mediating between the human and the divine, describing the block as marking the “act of birth” of the city.

⁶⁰ BERTARIONE/MAGLI 2015.

⁶¹ For Saepinum, DE BENEDITTIS/GAGGIOTTI/MATTEINI CHIARI

comes from Saepinum, where excavators found a pottery vessel containing eight small unguent jars carefully buried in alignment with the foundation of the wall.⁶² As Saepinum was not a colony, this is likely to be ritual deposit in connection with the construction of the walls rather than linked to a foundation rite.

Sanctuaries and processions

Many of the cities which built walls in the Augustan period have a connection with a pre-existing extramural sanctuary, to which they might be linked by means of a processional or sacred way through the city walls. City walls were inextricably linked to religious meaning in the Roman world,⁶³ and thus played an important part in Augustus' drive to restore, or to be seen to restore, the republican past by resurrecting traditional republican ceremonies and rites.

At the newly-founded colonies of Fanum Fortunae and Hispellum, for example, there is evidence that the colony appropriated or absorbed a pre-Roman sanctuary site or cult and specifically incorporated the means to do so in the layout of the Augustan city walls and gateways. The urban layout of Fanum Fortunae followed an orthogonal grid plan except for one road, which cut diagonally across it (Fig. 7). This "anomalous" road exited the urban centre through a secondary gateway in the Augustan city walls. The gateway and "anomalous" road should be understood both in relation to the theatre, amphitheatre and temple complex within the urban centre to which it led, and also in relation to the extramural religious life of the city. The unexpected orientation and narrow width of the "anomalous" road suggests that it may be a road which pre-dated the Augustan development of the city,⁶⁴ but was important enough not only to be preserved within the street grid but also to merit its own gateway into the colony. Outside the city, the "anomalous" road leads in the direction of Roncosambaccio some 5km away, where there is evidence for what may be a pre-Roman sanctuary, possibly the location of the eponymous sanctuary of Fortuna.⁶⁵ In my view, the Augustan city walls and gateway of Fanum Fortunae may have been deliberately

1993: 35. For Hispellum, EVANS 2012, but the carving is not mentioned by other commentators and I was unable to verify it on site.

⁶² CEGLIA/CURCI 2013.

⁶³ PINDER forthcoming.

⁶⁴ LUNI *et alii* 2000: 47, 93.

⁶⁵ DE SANCTIS 1992 noted the discovery at Roncosambaccio of architectural fragments including doric capitols and columns, along with basalt paving stones similar to those used at Fanum Fortunae. The case for Roncosambaccio being the site of the pre-Roman sanctuary of Fortuna is argued in PINDER 2015: 243-245.

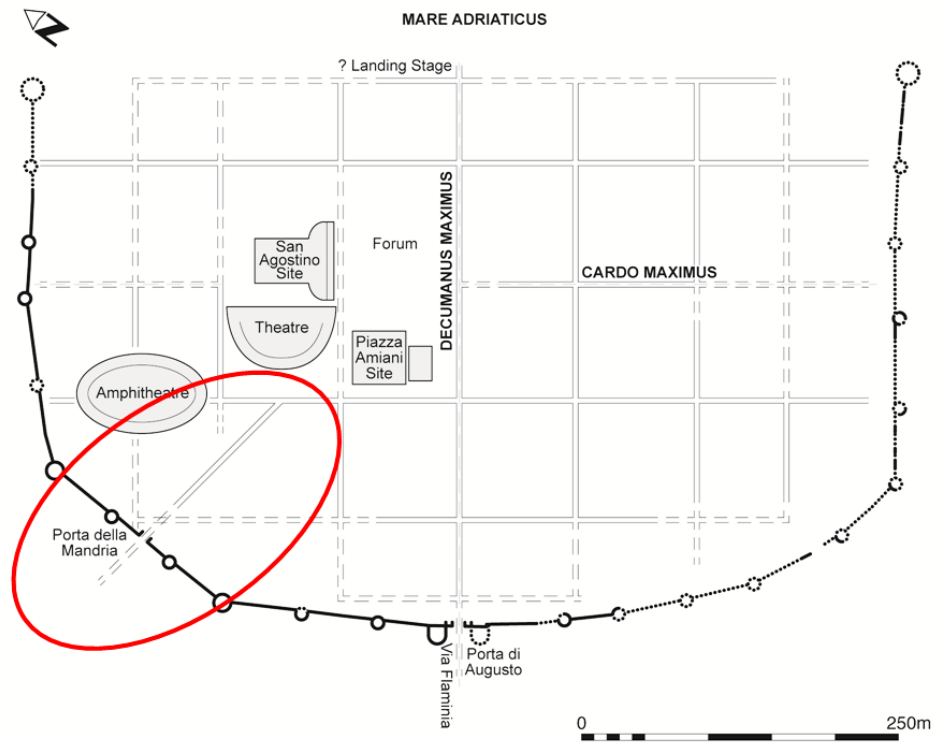


Fig. 7: the anomalous road and its relationship to the city walls at Fanum Fortunae. © author

designed to facilitate the passage of this road as a sacred way maintaining the memory of an earlier route to a pre-Roman sanctuary outside the city, even after the sanctuary had been appropriated or eclipsed by the Roman colony and relocated within the city.

At Hispellum, it appears that the Augustan walled circuit and in particular Porta Venere were deliberately positioned to dominate an important Umbrian cult centre, with a processional way linking the colony and sanctuary. As has already been noted, Porta Venere was built on an exceptionally difficult but precisely chosen and prominent site. Its practical uses as a gateway were limited, as it was not on a through route – the roads to neighbouring towns left from different gateways in the walled circuit. Rather, it should be interpreted as part of an integrated scheme with the Augustan appropriation and monumentalisation of the Italic sanctuary below.⁶⁶ The road which leads through Porta Venere from the centre of the colony is carefully aligned with the sanctuary and would have formed a sacred way for processions from the centre of the city (Fig. 8).⁶⁷ By linking the Roman colony to the existing pre-Roman sanctuary site with a new processional route through the city walls and its gateway, an unambiguous statement was being made about the role of the sanctuary, bringing it clearly within the orbit of the Roman colony.

A more even-handed relationship between Roman settlement and pre-Roman sanctuary, and the role of

⁶⁶ Archaeological evidence shows that the sanctuary had been in use since at least the fifth century BC, while architectural and votive finds indicate that initial monumentalisation of the site took place in the second or first centuries BC (SISANI 2006: 112-113).

⁶⁷ The existence of a processional way is supported by excavation notes from 1915, which recorded a street paved in "magnificent slabs" of white limestone on the slope which led up to Porta Venere (MARRONI 2005: 42).

Augustan city walls in connecting them, can be observed at Saepinum. About 6km distant from Saepinum, the Samnite sanctuary of San Pietro di Cantoni dominated the wide valley in which the Roman town lay and an important pre-Roman track connected the two. The Augustan redevelopment of urban Saepinum incorporated this track into the Roman town: it entered Saepinum through one of the monumental gateways and then formed the *cardo maximus*, but retained its original undulating course. The sanctuary site remained in use into the early and mid empire with some continuing form of cult life, although activity there was reduced.⁶⁸ Evidence has been found of processional routes and multiple entrances along the curtain wall which enclosed the sacred area of the sanctuary;⁶⁹ further work will reveal what, if any, relationship these routes had with Augustan Saepinum.

Imperial involvement and patronage relating to Augustan city walls

During the republic, the construction of city walls had been a local initiative, driven by civic magistrates;⁷⁰ under Augustus, the emperor took a personal interest, using city walls to push his new agenda and investing the material existence of city walls with ideological meaning. This is apparent not only through the physical city walls which he endowed but also through the symbolic representation of city walls in contemporary literature, art and coinage which he sponsored. City walls and their gateways thus formed an important part of Augustus' ideologically driven narrative of urbanism, underpinning a shared new culture.

Of the 18 city walls, towers and gateways constructed during the period 35 BC to 20 AD, six, possibly seven are known from epigraphic evidence to have been the benefaction of the imperial family. These are the colonies of Emona, Fanum Fortunae and Tergeste and the *municipia* of Saepinum, Laus Pompeia and Tridentum;⁷¹ at Hispellum, a fragmentary inscription currently located above one of Hispellum's secondary gates, the Arco di Augusto, refers to Augustus and is likely to relate to an act of imperial benefaction, but whether or not it can be associated with the gateway is disputed.⁷² There may have been more instances of imperial benefactions: the Augustan walls of

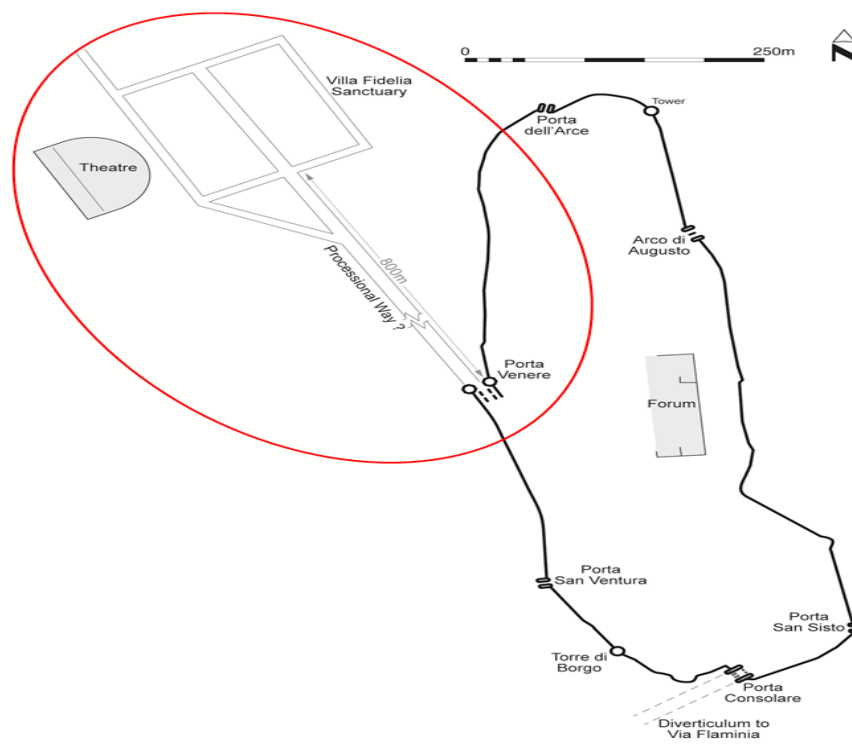


Fig. 8: the relationship between Porta Venere, city walls and Italic sanctuary at Hispellum.
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Alba Pompeia, for example, followed an unusual octagonal footprint and it is hard not to see something special in such a self-consciously distinctive design. At Urbs Salvia, drawings from the nineteenth century of one of the Augustan gateways records an inscription placed between the arches, of which only the final "S" was then extant and is now lost;⁷³ if recorded accurately, this is likely to have been a building inscription.

Augustus' interest in colonies is readily understandable, and he was proud of his record in founding them.⁷⁴ In practical terms, the provision of land and civic amenities was a key means of rewarding his veterans, but more importantly, colonies were a showcase for imperial values in Italy and beyond – *effigies parvae simulacraque [Romae]* in Aulus Gellius' expression.⁷⁵ But the imperial family was also generous in endowing *municipia* with city walls and/or gates; this is interesting given that, overall, the surviving epigraphic evidence for Augustan benefactions favours colonies.⁷⁶ Notably, the language used in the inscriptions recording imperial donations of city walls differs between colonies and *municipia*. For *municipia*, the formula *faciundum curavit/curaverunt* ([the emperor/the imperial family] saw to it being built) is used, perhaps stressing the maintenance of tradition and imperial *cura* as this was the formula used by civic magistrates in building inscriptions of the republican era, while at colonies the verb *dare* (he/they donated) is used, perhaps stressing imperial generosity.⁷⁷ At colonies, the impetus for imperial generosity is often

⁶⁸ MATTEINI CHIARI 2015. The site is currently being excavated by a team from the University of Perugia.

⁶⁹ MATTEINI CHIARI 2013.

⁷⁰ PINDER 2015.

⁷¹ Emona (CIL 03, 10768), Fanum Fortunae (CIL 11, 06218), Laus Pompeia (CIL 05, 06358), Saepinum (CIL 09, 02443), Tergeste (CIL 05, 00525), Tridentum (CIL 05, 05027).

⁷² CIL 11, 05266. See PINDER 2015: 44.

⁷³ PERNA 2006: 33.

⁷⁴ *Res Gestae Divi Augusti*, 28.

⁷⁵ Aulus Gellius *Noctes Atticae* 16,13,9.

⁷⁶ KEPPIE 1983: 117.

⁷⁷ HORSTER 2001: 49-56.

evident: for example, at Fanum Fortunae, situated at an important point of the Via Flaminia which Augustus has recently restored, Augustus' patronage of the city walls came following his foundation of the colony when significant development and monumentalisation of the urban area was also under way. At *municipia*, it is less obvious. The town of Tridentum, for example, established in the mid-first century BC, was strategically sited in the valley of the River Adige in north Italy, but there is nothing unusual about its circumstances which would seem to warrant this scale of imperial munificence.

It is only at *municipia* in the Augustan period that we see the phenomenon of towns constructing monumental gateways at their entrances without building a connecting walled circuit.⁷⁸ These free-standing gateways were generally placed on major through routes – Libarna on the Via Postumia, for example, and Carsulae and possibly Ocriculum on the Via Flaminia. Their function appears to be to announce the town's presence and to advertise to travellers the town's civic pride and sense of importance, displaying the symbolism of membership and the politics of emulation. It is thought that the free-standing double-arched gateways of Augusta Bagiennorum and Libarna, for example, were similar not only to each other but also to double-arched gateways within the walled circuits of cities such as Ariminum, Asculum and Tridentum.⁷⁹ The reason for the lack of continuous walls may be as mundane as insufficient resources to undertake the work, which would be very costly and time-consuming especially if external support was not forthcoming (and given that complete fortification was not necessary at a time of relative peace). Alternatively, it may be that *municipia* did not have the similar expectations or freedoms of colonies at local level so far as wall construction was concerned; this would be supported by the preponderance of inscriptions referencing the imperial family on the new-build walls of *municipia*.

The symbolic importance of Augustan city walls is mirrored in an ideology of walls widespread in Augustan culture. In literature, coinage, and representational and figurative art,⁸⁰ city walls were used as a synecdoche for the city itself, in keeping with Augustus' desire to encourage a model of city life and urban values and his use of cities as an effective means of spreading Roman cultural constructs.⁸¹ For example, Virgil used the Latin word *moenia* (city walls) as a synonym not only for the city but also for the urban moral values which a city represented. He made an explicit link

⁷⁸ Carsulae, Augusta Bagiennorum, Libarna and Pollentia (see map at Fig. 1). Ocriculum may be a further example, although the published evidence on the date of Ocriculum's free-standing monumental gateway is inconclusive (CENCIAIOLI 2000: 25-27).

⁷⁹ For Augusta Bagiennorum, ASSANDRIA/VACCHETTA 1925; for Libarna, GAMBARI 2014.

⁸⁰ For example, city walls are featured on mosaics at Ostia, Pompeii and elsewhere: for LAVAGNE 1988, such mosaics were explicit emblems of "Romanitas", indicating the importance of city walls in spreading the ideological message of the Roman empire. Bronze and silver coins of early imperial date from Emerita in Hispania Lusitania portray a city gate with two archways, flanked by tall towers (BURNETT/AMANDRY/RIPOLLÈS 1992, catalogue numbers 10, 12). In sculpture, the mural crown uses city walls as a metonym for the city and combines with it a representation of symbolic protection offered by the gods; there are examples from Fanum Fortunae (SENSI 2002) and Urbs Salvia (FABRINI/PERNA 2011).

⁸¹ ZANKER 1988: 328-329, ZANKER 2000.

in the ideology of a city between the Augustan vision of a new moral order of society and the security of the empire as symbolised by walls.⁸² This found physical expression in Augustus' patronage of city walls not just in Roman Italy but elsewhere in the empire. City walls were used to promote specific values and messages, stressing the importance of power, security and order within the moral framework in which Augustus positioned himself.

CONCLUSION

The Augustan period saw significant investment in the material reality and symbolic meaning of city walls. The city walls, towers and gateways constructed at this time show a surprising degree of difference in terms of their dimensions, design, form and construction technique, especially given the relatively narrow chronological window in which they were built and the relatively close geographic proximity of at least some of the cities. But some significant common themes emerge in how Augustan walled circuits engage with their physical and political environment. This was not the only period during which the appearance, location and associations of city walls were deliberately engineered for other than purely functional purposes, but it did find its culmination under Augustus. Urban communities wanted to be seen to subscribe to Augustus' programme of renewal, and one way of doing this was through public architecture such as city walls, which could be deliberately used to display power relations and to promote imperial ideology.

Whether for a colony or a *municipium*, the impulse to define the urban boundary in some way was important in the Augustan period. At first sight, this surge in wall construction might seem surprising given that Roman Italy was experiencing a time of relative peace and that defensive needs were not a priority. It is more readily explained in terms of relevance to the political agenda of the period and the association of city walls with a community's physical enactment of notions of urbanism and identity, for example through visual prominence, religious associations or imperial patronage. City walls were a clear sign of status and prestige, and a highly visible sign that an urban community subscribed to Augustus' new ideology.

City walls of this period should be read as a physical manifestation of imperial values, designed to impress and intimidate and to give visual reinforcement to the Augustan order. The importance of city walls in the Augustan period is entirely in keeping with Augustus' strategy to project a vision of peace rather than war but to underpin this message with an emphasis on power and authority. They were highly visible statements of the political strength, status and power of cities and through them of the Roman state. In an environment where public building was used to express social relations and cultural identity, the symbolism of protection projected by Augustan city walls was more important than the reality.

⁸² Virgil *Aeneid* I 263-4. Other examples may be found at *Aeneid* I 3-7; VII 157-9, VIII 714-6.

APPENDIX: KEY INFORMATION ON AUGUSTAN CITY WALLS IN ROMAN ITALY, 35 BC – AD 20

City	Status	Area	Perimeter	Plan	Technique (outer face)	Height/width	Inscription
Alba Pompeia	M	33ha	2.1km	octagonal	opus vittatum	8-9m/1.5m	no
Augusta Praetoria	C	42ha	2.5km	rectangular	opus quadratum	6.5m/1.5-1.9m	no
Augusta Taurinorum	C	48ha	3km	rectangular (chamfered)	opus vittatum	nk/1.8m	yes
Brixia	CC	50ha	3km	irregular	opus vittatum	nk/1.7m	yes
Concordia Iulia	C	40ha	2.1km	rectangular (chamfered)	opus testaceum	8m/2-2.6m	no
Emona	C	22ha	1.9km	rectangular	opus quadratum?	6-8m/2.5m	yes
Fanum Fortunae	C	21ha	1.8km (incl seafront)	irregular	opus vittatum	12m/1.8m	yes
Florentia	C	20ha	1.8km	3 regular, 1 irregular side	opus testaceum	nk/2m	no
Hispellum	C	15ha	1.8km	irregular	opus vittatum	13m/2.4m	possibly
Laus Pompeia	M	36ha?	nk	nk	opus testaceum	nk	yes
Mediolanum	M	72ha	3.5km	irregular	opus testaceum/ opus quadratum	7-9m/1.6m	no
Peltuinum	P	22ha	nk	irregular	opus quadratum (gates)	nk	no
Saepinum	M	12ha	1.3km	irregular	opus quasi-reticulatum	4.8m/1.75-1.9m	yes
Tergeste	C	nk	3km	irregular	opus quadratum	5.5m/2-3m	yes
Ticinum	M	38ha	2.8km	regular?	nk	nk	yes
Tridentum	M	13ha	1.2km	rectangular	opus mixtum	4-5m/1.2-1.3m	yes
Urbs Salvia	C	45ha	2.7km	irregular	opus testaceum	nk/1.5-1.6m	no
Venafrum	C	27ha	2.1km	rectangular	nk	nk/1.3m	no

C=colony; CC=colonia civica; M=municipium; P=praefectura; nk=not known

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ON THE MUTILATION AND BLINDING OF BYZANTINE EMPERORS FROM THE REIGN OF HERACLIUS I UNTIL THE FALL OF CONSTANTINOPLE

Abstract: Whoever reads about Byzantine history probably realises sooner or later that besides killing a pretender or emperor it was quite common to blind him – or to cut off his nose. This latter practice is called rhinotomy. It is the aim of this paper to examine the frequency of and the reasons for these forms of punishment in Byzantium from the beginning of the 7th century until 1453. The article takes a diachronic approach to the questions regarding Byzantine emperors and pretenders who were blinded or mutilated. The multiple brief case studies provided in the first part thus make up the core of the paper. But the statistical analyses in the second half are nevertheless crucial for the conclusions drawn at the end.

Keywords: *Blinding in Byzantium – mutilation – regicide – rhinotomy – rhinokopia*

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1. INTRODUCTION

Niccolò Machiavelli gave the following advice in his best-known work *The Prince*:

“Cruel acts are used well (if we can apply ‘well’ to wicked acts) if they are needed for political security and are all committed at a single stroke and then discontinued or turned into something that is to the advantage of the subjects.”¹

Reading about Byzantine history, it becomes apparent that besides killing a pretender or emperor it was quite common to blind him – or to cut off his nose. This latter practice is called rhinotomy. It is the aim of this paper to examine the frequency of and the reasons for these forms of punishment in Byzantium in a somewhat similar way as M. Eisner has examined the frequency of violent death and regicide amongst 1,513 monarchs in 45 monarchies across Europe between AD 600 and 1800.² As there can be identified “at least three distinct waves of regicide” in the Byzantine Empire,³ it might be possible to distinguish different waves of blinding and *rhinotomy* as well. The focus lies on punishments of emperors and pretenders, for it is they who exercise or

¹ Niccolò Machiavelli (BENNETT) 2010, 19.

² EISNER 2011, 1–22.

³ I. e. between 641 and 715 (six out of eight rulers killed), 945 to 976 (four subsequent rulers murdered) and 1180 to 1205 (again six out of eight suffered a violent death); see EISNER 2011, 15.

have the capability to exercise political and military power which makes them both vulnerable and potentially harmful in regard to political security⁴ – depending on the angle of perspective. It must be noted that unfortunately the author was not able to obtain a copy of O. Lampsidis' doctoral thesis *The Penalty of Blinding by the Byzantines*⁵, but J. Lascaratos' and S. Marketos' *Medical Remarks*⁶ on the subject have been of great help by drawing the writers attention to the Byzantine sources mentioning the punishment of blinding. Even though several studies which compared Wikipedia entries to more conventional sources of information generally found that Wikipedia information was "as accurate and often more comprehensive than traditional general encyclopaedias", as Eisner points out,⁷ the author has in this paper relied more heavily on the online encyclopaedia *De Imperatoribus Romanis* for the purpose of gathering information on the Byzantine emperors who were blinded or had their noses cut off, because the latter online encyclopaedia is edited by historians "whose entries are thoroughly peer-reviewed".⁸

The article takes a diachronic approach to the questions regarding Byzantine emperors and pretenders who were blinded or mutilated. The multiple brief case studies provided in the first part thus make up the core of the paper. But the statistical analyses in the second half are nevertheless crucial for the conclusions drawn at the end.

2. BLINDING AND RHINOTOMY BEFORE BYZANTINE TIMES

The practice of blinding as a form of physical punishment dates back to Antiquity. It was generally used as an act of vengeance and torture.⁹ Shalmaneser I, who was king of Assyria from 1274 BC – 1245 BC or from 1265 BC – 1235 BC, claimed to have blinded 14,400 enemy prisoners in one eye. Although this might seem to be a harsh treatment of prisoners, he was one of the first Assyrian kings who didn't just simply slaughter all captured enemies.

In the great mythologies, blinding is mentioned several times. In the Bible, Samson was blinded by the Philistines¹⁰, and the mythical Greek king Oedipus deliberately blinded himself by gouging out his own eyes after realising that he had by accident fulfilled the prophecy that he would eventually kill his father and marry his mother.¹¹ If we are to believe the Greek historian Herodotus, the Scythians

⁴ The term *political security* has been used in many different ways in the past. While the term is "widely used in the rhetoric of decision-makers or in compilations of a variety of subjects on security problems, political security is not an unequivocal label" (DA COSTA 2008, 561). In this work it relates solely to the stability of a state, to the stability of its social order and thus to the absence of inter-state conflict and civil war. It is therefore closely linked to *military security*. It may also address threats to sovereignty as B. Buzan, O. Wæver and J. de Wilde state in their book *Security: A New Framework for Analysis* (BUZAN/WÆVER/DE WILDE 1998, 239). Unlike in other publications, when used here, the term *political security* has nothing to do with the level of respect for human rights and democracy or the participation of citizens in the political system etc.

⁵ LAMPSIDIS 1949.

⁶ LASCARATOS/MARKETOS 1992.

⁷ See EISNER 2011, 5; studies mentioned by EISNER are: GILES 2005; HAMMWOHNER 2007; LORENZ 2009 and ROSENZWEIG 2006.

⁸ See EISNER 2011, 6.

⁹ Cf. GOES 2013, 234.

¹⁰ Buch der Richter 16, 21, Lutherbibel; cf. HARTSTOCK 2008, 107.

¹¹ Cf. ROSE 2003, 81–82.

used blind slaves for milk production in the 5th century BC.¹² Although Roman writers find the penalty of blinding to be typical for the Sasanian Empire, it was at times also used in the Roman Empire to punish Christians.¹³

The second major form of punishment this paper deals with is the so-called rhinotomy or rhinokopia. N. M. Spikes gives a very brief definition of the term in his *Dictionary of Torture*. He writes:

"Rhinokopia: To cut off someone's nose. *Even though Justinian lost his nose to Rhinokopia, he rose to become the emperor nonetheless.* The word *Rhinokopia* is Greek; however, nose amputations originate in ancient India, and amputation of any kind came from ancient Israel."¹⁴

G. Sperati makes reference in his article *Amputation of the Nose throughout History* to the "great harem conspiracy" at the time of Pharaoh Ramses III (XX dynasty, 1192–1166 BC) in the aftermath of which a famous trial was held. In this trial some of the people found guilty – including two judges – "were condemned to mutilation of the nose and ears".¹⁵ At the time, this was not a new form of punishment for the Egyptians. In fact, there was already a decree that dated back to General Horemheb (XVIII dynasty) which punished magistrates who had taken advantage of their role "with deportation and amputation of the nose".¹⁶

In the *Ramayana*, an ancient Indian epic poem about the struggle of the divine prince Rama to rescue his wife Sita from the demon king Ravana, the demon Shurpanakha attacked Sita but was thwarted by Lakshmana, who cut off her nose as well as her ears. Since *rhinotomy* was practiced in India in ancient times, also nasal reconstruction dates back to about 1000 BC in that region.¹⁷ In early India this penalty was commonly used to punish acts of adultery. It later became quite prevalent among the Arabs for the same kind of offenses.¹⁸

3. BLINDING AND RHINOTOMY IN BYZANTIUM

In Rome amputations were originally not used as penalties.¹⁹ It was not until late Antiquity that cutting off a hand became an established form of punishment. This kind of penalty was usually applied to counterfeiters of diplomas and forgers of coins in early Byzantine times. Leo III introduced new measures for criminal offences in his code entitled *Ecloga*, most probably published in 726,²⁰ notably

¹² Herodotus, Histories 4, 2.

¹³ Cf. PEARMAN 2010, 89.

¹⁴ SPIKES 2014, e-book.

¹⁵ SPERATI 2009.

¹⁶ SPERATI 2009.

¹⁷ Cf. MAZZOLA 1987, 4; according to other scholars written evidence for nasal reconstruction can be found in 6th-century BC India (cf. YALAMANCHILI *et alii* 2008, 3).

¹⁸ Among the Arabs men usually got away with 100 strokes of the cane or by paying a fine while the husband of the unfaithful wife was instructed to act as the executioner (cf. SPERATI 2009).

¹⁹ Although *rhinotomy* was very rarely performed also in ancient Greece and Rome (cf. SPERATI 2009). In addition, revenge for adultery in form of *rhinotomy* was tolerated already by "Roman law (Marziale, *Epigrammi* II, 83; III, 85) and could be inflicted upon either of those committing adultery. Sometimes, the offended party limited the reaction to requesting compensation, from the rival, in the form of money, instead of amputation of the nose" (SPERATI 2009).

²⁰ There was some debate over the exact year in the past. For further information cf. OSTROGORSKY 1963, 126.

substituting mutilation for the death penalty in many cases.²¹ Rhinokopia was now officially the punishment for adultery – but it had occurred and it would further occur in Byzantium in other contexts as the following chapter shall reveal.

3.1. RHINOTOMY

In 637 Athalarichos, who was an illegitimate son of the emperor Heraclius and had been involved in a plot against his father, became the first well-known victim of political mutilation in Byzantium. His cousin Theodore, who also had been involved in the plot met a similar destiny. Instead of having the traitors killed, Heraclius ordered the amputation of each plotter's nose and hands. Theodore, in addition, lost one leg as well. Both were exiled to a different island.²² Soon thereafter, in 641, another son of Heraclius should face a similar punishment: When Heraclius died on February 11, 641, he left the empire to both of his legitimate sons, who were half-brothers.²³ Heraclius Constantine (Constantine III), however, died shortly after his father had perished, and rumors spread that Martina, Heraclonas' mother who acted as a regent for her young son, had poisoned him. After Heraclonas had been deposed by the Senate, his nose was slit and his mother's tongue was cut out. Both were expelled to the island of Rhodes.²⁴

In the second half of the 7th century there would be three more incidents in which deposed emperors and co-emperors lost their noses. First we have to look at the reign of Constantine IV who had his brothers mutilated in 681 in order to make them ineligible to govern.²⁵ Even though Constantine had been made a co-emperor besides his father Constans II prior to his brothers Heraclius and Tiberius, who were elevated to this rank in 659, the attempt to demote the latter from their imperial position after the death of Constans II was not well received by the troops in the Anatolic Theme.²⁶ They revolted and insisted on Heraclius' and Tiberius' status as co-emperors.²⁷ R. S. Moore sums up the consecutive events as follows:

“Constantine, acting quickly, arrested and executed the leaders of the protest, thus quelling the dispute. He did, however, rescind his order and had his brothers reinstated as co-emperors. After the council concluded [i. e. the Third Council of Constantinople which is counted as the Sixth Ecumenical Council], Constantine removed his brothers from their positions, had their noses slit, and proclaimed his

²¹ A striking parallel is to be found on the British Isles: Around 350 years later William the Conqueror established blinding as a penalty for rebellion in order to replace the death penalty. Blinding was also utilized by his son Henry I of England who used it against his opponent William, Count of Mortain and at the same time established it – alongside with castration – as a punishment for thieves (cf. EVANS 2007, 37, 89–90).

²² Nicephorus (MANGO) 1990, 73.

²³ Cf. MOORE 1996.

²⁴ Cf. MOORE 1996; R. S. Moore states that this “is believed to be the first time that the oriental practice of mutilation was practiced by the Byzantines. It was used to signify that the mutilated person was no longer able to hold political power” (MOORE 1996). While one must agree with his second sentence, it has been demonstrated above that Heraclonas was not quite the first to suffer from this oriental treatment.

²⁵ Cf. MOORE 1997.

²⁶ Cf. BURY 1889, 308.

²⁷ Cf. BURY 1889, 308; They “marched to Chrysopolis and sent over the straits to Constantinople a deputation demanding that the two brothers should be crowned Emperor” (BURY 1889, 308).

son Justinian II as co-emperor.”²⁸

And it was his son, Justinian II, who would become most famous in regard to the subject of this paper. Not because of his *rhinotomy*, but because of the fact that he took his empire back nevertheless. The first years of his reign, which started in 685, proved to be quite successful for the empire. To mention just one of his achievements, Justinian II regained possession of the Balkans, which had by then been almost entirely lost to Slavic tribes.²⁹ However, the emperor's bloody persecution of the Manichaeans, as well as his suppression of some popular traditions led to disputes within the Church.³⁰ And while he was trying to protect the rights of free peasants against the aristocracy, which apparently had a lust for new land,³¹ his tax policies weren't favoured by the common people, making him unpopular both in Constantinople and in the provinces.³² It was the ongoing religious discontent, combined with his disregard for the Senate, his unpopular resettlement policy, his problematic relationship with large parts of the aristocracy and especially the heavy taxation which eventually led to the events that took place in 695 when Leontius, the *strategos* of Hellas, was proclaimed emperor by the Blue Circus faction that had led a successful coup in the city of Constantinople.³³ Leontius then ordered “that Justinian's nose and tongue be slit” and “exiled him to the city of Cherson”.³⁴

Ironically, only three years later, following the revolt of a group of officers and a siege of Constantinople by Apsimar, which lasted for several months, Apsimar had Leontius' nose slit and imprisoned him in a monastery. Apsimar took the name Tiberius II as emperor but was eventually executed along with Leontius upon Justinian's return to power in 705.³⁵

3.2. BLINDING

It was also in the year of 705 that the first well-known political mutilation by blinding occurred, when Patriarch Callinicus I of Constantinople, who had helped to depose Justinian II, was blinded and thereafter imprisoned in a monastery.³⁶ And many blindings of different styles³⁷ would follow throughout the next centuries. It is however not the object of this paper to chronologically enumerate all the instances of blinding mentioned in Byzantine sources – for there are hundreds of them³⁸ – but to present some typical examples and to reflect upon the reasons for the punishment.

We don't have to proceed much further down the line

²⁸ MOORE 1997.

²⁹ Cf. BURY 1889, 321.

³⁰ Cf. HOLLINGSWORTH 1991, 1084.

³¹ Cf. OSTROGORSKY 1956, 116–122.

³² Cf. MOORE 1998.

³³ Cf. MOORE 1998; cf. also BURY 1889, 327 and OSTROGORSKY 1956, 116–122.

³⁴ MOORE 1998; cf. also NORWICH 1990, 334.

³⁵ Cf. MOORE 1999; NORWICH 1990, 337.

³⁶ Cf. KIMINAS 2009, 44; LASCARATOS/MARKETOS 1992, 133; see also the sources the latter have gathered: Cedrenus 781, 3–4; Theophanes 574, 12–13; Grammaticus 169, 3–4; Nicephorus 777, 7; Glycas 518, 14–16.

³⁷ J. Lascaratos and S. Marketos write that the “penalty of blinding in Byzantium was enforced by various means and in order of frequency, (a) by destroying or enucleating the eyes with a sharp instrument, (b) by fire held close to the eyes and finally, (c) by pouring a boiling liquid in the eye orbits” (LASCARATOS/MARKETOS 1992, 141).

³⁸ Cf. LASCARATOS/MARKETOS 1992, 134.

of emperors to find the next prominent example of blinding. It was Justinian's successor Philippicus Bardanes. After being involved in a successful war against Armenians and having repelled "a Bulgarian raid against Thracian Bosphorus which reached the outskirts of Constantinople",³⁹ however now facing Arab raids, Philippicus Bardanes was blinded by officers in the hippodrome on June 3, 713⁴⁰ in the wake of a rebellion of Opsikion troops which had just broken out in the month before.⁴¹ He had only been emperor for a year and a half.⁴² Like many other emperors and pretenders who were mutilated, Philippicus was also exiled – but died in the following year.⁴³

After Theodosius III abdicated in favor of Leo III on 25 March 717⁴⁴ came the dynasty of the Isaurians, and with it the reign of Leo's son Constantine V Copronymos or "the Dung-named" who put his mark on Iconoclasm after Leo III had already set the agenda. Soon after Constantine V had assumed power⁴⁵ he faced the usurpation of his brother-in-law Artabasdos, the commander of the Opsikion theme.⁴⁶ Artabasdos' usurpation would last over two years – recognized not only by the patriarch of Constantinople⁴⁷ but also by the pope.⁴⁸ It is important to note that Constantine V received a very hostile treatment in the Iconophile sources (and those are the only sources that have survived), such as the *Chronicle* of Theophanes or the *Life of Stephen the Younger*.⁴⁹ Therefore S. TOUGHER does not trust Theophanes' narrative that Artabasdos is to be seen as innocent and that the icons played a crucial role in his uprising. To him it seems more likely that it had been "a deliberate coup launched by a strong candidate".⁵⁰ Eventually Constantine V reoccupied Constantinople in 743 and had Artabasdos and his sons blinded, "um sie als mögliche Thronprätendenten endgültig auszuschalten".⁵¹ What is remarkable is the fact that also Sisinnios, Constantine's ally in the civil war, was blinded. He was suspected to have planned on reaching for the diadem himself.⁵² In any case, Machiavelli would have applauded if we recall what he wrote about "cruel acts": that they were used well if they were "needed for political security" and were "all committed at a single stroke and then discontinued".⁵³

We shall now take a look at the life and reign of Constantine's grandson: Constantine VI. Due to his young age when his father died, his mother Irene and her chief minister exercised the regency on his behalf for ten years until he finally came to real power in 790 in the wake of a

³⁹ NEIL 2000 a.

⁴⁰ There remains some uncertainty about the date of his blinding; cf. NEIL 2000 a and GRIERSON 1962, 51–52.

⁴¹ Cf. Theophanes (TURTLEDOVE) 1982, 79.

⁴² See NEIL 2000 a.

⁴³ Cf. NEIL 2000 a.

⁴⁴ Cf. NEIL 2000 b.

⁴⁵ About a year after his father Leo III had died; cf. BRUBAKER/HALDON 2011, 157; for the chronology see *ibid.* footnote no. 9; cf. also STEIN 1980, 259.

⁴⁶ Ironically it was this theme "upon which the emperors also depended for their own defence" (BRUBAKER/ALDON 2011, 157).

⁴⁷ See TOUGHER 2004.

⁴⁸ Cf. BRUBAKER/HALDON 2011, 158–159.

⁴⁹ Cf. TOUGHER 2004.

⁵⁰ TOUGHER 2004.

⁵¹ STEIN 1980, 260.

⁵² Nicephorus (MANGO) 1990, 66; cf. also TOUGHER 2004 and ROCHOW 1994, 30.

⁵³ Niccolò Machiavelli (BENNETT) 2010, 19.

rebellion against his mother.⁵⁴ He was engaged to Rotrude, a daughter of Charlemagne, who was hence educated in Greek language and manners⁵⁵, but the alliance between Byzantium and the Frankish Empire had eroded in 786 and his mother Irene broke off the engagement in 787 or 788.⁵⁶ Constantine VI, once in command, did not prove to be a second Alexander, since his army was humiliatingly defeated by the Bulgarians in the Battle of Marcellae, which was fought in the year of 792.⁵⁷ Because of the rough terrain, the advancing Byzantine army broke its order so that the counterattack of the Bulgarians eventually became a great success and many Byzantine officers perished. However, in 793 he did manage to crush the revolt of his former Armenian supporters who had turned against him after he had blinded their General Alexios Mosele.⁵⁸ He also had his uncle blinded in order to remove an instant threat to his throne since a movement had formed in favor of the aforementioned. Besides that he had the tongues of his father's four other half-brothers cut off as well, thus dealing with other potential threats to political security in a cold-blooded manner that would have probably been appreciated by Machiavelli. Constantine VI himself was blinded "in a cruel and grievous manner"⁵⁹ in late April 797 by his mother's supporters⁶⁰ and then exiled to Principo.⁶¹ It was she who had vocally agitated against her own son beforehand.⁶² While Constantine VI is often seen as incapable of sound governance, L. Garland chooses her words more carefully when summing up his reign:

Constantine appears to have lacked diplomatic finesse and judgement, but since he was only 26 years of age at the time of his death, and clearly not without support from within the army, it is probably unwise to label him too categorically as an ineffectual commander, nor one who needed to be removed for the good of the state.⁶³

Even Theophanes – being highly critical of Constantine VI and favouring his mother for her uncompromising iconophile stance – suggests that the cruel and grievous blinding of Constantine was undertaken in order to make "him die at the behest of his mother and her advisers".⁶⁴ While Constantine eventually survived his blinding, many others were not as fortunate.⁶⁵ Among them was the Byzantine emperor Romanos IV Diogenes, who was blinded on 29 June 1072 and endured a painful and lingering death soon thereafter, because his wound had become infected.⁶⁶ Michael Attaliates (also Attaliota and Attaleiates) was a

⁵⁴ Cf. CUTLER/HOLLINGSWORTH 1991, 501–502.

⁵⁵ Cf. GSCHWIND 1995, col. 1054.

⁵⁶ Cf. GSCHWIND 1995, col. 1054.

⁵⁷ Cf. CUTLER/HOLLINGSWORTH 1991, 501–502.

⁵⁸ Cf. CUTLER/HOLLINGSWORTH 1991, 501–502.

⁵⁹ Theophanes AM 6289 [AD 796–797] (MANGO/SCOTT) 1997, 649.

⁶⁰ See GARLAND 2002.

⁶¹ Cf. GARLAND 2002.

⁶² Cf. CUTLER/HOLLINGSWORTH 1991, 501–502; cf. also GARLAND 1999, 85–87.

⁶³ GARLAND 2002.

⁶⁴ Theophanes AM 6289 [AD 796–797] (MANGO/SCOTT) 1997, 649; cf. also Cedrenus 27, 13–18.

⁶⁵ For other cases than the following mentioned cf. LASCARATOS/MARKETOS 1992, 142.

⁶⁶ Cf. CANDUCI 2010, 272; cf. also LASCARATOS/MARKETOS 1992, 141–142; in their medical research paper Lascaratos and Marketos state that "the resulting infections were often a common cause of the death of the victim" (LASCARATOS/MARKETOS 1992, 142).

Byzantine public servant and historian who was active in the second half of the 11th century and can thus be relied on for the matter at hand. Hence his vivid account of Romanos' blinding and death shall be cited here:

"And they permitted some unpractised Jew to proceed in blinding the eyes. And they tied him from four sides and tied his chest and belly and many fell upon him to hold him [...] and they brought the Jew who put out his eyes most painfully with an iron tool, while the victim below roared and bellowed like a bull and no one pitied him. And when this was repeated his punishment was ended [...] and his eyes were finally destroyed and their liquid spilled. When he rose his eye orbits filled with blood, truly a pitiful and deplorable sight, bringing unbearable sorrow to those who saw him, half dead, finished also from the disease he had. Then he was sent seated on a humble animal until he arrived at the Sea of Marmara. He dragged himself, exactly like a rotten corpse with his eyes put out and his head and face, from which grubs or worms appeared and fell, were swollen. After he lived several days in pain and exuding a bad odour, he finally died and was buried on the island of Poti, on the mountain peak [...] leaving the memory behind him that his troubles surpassed even Job's".⁶⁷

The blinding of Romanos IV Diogenes took place after he had been told by Andronikos Doukas that his life would be spared if he resigned the purple and retired to a monastery.⁶⁸

The last emperor that shall be mentioned in this part of the paper is Isaac II Angelus, who initially ruled for the period of ten years from 1185 till 1195. He is known to have exercised the penalty of blinding to a great extent, "his sons Andronicus I, John and Manuel being his first victims".⁶⁹ Ironically, he himself was blinded and imprisoned when overthrown by his brother Alexius III – whom he had failed to blind, as well, one might sarcastically remark. Isaac II Angelus should however become the first and only fully blind Byzantine emperor when eight years later he was raised from the dungeon to the purple once more for a short second reign (1203–1204) with his son Alexios IV Angels acting as the effective monarch. After being deposed a second time in 1204, he eventually died in prison.⁷⁰

3.3. CASTRATION

Castration was another means of eliminating potential opponents, since castrated men were not seen as actual men – in fact, they were viewed as being half dead.⁷¹ It was supposedly this deficiency which prevented Basil Lekapenos, the illegitimate son of Romanos I Lekapenos, from becoming emperor.⁷² Other examples of castrated pretenders were the sons of Leo V the Armenian, who was deposed in 820, after Leo himself had overthrown his predecessor Michael I Rhangabe and had had the sons of the latter castrated in 813.⁷³ Finally, acting very consequently indeed, Michael V

had all male members of John the Orphanotrophos's family castrated.⁷⁴

3.4. STATISTICS

After looking at characteristic mutilations of emperors and pretenders more closely in the last section, it is now time to think about total numbers and frequencies. Since mutilation was established as a common punishment for usurpers and traitors during the reign of Heraclius I,⁷⁵ it seems reasonable to begin the evaluation of data regarding Byzantine emperors who were blinded or mutilated with this emperor. Another reason to start the headcount with this particular emperor is that it was he who changed the official language of the empire from Latin to Greek in 620.⁷⁶ From Heraclius I (he ruled 610–641) until the fall of Constantinople in 1453 there were a total of 73 emperors – not counting the co-emperors or powerful regents.⁷⁷ The usurper Artabasdos is counted as an emperor because he was recognized as such by both the patriarch⁷⁸ and the pope.⁷⁹ It is further important to note that this section only contains information about emperors, not pretenders or patriarchs. The following questions will be answered:

Were there certain waves of mutilation affecting emperors in Byzantium, or is the phenomenon to be found in more or less the same frequency throughout Byzantine times?

If there are "bundles" of mutilations to be recognized, do they differ in style?

Did the likelihood of an emperor to be mutilated increase if his predecessor or pre- predecessor had been mutilated?

Was a Byzantine emperor more likely to be killed, or was he more likely to be blinded, and so on?

When in this section we attempt to elicit whether a Byzantine emperor was more likely to be killed or to be mutilated, we have to take into account those who were blinded and died soon thereafter of their wounds, Romanos IV Diogenes being the most prominent example. In this case, the intention to "only" maim the emperor is more important than the eventual outcome in the opinion of this writer. Romanos IV Diogenes will therefore be regarded as "blinded", not as "killed".⁸⁰ We also have to be aware of the fact that Justinian II was mutilated at the end of his first

⁷⁴ Cf. RINGROSE 2003, 62.

⁷⁵ Cf. KAZHDAN 1991, 297.

⁷⁶ Cf. DAVIS 1990, 260.

⁷⁷ The number of co-emperors is tremendously high for at least 50 emperors (out of the total amount of Byzantine emperors from the days of Constantine I "the Great" until the loss of Constantinople in 1453) had at least one co-emperor.

⁷⁸ See TOUGHER 2004.

⁷⁹ Cf. BRUBAKER/HALDON 2011, 158–159.

⁸⁰ Other examples are Heraclonas (641) and Michael V (1042) but perhaps not Constantine VI who was blinded 797 but may have lived until 804 (cf. CUTLER/HOLLINGSWORTH 1991, 501–502); it is however possible – even likely – that he died soon after he was blinded due to an infection of the wound. Eisner hence treats him as having been assassinated (cf. EISNER 2011, 18); yet, like in the aforementioned cases, he will be counted simply as "blinded" in this work. Andronicus I Komnenus on the other hand who was publicly tortured for three days – one hand was cut off and one eye gouged out before an Italian soldier "mercifully plunged a sword into his body" (CHISHOLM 1911, 976) – will neither be counted as blinded nor as mutilated since death was most definitely the intended outcome of the martyrs he had to endure in 1185.

⁶⁷ Attaliota 178, 10–23, 179, 4–11, 15–17 (cited in LASCARATOS/MARKETOS 1992, 141).

⁶⁸ Cf. NORWICH 1993, 357.

⁶⁹ LASCARATOS/MARKETOS 1992, 138; cf. Choniata 466, 11–19, 472, 7, 553, 16–18, 554, 8–11, 556, 20–21, 561, 1, 572, 14, 560, 13–14.

⁷⁰ Cf. VAN DIETEN 1976, 238–240.

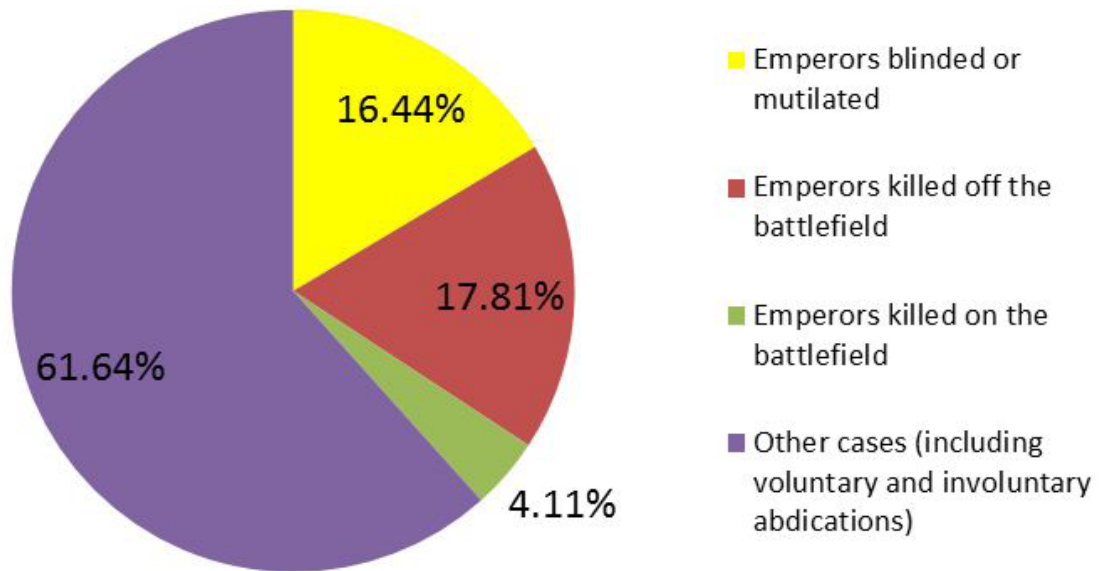
⁷¹ Cf. RINGROSE 2003, 62.

⁷² Cf. TALBOT/SULLIVAN 2005, 143.

⁷³ See Scriptor Incertus 341, 10–11; cf. also TREADGOLDT 1988, 188–189.

Fig 1

The percentage of Byzantine emperors blinded or mutilated between 610 and 1453



reign and killed at the end of his second. He will be treated as being two different emperors for statistical reasons. Furthermore, doubtful cases (i. e. suspected poisoning etc.) will be neglected in this paper.⁸¹

Looking at the emperors who were blinded or mutilated in a chronological order, we can distinguish different waves of mutilations⁸² – although what is most noticeable is the absence of any such treatment of an emperor between 797 and 1042. Another thing we notice at first glance is the fact that there were three cases of rhinotomy within a little more than half a century (641 till 698) and then this form of punishment does not occur again for any emperor throughout Byzantine times. It has been suggested before that rhinokopia had proven to be ineffective, with Justinian II regaining the throne in 705 despite the mutilation he had suffered at the end of his first reign, and was thus replaced by blinding. This assumption strikes this writer as fairly reasonable. Although it must be pointed out that after the blinding of Isaac II Angelus in 1195, who did regain the purple for a short time after having spent eight years in prison, the penalty of blinding for emperors and usurpers was not discontinued. The reason for this may be

⁸¹ All in all there are four such doubtful cases to be mentioned: Constantine VII (959), Romanos II (963), John I Tzimiskes (976) and Romanos III Argyros (1034). M. Eisner has them listed with a D indicating the uncertainty of their murder (see EISNER 2011, 18). John II Komnenos could be seen as such a doubtful case as well (cf. MAGDALINO 1993, 41), but he most likely died of septicaemia after accidentally cutting his hand with a poisoned arrow while hunting.

⁸² From 641 until 713 there were four emperors mutilated or blinded, from 743 till 797 two, from 1042 until 1071 again two, and from 1195 till 1261 three emperors were blinded.

that the second reign of Justinian II was much longer and of a different quality than that of Isaac II Angelus, who had to be “led by the hand”⁸³ and was obviously incapable of commanding troops on the battlefield.

In order to answer the third question – whether the likelihood of an emperor to get blinded or mutilated increases if his predecessor or pre-predecessor has been mutilated – we first have to find out the number of emperors whose predecessors or pre-predecessors met a similar destiny. This number is 3. That means that 3 out of 12 emperors – which is exactly a quarter (!) – were treated in a quite similar way as their pre- or pre-predecessors in this respect. While the probability of an emperor to be blinded or mutilated from 610 till 1453 was generally 12/73, this risk increased to ¼ if either a predecessor or a pre-predecessor had suffered such a treatment. This points to the significant autoregressive component of the phenomenon. The same is also true for regicide as M. Eisner has demonstrated.⁸⁴

When at last we compare the cases of regicide with those of blinding and rhinotomy we realize that the percentage of emperors who were killed is nearly the same as the percentage of emperors who were mutilated, the former being 17,81 % and the latter accounting for 16,44 %. Given that the number of doubtful cases of regicide (4 or 5) is relatively high for Byzantine times and that some of them might have been in fact actual regicides, we can conclude that a Byzantine emperor was slightly more likely to get killed than to get blinded or mutilated.

⁸³ LASCARATOS/MARKETOS 1992, 138; see also Choniata 727.

⁸⁴ Cf. EISNER 2011, 1, 15.

4. CONCLUSIONS

While the aim of this paper was not to describe in minute detail all the cases of blinding and rhinotomy throughout Byzantine history, as stated before, the brief case studies of characteristic mutilations of emperors and pretenders have shown one thing very clearly: The deposed or overthrown emperors, as well as the numerous pretenders and usurpers were blinded or mutilated in order to remove the threat of them rising again. A successful usurper viewed an overthrown emperor as a threat to his personal wellbeing *and* to the security of the state in the same way as a long established emperor saw any other pretender as a potential threat to political security, because a second person genealogically fit for the throne was naturally always likely to crave for power or to have been persuaded by some of the emperor's enemies to seize the crown for himself. "Not a good thing were a Caesar too many", the philosopher Areius said to Octavian in order to persuade him to have Caesarian (Ptolemaios XV), Julius Caesar's son by Cleopatra, killed.⁸⁵ As we have seen, the death penalty was in many cases substituted with a form of mutilation under Leo III. The penalties of rhinotomy and blinding provided the emperors or usurpers with an opportunity to achieve exactly what Octavian, the future Augustus, had achieved – yet without having to order an assassination or execution. That this conclusion is not a breakthrough discovery can easily be understood by reading what J. Lascaratos and S. Marketos have to say in their medical paper on blinding during Byzantine times:

"As strange as it may seem today this brutal and inhuman penalty was a lenient and philanthropic form of expression for that era, because it was enforced in order to limit the death penalty, without the emperors or insurgents, as the case might be, losing sight [an involuntary word play] of their main goal which was the removal to a safer distance of the dangerous foe from the throne or the crushing of every ambition to covert it."⁸⁶

The statistical approach of this paper however did lead to some new findings: while the fact that rhinotomy was replaced by blinding in the wake of Justinian's spectacular comeback had been pointed out before, the autoregressive nature of the phenomenon was never highlighted or even observed at all, according to this writer's knowledge.⁸⁷ Furthermore, this statistical approach has provided an opportunity to compare the frequency of regicides to that of mutilations of emperors in Byzantium from 610 till 1453. The data suggests that a Byzantine emperor in this period was slightly more likely to get assassinated, after all. Unfortunately, all the pretenders and usurpers had to be ignored in this study in order to keep the subject manageable. It thus remains a most desirable task to gather all information on mutilated and killed usurpers available in the sources for an all-embracing statistical analysis, although some cases may have never been recorded.

⁸⁵ Plutarch, Antonius 81, 2.

⁸⁶ LASCARATOS/MARKETOS 1992, 133–134.

⁸⁷ Although it is possible that O. Lampsidis in his doctoral thesis mentioned in the introduction to this paper does dwell on this particular aspect.

5. INDICES

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Reviews

Katja Lembke, *Ammoniaca II, Das Grab des Siamun in der Oase Siwa*, Mit Beiträgen von Heinz Felber und Jan Moje, Unter Mitarbeit von Michael Sohn (Zeichnungen) und Mohammed alRoumi (Photos) Archäologische Veröffentlichungen 115 (Wiesbaden, 2014), 117 S., 24 Tafeln, ISBN 9783447102391

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The focus of this review is placed on the publication of the Old Egyptian tomb of Siamun from the oasis of Siwa. The content of the book under consideration can be analyzed in the following manner:

The book commences with abbreviations (911) and bibliography (1316).

In the introduction, some general information is provided. A short catalogue of previous research is drawn up. The earliest mentioning of the Gebel elMota/Qaret al Missabbarin in modern travel literature can be found 1792 by W. G. Browne (17). The first hint at the decoration of the tombs was given 1826 by F. Cailliaud (17). The first meticulous archeological investigation of the oasis was conducted 1938 and 1941 by A. Fakhry (18). The tombs of the necropolis can all be assigned to the Ptolemaicroman time (20). The position and architecture of the tomb of Siamun are described, which is located at the western side of the plateau north of the mountain (20). The access to the monument of Siamun is gained by a six stepped staircase, which is – like the tomb – oriented from north to south with a deviation of 10 degree to the east (20). The tomb consists of a single long room, the length of which measures between 954 und 970 cm and breadth 260 cm (20). The area behind the southern wall, today mostly destroyed, is occupied by a nearly quadratic chamber A, in which the original main interment was made (20). The view of the side chambers BL having been used for secondary burials is advocated (20). The polychromic spectrum and preservation state of the paintings are given a detailed examination. The basic colour spectrum of the tomb consists of reddish-brown, green, and dark blue, being complemented by turquoise, light blue, cinnabar, pink, ochre, dark brown and black (22). The extraordinary use of cinnabar for the skin of the son of the tomb owner is touched on (23). The special feature of applying colours in al secco technique is highlighted (23). The case is made for the interpretation of the empty script bands in the uncompleted part of the tomb as index for a strict distinction between artists and scribes responsible for the decoration of the tomb (24). The paintings seem to have been executed from north to south (24).

In 2. Part A some space is devoted to the description of the scenes and translation of the inscriptions. The measures and preservation state are traced in a reasonable fashion. In the short commentary, the most important philological details are stressed (2539). The hitherto singular attestation for the office of the nekrostolistes in the tomb of Siamun is underlined, the activities of which are related to the mummification process (30). The one and only unusual late writing is represented by the “goose“ for the preposition “n“ “for“ to be found on the western wall (37).



In 3 Part B the analysis is conducted. In comparison with other architectural structures of the Gebel el Mota, a broader approach to the tomb of Siamun is embraced. The buildings are subdivided into two groups: a) instalments carved horizontally into the mountain, b) tombs dug on an incline in the northern plateau (41). The tomb of Siamun does actually adhere to the first group (41). In the necropolis, the tombs can be roughly split up into four types: 1) long facing one chamber tombs with staircases, main burials opposite the entrance, secondary burials in side walls, 2) entrance in the north, passageway with *loculi* in side walls, passages, shallowly vaulted chapel, second vaulted chapel, ambulatory around the chapel, backward tomb chamber, 3) porch with entrance corridor and open courtyard, rock complex with antechamber with secondary burial and chamber with main burial in the south, passage to undecorated chamber, main burial opposite entrance, 4) tombs with little shafts (4142). The division of the rock tomb with one single chamber and annexes on its sides can be detected already in the 26th dynasty at the oasis Bahrija (42). Staircases descending into the tomb arise already in Thebes of the New Kingdom (44). The preparation of the *loculi* before the decoration of the side walls can be compared with the early Hellenistic hypogeum A in Schiatbi (44). The decoration shows the following main themes: northern wall below the door guardians and northern area of the eastern wall: funerary procession; eastern wall: journey of the deceased through the underworld and transformation to Osiris; western wall: judgement of the dead, mummification and opening of the mouth (45). The ceiling in the front part is adorned with the goddess Nut and boats as symbol for the course of the sun, while the rear is stuffed with alternating vultures and hawks (45). The decoration of the walls and ceiling betrays Greek influence like the representation of the tomb owner as living person with locks and beard or an older man with a youth standing before him and stretching out a hand to his knee (47). In ancient Egyptian art, only two parallels for the last gesture are known, dating from the 4th dynasty and Amarna period, respectively (50). The tomb of Petoris

in Tuna el-Gebel from the late 4th century BC is adduced as prime example for the fusion of the Graeco-Roman elements and Egyptian traditions (51). The tomb of Siamun heralds a certain development which leads from the integration of the tomb owner as historical person in an Egyptian tale structure to a standalone, Roman influenced representation (53). The picture of a protective vulture hovering above the tomb owner in O 3 is understood as adoption of a motif from the royal iconographical repertory for the private sphere (53). The light skin colour of the men in the tomb of Siamun is interpreted as hint at a younger style change (57). The characteristics of the inscriptions, e. g. loss of eugraphy, replacement of signs, and missing words, are seen as hint at a scarce scribal competence (58). The reading of the name of the father of Siamun is corrected from "priw.w" to "hri.w" (59). The arrangement of the vertical text lines as columns of shorter lines is judged as indicative to a possible date from the Roman period (60). The investigation of the paleography is executed, the details of the signs being assessed as indication to a local tradition (68). The tomb owner is portrayed in the front part of the tomb as historic person and in the rear as transfigured one (87). The depiction as historic person, but with Egyptian clothes and integration in an Egyptian tale structure may suggest a date at the beginning of the Roman Empire (88). Greek elements such as egg staff and "Running Dog" have seeped into the *loculus* decoration.

In the 4th part, a catalogue of the painting fragments is prepared. The more than 1,000 fragments are classified in a) *loculus*-decorations, b) figural representations, c) hieroglyphs, d) furniture and tools, e) offering table, and f) ornaments (91). The fragments are introduced with measurements and short description.

The book is terminated with the plates (124), offering black-and-white as well as coloured photographs.

The reviewer arrives at the following conclusion: The details of the tomb are well assembled and presented lucidly. The arguments put forward make a balanced impression. The reader is indebted to the authors for the amount of data provided.

Reviews

Cicero, *On Life and Death*, transl. John Davie, ed. Miriam T. Griffin, Oxford World's Classics, Oxford University Press, 2017, ISBN: 978-0-19-964414-8, 260 pages.

On Life and Death comprises some of Marcus Tullius Cicero's most popular philosophical writings, in the translation of John Davie and edited by Miriam T. Griffin. Published in February 2017, the volume is part of the Oxford World's Classics collection. In what its curators are concerned, John Davie is a Lecturer in Classics at Oxford University and has been previously involved in a number of translations from both Greek and Latin, while Miriam T. Griffin is Emeritus Fellow at the same university and author of a number of books on classical subjects.

The book comprises three of Cicero's philosophical treatises (*Tusculan Disputations*, *On Old Age*, and *On Friendship*), each preceded by a synopsis, and two letters (one from Cicero to Gaius Matius and the other from Gaius Matius to Cicero). The choice of the treatises is meant to offer a balanced structure, half concerned with death and half concerned with life. The *Tusculan Disputations* and *On Old Age* focus on death and its approach whereas *On Friendship* and the letters to and from Gaius Matius concentrate on friendship as an expression of life. There is a logical progress in the positioning of the different pieces within the book, starting from death and progressing to old age, then to friendship in theory and ending with an example of friendship in practice.

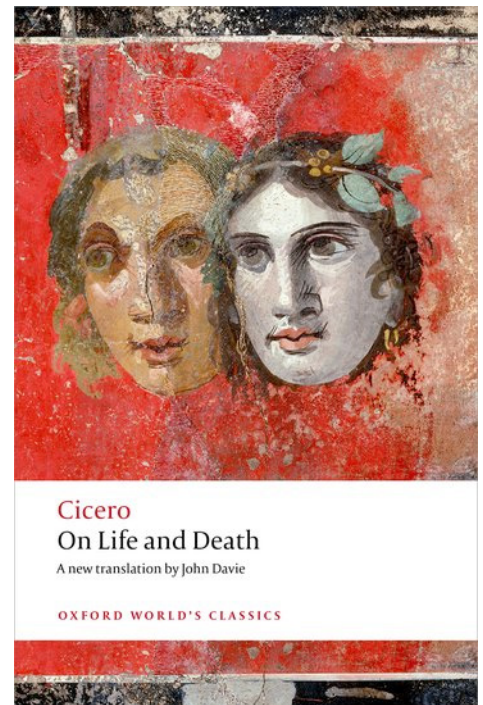
Cicero's *Tusculan Disputations* have death as the main subject, having been composed after Tullia's death. Death is discussed in the first book with the purpose of proving that it is not something negative, but quite the contrary, as it either cancels all sensation or gives access to a more complex and purer form of existence. The mortality or immortality of the soul are debated, and, while Cicero inclines for the latter, he does not give a certain answer (in the spirit of the New Academy), but offers arguments why neither of these represents something bad. Pain is reflected upon in the second book, in a similar manner as death is in the first. Distress is the subject of the third book and emotions the subject of the fourth. However, the third and fourth books of the *Tusculan Disputations* have only their prefaces translated and a synopsis provided in the edition in question, the translation of the main body of their text not having been included. The fifth book presents a discussion on virtue as the only and sufficient way towards a happy life.

On Old Age puts into light the potential shortcomings of old age (approach of death, loss of past strength and abilities, diminishing of one's role in public life, loss of pleasure) and combats each of them, providing the overall idea that through virtue old age can be at least as pleasant and beneficial to others as youth, but in its specific manner and by its specific means.

In *On Friendship* there arises the definition and characterization of true friendship, which, according to Cicero, can only occur between good (virtuous) men. Friendship needs to be characterized by truthfulness, even in situations when it may imply correcting a friend's faults through criticism.

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As a result, friendship becomes constructive and maintains virtue in friends.

The letters to and from Gaius Matius may be considered an illustration of Cicero's concept of friendship. They discuss whether Matius' support of Caesar and later of Octavian was moral and, if not, whether that may affect his friendship with Cicero. A significant point is remarked by Matius, who writes to Cicero that he had not reached that level of philosophy as to not support a friend, if that friend had decayed (referring to Caesar). His point highlights the difference between philosophical precepts in theory and their application in everyday life.

Even though *On Life and Death* creates an image of symmetry and logical evolution through the choice of the translated pieces, it does not offer an exhaustive perspective on Cicero's works on the named topics. His *Consolation* written after Tullia's death and a full translation of his letters to his friends would have perhaps given a more complete tackling of the subjects. Moreover, when concentrating strictly on the chosen works, there remains the question of why the third and fourth books of the *Tusculan Disputations* were not translated, as they would have not interfered with either the subject or the structure of the volume. Their absence may leave the reader with the impression of an incomplete understanding of the treatise. This gap is also signaled only in the "Note on the Text" section, without any further textual mark in the body of the text itself, which may cause confusion if the note is not borne in mind.

In what the translation is concerned, it is both very loyal to the Latin text and very fluent at the same time. It creates the impression of a text written in its mother tongue and provides a natural, enjoyable read, which facilitates the text's understanding and the reader's immersion in the cultural context. This characteristic makes the volume both a useful instrument for researches and an accessible text for those who want to become familiar with ancient philosophy.

The introduction and notes on the text provide valuable aids for the reader, setting up the context from the start and providing sufficient, but not excessive information. They introduce the reader progressively to Cicero, then to his work, then to the specific context of the texts at hand. The only shortcoming of the notes is the fact that they are not individually numbered, but numbered by the fragments to which they refer, thus making their potential quotation less specific.

All in all, *On Life and Death* provides a fresh, flowing translation of some of Cicero's most popular philosophical pieces. Moreover, it offers a new approach, based on the topic, not on chronology, which can be very useful for researchers in the field of philosophy when conducting targeted investigation. The volume is not perfect in terms of structure, but its faults are minimal and are overcome by the quality of the translation and of its supporting apparatus.