

## **OFFPRINT**

### **RGZM – TAGUNGEN Band 23**

zugleich

### **INTERDISZIPLINÄRE FORSCHUNGEN**

zu den Häfen von der Römischen Kaiserzeit  
bis zum Mittelalter in Europa Band 2

Johannes Preiser-Kapeller · Falko Daim (eds)

### **HARBOURS AND MARITIME NETWORKS AS COMPLEX ADAPTIVE SYSTEMS**

International Workshop »Harbours and maritime Networks as Complex Adaptive Systems« at the Römisch-Germanisches Zentralmuseum in Mainz, 17.-18.10.2013, within the framework of the Special Research Programme (DFG-SPP 1630) »Harbours from the Roman Period to the Middle Ages«

Römisch-Germanisches  
Zentrumuseum  
Leibniz-Forschungsinstitut  
für Archäologie

R | G | Z | M

**DFG** Deutsche  
Forschungsgemeinschaft



Redaktion: J. Preiser-Kapeller (Wien), Marie Röder (RGZM)  
Bildbearbeitung: Franz Siegmeth Illustration · Grafik-Design · Malerei,  
Bad Vöslau/A  
Satz: Claudia Nickel (RGZM)  
Umschlaggestaltung: Reinhard Köster (RGZM)

#### **Bibliografische Information der Deutschen Nationalbibliothek**

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in  
der Deutschen Nationalbibliografie: Detaillierte bibliografische  
Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

**ISBN 978-3-88467-248-8**

**ISSN 1862-4812**

© 2015 Verlag des Römisch-Germanischen Zentralmuseums

Das Werk ist urheberrechtlich geschützt. Die dadurch begründeten  
Rechte, insbesondere die der Übersetzung, des Nachdrucks, der  
Entnahme von Abbildungen, der Funk- und Fernsehsendung, der  
Wiedergabe auf fotomechanischem (Fotokopie, Microkopie) oder  
ähnlichem Wege und der Speicherung in Datenverarbeitungsanlagen,  
Ton- und Bildträgern bleiben, auch bei nur auszugsweiser Verwertung,  
vorbehalten. Die Vergütungsansprüche des §54, Abs.2, UrhG. werden  
durch die Verwertungsgesellschaft Wort wahrgenommen.

Herstellung: betz-druck GmbH, Darmstadt  
Printed in Germany.

# CONTENTS

<i>Claus von Carnap-Bornheim · Falko Daim · Peter Ettel · Ursula Warnke</i> Preface .....	VII
<i>Johannes Preiser-Kapeller</i> Harbours and Maritime Networks as Complex Adaptive Systems – a Thematic Introduction .....	1
<i>Franck Goddio · Damian Robinson · David Fabre</i> The Life-Cycle of the Harbour of Thonis-Heracleion: the Interaction of the Environment, Politics and Trading Networks on the Maritime Space of Egypt’s Northwestern Delta .....	25
<i>Myrto Veikou</i> Mediterranean Byzantine Ports and Harbours in the Complex Interplay between Environment and Society. Spatial, Socio-Economic and Cultural Considerations Based on Archaeological Evidence from Greece, Cyprus and Asia Minor .....	39
<i>Pascal Arnaud</i> The Interplay between Practitioners and Decision-Makers for the Selection, Organisation, Utilisation and Maintenance of Ports in the Roman Empire .....	61
<i>Flora Karagianni</i> Networks of Medieval City-Ports on the Black Sea (7 <sup>th</sup> -15 <sup>th</sup> century). The Archaeological Evidence .....	83
<i>Søren M. Sindbæk</i> Northern Emporia and Maritime Networks. Modelling Past Communication Using Archaeological Network Analysis .....	105
<i>Johannes Preiser-Kapeller</i> Harbours and Maritime Mobility: Networks and Entanglements .....	119
List of Contributors .....	141



## PREFACE

The establishment of the Special Research Programme (SPP) of the Deutsche Forschungsgemeinschaft 1630 »Harbours from the Roman Period to the Middle Ages. The archaeology and history of regional and over regional traffic systems« in spring 2013 for a period of six years provides the opportunity to study the conditions under which anchorages, harbours and port cities emerged, were used and disappeared. Within this framework, three major European shipping zones are scrutinized, which at first sight are characterised by very different conditions and dynamics: the Mediterranean, the Northern and Baltic Seas and inland waterways. For all three areas, the same fundamental questions are posed: How and under what conditions interfaces between water and land were designed and organised in space and time? Yet, natural and historical parameters as well as the available written and materials source evidence very much differ. Moreover, these various regions and periods are embedded in different and highly sophisticated scientific cultures with their own systems of concepts and thinking styles. The research focus therefore faces not only also otherwise existing challenges of major research projects to organise the analysis of immense amounts of data and the systematic exchange between the individual projects, but also to overcome »cultural« barriers between disciplines in order to ultimately provide large syntheses.

Besides the necessary explanations of terms and a discussion of criteria by which comparisons are to be drawn, it is also important to consider different theoretical approaches for their applicability and to use tools of the digital humanities in order to collect and analyse the evidence and to gain new scientific ground. Special meetings held at the RGZM in Mainz for the SPP-1630 are devoted to these issues. The first one focused on »Harbours and Maritime Networks as Complex Adaptive Systems« and took place on October 17<sup>th</sup> and 18<sup>th</sup> 2013. Through the contributions of the speakers and extensive discussions, it became clear that network theory and the accompanying digital tools are well suited to analyse complex systems, such as maritime and terrestrial transport systems and their interfaces.

Our thanks go to Johannes Preiser-Kapeller for the concept and organisation of the meeting as well as to the speakers who provided not only perfect presentations but also written versions of their contributions. May this collection of papers stimulate the working groups within the SPP »Harbours« and also beyond.

*The initiators of the SPP »Harbours«*

*Claus von Carnap-Bornheim*

*Falko Daim*

*Peter Ettel*

*Ursula Warnke*



## THE INTERPLAY BETWEEN PRACTITIONERS AND DECISION-MAKERS FOR THE SELECTION, ORGANISATION, UTILISATION AND MAINTENANCE OF PORTS IN THE ROMAN EMPIRE

When the editors of this meeting proposed me to present a paper about »The interplay between practitioners and decision-makers for the selection, organisation, utilisation and maintenance of harbours«, my first reaction was that first-hand available evidence relating to these topics, as well as scholarly literature were definitely too scarce to allow any serious attempt to propose any reconstruction of a pattern of interplay on a firm footing. But the question posed to me was so stimulating, that it at least seemed interesting to place these issues in the context of the current state of historiography and to speed-up research about topics that are analysed within the framework of the ERC (European Research Council) funded programme »Rome's Mediterranean Ports« (RoMP) directed by Simon Keay.

Any attempt to understand the interplay between performers and decision-makers must necessarily rely on a previous understanding of the structure of ports administration and of ports funding. Available evidence about these topics is unfortunately very scarce. It was actually so rare when I started looking at these issues that I once thought of entitling this paper »the sound of silence«. Even less rare now than at the time when Rougé was writing, evidence remains rare, and one has to think about the reasons why inscriptions relating to port administration are so exceptional. Thence we can reach one of the following two conclusions, or some mixture of both: either we are looking for functions that actually did not exist, or social conventions that ruled the display of public inscriptions left little or no space for the holders of these positions.

This situation may explain why little attention has been paid to port administration by modern historiography in the last 50 years. Rougé's pages on these topics are unfortunately the most out-dated part of his work, from both the point of view of the historical background and that of the evidence gathered. The most relevant article about our topic was published in 1980 by G. W. Houston. In this, he rightly pointed out how little we know about the administration of Portus and why that little could not be applied to other ports. We still know little about Portus, where many issues are still under discussion, and almost nothing about Italy.<sup>1</sup> No special attention has been paid so far to port administration outside Italy. For that reason, we shall provide here the preliminary results of our quest for new evidence from the provinces, and try to illustrate the new light it brings to the issue of ports administration.

The historiography of Roman harbours, however, is still dominated by an imperial and centralist perspective. But it is probably too restrictive to focus only on port administration as part of imperial administration and from the sole point of view of imperial centralism. The latter may well have been one of the layers of port administration in the Roman imperial Mediterranean, but it is possibly a misleading postulate to look primarily at it. If not entirely out-dated, Mommsen's *Staatsrecht* perspective has been widely challenged, and proved itself partly unsatisfactory to explain the complexity of the structure of the empire. It is also necessary to look at the empire through the lenses of other perspectives: that of the cities on one hand, that of political anthropology on the other hand. Since the early 1980s, the works of the late F. Jacques

and others have led to a complete re-evaluation of the role and competences of cities in the Roman Empire.<sup>2</sup> The under-estimation of the municipal layer in understanding ports is precisely the cause of Rougé's misunderstanding of part of the preserved evidence. The sphere of municipal activity has provided me with significant pieces of evidence for the topics I had been asked to examine here.

Last, but not least, the social and political organisation of the Roman Empire had at its top a divine autocrat. Its body used to be a pyramidal and client-based organ based upon the dignity and social status of individuals, a strong hierarchy of persons within legible networks.<sup>3</sup> The originality of this social and political pattern does not allow to pose the problem only in terms of administrative organisation, and requires a larger focus. It will be necessary to replace the question of the decision-making processes in port building and maintenance within the complicated context of the social relationships between the performers of that complex game, involving individuals, including the emperor, as well as groups, in highly codified interplays and networks.

### THE POINT OF VIEW OF INSTITUTIONAL AUTHORITY: A COMPLEX SITUATION

A first key to understanding decision-making could be provided by port administration. Unfortunately, we know very little about how the administration of ports was actually organised.

#### Lost harbour-masters

Any attempt to find some Roman equivalent to the modern function of harbour-master at Ostia as well as elsewhere has failed so far. The discovery at Caesarea Maritima of an inscription mentioning a Varius Seleukos as *κουράτορ πλοίων κολ(ωνίας) Καισαρείας* («curator of the ships of the colony of Caesarea») has led the editors of the text<sup>4</sup> to the idea that this would have been something like the local harbour-master, but this interpretation seems rather unlikely, if not impossible. *Curatores navium marinarum* et *curatores navium amnialium* are well known at Ostia. They were numerous enough there to form two *corpora*<sup>5</sup> there, and this number seems to exclude that their function may have been that of harbour-master. Furthermore, another inscription from Ostia shows that at least some of them were in charge of the ships of their own city in a remote harbour, in this case Ostia. A man settled at Portus, but likely to have originated at Carthage, as is suggested by his tribe, was *curator navium Karthaginiensum* (curator of the ships of Carthage) at Portus.<sup>6</sup> It seems probable then that Varius Seleukos was in charge of his mother-city's ships in some foreign port, likely Portus, rather than Caesarea's harbour-master. What the exact function of *curatores navium* was, I shall not examine here, but it is almost certain that they were not harbour-masters.

Only one possible extant witness of lower positions has been preserved. At Lilybaeum a slave, who qualifies himself as *actor portus Lilybitani*, had dedicated an *ex voto* after the safe return of Plotinus and Rufa, maybe his masters. But it is not absolutely clear whether this individual, apparently not an imperial slave, was involved in port administration or in tax-collecting (if *portus* means *portoria*).<sup>7</sup> He is likely to have been a slave of the tax-farmer in charge of the *statio* of Lilybaeum.

The lack of evidence about ports administration is so impressive that there seem to be only two possible explanations for that state of affairs. Either there was no ancient equivalent for the modern harbour-master, or the social legibility of the position and/or of the people appointed to it was not worth mentioning in public inscriptions.



## The city and its officials

The foundation of the so-called *coloniae maritimae* by Rome during the 2<sup>nd</sup>-1<sup>st</sup> centuries BC had placed most Italian harbours (in approximate chronological order: Antium, Tarracina, Ostia, Minturnae, Sinuessa, Sena Gallica, Castrum Novum, Pyrgi, Alsium, Fregenae during the 3<sup>rd</sup> century BC, and in the 2<sup>nd</sup> century BC, Puteoli, Salernum, Volturnum, Liternum, Sipontum, Buxentum, Crotone, Tempsa) under the direct authority of Rome.<sup>8</sup> A confirmation of that situation is given by the fact that in 179 BC, the moles of the port at Terracina had been funded by the Roman censors.<sup>9</sup> We also hear that by 166 BC, Rhodes had apparently lost its authority over its own harbour.<sup>10</sup> It seems that at some time things changed. This may have been a slow process: in Italy, when *coloniae maritimae*, which were not cities, but groups of Roman citizens, turned into cities, and overseas, when integration did not justify any longer the direct authority of Rome over foreign harbours.

Even indirect authority would have generated a heavy duty for the State, given the number of ports within the empire, and would have been a strange exception to the role played by the cities as the base of the imperial system. The works of the late François Jacques have provided new light on this role and on the relationships between cities and imperial power. The authority of cities upon their harbours undoubtedly needs re-evaluation in wake of this new thinking, which brings significant change to our image of harbours placed under the direct authority of Rome, a view which has been predominant in modern historiography. Although available space does not allow me to give a full demonstration here,<sup>11</sup> there is enough reliable evidence to show that ports were normally placed under the authority of cities. A much quoted passage of the late Diocletianic or Constantinian lawyer Aurelius Arcadius Charisius,<sup>12</sup> known in the *Digest* as *magister libellorum* and the author of a book *de muneribus civilis*, and a passage of Plutarch, hitherto never quoted by modern scholarship,<sup>13</sup> both list the function of port supervisors among municipal liturgies (or *civilia munera*), and show that this situation, already well-established by the late 1<sup>st</sup> century AD lasted into the late Roman Empire. In Plutarch's text, the λιμένων ἐπιμελείαι (supervisions of harbours) are listed among τὰς ἐν πολιτείᾳ διακονικὰς λειτουργίας (compulsory offices in civic life) together with τελῶν πράξεις (tax exactions), ἀγορᾶς ἐπιμελείαι (market surveillance, generally called ἀγορανομία) and embassies to the emperors. They were, then, to be considered as *munera civilia publica*, the Latin equivalent of τὰς ἐν πολιτείᾳ διακονικὰς λειτουργίας. Plutarch gives the person in charge of the port the title of *epimeletes*, which is the Greek equivalent of the Latin *curator*. A port supervisor would then have been called in Latin *curator portus*.

According to Aurelius Arcadius Charisius these were called *limenarchae*.<sup>14</sup> This is confirmed by two inscriptions from Ephesus<sup>15</sup>, where the function of λιμενάρχης is mentioned in lists of positions that include agoranomes, making it clearly a duty/service or *munus*, in accordance with both Plutarch and Aurelius Arcadius Charisius. They apparently wanted to point out that, although these supervisors had the capacity of using public funds in exercising their office (*facultas erogandi pecuniam publicam*), they nevertheless were *munerarii* rather than magistrates. The distinction between *honores* and *munera* may have been tiny and sometimes unclear, as was the case of the *quaestura* considered in some cities as a magistracy (*honor*) and in other ones as a *munus*.<sup>16</sup> Two inscriptions employing the verb *limenarchein* at Arados in Syria<sup>17</sup> and at Kreusis<sup>18</sup> (the main harbour of Thespiea in Boeotia) seem to confirm that these were considered to be magistrates rather than *munerarii* in these two particular cities.

The silence of the epigraphic evidence about this kind of function can be explained by the lack of social visibility, dignity, prestige and glory attached to *munera*/liturgies, these being tasks performed by the effect of an order rather than by choice, placed under the command of a magistrate, deprived of *potestas* or direct *facultas iubendi*, and that, contrary to «euergetism», normally implied no personal expense.<sup>19</sup> This is

why there was generally no reason to mention such offices in inscriptions displayed in public spaces, unless they had been managed in an exceptional way or in cities such as Ephesus, where *munera* were mentioned together with *honores*.

It is still uncertain whether the *epimeletai/curatores* and *limenarchai* were exactly what would be modern harbour-masters, or if they were rather in charge of the port's infrastructure (or were they just police officers?), but it is quite certain that cities had, at least nominally, full authority over their harbours. Initiative and decision-making must then have been left to the city and to its institutions. We must imagine that in the West this was the task of the *aediles* and by delegation that of special curators. Decisions may have followed the usual decision-making process in cities, and decrees were created by an ad hoc assembly, the *ordo*, the *boule*, or the *ekklesia*, depending on the city's constitution. If the capitals found along the jetty at Gightis, in front of Girba in the Lesser Syrtis, did actually belong to the jetty and had not been re-used, then this may have belonged to the same town-planning initiative as the forum, where exactly the same capitals were found.<sup>20</sup> We know that at Smyrna (and probably at Ephesus under Trajan as well) the harbour – or part of the port – had been funded by a subscription.<sup>21</sup>

### The authority of the city challenged by imperial governors?

This scenario fits well into the perspective we now have on the »privilège de liberté« of Roman imperial cities. But some scholars are still reluctant to give full space to this vision and insist on the idea that this would be mainly the case of *civitates liberae*. They often argue that the example of the harbour at Ephesus shows that this was not the case of *civitates stipendiariae*. Some have seen in the interference between the governor and the city a clue as to the status of Ephesus as *civitas stipendiaria* as opposed to *civitas libera*.<sup>22</sup> A famous decree<sup>23</sup> of the Proconsul L. Antonius Balbus, usually dated to AD 147 apparently gives the proconsul full authority over the harbour. The severity and the apparent impoliteness of its general tone are obvious and contrast to the usual deference of governors towards cities, even when these were not *civitates liberae*. Albeit, the governor is very careful and is fully aware that he is interfering with the sphere of authority not only of this particular city, but also of its highest magistrate, who also happened to be an Asiarch. He therefore emphasises the reasons why he had to interfere through this decree. The harbour of Ephesus, he says, was not only Ephesus' matter, but also impacted on the rest of the world. It is only because, despite a municipal decree, local institutions had failed to resolve the problem that he had to intervene on behalf of larger, or even global concerns, and on the grounds of the special ties that existed between Antoninus Pius and Ephesus. These ties, as well as the common interest of the empire had eventually made Antoninus Pius the guardian of the port of Ephesus. His governor eventually was not stepping into the city of Ephesus' shoes. He came to support the city, to increase its efficiency. The municipal decrees remained valid and offenders were still liable to the city. But the governor considered that these had also offended the Emperor and were for that reason liable to him. The context makes Antonius Albus' edict very original, and in a way contradictory. On the one hand the authority of the city over its harbour remained unchallenged; on the other hand, because the city could only impose fines, which were not sufficient to provide results, and since the interest of the rest of the empire was involved and more severe penalties were needed, the only competent tribunal was the governor's or the emperor's.

The situation of Ephesus was special anyway. Under the Flavians, during more than ten years, the magistrates of the city had been placed under supervision of an *episkopos* appointed by the emperor<sup>24</sup>. Also, the port was under the permanent threat of silting up. In any case, interventions of the governor had never abolished the authority of the city over its own harbour.

### **Portus Augusti: the emperor and his representatives in imperial ports**

But a few harbours were probably placed under the direct authority of the emperor. This was undoubtedly the case at *Portus Augusti*, and probably at *Centumcellae*<sup>25</sup> and *Portus Iulius*, as the name itself shows, and where no individual city had the authority over the harbour. The situation of Puteoli, where a *procurator portus Puteol(ani)*, who had his *origo* at Puteoli, may well have been a municipal *procurator* rather than an imperial one,<sup>26</sup> is less clear.

Even in these cases, it is difficult to find an explicit authority over the harbour. Although our knowledge of port administration at Portus has been much improved thanks to G. W. Houston and C. Bruun,<sup>27</sup> some essential points remain under discussion. Among these is the exact sphere of authority of the *procuratores portus Ostiensis* and later *procuratores portus utriusque*, which is far from being clear. The latter (who have apparently replaced the former after the building of Trajan's harbour) are likely to be the same as the *procuratores Augusti*, whose names appear on at least 14 lead pipes at Portus and Ostia and who were placed under the authority of the *a rationibus*. This is the opinion of Houston, following Pflaum, but this hypothesis has been rejected by C. Bruun, on the grounds of what appear to be rather weak arguments. My opinion is that the presence of the same name (*Agricola*, much rarer than argued by C. Bruun)<sup>28</sup> in the same reign, on a lead pipe<sup>29</sup> and on a public inscription left by a *procurator portus utriusque*<sup>30</sup> leaves little room for doubt. If so, the *procuratores portus utriusque* were placed under the authority of the *procurator a rationibus* and were in charge of imperial estates. They were usually freedmen and only on one occasion was the position opened for people of higher status, in that case a *ducenarius* knight.<sup>31</sup> Evidence seems to contradict the idea that the equestrian *procuratela*, attested only once just before the *millenium urbis*, introduced a new sustainable status of the office.<sup>32</sup> The fact that these *procuratores*, placed under the authority of the *rationalis*, intervene in the water supply of Tor Boacciana<sup>33</sup>, the lighthouse at the mouth of the Tiber, as well as in other sectors at Ostia and at Portus seem to indicate that their authority extended to any imperial estate or infrastructure, either at Ostia or Portus. But these were clearly not harbour-masters *stricto sensu*. Their authority could be challenged by higher authorities or individuals in the hierarchy of the State apparatus. Officials of the Annona office could take decisions regarding the harbour at Portus. In AD 210 the *Praefectus Annonae* could define the area whence it was legal to extract sand for ballasting the ships.<sup>34</sup> A papyrus<sup>35</sup> confirms that ships sailing back from Ostia to Egypt were sailing with ballast. Ballasting empty ships without causing harm to the port of destination of Annona could naturally be considered as part of the powers of the *Praefectus*. This does not mean that the *Praefectus Annonae* was in charge of the port. His presence at Portus is as discrete as is that of his administration.<sup>36</sup> But his personal statute and place in the hierarchy of the State officials, as a *perfectissimus*, assisted by the dreaded *frumentarii* and under Constantine (or just after his death) granted the *ius gladii*<sup>37</sup>, made him one of the most powerful men of the empire. The inscription of AD 210 shows that at the end of Severus' reign the authority of the *Praefectus Annonae* upon the infrastructure at Portus was not as firm or accepted as it might have been, for he had to engrave the copies of the letters of his predecessors who had founded this self-proclaimed authority, in order to provide his decision and the authority upon which it was based with a sustainable existence.

As far as we know, the imperial administration of Portus looks much more like an administration at Portus than an administration of the harbour of Portus properly speaking. It seems to be the result of a cluster of possibly conflicting authorities, whose hierarchy could be that of the chief officials, the *Praefectus Annonae*, the *a rationibus*, and so on... The increasing authority of the *Praefectus Annonae* and of the *frumentarii* from the reign of Severus onwards gave him a special importance in this game of influence, and probably not only at Portus. The latter *Praefectus Annonae* may have played a great role in the circulation of information between the provinces and the emperor, as well as the regional *Procuratores Annonae*.<sup>38</sup>

## FUNDING BUILDING AND MAINTENANCE: PROTECTORS AND BENEFACTORS, THE EMPEROR AND SOME OTHERS

Funding imperial harbours was by nature the emperor's affair. As far as Roman imperial cities were concerned, it is generally assumed that their public incomes tended to be significantly lower than the actual level of their expenses, and that funding monuments and infrastructure was made possible with the help of local »euergetism« or with that of the emperor, especially when huge works were necessary. We therefore must establish whether the building and maintenance of ports conformed to this general pattern of civic life under the Roman Empire. »Port« must be understood in its most restrictive sense.

It appears that in the inscriptions from Ephesus, »limen« means the basins and their limits (piers, wharves, quays, breakwaters), but not other features (porticoes), in accordance with Opramoas of Rhodiapolis, who is said to have spent 18,000 *denarii* on rebuilding the double portico of the harbour after an earthquake at Patara in Lycia<sup>39</sup> and who calls it the portico »near the harbour«, exactly as Vitruvius<sup>40</sup> speaks of porticoes »around the harbour«, although these used to be located on the sea-front along the quays.

### The emperor and others

I have recently pointed out that all dedicatory inscriptions relating to the building mention the emperor as the performer of the celebrated achievement. This opinion must be qualified. A couple of inscriptions actually mention port building activities which have nothing to do with the emperor. Some, such as at Smyrna, were based on public subscriptions to collect money, in order to achieve what is described as »building the port« (*kataskeuein ton limena*).<sup>41</sup> The same expression occurs in several inscriptions at Ephesus, where funding the »building of the port« appears to be rather common. During, the reign of Trajan, the sums spent by a single person on such occasions range from 2,500 to 75,000 *denarii*<sup>42</sup> and are relatively small in comparison to other known construction costs.<sup>43</sup> Both the sums and their timing suggest that they were little more than limited refitting, embellishment of existing structures, or parts of larger works. These amounts were not determined by the needs of the harbour, but rather by the customary amounts that people reaching certain positions had to spend. Sums of between 70,000-75,000 *denarii* were customarily expected from a High Priest<sup>44</sup> and while they could hardly support the full-scale building of ports, they could certainly finance parts of them, especially when they were but the most remarkable contributions to a public subscription.<sup>45</sup>

Some have supposed a similar process at work at Cartagena, where, much earlier, an individual would have paid for the building of three *pilae* and *fundamenta*. However, it has been recently argued with convincing arguments that these projects did not actually refer to the harbour.<sup>46</sup>

Individuals funding »oversized« project would inevitably have been considered as challenging the emperor. This is in a way what happened to a certain T. Claudius Aristi who together with his wife Iulia Claudia Laterane had built a 38km long aqueduct and related monuments, i. e. a monumental fountain and two nymphaea, whose total cost is not stated, but has been estimated at several million *sestertii*.<sup>47</sup> As a result he was brought to the tribunal of the emperor by a *delator* at the initiative of his enemies, but eventually acquitted.<sup>48</sup> He had been clever enough to dedicate all these monuments to the emperor... The highest known contribution to harbour building at Ephesus – 75,000 *denarii* – is roughly equal to the highest contribution to public buildings known from Pergamon<sup>49</sup> also in the reign of Trajan. Neither the size of these operations, nor their conventional amount, nor even the collective character of subscriptions could break

the unwritten law that made port building a privilege of the emperor. Even governors could be subject to the same rule. In the reign of Nero, Q. Marcius Barea Soranus, Proconsul of Asia had built some infrastructure within the harbour (he had »opened« the harbour),<sup>50</sup> and faced the emperor's anger for having done what was considered by Nero to be his own privilege.

As was usual in Roman imperial cities, the provision of infrastructure was essentially driven by euergetism; imperial euergetism when greater works were concerned, and private initiative in the case of smaller projects. The building of infrastructure thereby was fragmented in micro-interventions, whose purpose was symbolic rather than really pragmatic. Even maintenance was the affair of benefactors. Again at Ephesus at some time after AD 212, a high-priest offered the city the dredging of the harbour on occasion of his new position.<sup>51</sup> The amounts and purposes of each donation were highly conventional and had to contribute to the greatness of the city and to the welfare of its citizens. Members of the elite had to spend customary sums for the benefit and prestige of the city when they reached certain positions, but, at least to some extent, they were free to choose the purpose of their funding. Some chose the harbour. The reason may have been primarily symbolic. Their decision to fund works at the port rather than games or the gymnasium or baths supposes that the port was in the community's mind both in terms of its symbolic value for the city's greatness (especially when similar works may have been undertaken in a rival city, such as Smyrna) and of its wealth and in terms of preoccupation: at Ephesus these operations (likely all part of the same larger project) are concentrated in Trajan's reign, and were succeeded by the diversion of the river Kaÿstros under Hadrian. A century later the level of silting of the harbour may have become worrying enough to justify the donator's choice to pay for dredging it, although this left no sustainable, monumental trace. But ultimately the reason for targeting money at the »building« or maintenance of the port was basically the promotion of individuals to higher positions. They were close enough to the concerns of their fellow-citizens to appreciate when it was appropriate to fund games, works at the port, the Gymnasium or rather the Baths. Here again the reasons may have been, if not purely, at least highly symbolic, and we have found no trace of any project of great relevance in terms of amount.

Subscriptions may have allowed for more significant undertakings, although no amount is known so far; but when large-scale works were needed, the city had to turn to the emperor, for he not only had the wealth, but also the engineers and architects necessary to achieve larger projects involving diverting rivers, deep excavations or building moles in open water.

### **The emperor as protector and saviour of human mankind: lighthouses and port building**

The question of the conventions that applied to dedicatory inscriptions of monuments on behalf of the emperor is a general one: it is not specific to port infrastructure and has already been studied as a whole.<sup>52</sup> Ports are not that different from other projects as long as single buildings were concerned: moles, warehouses or porticoes were all features whose building was in the hands of wealthy individuals.<sup>53</sup> Huge and extraordinary works, such as a lighthouse or port building were different from smaller buildings and pose the question of the difference of nature of infrastructure projects undertaken by the emperor, who was Lord of the land and the sea, acting for the common good, and of gifts addressed to a special community, usually a city, that made the emperor the wealthiest of benefactors.

The first duty of the emperor was the protection and welfare that he owed to any of his subjects, without consideration of any special favour to identified individuals or groups. One of the main aspects of the Roman image of the emperor/*imperator* (as well as, earlier, of that of the Ptolemies) is based upon his *pro-noia/providentia*, whose instrument was *epimeleia/cura*, which is stronger than the constraints of Nature

(*physis*).<sup>54</sup> This consists in challenging nature thanks to technical achievements made possible not only by his extraordinary wealth, but also by his supra-human mind and divine nature in order to provide mankind with welfare, a better life and a higher level of security.

The lighthouse built on the island of Thasos by a certain Keratos was much older than Ptolemy II's famous lighthouse at Pharos. Both dedicatory inscriptions referred to the »salvation«<sup>55</sup> of sailors<sup>56</sup>. The proposed reconstruction of the dedication of Caesarea Maritima's lighthouse is unfortunately too fragmentary and Alföldy's reconstructions are too hazardous to give us sufficient ground for discussion,<sup>57</sup> but very similar words are found on the dedicatory inscription on Nero's lighthouse at Patara, dated to AD 64-65.<sup>58</sup> This inscription sheds interesting light on lighthouse building in general, first because it was the work of the Emperor. In this case, there is no direct relationship to the travels of the Emperor. We have seen that Tacitus considers that the main reason why the Proconsul of Asia had been sued was his efficient works at the harbour of Ephesus. He had in some way done what was basically the emperor's duty and, acting in his own name, he had offended the emperor's majesty. While in the dedication itself, engraved under Nero, the governor appears only as the emperor's representative, in a second inscription, engraved under Vespasian to honour the same governor, he is considered as the actual builder of the lighthouse. He had been involved not only in building Nero's lighthouse – not a very big one, actually – and the complementary lighthouse, called *antipharus*, but also in other more usual building activity. The latter qualified him for the title of »Benefactor«, the former for that of »Saviour«. This emphasizes the fundamental distinction between euergetism (benefaction), devoted to a special community and the *epimeleia* due to larger groups.

In the current state of epigraphic evidence, the dedicatory inscriptions of Claudius and Trajan found at Portus stress the positive effect of the canals on the floods of the Tiber more than the building of the port itself, which appears almost incidental. These record that the emperor had »freed the City from the threat of floods«,<sup>59</sup> celebrating his role as a Saviour. Hadrian is called too »Benefactor and Saviour« on behalf of his works at the harbour (IvE 274).

When Josephus relates the intervention of the Emperor Gaius in improving or building harbours on the Strait of Messina<sup>60</sup>, he does not mention safety or euergetism, but utility (ὠφελεία) in the context of grain supply. According to Josephus, the Emperor then paid no special interest in the harbours themselves, but rather in their role as conduits for the supply of grain to Rome. And when Cassius Dio (60.11.1-5) describes Claudius undertaking the building of Portus he mentions the treatment of famine as the main cause for that decision, while the principal reason for the size of the project was the dignity (φρόνημα) and greatness (μέγεθος) of Rome.

As far as we know, imperial attention focused on the network of ports supplying Rome (Portus Iulius, Portus, Centumcellae, Carthage, Ephesus, the Straits of Messina), and to lesser extent to other harbours (e. g. shelters between Puteoli and Portus) – in other words the focus was on Rome. This is explicit in a 4<sup>th</sup> century inscription from Rusicade<sup>61</sup> and underlies Antonius Albus's decree at Ephesus. Where the latter is concerned, it is interesting that the intervention of the emperor and the governor tends to concentrate upon ports where the governor was present or involved, mainly in the provincial capital or other leading cities.

A common point between the decree of the governor L. Antonius Albus and the only dedicatory inscription left by Claudius at Portus is that they tend to give technical details and explanations about the intervention and the kind of improvement that it was supposed to provide. The way the Emperor, as well as the elite who ruled the empire and the cities within it, were able to understand and explain Nature and to overwhelm it with science or technology was one of the main qualities that justified the exercise of power. Owning some of the technical curiosities described by Hero of Alexandria and being able to explain their meaning was something like a justification of the natural character of this aristocracy.

For that reason, neither in Pliny the Younger's Letters, nor in the description of the works of Claudius or Trajan do we find any mention of the decision-making process, nor of other people involved in the process. Exhibiting interest in technical challenges such as excavating a channel between the sea and the lake at Nicomedia was part of the leading class culture and a key to good governance. Huge works were not only supposed to be useful. They also used to be integral to the ideology of power and of its presentation.<sup>62</sup> The main patterns of the ideological framework of huge works, of which ports formed just a part, is well summarized by Pliny the Younger: a far-sighted providential work »worth not only (Trajan's) eternity, but also glory, that would be beautiful and of public utility«, as well as a duty and, therefore, a sign of the magnanimity of the emperor (*Epist.* 10. 41.1). He would prove himself superior to kings that had left similar works unfinished.

For that reason, elements of the decision-making process are not usually mentioned, so as to stress the cleverness and divinity of the emperor.

Who were the emperor's advisors? A complex entourage, in which »friends« (the so-called *cohors amicorum*), the officials (imperial freedmen, Annona and governors, at Rome and in the provinces), as well as technocrats involved in the practical realization of projects were all present. All of these people in turn were involved in client networks, which were integral to the social structure of the Roman Empire.

Dio's text describing the process of decision-making for Claudius's basin at Portus is virtually the only extant evidence for decision-making in harbour contexts. It shows architects and other people advising the Emperor not to undertake such a huge work, and the Emperor eventually deciding to undertake it. Quintilian suggests that there had been prior discussions and that the technical point of view of the architects was only part of what might have been a larger debate.<sup>63</sup> Here we encounter a very conventional *topos*: emperors had to undertake over-sized works, even if the risk was high that these would never be completed. And eventually the emperor took his decision against the views of his advisors.

The discussion between Trajan and Pliny about the construction of a canal between the lake at Nicomedia and the sea (*Epist.* 10. 41; 42; 61; 62) illustrates both the consequences of a the visit of a governor to a city in his province (Nicomedia) and the steps of the decision-making process. The governor alone realizes how useful such a work would be – it had been realized by a king long ago even though he had failed to bring it to a successful conclusion. He then estimates whether enough inhabitants could be used on the work, this being the first step about the feasibility of the work, and only then explores its technical practicability, with the help and advice of local architects. Then he turns to the emperor for approval and further technical support, in order to establish with certainty the feasibility of the work. The emperor alone would decide and become the only official performer of the project.

For the cultural reasons that I have tried to underline above, we must not underestimate the actual interest and competence of emperors, governors and higher state officials, or of members of municipal elites, in engineering, technical and architectural matters. The density of official correspondence between the emperor and his governors or other representatives such as freedmen or procurators, clearly exemplified by Pliny the Younger's Tenth Book of his *Epistles*, a selection of his correspondence with the emperor, established a strong connections between the centre of power and the provinces. The ties between governors and the provincial capital were probably particularly strong, but visits of the governor to other cities (especially to those who used to be rivals of the capital) within his province in turn allowed the emperor to obtain direct information about several cities, if not about all of them. This process is again well exemplified by Pliny's correspondence with Trajan. Infrastructural issues involving baths, aqueducts or canal buildings at Apamea, Nicaea or Nicomedia discussed by Pliny and the emperor all had their origins in the governor's travels. As governors were essential for the development of some ports like Ephesus and Patara, they were also probably so for other harbours as well.

The number of imperial *horrea* in several ports outside Rome could highlight further connections between ports and the emperor. Such *horrea* existed at Cumae<sup>64</sup>, Luna<sup>65</sup> and outside Italy at Carthage<sup>66</sup> and Hippo Regius<sup>67</sup> in Africa, at Rusicade<sup>68</sup> in Numidia and in many other places in the Roman East. Their direct relationship with the *annona* has recently been challenged by L. Cavalier,<sup>69</sup> whose stimulating article invites us to reconsider the role of warehouses in general, as C. Virlouvet did on the basis of the evidence of *Tabulae Sulpiciorum*.<sup>70</sup> This makes little difference for our purpose. Through the administration and administrators of these estates, the emperor similar to other owners received some information about their environment – in that case the port where they were located.

### **Imperial »euergetism«: the expression of *amor* and *adfectio* towards a city**

When it was the emperor's intention not to serve the common interests of his subjects, but to make a gift to a specific community instead, he then acted as an euergetist. Euergetism, which had its own rules, was an ostensible testimony of the personal affection and close relationship between the benefactor and a special group, here, a city. This *adfectio* relied on the personal history of the benefactor, of that of his (or her) family and on possible common friends. The beloved, favoured group was also this, and not another one, and the emperor could thus express his preference for one city with respect to another. This is not of secondary importance in a context where cities were friends or foes with one another; cities could actually hate each other to such an extent that one city could seize any opportunity to humiliate (or even annihilate) another one (generally a neighbouring one) in the Latin West, as well as in the Greek East. Such antagonism, intensified by imperial (dis-)favour, could lead to outbreaks of incredible violence.

The story of the complex relationship between Smyrna, Ephesus and Emperor Hadrian provides a good example of the role of imperial euergetism in expressing the variable levels and hierarchy of imperial affection, and the Emperor's preferences, which represented a public humiliation for those cities which received less than others or nothing at all. Smyrna and Ephesus were traditionally rival cities. During his voyage in AD 124 Hadrian clearly decided to humiliate Ephesus. Although the province's capital, it happened that Ephesus was now ranked only at number three in terms of imperial neocorates, behind Pergamon and the despised Smyrna. The Emperor then spent 10 million *drachmae* in favour of Smyrna, but his passage through Ephesus left no trace. He even refused to fund the channelling of a small tributary of the River Caystrus and ordered the city to carry out the work at its own expense. During his second voyage in AD 129 the Emperor was less rude towards the city. He seized this opportunity to divert the River Caystrus and thus »make the port navigable«. It is interesting that even then he did not offer a sum of money or monuments, but offerings to the goddess Artemis and supplied corn to the city. As a reward he was honoured as »founder and saviour« of the city rather than as a benefactor. He had not embellished the city, nor had he granted it a second imperial neocorate. He had just saved it. He had not demonstrated any special affection to the city, but had carried out his duty as an emperor saving it from starvation and isolation.<sup>71</sup>

Similar large-scale enterprises could have a different meaning in other contexts. Vespasian undertook major works at the harbour of Seleucia, diverting the waters of the river away from the harbour through a tunnel. The reason for this was that he had been supported by the city after the Eastern legions had proclaimed him as Emperor.<sup>72</sup> Severus carried out works at Leptis Magna, because he was a native son of that city.<sup>73</sup> Similarly, Nero created a colony and built an expensive port at *Antium*, because he was born in that city.<sup>74</sup> Here the ties between these cities and the emperor or members of his family were the key for understanding the possible needs of these cities, but also for deciding the size of the sums that the emperor or members of his family would spend upon them.



In a sense, ports were not very different – but (maybe) in terms of cost – from other monuments or infrastructure projects offered to a number of cities. Cassius Dio<sup>75</sup> mentions ports together with aqueducts, the corn supply, distributions in kind (known at Smyrna) and buildings. All of these he considers »honours« (τιμαί), rather than infrastructure stricto sensu. Although we have noticed that the context for the works at Ephesus was everything but »honours«, Dio's account reveals that euergetism was basically understood by his beneficiaries: as a mark of honour, rather than in terms of the provision of utilities. It is worth underlining that this passage actually speaks of the previously unknown level of euergetism achieved by one particular emperor: Hadrian. The alleged reason was this Emperor's travels.

An inscription from Ephesus brings confirmation and some precision to the Severan historian's testimony. Dated to AD 129 it commemorates the supply of corn to the city and huge works at its ports (the inscription uses the plural) on the occasion of the Emperor's journey, including diverting the River Caystrus.<sup>76</sup> We have seen that the Emperor had had a tough relationship with the city during his first voyage. It is clear that the second voyage had been the starting-point of a slow change made visible by the second neorate which was finally granted to the city in the year AD 131/132. It also allowed the Emperor to understand that the issues of the ports of Ephesus were serious, and a concern for the entire Mediterranean, as the edict of L. Antonius Albus later pointed out. Imperial travels undoubtedly had impact on the cities' infrastructures, in the same way as a governor's visits to the cities of his province.<sup>77</sup> They generated building activity to celebrate the emperor or the governor. In return, these had to repay in a way the community for the *adfectio* it had demonstrated with stronger signs of *adfectio*. This was but a game of ruled mutual duties and honours. These journeys were also an opportunity for the emperor to appreciate particular situations from a personal point of view. There is no doubt that the imperial *horrea* built by Hadrian at Patara and Andriake in Lycia are a direct consequence of the Emperor's visits to these places. They were built at the time of his travels. But the inscriptions they bear show clearly that they were not considered as part of euergetism. They were just part of the Emperor's personal interest. Imperial autopsy was also part of decision-making. This is a key for the decision of Hadrian to divert the River Caystrus to save Ephesus' port from silting, as it was the key for other interventions by governors within the same harbour. In addition to governor's and other imperial officials' reports and travels, imperial journeys may have been essential for the development of port infrastructure, as well as infrastructure in general, because they allowed for a direct perception of actual needs.

Two inscriptions from Puteoli commemorate the same act by Antoninus of the restoration of twenty *pilae* destroyed by the sea.<sup>78</sup> At first sight his could give the impression that the harbour was under the control of the emperor. In fact, he was acting as an euergetist, in executing a promise to the city by Trajan. This was considered as a beneficium, among others (a lacuna does not allow to make it clear whether these were Hadrian's other promises or specific Antoninus' gifts) probably in order to show that the building of two new ports at Centumcellae and Portus was not to be seen to have been to the detriment of Puteoli and that the love of the emperor towards this city was unchanged. To become an euergetist himself, Antoninus has given more than Hadrian had promised (*munitio[ne adiecta]*), even in the case of the *pilae*.

Huge works involving diverting rivers or huge moles were undoubtedly the affair of the emperor, not only because he alone, as a person or on behalf of the State, had both the wealth and the technical staff necessary for such achievements, but also for ideological reasons. The presence of the emperor or strong ties with a community were the background for his intervention as a person; local officials and the emperor's travels could be the reason for his intervention on behalf of the State, even if the limit may sometimes have been very small...

## SOCIAL INTERMEDIATION: COLLEGIA, PATRONS, IMPERIAL OFFICIALS

Since Mommsen, the Roman Empire has traditionally been perceived mainly as an administrative structure. Given the relatively small number of people actually involved in administration, it has become increasingly difficult to build a model of the management of the empire only on the basis of state administration.

We have seen that cities formed another essential level of decision-making. It is also necessary to place decision-making and power-based relationships in their social contexts. Beyond administrative hierarchies, the dignity of individuals and personal networking were the main characteristics of a society that was entirely based upon patronage and clientele. This was the case not only for people, but also for cities. As with individuals, groups, including cities, were friends or foes with each other, rivals or partners, and chose patrons within a complex structure of networks. Lobbying was an essential part of any decision-making process. The social status of an individual and the networks to which he belonged were perhaps more important than the position to which he had been appointed *stricto sensu*.

We cannot deny the existence of, nor the immense power conferred by, legal authority and administrative positions, indeed, but we must be aware that beside these (and part of the appointment process as well) lobbies, networks and patronage could be absolutely essential in decision-making. We must take into account the levels of social intermediation and their structure in order to have a clearer idea of the interference between administration and structured, visible, personal relationships.<sup>79</sup> As we have seen, the relationship between the governor Antonius Albus and one of the highest magistrates at Ephesus, Ti. Claudius Marcellus, who was a Roman citizen and a member of the Council of Asia, was both cordial and close. The governor had kindly suggested him to take some decisions; and only when these had failed to reach the expected goals did he eventually decide to intervene within the limits of the full respect due to an influential man and to the city he was ruling.

Two decades later, having been asked to become the patron of Cirta in Numidia, Fronto, the tutor of M. Aurelius and Lucius Verus, and for that reason a man of high influence, did not accept the honour, but proposed other names instead. Some were personal relatives, some were not. All had in common to be skilled in pleading causes and to be senators.<sup>80</sup> The first duty of a patron was to defend the city both at the tribunal and through lobbying. The same pattern applied to individuals belonging to the patron's clientele. The last decade of scholarship has entirely reappraised the importance and structure of the *corpora*. Once thought to be simple professional guilds, these now appear to have been an intermediate structure between the elite and the plebs, as well as places for social intermediation.<sup>81</sup> They were also something like clubs, whose members included not only people who had an occupation in common, but were also prominent people associated with the group as a result of their social position.

Evidence from Ostia has provided the clearest instances of the role of the *collegia* in social and administrative intermediation.

A certain Caius Granius Maturus illustrates the kind of networking that bridged the gap between the local practitioners of port activity and the higher echelons of imperial administration.<sup>82</sup> As a reward for his gifts to the city, he was made *gratis* a decurion and, later, a duumvir at Ostia. He was a member of the *corpus mentorum Ostiensium* and of the *corpus curatorum navium marinarum*, and was also patron of the latter, together with another four *corpora*: the *corpus curatorum navium amnialium Ostiensium*, the *corpus dendrophorum Ostiensium* and another two, whose names are unfortunately too mutilated to allow any convincing reconstruction. The same man was also a close relative of two prominent individuals: the Senator Marcus Lollius Paulinus, who calls him an *amicus*, and Maturus, who himself dedicated in AD 149 a statue, whose dedicatory inscription to a previous prefect of the Annona, then prefect of Egypt, has been preserved. This prefect he calls *amicus* »friend«.<sup>83</sup> We should bear in mind the breadth of the horizons of

possible lobbying, unveiled by this friendship to the eyes of a community of people who had chosen to place themselves under his protection.

We can imagine that this intermediation allowed not only for lobbying, but also for bottom-up information processes between the practitioners of port activity and people whose administrative functions were in direct relationship with the latter's activity, while their position brought them in relation with the emperor himself. A Roman knight C. Veturius Testius Amandus may be celebrated by the *V corpora lenunculariorum* as a *defensor*.<sup>84</sup> At some time the *codicarii* had joined them in honouring the man. The word *defensor* clearly means that he has defended their cause in justice, but in addition to this it is said that he had always protected them in a more general sense. Close relationships between influential people and practitioners of port activity were undoubtedly numerous.

At the limits of the sphere of legal authority, the links that tied groups of practitioners of ports' activity and officials of the Annona or the hierarchy between imperial offices could interfere with the possible or supposed port administration. At Portus, in the reign of Philippus, the *codicarii* and *navicularii* erected a statue in honour of the *ducenarius procurator portus utriusque*, apparently before he had left his position.<sup>85</sup> Under Constantine, when the *codicarii* and *navicularii infernates* of Ostia decided to honour the Emperor, the prefect of the Annona himself erected the statue.<sup>86</sup> At Arles, two documents show the existence of direct relationships between *navicularii* and officials of the Annona. One is a decision of the *praefectus Annonae* about internal affairs of the *navicularii* of Arles, as people involved in the service of the Annona, with the declared intention to treat them in a respectful and protective way.<sup>87</sup> This mentions at some point a procurator who is ordered to submit himself to the decree of the *navicularii*. This may well be the *procurator Augustorum ad annonam/provinciae Narbonensis et Liguria* known through another inscription from Arles.<sup>88</sup> In the first case, relations were probably not good, but it is clear that the affair was successfully transmitted to the prefect in person (undoubtedly at the *navicularii's* initiative), probably following the complex itinerary of petitions, and that the prefect had chosen to support the claims of the local college. In the second case, the procurator (a very low-grade knight who had not yet reached his fourth *militia*) had been honoured by them and had become their patron, after or at his departure for his fourth *militia* (the prelude of a hopefully brilliant equestrian career).

The same kind of strong relationship had been established under the joint reign of Marcus Aurelius and Lucius Verus between Sextus Iulius Possessor, *procurator Augg(ustorum duorum) ad ripam Baetis* and the *scapharii Hispalenses*, who gave him a *satisfecit*, probably when he was leaving his function in Spain to be appointed *procurator Augusti Ostis ad annonam*.<sup>89</sup> Such ties show that relationships between officials and *corpora* were closer than one imagines, especially when these officials were younger ones.

There is no evidence so far that these patterns have been involved in any step of building, maintenance or decision-making, but there is no reason why there would be preserved evidence about it. This is not the matter recorded by inscriptions or literature. But it was so essential to Roman society and politics that it is almost impossible to imagine that it wouldn't have strongly impacted upon any administrative process, exactly as corruption did, without leaving notable traces.

This short enquiry challenges the traditional top-down view of a port-system entirely dominated by the imperial will, but does not exclude it from the game. Not only has it led us to re-evaluate the role – and difficulties – of cities in managing their own ports similar to the ways they managed (or tried to manage) their public building and supply policies. It has also underlined the importance of personal patronage and social intermediation, in other words, of personal and civic networks, in the development of port-building policies. The identity of beneficiaries and benefactors was often more essential than the practical impact of the building projects. The emperor nevertheless remains the main, if not the sole, performer of huge works, including port building.

This conclusion is not so surprising. It fits within the general patterns of how scholarship currently understands the Roman Empire to have functioned, and it shows that ports were but a particular case of the more general pattern of a society based upon social dignity and clientage and ruled by a divine, but remote emperor. There is no trace of any sustainable maintenance process. This rather took the form of punctual, expensive, but more spectacular and legible interventions (dredging or »building«). These reflect the collective consciousness of needs in harbour building or maintenance, because some decided to invest in that kind of gifts rather than in offering games or baths, with the certainty that it would please the beneficiaries. However the causes for interventions have their roots in less pragmatic intentions or conventions: the staging of self-presentation, personal or collective status and relationships between individuals and groups.

## Notes

- 1) Rougé 1966, 201-211. – Houston 1980. – Bruun 2002.
- 2) Jacques 1984. – Sartre 1991. – Karwiese 1995.
- 3) Alföldy 2014.
- 4) Lehman/Holum 2000, no. 12, 47-48 = ZPE 99 (1993), 287. 291-292. 294-295.
- 5) CIL XIV, 363 (add. p. 482. 615); CIL XIV, 364 (add. p. 615); CIL XIV, 409 = Thylander 1952, no. 339 = D 6146 = Meiggs 1960, 200; CIL XIV, 4142 = D 6140 (dated AD 173, October 20<sup>th</sup>). The usual reconstruction of CIL XIV, 4549,42 (piazzale delle Corporazioni, locus no. 42): *[curatores(?) n]avium d[e suo(?)]* | *N[---* is very dubious.
- 6) CIL XIV, 4626 = AE 1914, 275: *L(ucius) Caelius L(uci) fil(ius) A[rn(ensi)] | Aprilis Valerian[us] | curator navium Kartha[g(iniensi)] | et Arellia Eleuthera eius | fecerunt sibi et | lib(ertis) libert(abusque) posterisq(ue) eorum.* »Lucius Caelius Aprilis Valerianus, son of Lucius, inscribed in the Arnensis tribe, curator of the ships of Carthage and Arellia Eleuthera, his wife, have made (this grave) for themselves, for their freedmen of both sexes, and for their posterity«.
- 7) CIL X, 7225 = D 6769 (Marsala/Lilybaeum): *Salvis Plotino et I Rufa E(u)logus ser(vus) I act(or) port(us) Lilybit(a)ni I hoc sacrarium I ex voto exornavi.* »Because Plotinus and Rufa are safe, I, Eulogus, slave, manager of the port (or »customs«) of Lilybaeum, have adorned this sacred monument in fulfillment of his vow«. We have followed Dessau's reading rather than Dressel's. There is no proof that Eulogus was an imperial slave.
- 8) Salmon 1963; 1969, 70-81. The list of colonies is given by Liv. 37.38.4 and 36.3.6.
- 9) Liv. 40.51: *Censores (...) opera ex pecunia attributa diuisaque inter se haec confecerunt. Lepidus molem ad Tarracinam, ingratum opus, quod praedia habebat ibi priuatamque publicae rei impensam inseruerat.* »The censors achieved the following works with the money they had received and divided between them: Lepidus, a mole at Tarracina, an unpopular work, because he had estates in that city and had mixed a private expense with State expenditure«.
- 10) Polyb., 30.31.12
- 11) This will be the topic of a Rome's Mediterranean Ports ERC programme monography devoted to the administration of Roman ports.
- 12) Dig. 50.4.18.10 = Arcadius Charisius *de muneribus ciuilibus: Hi quoque, qui custodes aedium uel archeotae, uel logographi, uel tabularii, uel xenoparochi (ut in quibusdam ciuitatibus) uel limenarchae uel curatores ad extruenda uel reficienda aedificia publica siue palatia siue naualia uel mansiones destinantur, si tamen pecuniam publicam in operis fabricam erogent, et qui faciendis uel reficiendis nauibus, ubi usus exigit, praepo-nuntur, muneribus personalibus adstringuntur.* »Also, those who as guards of (public) buildings, or *archeotae* or *logographi*, or keepers of public archives, or *xenoparochi* (as in some cities), *limenarchae*, or curators in charge of the building or restoration of public buildings, palaces, naval infrastructure or post houses, even if they are spending public money for the purpose of the work's achievement; and also those in charge of building or restoring ships, where it is the use to impose it, are holding *munera personalia*«.
- 13) *An seni respublica gerenda sit* (19): ἔστι δ' ὅπου καὶ τὸ φιλόνηκον καὶ παράβολον ὥραν ἔχει τινὰ καὶ χάριν ἐπιτρέπουσαν τοῖς τηλικούτοις ὁ πρεσβύτης δ' ἀνὴρ ἐν πολιτείᾳ διακονικὰς λειτουργίας ὑπομένων, οἷα τελῶν πράξεις καὶ λιμένων ἐπιμελείας καὶ ἀγορᾶς, ἔτι δὲ πρεσβείας καὶ ἀποδημίας πρὸς ἡγεμόνας καὶ δυνάστας ὑποτρέχων, ἐν αἷς ἀναγκαῖον οὐδὲν οὐδὲ σεμνὸν ἐνεστὶν ἀλλὰ θεραπεία καὶ τὸ πρὸς χάριν, ἐμοὶ μὲν οἰκτρὸν, ὡ φίλε, φαίνεται καὶ ἄζηλον, ἑτέροις δ' ἴσως καὶ ἐπαχθὲς φαίνεται καὶ φορτικόν. »But the old man in public life who undertakes subordinate services, such as tax-farming and the supervision of harbours and of the market-place, and who moreover works his way into embassies and trips abroad to visit the emperors and rulers, in which there is nothing indispensable or dignified, but which are merely services and a quest for gratitude, seems to me, my friend, a pitiable and unenviable object, and to some people, perhaps, a burdensome and vulgar one« (transl. Goodwin).
- 14) The word *limenarches* used by Charisius probably reflects the prevailing terminology. Plutarch's text is closer to the Greek tradition and describes rather than names the function. Raschke 1978, 778 note 566, has already noticed that the word *limenarches* probably had several meanings. It is obvious that most other occurrences, especially in papyri, refer to customs and tax-gathering (*portoria*), rather than to ports.
- 15) *Inscr. v. Ephesos*, t. II no. 558, 1 p. 229; t. III no. 802 p. 148-149.

- 16) Aurelius Arcadius Charisius (= Dig. 50.4.18.2): *Et quaestura in aliqua civitate inter honores non habetur, sed personale munus est.* »In some cities, even the *quaestura* is not listed among the magistracies, but is a personal *munus*«.
- 17) IGLS VII 4016 bis (Aradus, Syria, ca. AD 207).
- 18) IG VII. 1826 (Kreusa, Beotia, on the harbour, 2<sup>nd</sup> century AD?). Kreusis (or Kreusis or Kreusae) was the port of Thespieae, cf. Strab. 9.2.14; 25.
- 19) Aurelius Arcadius Charisius (= Dig. 50. 4.18.10) explicitly mentions the use of public funds (*si tamen pecuniam publicam in operis fabricam erogent*) by these *munerarii*. The expression *limenarcha creato* in Cod. Justin. 7.16.38 (Dec. 294) in relationship with *res publica* leads us to the same sphere of municipal officials. Callistrate (*I Cognition.* = Dig. 50.4.14.1) gives a clear definition of the *munus publicum*: *Publicum munus dicitur, quod in administranda re publica cum sumptu sine titulo dignitatis subimus.* »We call public *munus* anything we undertake in the administration of the *res publica* with an expense and without any motive of dignity«. About *munera* as the effect of an order or customary constraint, Marcian, *I publicorum iudiciorum* = Dig. 50.16.214 (*»Munus« proprie est, quod necessarie obimus lege more imperiove eius, qui iubendi habet potestatem.* »*Munus* is, properly speaking, any appointment we take on by an effect of Law or custom, or in execution of an order of those who have the power to give orders«); cf. also Paulus, *I responsorum* = Dig. 50.1.21. pr. Because *munera* were placed under the orders of others and bore no dignity to the *munerarius*, there was no reason to celebrate *munera* in inscriptions, unless in exceptional situations.
- 20) Slim et al. 2004, 126-128 no. 61.
- 21) Petzl 1987, 191 no. 696.
- 22) Guerber 1995.
- 23) SEG 19.684 = AE 1967. 480 = IvE 23 (AD 147): [Αγαθή] · Τύχη· Ι Λ. Αντώνιος Άλβος ανθύπατος Ι λέγει· Ι Ει τῆ μεγίστη μητροπόλει τῆς Ι Ἀσίας [καί] μόνον οὐχι καί τῷ κόσμῳ [ἀναγκαιόν] ἔστιν τὸν ἀποδεχόμενον τοὺς πανταχ[όθ]εν εἰς αὐτὴν καταγομένους λιμέν<a> μὴ Ι ἐνποδίζεσθαι, μαθῶν τίνα τρόπον Ι βλάπτ[ου]σι, ἀναγκαιὸν ἡγησάμην Ι διατάγ[μ]ατι καί κἄλῦσαι καί κατὰ τῶν ἀπειθούντων τῆ]ν προσήκουσαν ζημίαν ὀρίσαι. Ι παραγγέλω [οὔ]ν καί τοῖς τὰ ξύλα καί τοῖς Ι τοὺς λίθους ἐνπορευομένοις μήτε τὰ ξύλα Ι παρὰ τῆ ὄχθῃ τιθεῖν μήτε τοὺς λίθους Ι πρῖζειν· οἱ μὲν γὰρ τὰς κατασκευασθείσας ἐπὶ Ι φυλακῆ τοῦ λιμένος πείλας τ[ῶ] βάρει τῶν φορτίων Ι λυμαίνονται, οἱ δὲ ὑπὸ τῆς ἐννειμ[έν]ης σμείψεως Ι [λατύ?]πης, ἐπει εἰσφερομένη τὸ βάθος [συ]νχωρνῦντες Ι τὸν ὄσον ἀνείργουσι, ἐκάτεροι δὲ ἀνόδευτον Ι τὴν ὄχθην ποιοῦσιν. ἐπει οὖν ἐπιθεμ[έ]ν[ο] υ μου Ι οὐκ ἔγνε[ν]το ἱκανὸς Μάρκελλος ὁ γραμματεὺς Ι ἐπισχεῖν ἄν ὡς τὴν θρασύτητα, ἴστωσαν ὅτι Ι ἄν τις μὴ γνοὺς τὸ διάσταλμα καταλημφθῆ τῶν Ι ἀπειρημένων τι πράττων, ἐσοῖσει vacat Ι τῆ ἐπιφανεστάτη Ἐφεσίων πόλει καί οὐδὲν ἤττον αὐτὸς τῆς ἀπειθείας ἐμοὶ λόγον Ι ὑφέξει· τοῦ γὰρ μεγίστου αὐτοκράτορος περὶ Ι φυλακῆς τοῦ λιμένος πεφροντικότες Ι καί συνεχῶς περὶ τούτου ἐπεσταλκότες Ι τοὺς διαφθείροντας αὐτὸν οὐκ ἔστιν δί καιον μόνον ἀργύριον καταβάλλοντας Ι ἀφείσθαι τῆς αἰτίας. προτεθήτω. Ι Γραμματεύοντος Τ. Κλ. Πολιλυδεύκου Μαρκέλλου Ἀσιάρχου. »To Good Fortune. Words of L. Antonius Albus, proconsul: If it is necessary not only to the greatest metropolis of Asia, but also to the Universe not to hinder the harbour that shelters those who come to it from everywhere, when I learnt that some had found a way to get rid of this, I thought it necessary to use constraint and to determine against the disobedient ones the appropriate penalties. I therefore declare that it is forbidden for the timber- and stone-traders to place timber and to saw stone on the quay: these in fact cause damage to the *pilae* that have been set up for the protection of the harbour, the former because of the weight of the loads, the latter because of the reject of the waste pieces of stone, for they silt the depth of water with this deposit and therefore prevent the water from flowing; the former as the latter equally make the quay inaccessible. Given that the Secretary (of the People) Marcellus, whom I had urged to put an end to this form of impudence has proved to be unable to do so, let them understand that anyone who, ignoring the regulation, should be caught having done something in contradiction to these dispositions, will pay to the most splendid city of the Ephesians [blank] and that he nevertheless will render account to me of his disobedience. For, as the greatest emperor has been preoccupied with the protection of the harbour and has continuously sent edicts on the matter, it would not be right that people who ignore him, would only pay the fine and escape this accusation. Let (this decree) be displayed. Being Secretary (of the People) Tiberius Claudius Polydeucus, Asiarch«. On this text see Hurllet 2007, 150-151, who insists on the excellent relationship between Ephesus and Antoninus (cf. also Halfmann 2004, 100ff.) as the reason for this edict, and Kokkinia 2014.
- 24) Kirbihler 2005.
- 25) Pliny the Younger, *Ep.* 6.31.7: *Habebit hic portus, et iam habet nomen* (»this harbour will bear and already bears the name of his founder«) CIL, 6675,5 = CIL XV, 6: *Port(us) Trai(ani)*.
- 26) AE 1972, 79 (Pozzuoli/Puteoli): *Sucessi || mirae prosapiae adque | nimiae integritatis | Iulio Sulpicio Successo v(iro) e(gregio) p[atrono] c(oloniae) | procuratori portus Puteol(anorum) | ob meritis et adfectione | amoreque eius erga cives et patria(m) | ut ordo splendidissimus populusq(ue) | Puteolanus comprobavit | regio decatriae cultores dei patri | vexillari statuam ponendam | sollicitè adcura(ve)runt || dedicata VI Idus Aug(ustas) | T(ito) Vitrasio Pollione II M(arco) Flavio Apro II co(n)s(ulibus)*. »Statue of Successus, to a man of astonishing origin and highest integrity. To Iulius Sulpicius Severus, illustrious man, patron of the colony, procurator of the port of Puteoli, in reward of his merit, love and affection towards his fellow-citizens and homeland, the regio of the Decatriae, the flag-bearer worshippers of the home-god, have attended with special attention to the provision of erecting the statue. Dedicated to the 6<sup>th</sup> day before the Ides [8<sup>th</sup>] of August, under the second joint consulate of Titus Vitrasius Pollio and Marcus Flavius Aper«. The inscription has been engraved on a re-used pedestal and is not clearly dated, for the date inscribed belongs to the first stage of the pedestal. Previous dating relied upon the postulate that the man is an equestrian imperial procurator and that this is necessarily after than the one at Ostia. If the ducenarius at Ostia had soon been replaced by freedmen, the interpretation and dating of this inscription must be reassessed.
- 27) Houston 1980. – Bruun 2002.
- 28) Although the name *Agricola* is rather common among citizens, I could find only one other occurrence of a slave or freedman bearing this name within the limits of the empire. This was during the reign of Trajan, and the individual also belongs to the *familia* Caesaris: CIL VI, 8533 (p. 3890).

- 29) CIL XIV, 5309,22 = AE 1913, 82b.
- 30) CIL XIV, 125 = IPOstie-B, 324 = D 2223 Ostia Antica (AD 224).
- 31) CIL XIV, 170 = CIL VI, 1624 (p. 3811. 4721) = IPOstie-B, 338 = D 1433 = Tyche-2010-89 (Ostia Antica, AD 247).
- 32) A freedman *procurator* is mentioned again later on a lead-pipe under Trebonianus Gallus, CIL XIV, 5309,26 = AE 1913, 83.
- 33) CIL XV, 7746-7747.
- 34) AE 1977, 171 (Portus): *Sicut coram praecepit / v(ir) p(erfectissimus) Messius Extricatus / praef(ectus) ann(onae) titulus ponetur / qui demonstrat ex quo loci / in quem locum saborrariis / saborram tollere liceat factum / autem opus est ut idem titulo / retro omnium praefectorum / litterae instruantur quibus / de podismo est statutum quibusque / suam auctoritatem idem v(ir) p(erfectissimus) / manere praecipit titulus / scri(p)tus per / Iulium Maternum / (centurionem) fr(umentarium) XV Kal(endas) Octobr(es) / Faustino et Rufino co(n)s(ulibus) / cura(m) agente M(arco) Vargunteio / Victore.* »In accordance with the personal instructions of the perfectissimus Messius Extricatus, prefect of the Annona, let an inscription be placed to indicate from what to what place the ballast-gatherers (*saborrarii*) have the right to remove sand for ballasting; and that on the back of this inscription the letters of all the prefects taking decisions concerning the footage of this area and through which the *perfectissimus* has given orders to make his authority sustainably unchallenged. Written by Iulius Maternus, centurio frumentarius, the 15<sup>th</sup> day before the Kalends of October, under the consulate of Faustinus and Rufinus, under the supervision of Marcus Vargunteius Victor« (September 17<sup>th</sup>, AD 210).
- 35) PBingen 77.
- 36) The *adiutor / praefecti annonae ad horrea Ostiensia et Portuensis* »assistant of the prefect of the Annona, in charge of the warehouses at Ostia and Portus« (IDRE-2, 435 = AE 1983, 976 = AE 1987, 1026, Maktar) is the same as the *adiutori Ulpii Saturnini praef(ecti) annon(ae) / ad oleum Afrum et Hispanum recensendum item solamina transfelrenda item vecturas nav(i)culariis exsolvendae* »assistant of Ulpian Saturninus, prefect of the Annona, in charge of the inventory of the African and Spanish oil, of transportation of the surplus and to pay the transport to the *navicularii*« (CIL II, 1180 = D 1403 = CILA-2-1, 23 = IDRE-1, 179 = AE 1965, 237 = AE 1971, 171 = AE 1991, 993. Sevilla from the base of the minaret of La Giralda), and his office seems to have been exceptional, cf. Erkelenz 2007, 298 note 39. The activity of the *proc(urator) annonae Ostiae et in Portu*, known in the later years of Trajan's reign (ILTun 720 = RHP 171 = IDRE-02, 424 = AE 1939, 81a), has left no trace at Portus itself.
- 37) CIL VI, 1151 (p. 845. 3071. 3778. 4329. 4340) = CIL VI, 31248 = D 00707 (Rome); CIL VI, 41293 (Rome); CIL VIII, 5348 = CIL VIII, 17490 = ILAlg 1, 271 = D 01228 (Guelma/Calama), CIL X, 1700 = D 1231 (Pozzuoli/Puteoli), CIL XIV, 135 (p. 613) = EE 9, 334 (Ostia Antica); CIL XIV, 4449 = Thylander, IPOstie B, 336 (Ostia Antica). The inscriptions from Rome (CIL VI, 1151), Portus (CIL XIV, 4449) and Guelma, in Africa (CIL VIII, 5348 = CIL VIII, 17490), refer to the same L. Crepereius Madalianus (PLRE 1.530; Scharf 1994, 66-68). These are the oldest extant mentions of a *Praefectus Annonae cum iure gladii*. He was *Praefectus* when the news of Constantine's death (May 27<sup>th</sup>, AD 337) reached Rome and was already *vicarius Italiae* in AD 341 (*Codex Theodosianus* 16.10.2).
- 38) About the role of *frumentarii*, see Rankov 2006. For regional *procuratores Annonae*, see CIL XII, 672 (p. 817) = D 1432 = CAG-13-05, p. 676 = ZPE-63-173 = AE 1981, 400 = AE 1984, 631 = AE 1986, 479 = AE 1987, 753 dedicated to a *procur(ator) Augustorum ad annonam provinciae Narbonensis et Liguriae*.
- 39) IGRP III. 739 (Rhodiapolis, the inscription in Opraomas' grave is a list of decrees and official documents with the extensive list of his gifts to Lycian communities): XVII, ll. 68-70 *ὑπέσχη*] | το δὲ καὶ ἄλλα [εἰς κατασκευὴν τῆς] | | πρὸς τῷ λιμένι στοᾶς αὐτῶν; XVIII. 85-90 τῆ μὲν | | Π[αταρ[έ]ων πόλει πρότερον μὲν ἀργυ[ρίου] δηνάρια | δισμύρια, πάλιν δὲ ἄλλα εἰς κατασκευ[ὴν] | στοᾶς διπλῆς τῆς πρὸς τῷ λιμένι ἤδη δηνάρια [μ]ύρια ἑκτακισχίλια ὑποσχόμενος καὶ ὅλον τὸ ἀνάλωμα πληρώσειν. To the city of Patara, he had first given 20,000 *denarii* in silver, after he had already given 18,000 *denarii* for the building of the double portico near the harbour.
- 40) *Arch.*, 5.13.
- 41) Petzl 1987, no. 696 p. 191.
- 42) IvE 2061.II, l. 13ss. About these interventions at the port of Ephesus, see Kokkinia 2014.
- 43) The highest amount is 75,000 *denarii* or 300,000 *sestertii*, but this amount reflects the particular situation of the benefactor, a Roman knight from another city, who had probably invested much more in the works at the theatre where he is celebrated and that he is said to have erected (Halfmann 2004, 88). Also during Trajan's reign Pliny the Younger in Bithynia gives the cost of a first aqueduct at Nicomedia as 3,318,000 *sestertii* (equal to 830,000 *denarii*). The cost of the 38 km long aqueduct built at Ephesus by Aristio and his wife together with one monumental fountain and two *nymphaea*, including the one dedicated to Trajan, may have reached a couple million (Halfmann 2004, 89-91). The cost of the theatre at Nicaea had already reached the amount of 10 million *sestertii* (or 2.5 million *denarii*) when it still had not been completed. The data gathered by Duncan-Jones 1974, 89ff. 157ff. indicate that this was the average price of municipal baths in medium or small towns of Italy during the 2<sup>nd</sup> century, and more or less the price of the quadrifons triumphal arch at Tébessa in Africa (AD 214) and half the price of a monumental fountain at Caputamsaga. The *proscenium* and *frons scenae* of the theatre at Leptis Magna cost half a million *sestertii* in 157/158 AD. Building harbours such as Ephesus' must have cost millions of *denarii*. We must probably think of smaller restorations or mere restyling.
- 44) Karwiese 1995, 110. – Engelmänn 1996, 93.
- 45) A mutilated and undated inscription found in Trajan's Nymphaeum at Ephesus (IvE 1391) nevertheless considers the harbour's building completed; the exact meaning of this inscription is very unclear. Another two inscriptions refer to port building by individuals under Trajan (IvE 2061; 3066). These were probably contributions to the harbour's building mentioned in the previous inscription, and date it to AD 105.
- 46) CIL II, 3434 = CIL II, 5927 = CIL I, 2271 (p. 1104) = CartNova 1 = ILLRP 778 = ELRH-C 10 = HEp-18, 257 (Cartagena/Carthago Nova). Gianfrotta 2009, 103-105 rightly rejects as parallel two contemporary Late Republican inscriptions from Capua, where similar donations including piers/moles cannot refer to parts of a port: CIL X, 3774 = CIL I, 673 (p. 930. 931) = ILLRP 706 and CIL I, 2944 (p. 930) = AE 1952, 55 = ILLRP 708 (Capua).
- 47) IvE 234. 424. 424 A. 3217. For the entire affair and the estimation of the amount, see Halfmann 2004, 89-91.

- 48) Pliny the Younger had been invited by the Emperor to attend his council at Centumcellae, where this affair was judged. He gives us the following account of the story (*Epist.*, 6.31.3): *Dixit causam Claudius Ariston princeps Ephesiorum, homo munificus et innoxie popularis; inde invidia et a dissimillimis delator immissus, itaque absolutus vindicatusque est.* «Claudius Ariston, who has the first rank among the Ephesians, made his plea. He is a man of great munificence and innocent popularity, and for that reason had aroused the envy of persons opposite to him in character who had instigated a delator. For these reasons, he has been acquitted and restored to his honour».
- 49) 70,000 *drachmai* (= *denarii*) for the portico of the gymnasium, cf. IGRP IV 501.
- 50) Tac. *Ann.* 16.23. He was in charge before AD 63, maybe in 61, and was sued in 65 *quia portui Ephesiorum aperiendo curam insumperat*, «on the pretext that he had expended care on opening the port of the Ephesians».
- 51) IvE 3071.
- 52) Horster 2001.
- 53) Arnaud 2014.
- 54) See e.g. Strabo 16.1.11; 17.1.3; 17.1.42 and Arnaud 2008. *Providentia*, which is the expression of both human foresight and divine providence, also occurs twice in relation with huge works in Pliny the Younger's and Trajan's correspondence (*Epist.* 8.17.2; 10.62).
- 55) Pliny the Younger (*Ep.* 6.31.7) tells of the port of Centumcellae: *hic portus (...) eritque vel maxime salutaris.* «This port will also be essentially saving (people)».
- 56) Thasos, IG XII, 8, 68: [ 'Α]κρηράτο ε[ι]μι μνημα | το Φ[ρα]σ] ηριδο, κειμαι δ' επ' [α]κρο | Ναυσ[τ]ά[θ]μο σωτήριον νηυσίν | τε κα[ι] ναύτησιν άλλα Χαιεεε. »I am the memorial of Akeratos, son of Phrasierides, and I lie at the naval port's utmost point, salvation to ships and to sailors: so farewell!«. According to Lucian (*Hist. conscr.* 62), the text of the dedicatory inscription of the Pharos Lighthouse reads as follows: Σώστρατος Δεξιφάνους Κνίδιος θεοῖς σωτήρσιν ὑπὲρ τῶν πλοῖζομένων. »Sostratos, son of Dexiphanes of Cnide, to the Saving Gods in favour for those who sail«; Strabo (17,1,6, C 791) gives another version of the same text: τοῦτον δ' ἀνέθηκε Σώστρατος Κνίδιος, φίλος τῶν Βασιλέων, τῆς τῶν πλοῖζομένων σωτηρίας χάριν, ὡς φησιν ἡ ἐπιγραφή. »Sostratos of Cnide, a friend of the Kings, has built (this tower) for the salvation of those who sail, says the inscription«.
- 57) AE 1999, 1681 = 2000, 1518 = 2002, 1556 = Lehman/Holum 2000, no. 43 p. 67-70. The late G. Alföldy (1999; 2002) identified the *Tiberieum* dedicated by Pontius Pilatus with Josephus's *Druseum* (BJ 1.412; AJ 15.336), this being also the lighthouse of Carsarea Maritima's harbour, an interpretation eventually accepted by Grüll 2010, 152-153 who had once challenged it; more recently Alföldy (2012) proposed identifying the *Druseum* and the *Tiberieum* with the two towers that formed the entrance of the harbour, each being a lighthouse. Although clever and tantalising, this interpretation is a bit difficult and contradicts the traditional location of the lighthouse of Caesarea. İşkan-İşik/Eck/Engelmann 2008, 100 have proposed to restore at the beginning of the inscription [*Nautis*], but is not very convincing. Although lighthouses were dedicated to the security or salvation of sailors, no preserved inscription appears to have dedicated a lighthouse to sailors.
- 58) İşkan-İşik/Eck/Engelmann 2008, 93: Dedication of the lighthouse (including the comments of C. P. Jones, The Neronian Inscription on the Lighthouse of Patara. *Zeitschrift für Papyrologie und Epigraphik* 166, 2008, 153-154): Νέρων Κλαύδιος (...) [αὐτοκρα]τάω[ρ] γ]ῆς καὶ θαλάσσης τὸ θ, ὁ πατὴρ πα[τρῶ]ος, τὸν φάρον κατεσκεύασεν πρὸς ἀσ]φάλειαν [τῶ]ν πλοῖζομένων]ν διὰ Σ[έ]ξτου Μαρκί[ου] Πρεῖς[κου] πρεσβ[ευ]τοῦ [καὶ] ἀντ[ιστ]ρατήγου [Καίσαρ]ος [κτι]σα[μέν]ου τ]ὸ ἔργον. »Nero Claudius (...), Lord of the land and the sea for the 9<sup>th</sup> time, Father of the Fatherland, has built this lighthouse for the safety of those who sail, carried out by Sextus Marcius Priscus, Caesar's *legatus pro praetore*, who has made the dedication of the work«. Dedication to Sex. Marcius Priscus (ibidem 94): [Σέ]ξτον Μάρκιον Πρεῖσκον, πρεσβευτὴν Αὐτοκράτορος Οὐεσπασιανοῦ Καίσαρος Σεβαστοῦ, ἀντιστράτηγον καὶ πάντων αὐτοκρα[τ]όρων ἀπὸ Τιβερίου Καίσαρος Παταρέων ἢ Βουλῆ καὶ ὁ δῆμος δικαιοδοτήσαντα τὸ ἔθνος ὀκτετιὰν ἀγνώως καὶ δικαίω[ς], κοσμήσαντα τὴν πόλιν ἔργοις περικαλλεστάτοις, κατασκευάσαντα δὲ φάρον καὶ ἀντίφαρον πρὸς ἀσφάλειαν τῶν πλοῖζομένων, τὸν σωτήρα καὶ εὐεργέτην. »(in honour of) [Sextus Marcius Priscus, legate of the emperor Vespasian Caesar] Augustus, and propraetor of all emperors since Tiberius Caesar, from the Council and the People of Patara, because he has rendered justice to the (Lycians) kindly and rightly, because he has embellished the city with the most beautiful works and because he has built the lighthouse and the 'antipharus' for the safety of those who sail. In honour of their saviour and benefactor«.
- 59) Claudius: CIL XIV, 85 = IPOstie B, 310 = ELOstia p. 145 = Horster 2001, 269 = D 207 = Epigraphica 2002, 140: *Ti(berius) Claudius Drusi f(ilius) Caesar / Aug(ustus) Germanicus pontif(ex) max(imus) / trib(unicia) potest(ate) VI co(n)sul design(at)us IIII imp(erator) XII p(ater) p(at)riae / fossis ductis a Tiberi operis portu[s] / caus[us] emissis[us] in mare urbem / inundationis periculo liberavit*; Trajan: CIL XIV, 88 = CIL VI, 00964 (p. 3070. 4311. 4441) = IPOstie B, 312 = ELOstia p. 145 = Horster 2001, 271 = D 5797a = Epigraphica 2002, 122 = AE 2002, 279: [*Imp(erator) Caes(ar) divi] / Ne[r]vae fil(ius) Nerva / Traj(ianus) Aug(ustus) Ger(manicus) / Dac[ic]us trib(unicia) pot(estate) 3 / im[p(erator) 3 co(n)s(ul) 3 p(ater) p(at)riae] / fossam [fecit] / [q]ua inun[dat]iones Tiberis] / [a]dsidue u[rbem] vexantes] / [rivo] per<e=F>[ne instituto arcerentur].*
- 60) *Ios. Ant. Iud.* 19, 2, 5: ἔργον δὲ μέγα ἢ βασιλείου οὐδὲν αὐτῷ πεπραγμένον εἶποι ἂν τις ἢ ἐπ' ὠφελεία τῶν συνόντων καὶ αὐθις ἀνθρώπων ἐσομένων, πλήν γε τοῦ περὶ Ῥήγιον καὶ Σικελίαν ἐπινοηθέντος ἐν ὑποδοχῇ τῶν ἀπ' Αἰγύπτου σιτηγῶν πλοίων: [206] τοῦτο δὲ ὁμολογουμένως μέγιστόν τε καὶ ὠφελιμώτατον τοῖς πλέουσιν: οὐ μὴν ἐπὶ τέλος γε ἀφίκετο, ἀλλ' ἡμίερον ὑπὸ τοῦ ἀμβλυτέρω αὐτῷ ἐπιπονεῖν κατελείφθη. »And for any great or royal work that he ever did, which might be for the present and for future ages, nobody can name any such, but only the one that he made about Rhegium and Sicily, for the reception of the ships that brought corn from Egypt; which was indeed a work without dispute very great in itself and of very great advantage to navigation. Yet this work was not brought to a conclusion by him, but the one half of it was left unfinished, because of his lack of application to it«.
- 61) CIL VIII, 7975 = CIL VIII, 19852 = ILaIlg II.1, 379 = D 5910: *horrea / ad securitatem populi Romani / pariter ac provincialium con[structa].*

- 62) Leveau 1993.
- 63) Quintilian, *Inst. or.* 2.21.18: *ergo cum de faciendo portu Ostiensi deliberatum est, non debuit sententiam dicere orator? atqui opus erat ratione architectorum.* The same author (*Inst. or.* 3.8.16) makes the debate about building Portus the paradigm of debates, together with cutting the Isthmus of Corinth and draining the Pontine marshes.
- 64) AE 1912, 251: *Hor(ri)ei(s) Mamercianis / Caesaris A(ugusti).*
- 65) CIL XI, 1358: *D(is) M(anibus) / Cla[ui]diae(!) / Benedictae(!) / Abascantus / Imperatorum / hor[r]earius / coniugibus si / fecit et cidit / [-----].*
- 66) CIL VIII, 13190 = ILTun 916: *Dis Man(ibus) sacr(um) / Chrestus Aug(usti) custos / Uti<c=K>a(e) horreorum / Augustae pius vixit / annis LXXX.*
- 67) AE 1924, 36: *Genio et / numini / horreorum / Sabinus / Aug(ustorum) lib(ertus) / c(ustos) s(acrorum) h(orreorum) Hip(ponensium) R(egiorum) / item cura / cancellorum.*
- 68) CIL VIII, 7975 = CIL VIII, 19852 = ILaIlg II.1, 379 = D 5910: *Pro magnificentia temporum / principum maximorum domi[n]orum orb[is]s Valentiniani et / Valenti[s] semper Aug(ustorum) horrea / ad securitatem populi Romani / pariter ac provincialium constructa omni maturitate / dedicavit Publius Caeionius / Caec[us] Albinus v(ir) c(larissimus) cons(ularis) / sex(ascalis) p(rovinciae) N(umidae) Cons(tantinae).*
- 69) Cavalier 2012.
- 70) Virlovet 2000.
- 71) For more details, see Halfmann 2004, 98-99. Gifts to Smyrna: Philostrate, *Soph.* 531; channelling the Caystrus' tributary: AE 1993. 1472; corn-supply and great works at the harbour in AD 129: IvE 274.
- 72) Erol/Pirazzoli 1992. – Uggeri 2004.
- 73) Bartoccini 1958. – Laronde 1988; 1994. – Beltrame 2012.
- 74) Suet., *Ner.* 9: *Antium coloniam deduxit ascriptis ueteranis e praetorio additisque per domicilii translationem ditissimis primipilariis; ubi et portum operis sumptuosissimi fecit.*
- 75) Cassius Dio 69.5.3 (= Xiph. 244, 1-245, 6 R. St., Exc. Val. 294 [p. 713, Suidas s.v. Ἀδριανός]: *πολλὰς μὲν γὰρ καὶ εἶδεν αὐτῶν, ὅσας οὐδεὶς ἄλλος αὐτοκράτωρ, πάσαις δὲ ὡς εἰπεῖν ἐπεκούρησε, ταῖς μὲν ὕδωρ ταῖς δὲ λιμένας σῆτόν τε καὶ ἔργα καὶ χρήματα καὶ τιμὰς ἄλλαις ἄλλας διδούς.*
- 76) IvE, no. 274, l. 12sq.: (...) *σειτοπομπή[ας δὲ] / ἀπ' Αἰγύπτου παρέχοντα καὶ τοὺς λιμένας / πο[ι]ήσαν[τα] πλωτοῦς, ἀποστρέψαντά τε / καὶ τὸν βλά[πτοντα] τοὺς] λιμένας ποταμὸν / Κάϋστρον διὰ τὸ [- - -] »and he has sent corn from Egypt and made the ports navigable, and has even diverted the River Caystrus that caused damage to the ports«.*
- 77) Christol 2012.
- 78) CIL X, 1640 = D 336: *Imp(erator) Caesar divi Hadriani fil(ius) / divi Traiani Parthici nepos / divi Nervae pronepos T(itus) Aelius / Hadrianus Antoninus Aug(ustus) Pius / pont(ificis) max(imus) trib(unicia) pot(estate) II co(n)s(ul) II / desig(natus) III p(ater) p(atris) opus pilarum ui / maris conlapsum a divo patre / suo promissum restituit; CIL X, 1641 (Add. p. 1008): [Imp(eratori) C]aesari divi [Hadriani filio] divi Traiani] / [Part]hici nepoti divi [Nervae pronep(oti) T(it) Aelio Hadriano] / [Ant]onino Aug(usto) Pio [pont(ifici) max(imo) trib(unicia) pot(estate) II co(n)s(uli) II p(atris) p(atris)] / [c]olonia Flav[ia Augusta Puteoli] / [quod] super cetera beneficia a divo patre promissum / op]us pilarum viginti ui maris conlapsum splendore] / [anti]quo et munitio[n]e adiecta restituit.*
- 79) Verboven 2002 has analysed in detail the importance of *amicitia* and patronage in the structure of the Late-Republican economy. The increasing complexity of network structures during the imperial period does not challenge the validity of the pattern.
- 80) Fronto, *Ad Amicos*, 2.7.
- 81) Christol 2003a; Tran 2006; 2014; Broekert 2011; Verboven 2011; on the relationship between individuals and the State (cities as well as the imperial State) through *collegia* in port-cities, see mainly Rohde 2012. De Salvo 1992 is now widely outdated.
- 82) CIL XIV, 363; CIL XIV, 364 (add. p. 615); he is also mentioned in CIL XIV, 362 (D., 6135); Tran 2006 has recognized him as the anonymous person honoured by AE 1988, 212.
- 83) CIL XIV, 4458.
- 84) CIL XIV, 4144 = D 6173 = AE 1998, 876 (Ostia Antica), whose text actually should read as follows: *C(aio) Veturio C(ai) filio Testio / Amando / <<eq(uiti) R(omani) patron>> et / defensori V corporum / lenunciarior(um) Ostiens(ium) / universi navigarii corpor(um) / quinque ob insignem eius / in d[efend]endis se et in tuendis / eximiam diligentiam dignissimo / [a]tque abstinentissimo viro / ob merita eius / [et patrono cor]poris splendissimi codicar(iorum) / l(ocus) d(at)us d(ecreto) d(ecurionum) p(ublice).* »To Caius Veturius Testius Amandus, son of Caius, Roman knight, patron and defender of the shippers of the five corpora of Ostia, all the sailors of the five corpora, as a reward of the exceptional diligence he has shown in their defence and protection. To a man of highest dignity and abstinence, as a reward of his merit and to the patron of the bargees. The site was granted by public decree of the decurions«. The words <<eq(uiti) R(omani) patron>> have been engraved at a second step on an erased text and belong to a later state of the text. It is difficult to understand what may have been erased from the first version and why. Maybe he was not a Roman knight then. The penultimate line is also an addition to the original text. There are 14 letters missing and cannot be read [quin]q(ue) corporis splendissimi codicar, as suggested by Hirschfeld. We therefore suggest reading [et patrono cor]poris splendissimi codicar(iorum). On this inscription, see Tran 2014 (forthcoming, not read).
- 85) CIL XIV, 170 = CIL VI, 1624 (p. 3811. 4721) = IPOstie-B, 338 = D 1433 = Tyche-2010-89 = AE 2010, +239 (Ostia Antica, AD 247), quoted above in note 30.
- 86) CIL XIV, 131 = D 687.
- 87) CIL III, 14165,8 (p. 2328,78) = D 6987 = AE 1899, 161 = AE 1900, 201 = AE 1905, 216 = AE 1998, 876 = AE 2006, 1580 (Beirut/Berytus). For this text, see Virlovet 2004, who rightly thinks that it was originally displayed at Arles and was transferred to Beirut probably during the Crusades.
- 88) CIL XII, 672 (p. 817) = D 1432 = CAG-13-05, p. 676 = ZPE-63-173 = AE 1981, 400 = AE 1984, 631 = AE 1986, 479 = AE 1987, 753 (Arles/Arelate). On this inscription and the previous one, see also Christol 1982.
- 89) CIL II, 1180 = D 1403 = CILA-2-1, 23 = IDRE-1, 179 = AE 1965, 237 = AE 1971, 171 = AE 1991, 993. Found at Seville, at the base of the Giralda together with other material from the house



of the Guild of the boatmen (*scapharii*): *Sex(to) Iulio Sex(ti) filio) Quir(ina) Possessori / praef(ecto) coh(ortis) III Gallor(um) praeposito nume(ri) Syror(um) sagittarior(um) item alae primae Hispalnorum curatori civitatis Romulensium Mallvensium tribuno mil(itum) leg(ionis) XII Fulminatae / curatori coloniae Arcensium adlecto / in decurias ab Optimis Maximisque / Imp(eratoribus) Antonino et Vero Augg(ustis) adiutori Ulp(ii) Saturnini praef(ecti) annon(ae) / ad oleum Afrum et Hispanum recen(sendum) item solamina transfe(renda) item vecturas nav(ig)ulalriis exsolvendas, proc(uratori) Augg(ustorum) ad / ripam Baetis scapharii Hispalen(ses) ob innocentiam iustitiam/que eius singularem.* »To Sextus Julius Possessor, son of Sextus, inscribed in the Quirina tribe, Prefect of the Third Cohort of the Gauls, commander of a numerus of Syrian archers, and of the first ala of the Spanish, curator of city of Romula Malva,

military tribune of Twelfth Legion Fulminata, curator of the colony of Arca, added to the *decuriae* by the Best and Greatest emperors Antoninus and Verus, assistant of Ulpius Saturninus, Prefect of the *Annona*, in charge of inventory of the African and Spanish oil, of transportation of the surplus and of paying the freightage to the shippers (*navicularii*), procurator of the two Emperors in charge of maintaining the banks of the River Baetis, the boatmen (*scapharii*) of Hispalis, as a reward for his exceptional integrity and justice«. Part of his career following his departure from Hispalis is known through an inscription from Mactaris, Maktar in Tunisia, where he had his origin (IDRE II, 435 = AE 1983, 976 = AE 1987, 1026). On this man, see Remesal Rodríguez 1991; Christol 2003b; Erkelenz 2007, 298 note 39.

## Bibliography

- Alföldy 1984: G. Alföldy, *Römische Sozialgeschichte* (Wiesbaden 1984).
- 1999: G. Alföldy, Pontius Pilatus und das Tiberieum von Caesarea Maritima. *Scripta Classica Israelica* 18, 1999, 85-108.
- 2002: G. Alföldy, Nochmals: Pontius Pilatus und das Tiberieum von Caesarea Maritima. *Scripta Classica Israelica* 21, 2002, 133-148.
- 2012: G. Alföldy, L'iscrizione di Ponzio Pilato: una discussione senza fine? In: *Iudaea Socia – Iudaea Capta*. Convegno Internazionale della Fondazione Canussio, Cividale del Friuli, 22-24 settembre 2011 (Pisa 2012) 137-150.
- Arnaud 2008: P. Arnaud, Conscience de l'impact environnemental et choix d'aménagements concurrentiels des cours d'eau chez les auteurs anciens. In: E. Hermon (ed.), *Vers une gestion intégrée de l'eau dans l'empire romain*. Actes du colloque international, Université Laval, Québec, 27-30 octobre 2006. *Atlante Tematico di Topografia Antica Supplementi* 16 (Roma 2008) 157-162.
- 2014: P. Arnaud, Maritime Infrastructure. Between Public and Private Initiative. In: A. Kolb (ed.), *Infrastruktur und Herrschaftsorganisation im Imperium Romanum*. Herrschaftsstrukturen und Herrschaftspraxis 3. Akten der Tagung in Zürich 19.-20.10.2012 (Berlin 2014) 161-179.
- Bartocchini 1958: R. Bartocchini, Il porto romano di Leptis Magna. *Bollettino del Centro Studi per la Storia dell'Architettura* 13 (Roma 1958).
- Beltrame 2012: C. Beltrame, New Evidence for the Submerged Ancient Harbour Structures at Tolmetha and Leptis Magna, Libya. *International Journal of Nautical Archaeology* 41/2, 2012, 315-326.
- Broekaert 2011: W. Broekaert, Partners in business: Roman merchants and the potential advantages of being a collegiatus. *Ancient Society* 41, 2011, 221-256.
- Bruun 2002: C. Bruun, L'amministrazione imperiale di Ostia e Portus. In: C. Bruun / A. G. Zevi (eds), *Ostia e Portus nelle loro relazioni con Roma* (Roma 2002) 161-192.
- Cavalier 2007: L. Cavalier, Horrea d'Andriakè et Patara: Un nouveau type d'édifice fonctionnel en Lycie à l'époque impériale. *Revue des Études Anciennes* 109/1, 2007, 51-65.
- Christol 1982: M. Christol, *Les navicaires d'Arles et les structures du grand commerce maritime sous l'Empire Romain*. *Provence Historique* 32, 1982, 5-14.
- 2003a: M. Christol, *Activité économique, appartenance à l'élite et notabilité: les collèges dans la Gaule méridionale et la vallée du Rhône*. In: M. Cébeillac-Gervasoni / L. Lamoine (eds), *Les élites et leurs facettes. Les élites locales dans le monde hellénistique et romain*. Collection de l'École Française de Rome 309 (Rome 2003) 323-335.
- 2003b: M. Christol, *L'Huile du prince*. In: M. Garrido-Hory / A. Gonzalès (eds), *Histoire, Espaces et Marges de l'Antiquité*. Hommages à Monique Clavel-Lévêque (Besançon 2003) 209-226.
- 2012: M. Christol, «Voyages organisés»: les interventions des «autorités et la géographie administrative de la province d'Afrique. *Comptes-Rendus de l'Académie des Inscriptions et Belles-Lettres* (Paris), janvier-mars 2012, 653-678.
- De Salvo 1992: L. De Salvo, *Economia privata e pubblici servizi nell'impero romano*. I corpora naviculariorum (Messina 1992).
- Duncan-Jones 1974: R. Duncan-Jones, *The Economy of the Roman Empire*. *Quantitative Studies* (Cambridge 1974).
- Engelmann 1996: H. Engelmann, *Eine Victoria Caesaris und das Parthermonument* (IvE 721). *Zeitschrift für Papyrologie und Epigraphik* 113, 1996, 91-93.
- Erkelenz 2007: D. Erkelenz, *Die administrative Feuerwehr? Überlegungen zum Einsatz ritterlicher Offiziere in der Provinzialadministration*. In: R. Haensch / J. Heinrichs (eds), *Herrschen und Verwalten. Der Alltag der römischen Administration in der Hohen Kaiserzeit* (Köln et al. 2007) 289-305.
- Erol / Pirazzoli 1992: O. Erol / P. Pirazzoli, *Seleucia Pieria: an ancient harbour submitted to two successive uplifts*. *International Journal of Nautical Archaeology* 21/4, 1992, 317-327.
- Gianfrotta 2009: P. A. Gianfrotta, *Questioni di pilae e di pulvis puteolanus*. *Rivista di Topografia Antica/Journal of Ancient Topography* 19, 2009, 101-120.
- Grüll 2010: T. Grill, *The Legendary Fate of Pontius Pilate*. *Classica et Medievalia* 61, 2010, 151-176.

- Guerber 1995: E. Guerber, Cité libre ou stipendiaire? À propos du statut juridique d'Éphèse à l'époque du Haut-Empire romain. *Revue des Études Grecques* 108, 1995, 388-409.
- Halfmann 2004: H. Halfmann, Ephèse et Pergame. Urbanisme et commanditaires en Asie Mineure romaine. *Scripta Antiqua* 11 (Bordeaux 2004) [= Städtebau und Bauherren im römischen Kleinasien. Ein Vergleich zwischen Pergamon und Ephesos. Beihefte der *Istanbuler Mitteilungen* 43 (Tübingen 2001)].
- Horster 2001: M. Horster, Bauinschriften römischer Kaiser. Untersuchungen zu Inschriftenpraxis und Bautätigkeit in Städten des westlichen Imperium Romanum in der Zeit des Prinzipats (Stuttgart 2001).
- Houston 1980: G. W. Houston, The administration of Italian Seaports during the first three centuries of the Roman Empire. In: J. H. D'Arms / C. Kopff (eds), *The seaborne commerce of ancient Rome: studies in archaeology and history* (Rome 1980) 157-171.
- Hurllet 2007: F. Hurllet, L'eau et le pouvoir. L'exemple de l'Empire romain (1<sup>er</sup>-III<sup>e</sup> siècles ap. J.-C.). In: P. Le Louarn (ed.), *L'eau: sous le regard des sciences humaines et sociales* (Paris 2007) 137-155.
- İşkan-İşik/Eck/Engelmann 2008: H. İşkan-İşik / W. Eck / H. Engelmann, Der Leuchtturm von Patara und Sex. Marcus Priscus als Statthalter der Provinz Lycia von Nero bis Vespasian. *Zeitschrift für Papyrologie und Epigraphik* 164, 2008, 91-121.
- Jacques 1984: F. Jacques, Le privilège de liberté. Politique impériale et autonomie municipale dans les cités de l'Occident romain (161-244). *Collection de l'École Française de Rome* 76 (Paris 1984).
- Jones 2008: Ch. P. Jones, The Neronian Inscription on the Lighthouse of Patara. *Zeitschrift für Papyrologie und Epigraphik* 166, 2008, 153-154.
- Karwiese 1995: S. Karwiese, Groß ist die Artemis von Ephesos. Die Geschichte einer der großen Städte der Antike (Wien 1995).
- Kirbihler 2005: F. Kirbihler, L. Cusinius, episcopus à Éphèse. *Jahreshefte des Österreichischen Archäologischen Instituts in Wien* 74, 2005, 151-174.
- Kokkinia 2014: C. Kokkinia, Rome, Ephesos, and the Ephesos Harbor: a Case Study in Official Rhetoric. In: A. Kolb (ed.), *Infrastruktur und Herrschaftsorganisation im Imperium Romanum. Herrschaftsstrukturen und Herrschaftspraxis* 3. Akten der Tagung in Zürich 19.-20.10.2012 (Berlin 2014) 180-196.
- Laronde 1988: A. Laronde, Le port de Leptis Magna. *Comptes-rendus de l'Académie des Inscriptions et Belles-Lettres* 1988, 337-353.
- 1994: A. Laronde, Nouvelles recherches archéologiques dans le port de Lepcis Magna. *Comptes-rendus de l'Académie des Inscriptions et Belles-Lettres* 1994, 991-1006.
- Lehman/Holum 2000: C. M. Lehman / K. G. Holum, *The Greek and Latin inscriptions of Caesarea Maritima* (Boston 2000).
- Leveau 1993: Ph. Leveau, Mentalité économique et grands travaux hydrauliques: le drainage du lac Fucin aux origines d'un modèle. *Annales. Économies, Sociétés, Civilisations* 48/1, 1993, 3-16.
- Meiggs 1960: R. Meiggs, *Roman Ostia* (Oxford 1960).
- Petzl 1987: G. Petzl, *Die Inschriften von Smyrna II*, 1 (Bonn 1987).
- Rankov 2006: B. Rankov, Les frumentarii et la circulation de l'information entre les empereurs romains et les provinces. In: L. Capdetrey / J. Nelys-Clément (eds), *La circulation de l'information dans les états antiques* (Bordeaux 2006) 129-140.
- Raschke 1978: M. G. Raschke, *New Studies in Roman Commerce with the East*. In: H. Temporini (ed.), *Aufstieg und Niedergang der Römischen Welt. Geschichte und Kultur Roms in der neueren Forschung II. Principat* 9, 2 (Berlin 1978) 604-1361.
- Remesal Rodríguez 1991: J. Remesal Rodríguez, Sextus Iulius Possessor en la Bética. In: Gerion. *Homenaje al Dr. Michel Ponsich* (Madrid 1991) 281-295.
- Rohde 2012: D. Rohde, Zwischen Individuum und Stadtgemeinde. Die Integration von »collegia« in Hafenstädten (Mainz 2012).
- Salmon 1963: E. T. Salmon, *The Coloniae Maritimae*. *Athenaeum* 41, 1963, 3-33.
- 1969: E. T. Salmon, *Roman Colonization under the Republic* (Ithaca, New York, London 1969).
- Sartre 1991: M. Sartre, *L'Orient romain. Provinces et sociétés provinciales en Méditerranée orientale d'Auguste aux Sévères* (Paris 1991).
- Scharf 1994: R. Scharf, *Comites und comitiva primi ordinis* (Mainz 1994).
- Slim et al. 2004: H. Slim / P. Troussat / R. Paskoff / A. Oueslati, *Le littoral de la Tunisie. Étude géoarchéologique et historique* (Paris 2004).
- Thylander 1952: H. Thylander, *Inscriptions du port d'Ostie* (Lund 1952).
- Tran 2006: N. Tran, Les membres des associations romaines. Le rang social des collegiati en Italie et en Gaules sous le Haut-Empire. *Collection de l'École Française de Rome* 367 (Rome 2006).
- 2014: N. Tran, C. Veturius Testius Amandus, les cinq corps de léculaires d'Ostie et la batellerie tibérine au début du III<sup>e</sup> siècle. *Mélanges de l'École Française de Rome. Antiquité* 126 (2014). <http://mefra.revues.org/2043> (20.1.2015).
- Uggeri 2006: G. Uggeri, Seleucia Pieria: il porto di Antiochia sull'Oronte. *Journal of Ancient Topography* 16, 2006, 143-176.
- Verboven 2002: K. Verboven, The economy of friends. Economic aspects of amicitia and patronage in the Late Republic. *Collection Latomus* 269 (Bruxelles 2002).
- 2011: K. Verboven, Resident aliens and translocal merchant collegia in the Roman empire. In: O. Hekster / T. Kaizer (eds), *Frontiers in the Roman World. 9<sup>th</sup> Workshop of the International Network Impact of Empire* (Leiden 2011) 335-348.
- Virlouvet 2000: C. Virlouvet, Les denrées alimentaires dans les archives des Sulpicii de Pouzzoles. *Cahiers du Centre Gustave Glotz* 11, 2000, 131-149.
- 2004: C. Virlouvet, Les naviculaires d'Arles à propos de l'inscription provenant de Beyrouth. *Mélanges de l'École Française de Rome. Antiquité* 116/1, 2004, 327-370.

**Das Zusammenspiel zwischen Praktikern und Entscheidungsträgern für die Auswahl, Organisation, Nutzung und Erhaltung von Häfen im Römischen Reich**

Dieser Artikel stellt die traditionelle Sicht eines römischen Hafen-Systems, das vollständig vom kaiserlichen Willen dominiert wurde, in Frage. Er untersucht die Rolle – und Schwierigkeiten – der Städte für und bei dem Erhalt ihrer Häfen im Vergleich mit Maßnahmen zur Errichtung öffentlicher Gebäude oder zur städtischen Versorgung. Betont wird die Bedeutung von Patronage und Vermittlung, also von persönlichen Netzwerken, für die Motivation, Planung und Gestaltung hafenbaulicher Aktivitäten. Dabei erwiesen sich Status und Statusstreben der Begünstigten und Wohltäter oft als wichtiger als die praktischen Auswirkungen der Bauvorhaben. Der Kaiser bleibt jedoch der wichtigste, wenn nicht der einzige, Initiator der größten Bauvorhaben, auch im Bereich der Häfen.

**The Interplay between Practitioners and Decision-Makers for the Selection, Organisation, Utilisation and Maintenance of Ports under the Roman Empire**

This paper challenges the traditional top-down view of a Roman port-system entirely dominated by the imperial will. It re-evaluates the role – and difficulties – of cities in managing their own ports similar to the ways they managed (or tried to manage) their public building and supplies policies. It also underlines the importance of personal patronage and social intermediation, in other words, of personal and civic networks, in the development of port-building policies. The identity of beneficiaries and benefactors was often more essential than the practical impact of the building projects. The emperor nevertheless remains the main, if not the sole, performer of huge works, including port building.

**L'interaction entre les praticiens et les décideurs pour la sélection, l'organisation, l'utilisation et l'entretien des ports sous l'Empire romain**

Cet article remet en question le point de vue de haut en bas traditionnelle d'un port-système romain entièrement dominée par la volonté impériale. Il réévalue le rôle – et les difficultés – des villes dans la gestion de leurs propres ports similaires à la façon dont ils ont réussi (ou tenté de gérer) leur bâtiment public et les politiques de fournitures. Il souligne également l'importance du mécénat personnelle et intermédiation sociale, en d'autres termes, de réseaux personnels et civiques, dans le développement de politiques de renforcement de port. L'identité des bénéficiaires et des bienfaiteurs était souvent plus essentiel que l'impact pratique des projets de construction. L'empereur reste néanmoins la principale, sinon la seule, interprète de grands travaux, notamment la construction du port.

