

Simon Malmberg

# Neighbourhoods by the Tiber: Life at Two Harbours in Rome

**Abstract:** This study looks at two locations in Rome, at Ripetta and Pietra Papa, that could function as a departure for a discussion about harbour neighbourhoods in the city. Since we lack complete preserved ancient urban districts in Rome, as opposed to Pompeii or Ostia, this study will have to combine material from two ancient harbours at Rome, complemented by information about harbour life in early modern Rome. Specific forms of urban neighbourhoods probably evolved in harbours, which were characterised by the interaction between permanent and temporary residents. Neighbourhoods can be seen as socio-spatial phenomena that go beyond material culture. Studying them may challenge the material focus of archaeology by forcing us to look specifically at intangible social relations and human activities that do not necessarily leave any physical traces. This contribution uses material from different periods to highlight the possibility of port functions and neighbourhood arrangements that are not visible in the archaeological or textual material from ancient Rome. It also discusses trajectories of change in the harbours in the short term (days), midterm (seasons) and long term (centuries).

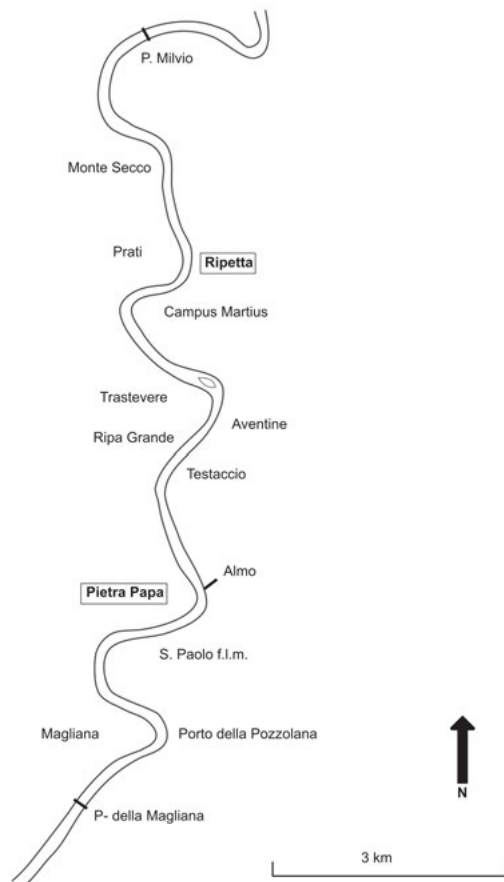
## Introduction

The city of Rome was among the largest and most important ports of the Empire, with harbour facilities stretching for many kilometres along the Tiber. This study will look at two harbour locations in Rome that could function as a departure for a new perspective on neighbourhoods in the city, which will also take into account human activities that did not leave permanent physical traces. Harbour neighbourhoods are chosen because they have been previously somewhat neglected in neighbourhood studies in Rome. They also present a different form of neighbourhood, characterised by seasonality, temporary inhabitants and structures and land-water interaction. The first of the harbour neighbourhoods under investigation is at Pietra Papa, in the southern part of Rome, which received ships coming up from the Mediterranean. The other is the Ripetta harbour in northern Rome, which was one of the ports for riverboats coming downriver from the Tiber Valley (Fig. 1). The two harbours are not chosen for a comparison or as a contrast, but rather to provide complementary material in a city which only allows fragmentary glimpses of harbour life.

Pietra Papa has been chosen for this study because it is a rare example in Rome of a large part of a harbour being excavated in a planned and published excavation. While the ancient Ripetta harbour is far more fragmentary, it instead provides us with a continuity seldom seen among Rome's harbours, being in use from at least A.D. 20 until 1889. Pietra Papa is also chosen because it has been puzzling scholars due to its lack of much of the infrastructure associated with harbours, such as buildings for storage and distribution, that can be found in for example Testaccio. Neither are there any known centres of habitation for workers at or close to the harbour. Although the area of the Ripetta harbour

---

**Article note:** I am grateful to Annette Haug and Christian Beck for organising the conference 'The Dynamics of Neighbourhoods and Urban Quarters' at Kiel University in November 2021, for the invitation to contribute, and facilitating my digital participation. I am also in debt to the other participants for lively and rewarding discussions. Furthermore, I would like to thank the editors Annette Haug, Adrian Hielscher and Anna-Lena Krüger, and the reviewers, that have worked so hard to produce this volume. Finally, I would also like to extend my gratitude to the Norwegian Institute in Rome who provided me with support, workspace and access to sites and libraries, and the Meltzer Foundation that financed extended visits to Rome.



**Fig. 1:** The urban part of the Tiber in antiquity with the Ripetta and Pietra Papa harbours marked out.

had become quite densely urbanised by the 2<sup>nd</sup> century A.D., it too for a long time lacked any identifiable structures for storage and distribution.

The study consists of four parts: First a presentation of the theoretical perspectives of the study, which closely adheres to the volume's overall goals and how these might be applied to harbour neighbourhoods in Rome as well as our sources for studying them. The second part describes the two chosen harbours more in detail, which is complemented by material from early modern Rome at Ripetta. Then follows a discussion where the theoretical perspectives are applied to how the two ancient harbours might have worked as neighbourhoods. The last section looks at the temporal dimension of the harbour neighbourhoods, again related to one of the main themes of the volume, in a short-, medium- and long-term perspective.

## Harbour Neighbourhoods: Perspectives and Challenges

The main highways, urban streets, city gates and fora in Roman cities were important social spaces, where people moved, met and interacted. Studies of ancient urban social organisation and development have developed into an important research field, to which I have been devoted. It became natural to extend my research on urban movement and social life to also include the urban Tiber. This part of the river intersected ancient Rome and formed one of the most important traffic arteries and locations for human interaction in the city. The Tiber was essential to the city of Rome and connected it with the Mediterranean and the port cities at the mouths of the river, as well as with the important agricultural inland regions of the Tiber Valley. In the Late Republic and the Imperial period, the Tiber became fundamental in supporting up to a million inhabitants in Rome, which necessitated the

construction of harbour facilities at an unprecedented scale in the city, within an area of 18 km along the river<sup>1</sup>.

In the study of harbour areas of ancient Rome as urban neighbourhoods, it is important to explain the perspective and definition of ‘neighbourhood’ used here. Following the overall theoretical perspective of this volume, I have chosen to emphasise the socio-spatial aspects of neighbourhood, following the work by American sociologist Gerald Suttles, who defined it as a ‘network of acquaintances [...] known from shared conditions of residence and the common usage of local facilities’<sup>2</sup>. Suttles saw neighbourhoods as subjective, with blurred limits and a gradually decreasing social relevance, dependent upon both physical and social distance. Using this perspective, the neighbourhood is created through the constant actions by the individuals living there.

Suttles divided the experience of neighbourhood into three categories of decreasing relevance. The first category is the face-block, consisting of individual, local, face-to-face relationships, usually among houses along both sides of a street for the length of one city block. In this study, the quay can be understood as a form of street. The next stage is what Suttles termed the defended neighbourhood, which comprises several city blocks with a corporate identity, and constitutes a safe haven for its inhabitants. This would correspond to the larger harbour neighbourhood area, including harbour buildings farther from the river. The third category moves beyond the neighbourhood, to what Suttles called the community of limited liability. This is an administrative city unit with an official name and boundaries, which would be equivalent to a formal city district in ancient Rome, such as a *vicus* or an urban region<sup>3</sup>.

The concepts developed by Suttles will be applied to two harbour neighbourhoods in Rome, discussed in more detail in part three below. These harbours had normal face-blocks based on streets, open spaces and buildings, but in addition we can perceive the harbour quays as a form of face-block, with buildings on one side and moored river craft on the other. The river should thus not be seen as a boundary or an obstacle in the harbour neighbourhood, but as a central part of it. Shared facilities are central to neighbourhood identity, and we find that these two harbour neighbourhoods were lavishly equipped with aqueduct water that supplied *nymphaea*, fulleries and bathhouses that might have been used by the harbour inhabitants. Another aspect is that of social networks, where we will look at the groups that potentially made up most of the inhabitants of the harbour neighbourhoods. The temporary character of both inhabitants and their housing facilities lent a special dynamic and fluidity to the character of these neighbourhoods.

To study port areas in Rome from a neighbourhood perspective has been a somewhat neglected topic, and understandably so in view of the general lack of information about harbour life in the city. Roman literary texts are mostly occupied with mythology or dramatic historic events when they deal with the Tiber and seldom mention the social life of harbour inhabitants. Legal texts are somewhat more forthcoming but are mainly occupied with ownership or user rights. There are some depictions of harbour scenes in Roman art, but very little directly related to the city of Rome. Epigraphy provides some evidence related to harbours in the city. The most important epigraphic material for harbour neighbourhoods in Rome is probably the different marble plans, that partly depict harbour areas<sup>4</sup>.

When it comes to archaeological sources, the construction of the muraglioni, the flood walls of Rome, at the end of the 19<sup>th</sup> century, could have been a golden age of harbour archaeology. But the opportunity was not seized because rapid urban modernisation efforts were prioritised to the detriment of proper archaeological investigations, and thus very little was recorded or saved. Things

<sup>1</sup> For an overview of previous scholarship on Rome’s harbours, see Malmberg 2015; 2021. For an overview of Rome’s demographic and economic relationship to its immediate hinterland, see Malmberg, in press.

<sup>2</sup> Suttles 1972, 55. See also the introduction to the present volume.

<sup>3</sup> Suttles 1972, 21–81.

<sup>4</sup> See Malmberg 2021 for an overview of available sources for the port of Rome. For a general overview of scholarship and ancient sources on Roman ports, see Arnaud – Keay 2020; Keay 2020; 2021.

have improved, especially since the 1970s, due to pioneering efforts by several Italian archaeologists, but the excavated material provides little direct information regarding specific human activities and social interaction<sup>5</sup>.

To be able to understand the city of Rome as a whole it is essential to include studies of the city's interaction with the river, since harbour areas are very relevant in relation to socio-spatial aspects of urban life. Studies of this type presuppose the use of a large range of different sources. There is especially a danger for aspects that are not preserved in the ancient material culture to be overlooked. For this reason, evidence from later periods in Rome can provide an important complementing perspective on the organisation of goods, services and workers at the city's harbours in ways that did not necessarily involve permanent physical structures. The rebuilding of the Ripetta harbour at the beginning of the 18<sup>th</sup> century will supply such material for this study. Of course, this kind of material cannot provide us with facts about ancient Rome, but rather with useful ideas, and open our minds to different possibilities and aspects of harbour life.

## A Close Reading of Two Roman Harbours

We have now established the theoretical parameters of the chapter and their application to harbour neighbourhoods, as well as the challenges we meet in piecing together a coherent picture of harbour life in ancient Rome. In the following part, the empirical knowledge we have about the two harbours in Rome will be presented more in detail.

### Pietra Papa

The first harbour of this study is the one at Pietra Papa, in southern Rome (Figs. 2–3). It is one of the few sites where we have knowledge of the larger infrastructural context of the port since it was mostly unearthed in a single, planned, large-scale excavation. Major findings of port structures were made during drainage work in 1892, and again after flooding in 1915, which in turn led to large-scale excavation work in 1939–1940. The excavators found an inclined concrete quay at least 400 m long, faced in *opus mixtum*. Brick stamps suggest a construction date in the first half of the 2<sup>nd</sup> century. Several large, perforated mooring stones in travertine formed part of the quay, and two stairways in travertine connected the river with the top of the quay. Along the edge of the quay, three river-boundary stones were found in situ, together with several other *cippi* without inscriptions. Marks from ropes on two of the inscribed stones showed that they had also been used as mooring stones. Behind the quay the excavators found two bathhouses, both constructed in the first half of the 2<sup>nd</sup> century: one smaller and simpler to the north, with floors in black-and-white mosaics, and one larger farther south, with frescoes of riverboats and marine motifs of high quality and floors in polychrome mosaics from a later 4<sup>th</sup>-century phase. The larger bath also had a *palaestra* with a pool, and a large cistern that was probably connected to an aqueduct. Farther to the south were a *nymphaeum*, a fishpond, a fullery and a monumental rectangular tomb in concrete with remains of marble decoration, a series of modest burials and several *columbaria*<sup>6</sup>.

It has been observed as a global phenomenon in the early modern period that harbour workers usually live close to the harbour<sup>7</sup>. At Pietra Papa, we have no indications of a permanently settled pop-

<sup>5</sup> For overviews, see Aldrete 2007, 247–252; Malmberg 2015, n. 1. For specific examples, see Malmberg 2021.

<sup>6</sup> Jacopi 1940; 1943; Le Gall 1953, 172. 196 f. 258 f. 271; Mocchegiani Carpano 1975/76, 243 f.; 1981, 152; Castagnoli 1980, 37 f.; Palmer 1981, 383; Rossetti – Tella 1991; Taylor 2000, 190. 197 f.; Imperatori 2003, 164 f.; Malmberg 2021, 353–355.

<sup>7</sup> Davies – Weinbauer 2000.

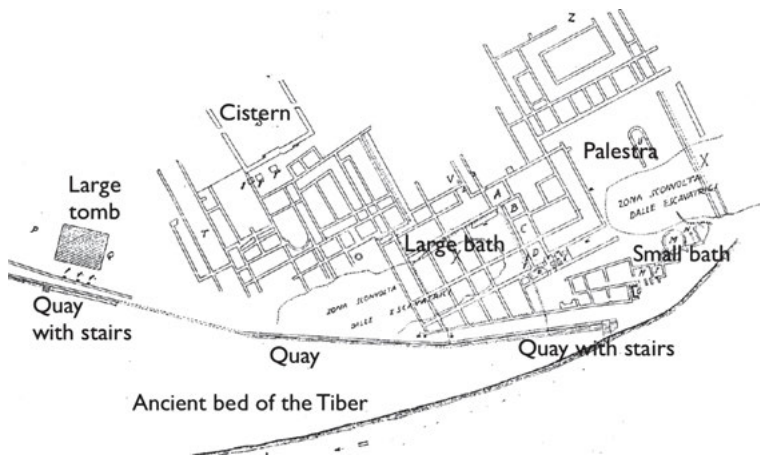


Fig. 2: Plan of the excavations at Pietra Papa in 1939–1941.

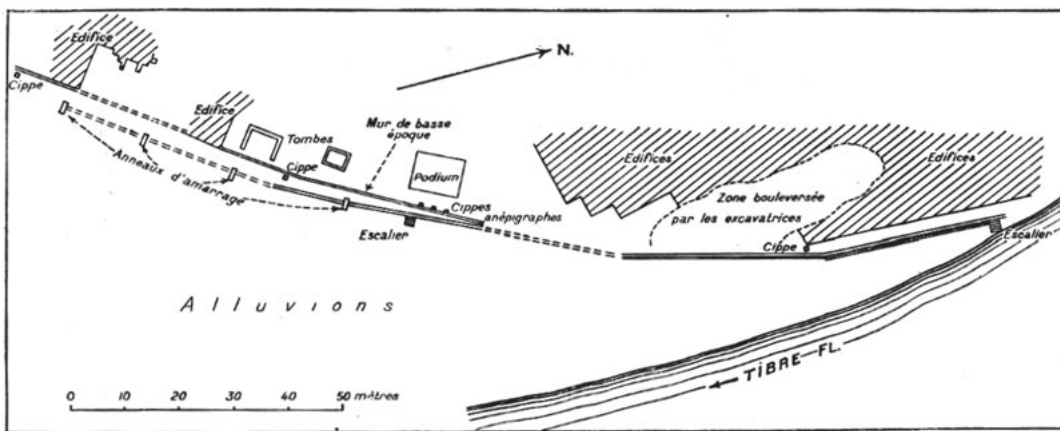


Fig. 3: Plan of the quay at Pietra Papa.

ulation<sup>8</sup>. This, together with the lack of storage and distribution facilities, has led scholars to suggest that the site was not a proper harbour but only a toll or waiting station on the way to inner-city harbours<sup>9</sup>. I find this argument wanting, in view of the massive investment needed to build an at least 400 m long concrete quay equipped with large mooring stones and delimited by official boundary stones. As will be demonstrated, a lack of buildings for storage, commerce or habitation does not preclude a thriving harbour with a seasonal population of dock workers. No similar quays have come to light at any other presumed way stations between the Tiber mouth and Rome, which demonstrates that it was feasible to moor river barges during the night without access to concrete quays<sup>10</sup>.

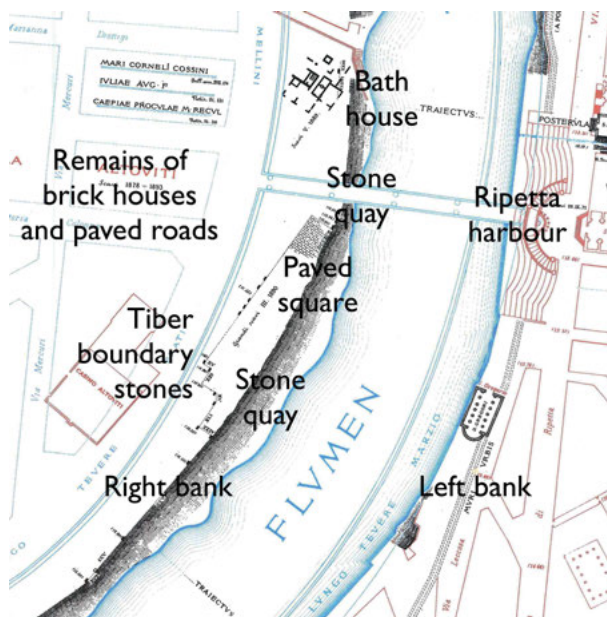
## Ancient Ripetta

The second example is the Ripetta harbour, which was well-positioned in the northern part of Rome to receive goods coming down from the Italian inland (Fig. 4). It occupied a central location, at the junction of the river and the Via di Ripetta, a road that goes back to the Early Imperial layout of the northern Campus Martius. We first hear about a harbour here in A.D. 20, mentioned by Tacitus as

<sup>8</sup> That the port at Pietra Papa had social functions is however beyond doubt, through the existence of no less than two large bathhouses, one simpler and one more luxurious, both located right next to the quay.

<sup>9</sup> Le Gall 1953, 259; Palmer 1981, 383–393.

<sup>10</sup> Keay 2012, 48; Aguilera Martín 2012, 113 f.; Fedeli 2013; Malmberg 2021, 356 f. Indeed, simple river mudbanks were used to moor river barges in Rome itself during the medieval and early modern period.



**Fig. 4:** Plan of the Ripetta harbour. On the eastern, left bank is the 18<sup>th</sup>-century harbour, built on top of an ancient quay. On the western, right bank are remains of an ancient harbour excavated in the 1890s.

located next to the Mausoleum of Augustus. Remains of the harbour structure were unearthed during the construction of a new port in the early 18<sup>th</sup> century. A 50 m stretch of the ancient quay was found, which was built in blocks of stone and paved in travertine. An Augustan Tiber marker was found at the quay, which might give a chronological indication<sup>11</sup>.

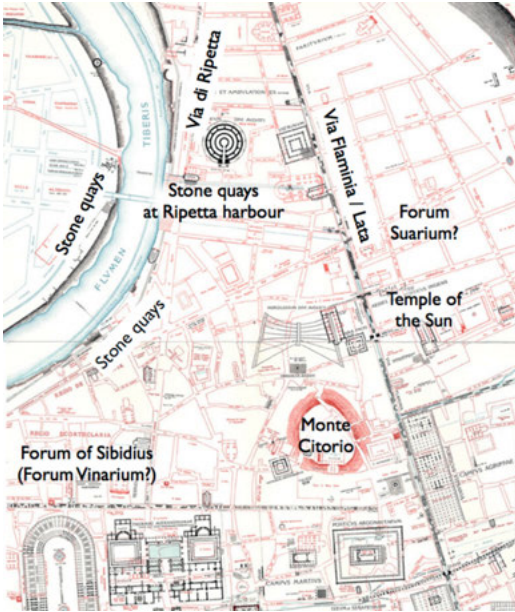
There are also ancient harbour remains on the opposite, right Tiber bank. During construction of the Ponte Cavour in the 1890s a stone quay was discovered together with a large, paved square. A series of Tiber boundary stones from the Augustan period was found in situ along the edge of the quay. There is limited knowledge of the harbour area beyond the paved square since it was hurriedly developed for housing in the 1880s without scientific excavation, but there are indications the area was densely urbanised in antiquity, with many finds of brick housing and paved streets. Just north of the square, a building in *opus mixtum* with a large, porticoed courtyard was uncovered, which could be tentatively identified as a bath building because of its indoor pools. The interior walls were partly covered in painted plaster, and some rooms had simple white mosaic floors while others preserved fragments of *opus sectile*. Based on a brick stamp found in situ, the building can be dated to the middle of the 1<sup>st</sup> century A.D.<sup>12</sup>.

Ancient remains found on the left bank at Ripetta were the result of inadvertent discoveries related to infrastructural work in a crowded part of the modern city. Thus, they cannot give us a detailed understanding of the ancient harbour. However, results from many different discoveries can be pieced together to provide an image of the general development of the area. They show that it began to be occupied by houses from the Flavian period and turned into a densely urbanised area in the course of the 2<sup>nd</sup> century A.D., with the monuments from the Augustan period built over or confined to more limited areas. There is evidence of both *insulae* and *domūs*, and a dense network of paved streets and sewers, but during the early Empire with no traces of buildings directly linked to harbour activities, such as markets, warehouses, or distribution centres<sup>13</sup>.

<sup>11</sup> Tac. Ann. 3, 9, 2; Maischberger 1997, 106; De Caprariis 1999, 220 f.; Malmberg 2021, 329.

<sup>12</sup> Lanciani 1881; 1885; Lanciani – Borsari 1885; Marchetti 1889; 1890; Le Gall 1953, 203 f.; Steinby 1974/75, 96; Mocchegiani Carpano 1981, 143; Quilici 1986, 202; Maischberger 1997, 105; LTUR V (2000) 69–73 s. v. Tiberis (M. Maischberger) 72; LTUR Suburbium V (2008) 148–156 s. v. Tiberis (M. Maiuro) 154; Muzzioli 2015; Malmberg 2021, 331–333.

<sup>13</sup> Rakob 1987, 694–709; Sediari 1997; Brandt 2012, 110 f.; Coletti – Loreti 2016, 320–323. Due to the random and fragmentary character of excavations, and the lack of proper publication of older findings, it is impossible to provide further details regarding design of streets, *tabernae* or house sizes close to the Ripetta harbour.



**Fig. 5:** Plan of the harbour at Ripetta and major commercial infrastructure in northern Campus Martius in Late Antiquity.

This, however, changed in late antiquity (Fig. 5). The newly built Temple of the Sun at today's Piazza di S. Silvestro functioned both as a storage and distribution facility of state-subsidised wine by the 4<sup>th</sup> century, and other new marketplaces for wine and pork were also located in the northern Campus Martius. Moreover, a large refuse dump, today known as the Monte Citorio, developed next to the Column of Marcus Aurelius. Puzzlingly, none of this infrastructure is in the immediate vicinity of Ripetta, but rather removed ca. 400–500 m from the harbour. This could perhaps be explained by the urbanisation of the area taking place long before the harbour had become more important. Thus, by the 4<sup>th</sup> century, new economic facilities might have to be located where there happened to be free space, making the handling of goods less efficient<sup>14</sup>.

## Early Modern Ripetta

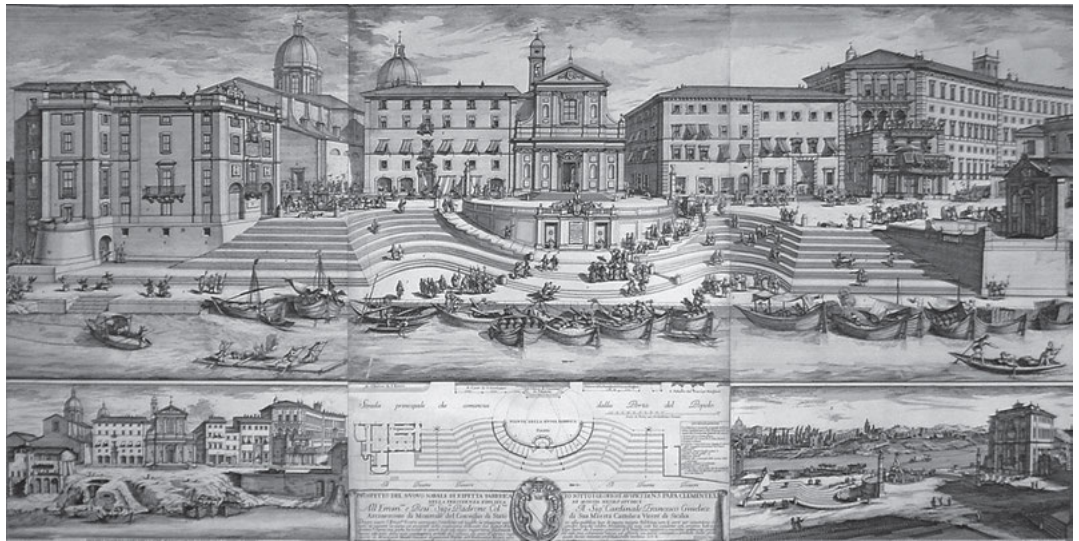
Ripetta seems to have been in continued use through the ancient, medieval and modern period, until the closing of the port due to construction of the flood walls in 1889, and can thus provide a tantalising glimpse of urban continuity. This part will describe the same Ripetta harbour but removed in time from the ancient remains by one and a half millennia. In the early modern period, the harbour consisted only of a dirt bank, and an open unpaved court which also functioned as a garbage dump (Fig. 6). The harbour was remodelled in 1703–1704 with a formal piazza, a hemicycle with a fountain, ramps, symmetrical steps, and most importantly, the regularisation and solidification of the lower riverbank (Fig. 7). The new layout was realised in less than a year, using mainly stone taken from the Colosseum. In connection with the rebuilding, we have access to a trove of planning documents and series of letters, issued by the President of the Tribunale delle Strade, the papal authority responsible for street and harbour works in Rome at the time. These texts not only describe the building project, but also detail the workings of the harbour in dialogue with merchants, porters and boatmen already active in the harbour<sup>15</sup>.

<sup>14</sup> Le Gall 1953, 202. 288–290. 314–316; LTUR I (1993) 267–269 s. v. Ciconiae (C. Lega); Maischberger 1997, 105; De Caprariis 1999, 220 f. 225 f.; Malmberg 2015, 198 f.; 2021, 329–331; Liverani 2020, 25.

<sup>15</sup> Taja 1705, 37–41. 46–48; Nicolai 1829; Marder 1975, 27–31; 1980, 33–37.



**Fig. 6:** Porto della Legna with the Ripetta harbour in the background in 1685. Painting by Caspar van Wittel. The simple arrangements of both harbours can clearly be seen.



**Fig. 7:** The new harbour at Ripetta, built in 1703–1704 by Alessandro Specchi, who also made this engraving.

The 18<sup>th</sup>-century harbour received boats loaded with firewood, charcoal, stone and brick produced in the Tiber Valley above Rome. Foodstuffs, mainly wine, olive oil, fruit and vegetables, were also unloaded here. The bulkiest commodity was timber, that was floated downriver bound together in large rafts which were moored at Ripetta, or somewhat farther upstream at the Porto della Legna. When cargoes arrived, they were not unloaded until they were sold. Usually, agents scoured the city for prospective buyers, who would come to the shore, or board the boats to do business, usually at auctions. Thus, there developed a kind of floating market at Ripetta, that catered mostly to wholesale buyers, but also handled some retail. There were no permanent structures for either sale or storage at the harbour; also after the construction of the new harbour, since all activities occurred either on the vessels or in the open piazza. However, the harbour was equipped with a customs house, to



handle paperwork and payments. There were not any permanent living facilities in the harbour, and yet hundreds of people lived there, at least during the summer season. Porters and other harbour workers slept in the open or erected small tents to protect against rain. The boat crews lived onboard their vessels, below decks or in tents. Even the timber rafts were equipped with small huts to live in. In the planning of the new harbour, living quarters for these dock workers were not included. However, aqueduct water was specifically made available for the workers through the construction of a decorative fountain placed at the centre of the harbour<sup>16</sup>.

There are some striking similarities between ancient and early modern Rome at Ripetta. The location had open squares in both the ancient and modern periods, but no signs of storage or market buildings at the harbour itself. It can also be fruitful to compare these arrangements with a similar puzzling lack of storage, commercial and living facilities at the harbour of Pietra Papa. A difference between the 18<sup>th</sup>-century port at Ripetta and the two examples from ancient Rome is the size of the harbours, which were larger in the ancient period. This should not come as a surprise in an ancient city ten times the size of its 18<sup>th</sup>-century counterpart. Another difference is that in ancient Rome public bathhouses were central to social life, while they were banned in the 18<sup>th</sup>-century city. There are indeed baths at both ancient harbours, but not at the early modern one<sup>17</sup>.

## Harbour as Home: Applying the Concept of Neighbourhood

In this section, the theoretical perspectives and empirical knowledge will be merged in an attempt at an interpretation of how these two harbours worked as a specific form of urban neighbourhoods. The street has been recognised as essential to neighbourhood life, and also formed the basis for Suttles' idea of the face-block. At Rome's harbours, in addition to normal street-based face-blocks, we can think of the quay as a form of street. Their boundaries were delineated by *cippi*, similar to how Roman public highways were marked out, creating an unobstructed street-like feature along the river. Beyond the Tiber boundary stones, people were free to construct buildings that formed one side of the face-block. The other was formed by the river craft that were moored at the quay. We might imagine these craft moored in several rows, similar to arrangements depicted in 16<sup>th</sup>-century drawings and 19<sup>th</sup>-century photographs from the Ripa Grande harbour at Rome (Figs. 8–9). You could therefore characterise harbours like those at Ripetta and Pietra Papa not only as neighbourhoods located adjacent to the river, but also partly **on** the river, a neighbourhood on water. Rivers are often viewed as natural obstacles or boundaries in the urban landscape. In the case of harbours, the river was integral, even central, to the neighbourhood. The impermanent nature of the river, and the use of river craft as mobile living units, gave a further dynamic to harbour neighbourhoods. If we apply Suttles' categories of scale, Ripetta, with its 50-metre quay, can be seen as a face-block, while the harbour at Pietra Papa, being eight times longer, could be perceived as a linear form of defended neighbourhood.

Harbour areas, where hundreds of people worked and lived together in close proximity, had the potential to develop strong neighbourhood bonds. In early modern Rome, many dock workers constantly shared space and facilities when working together in teams. They shared fountains for drinking and household water and slept close together in the open or with tents providing some privacy.

It should be noted that both ancient harbours were plentifully provided with aqueduct water: at Ripetta both riverbanks were supplied (Campus Martius through the Aqua Virgo and Prati by the Aqua Traiana), while Pietra Papa received piped water despite its remote location. The *nymphaeum* at Pietra Papa could have had a similar function to the central fountain at early modern Ripetta,

<sup>16</sup> Corvisieri 1877/78, 139 f.; Rodocanacchi 1894, 233–244; Mira 1954, 34–40; Delumeau 1957, 388.

<sup>17</sup> Poirier 2005, 158 f.: Public baths were banned due to the transmission of syphilis. Syphilis is first attested in Europe in 1495, when it spread from America.



**Fig. 8:** Ripa Grande in Rome in the 1550s. Drawing by Pieter Bruegel the Elder.



**Fig. 9:** Ripa Grande in the 1870s.

providing workers with clean drinking and household water. Moreover, clothes washing could have been provided by the nearby fullery. The aqueducts at Ripetta and Pietra Papa also supplied the bathhouses that were located just next to the quays. Bathing would be very welcome after a day's hard work in the port but would also be an excellent opportunity to socialise. These facilities all point to a thriving, albeit in the case of Pietra Papa, temporary neighbourhood, that might have involved hundreds of workers during the hot summer months.

River traffic and harbour activities were much affected by seasonal variations in ancient Rome. Thus, many harbour workers were seasonal labourers who lived migrant lives away from their families, and harbours therefore must have seen a rapid turnover of people. Harbour workers were probably a heterogeneous group consisting of freeborn, freed and slaves, with different languages, cultures and backgrounds. These factors potentially weakened bonds within the group as a whole. On the other hand, absence or weakening of family ties together with constant proximity to other workers might have developed other types of networks based on profession, religion, culture and ethnicity.

The organisation of harbour workers into such networks can indeed be seen in Roman epigraphic and legal sources, where workers are grouped into *collegia* based on a hierarchy of different work assignments and professions. We know of the *collegia* of the grain measurers, timber dealers, sack carriers, amphorae carriers, sand carriers, stevedores, warehouse workers and warehouse guards. There were also organisations for skippers, boatmen, ferrymen and divers, as well as for grain, wine and oil merchants. To this can also be added members of state organisations, such as the Imperial

bureaucracy for the maintenance of the river and its banks, and the administration of the food dole<sup>18</sup>. One potential way to mark hierarchies spatially can be observed at Pietra Papa with its two different bathhouses, one larger, more luxurious, and one simpler.

To what extent migrant harbour workers were integrated with the local population of Rome is probably beyond the reach of our available source material. Rome's population was known in antiquity for its many immigrants. Could this have led permanent city dwellers to be more open to seasonal workers, or would they have shut them out as outsiders and temporary passers-by? Experiences in this regard in the modern period seem to be as diverse as there are historical examples<sup>19</sup>.

## Temporal Dimensions of Harbour Neighbourhoods

One of the overarching goals of this volume, as set out in the editors' introduction, is to move beyond neighbourhoods as unchangeable entities, and also stress their temporal dimension. Thus, in this final section we will also look at harbour neighbourhoods from a temporal perspective: who spent time and put their stamp on the area within different time frames, and how did that change an area over time? These trajectories of change in the two harbour neighbourhoods will here be discussed in the short term (days), midterm (seasons) and long term (centuries).

For changes in the population of the harbour neighbourhoods in the short term, within days, we can presume a mix of permanent urban residents and temporary workers. There is an ongoing debate regarding the ratio between these two groups, but this cannot generally be resolved due to a lack of evidence<sup>20</sup>. Many of the temporary inhabitants were probably day labourers who might work in the port one day and somewhere else in the city the next. It also included crew onboard the river craft that might be moored for at most a few days before moving on. The boatsmen were not a homogeneous group but ranged from crew and haulers working the large barges between Rome and the Tiber mouths, to farmhands from the hinterland carrying local agricultural produce in small skiffs or loggers from the Tiber Valley travelling on timber rafts. Their common denominator was that they all probably lived on their river craft, as documented in 18<sup>th</sup>-century Rome.

In the midterm temporal perspective, the largest change was related to people working and living in the harbours on a seasonal basis. The use of the Tiber, and thus of the harbours, was dependent on seasonal variations. The river was hard to navigate between November and April due to a fast and dangerous current, but a slow pace in summer made it easy to use for transport. The period between April and November was also considered the primary sailing season on the Mediterranean, and the recommended time for concrete construction at Rome. Moreover, from June, overseas grain shipments began to arrive at the Tiber mouth, followed by the Italian grain harvest in June–July, most fruits and vegetables in August–September and wine in October. A steady stream of agricultural products thus reached Rome both from the Mediterranean and the inland regions in the period between June and October. This traffic probably had a major impact on the composition of the harbour inhabitants<sup>21</sup>.

There was thus a significant difference in activity in the port of Rome, with a peak during summer, while in winter and early spring we can imagine that activity in the harbours almost came to a standstill. Gregory Aldrete and David Mattingly estimated a total workforce of 3,000 at peak activity to handle the loading and unloading of goods in Rome's harbours in the Early Imperial period.

<sup>18</sup> Sirks 1991, 258 f.; Aldrete – Mattingly 1999, 183, 190; Rougier 2020; Tran 2020; Virlovet 2020.

<sup>19</sup> Compare for instance the very different experiences of segregation and integration of seasonal harbour workers in 19<sup>th</sup>-century New Orleans, Bremen, and London: Arnesen 2000; Lee 2000; Mankelov 2000.

<sup>20</sup> Workers mostly from permanent urban population: DeLaine 2001; Holleran 2011; 2016. Workers mostly from migrant population: Erdkamp 2008; 2016.

<sup>21</sup> Frontin. Aq. 123; Le Gall 1953, 15–18, 31, 128; Aldrete 2007, 56–61, 66–71; Malmberg 2015, 189–192.

They acknowledged that this is probably an underestimation. Paul Erdkamp and Lance LaGroue used 19<sup>th</sup>-century Shanghai as a comparable example of a major city supplied along a river that could only be efficiently used for two thirds of the year. With a population of 500,000, about half that estimated for Early Imperial Rome, Shanghai needed 20,000 dock workers in peak season, but only about 5,000 during winter. To these workers must then be added several thousands of crew manning river craft. The existence of this large seasonal workforce also led to other people being drawn to the harbours to provide additional services, for example to supply dock workers with foodstuffs and entertainment<sup>22</sup>.

Using the analogy from 18<sup>th</sup>-century Ripetta with its lack of permanent living quarters as well as buildings for storage and distribution, it does not seem far-fetched to suggest that both Ripetta and Pietra Papa could have been active harbours, with storage and sales onboard the vessels, and both boatmen and dockworkers living in temporary facilities, such as tents, huts and river craft. The harbours would likely have been operated on a seasonal basis, at Pietra Papa mostly by temporary workers due to its relatively isolated location in relation to the main centres of permanent habitation. This seasonal variation, combined with its geographic location, might have transformed the Pietra Papa neighbourhood into almost a ghost town during winter.

Ancient Ripetta had a different situation since it was located in an increasingly urbanised central area of Imperial Rome. A large portion of the dock workers could have been permanent residents of the urban district, but many could still have been migrant, seasonal workers. In fact, evidence from the early modern harbour at Ripetta points to most of the dock workers being migrants, living in temporary facilities, even though the harbour also in this period was situated in a densely inhabited part of the city. Overall, the ancient Ripetta neighbourhood probably saw a noticeable but less dramatic seasonal change in the number of inhabitants compared to Pietra Papa, not least because Ripetta was a much smaller harbour.

There were also longer-term changes in the two harbour neighbourhoods, which can be observed across the centuries. In this long-term perspective it can be argued that there were different types and paces of change at Ripetta and Pietra Papa. Ripetta became equipped with stone quays and river-boundary stones along both banks in the Augustan period. A further improvement came with the provision of aqueduct water to northern Campus Martius through the Aqua Virgo, while Prati di Castello benefited from a side channel of the Aqua Traiana that was built to supply the *naumachia* of Trajan. Harbour-related facilities at Ripetta handling storage, distribution and waste disposal came to be gradually added from the late 3<sup>rd</sup> century, although somewhat removed from the river, as the harbour gained in economic importance. Ripetta harbour thus developed gradually, until it reached its peak use in the 4<sup>th</sup> and early 5<sup>th</sup> centuries.

Long-term change at Pietra Papa, on the contrary, was comprehensive and sudden. The quay, ramps, aqueduct, *nymphaeum* and bath complexes all seem to have been built within a few decades in the first half of the 2<sup>nd</sup> century in a rural location, only previously occupied by an aristocratic villa from the Augustan period. The harbour seems to have been planned as a single project, similar to other large-scale 2<sup>nd</sup>-century harbours to the south of the city centre. It was located on the outskirts of Rome, and never seems to have become fully integrated within the urban area. Most of the complex was in use and kept up until at least the 4<sup>th</sup> century, but by the 5<sup>th</sup> century it had probably become abandoned.

The effect of the construction of proper quays can be observed at early modern Ripetta, which facilitated both the handling of goods through the proper mooring of river craft, and also provided living spaces for the dock workers and offered some protection from the river. Thus the quays probably played a central role, both economically and socially, in the harbour neighbourhood, comparable to the central street in other urban neighbourhoods. The provision of aqueduct water was another development that had a great impact on social relations. It made life more comfortable and

---

22 Aldrete – Mattingly 1999, 197–199; Johnson 2000; LaGroue 2008, 15; Erdkamp 2008, 423–430; 2016, 40 f.; James 2021, 160–192.

safer, by providing good quality drinking water, as well as water for washing bodies and clothes. It also allowed the construction of that most central communal social space in Roman society, the bathhouse. The relative importance of the different harbour buildings can be gauged by the temporal order in which they were provided. At Ripetta, the quays are stressed as the most important element in the early modern rebuilding, and this is also the first element that is provided in the ancient port. Aqueduct water soon follows, although a bit later on the Prati side. What seems to have been the least important element is that of buildings for storage and commerce, which were never built in early modern Ripetta and ancient Pietra Papa, and were the last addition to the ancient Ripetta harbour. Pietra Papa was not even provided with permanent housing, and was never fully integrated into the urban fabric. Crucially, this might have been a main reason for its eventual abandonment in late antiquity, whereas Ripetta lived on as a harbour neighbourhood for another millennium and a half.

## Conclusions

For archaeologists, physical remains often take centre stage. But neighbourhoods can be seen as socio-spatial phenomena that go beyond material culture. Neighbourhood studies may thus challenge that material focus by forcing us to look specifically at intangible social relations and human activities that do not necessarily leave any physical traces. Specific forms of urban neighbourhoods probably evolved in harbours, which were characterised by the interaction between permanent and temporary residents.

This study has attempted to show the benefits of using material from different periods to highlight the possibility of port functions and neighbourhood arrangements that are not visible in the archaeological or textual material from ancient Rome. Most of the activities and people in the early modern port of Rome were highly mobile, seasonal and left very few physical traces. These include riverboats and open quay spaces that were used for storage, public auctions and living space. This might suggest new ways of approaching the study of ancient harbour neighbourhoods, and to think about how they might have worked and developed.

Some elements that were similar at Ripetta and Pietra Papa have been highlighted: the centrality of the quay as a focus for neighbourhood life, the lack of large-scale buildings for storage and distribution close to the river, the plentiful access to aqueduct water and bathhouses and its social implications and, at least for Pietra Papa, the lack of permanent housing for harbour workers and the resulting physical proximity of inhabitants.

The contribution also discusses temporal dimensions in the harbours in the short term (days), midterm (seasons) and long term (centuries). Short-term change might have in general been characterised by a rapidly changing population, while the midterm was dominated by the seasonal changes of the Tiber and the arrival of goods. Long-term change, it is suggested, expressed itself differently at the two harbours, with gradual developments at Ripetta and comprehensive and sudden change at Pietra Papa.

A fundamental issue when studying harbour neighbourhoods is the transient nature of a large part of their population, and how this might have affected the sense of community that underpinned neighbourhood formation. Did harbour neighbourhoods consist of workers who only occasionally came together for work in the harbour on a daily basis? Or did they make ‘real’ neighbourhoods where people both worked and lived for part of the year before moving on? And what about the off-season? Was a neighbourhood on the margins of the city, like Pietra Papa, depopulated in winter? Probably some people lived there all year round, at least to maintain the infrastructure. What kind of neighbourhood community developed in this off-season? This might be the most important difference between the two harbours under study, since Ripetta probably had a much larger share of its population that lived there on a permanent basis. On one hand, this might have led to stronger

neighbourhood ties at Ripetta. But the opposite might equally be true, since that permanent population might have resisted the ‘intrusion’ of seasonal workers into the harbour, resulting in segregation and a lower level of social cohesion as a result.

Of equal importance is the potential social impact of harbour infrastructure. The central role of built-up quays for harbour life has been stressed in this study. Similarly, the ubiquitous presence of piped water and bathhouses in harbours point to their central role. The lack of proper buildings for habitation, commerce and storage, might on one hand have made life in harbours hard to endure, and led to more mobile populations. But on the other it probably further intensified social contacts during the peak season. Of course, other harbours in ancient Rome had more developed facilities for commerce and storage, and also, it has been argued, for housing workers. It thus might be useful in future studies to compare the formation and resilience of neighbourhood identities across a larger number of different harbour districts in Rome and elsewhere, including areas such as Testaccio and Trastevere.

Social relations at the neighbourhood level are an exciting and complex field of study, not the least because they operate at a middle level, below the level of general urban society, but above that of individual households. Neighbourhoods thus stand at the intersection between more public forms of urban activities, and the private lives of its inhabitants. By previously focusing our research either on public monuments or domestic space, this middle level might not have until recently received the attention it deserves.

I hope in this study to have underscored how the Tiber riverbanks were prime locations for human interaction and urban neighbourhoods. This study should be seen only as an attempt to initiate a debate on the social life of Rome’s harbour neighbourhoods. We need to focus more on these urban areas, using approaches that incorporate broad comparative perspectives and use of sources. Although challenging to address, due to the limited ancient material available, it is nevertheless important that we devote more effort to studying this essential part of urban life in Rome to be able to understand the city’s urban structure and organisation as a whole.

#### **Simon Malmberg**

Department of Archaeology, History, Cultural Studies and Religion  
University of Bergen  
Simon.Malmberg@uib.no

## **Illustration Credits**

Fig. 1: S. Malmberg.

Fig. 2: after Jacopi 1943, Pl. 2, edited by S. Malmberg.

Fig. 3: after Le Gall 1953, Fig. 8.

Fig. 4: after Lanciani 1901, Pl. 8, edited by S. Malmberg.

Fig. 5: after Lanciani 1901, Pls. 8, 15, edited by S. Malmberg.

Fig. 6: Gaspar van Wittel, Public domain, via Wikimedia Commons: <[https://commons.wikimedia.org/wiki/File:Caspar\\_van\\_Wittel\\_-\\_View\\_of\\_Rome\\_with\\_the\\_Tiberand\\_Castel\\_Sant%27Angelo\\_-\\_WGA25830.jpg](https://commons.wikimedia.org/wiki/File:Caspar_van_Wittel_-_View_of_Rome_with_the_Tiberand_Castel_Sant%27Angelo_-_WGA25830.jpg)> (23.01.2023)

Fig. 7: Alessandro Specchi, Public domain, via Wikimedia Commons: <[https://commons.wikimedia.org/wiki/File:Alessandro\\_Specchi\\_%E2%88%92\\_Porto\\_di\\_Ripetta\\_\(incisione\).jpg](https://commons.wikimedia.org/wiki/File:Alessandro_Specchi_%E2%88%92_Porto_di_Ripetta_(incisione).jpg)> (23.01.2023).

Fig. 8: Pieter Brueghel the Elder, Public domain, via Wikimedia Commons: <[https://commons.wikimedia.org/wiki/File:Pieter\\_Bruegel\\_the\\_Elder\\_-\\_ca.\\_1552-54\\_-\\_Ripa\\_Grande\\_in\\_Rome.jpg](https://commons.wikimedia.org/wiki/File:Pieter_Bruegel_the_Elder_-_ca._1552-54_-_Ripa_Grande_in_Rome.jpg)> (23.01.2023).

Fig. 9: Iuchi1978, Public domain, via Wikimedia Commons: <[https://commons.wikimedia.org/wiki/File:Ripa\\_Grande\\_Rome.jpg](https://commons.wikimedia.org/wiki/File:Ripa_Grande_Rome.jpg)> (23.01.2023).

## Bibliography

- Aguilera Martín 2012: M. Aguilera Martín, *La sirga en el Tíber en época romana*, in: Keay 2012a, 105–123
- Aldrete 2007: G. Aldrete, *Floods of the Tiber in Ancient Rome* (Baltimore 2007)
- Aldrete – Mattingly 1999: G. Aldrete – D. Mattingly, *Feeding the City. The Organization, Operation, and Scale of the Supply System for Rome*, in: D. Potter – D. Mattingly (eds.), *Life, Death and Entertainment in the Roman Empire* (Ann Arbor 1999) 171–204
- Arnaud – Keay 2020: P. Arnaud – S. Keay, *Inscriptions and Port Societies. Evidence, ‘Analyse du discours’, Silences and Portscapes*, in: Arnaud – Keay 2020a, 36–62
- Arnaud – Keay 2020a: P. Arnaud – S. Keay (eds.), *Roman Port Societies. The Evidence of Inscriptions* (Cambridge 2020)
- Arnesen 2000: E. Arnesen, *Race and Labour in a Southern US Port. New Orleans 1860–1930*, in: Davies et al. 2000, 38–56
- Brandt 2012: O. Brandt, *San Lorenzo in Lucina. The Transformations of a Roman Quarter* (Rome 2012)
- Castagnoli 1980: F. Castagnoli, *Installazioni portuali a Roma*, *MemAmAc* 36, 1980, 35–42
- Coletti – Loreti 2016: C. Coletti – E. Loreti, *Piazza Augusto Imperatore. Excavations 2007–2011. The Late Antique Transformations*, *MemAmAc* 61, 2016, 304–325
- Corvisieri 1877/78: C. Corvisieri, *Delle posterule tiberine tra la porta Flaminia ed il ponte Gianicolense*, *ArchStorRom* 1, 1877/78, 79–121. 137–171
- Davies – Weinbauer 2000: S. Davies – K. Weinbauer, *Towards a Comparative International History of Dockers*, in: Davies et al. 2000, 3–14
- Davies et al. 2000: S. Davies – C. Davis – D. de Vries – D. van Voss – L. Hesselink – K. Weinbauer (eds.), *Dock Workers. International Explorations in Comparative Labour History 1790–1970* (London 2000)
- De Caprariis 1999: F. De Caprariis, *I porti della città nel IV e V secolo d.C.*, in: W. Harris (ed.), *The Transformations of Urbs Roma in Late Antiquity* (Portsmouth 1999) 216–234
- DeLaine 2001: J. DeLaine, *Bricks and Mortar. Exploring the Economics of Building Techniques at Rome and Ostia*, in: D. Mattingly – J. Salmon (eds.), *Economies Beyond Agriculture in the Classical World* (London 2001) 230–268
- Delumeau 1957: J. Delumeau, *Vie économique et sociale de Rome dans la seconde moitié du XVI siècle I*, *BEFAR* 184 (Paris 1957)
- Erdkamp 2008: P. Erdkamp, *Mobility and Migration in Italy in the Second Century BC*, in: L. de Ligt – S. Northwood (eds.), *People, Land, and Politics. Demographic Developments and the Transformation of Roman Italy 300 BC–AD 14* (Leiden 2008) 417–449
- Erdkamp 2016: P. Erdkamp, *Seasonal Labour and Rural–Urban Migration in Roman Italy*, in: L. de Ligt – L. Tacoma (eds.), *Migration and Mobility in the Early Roman Empire* (Leiden 2016) 33–49
- Fedeli 2013: M. Fedeli, *Le presenze archeologiche lungo le rive. Approdi e navigazione a valle di Roma*, in: G. Vertecchi – C. Virlovet (eds.), *City, River, Littoral* (Rome 2013), <<https://romatevere.hypotheses.org/436>> (08.08.2022)
- Holleran 2011: C. Holleran, *Migration and the Urban Economy of Rome*, in: C. Holleran – A. Pudsey (eds.), *Demography and the Graeco-Roman World* (Cambridge 2011) 155–180
- Holleran 2016: C. Holleran, *Getting a Job. Finding Work in the City of Rome*, in: K. Verboven – C. Laes – P. Van Nuffelen (eds.), *Work, Labour, and Professions in the Roman World* (Leiden 2016) 87–103
- Imperatori 2003: P. Imperatori, *Contributi per la carta archeologica del comprensorio Portuense-Magliana* (Rome 2003)
- Jacopi 1940: G. Jacopi, *Scavi e scoperte presso il porto fluviale di S. Paolo*, *BCom* 68, 1940, 97–107
- Jacopi 1943: G. Jacopi, *Scavi in prossimità del porto fluviale di San Paolo località Pietra Papa*, *MonAnt* 39, 1943, 1–178
- James 2021: P. James, *Food Provisions for Ancient Rome. A Supply Chain Approach* (London 2021)
- Johnson 2000: L. Johnson, *Dock Labour at Shanghai*, in: Davies et al. 2000, 269–289
- Keay 2012: S. Keay, *The Port System of Imperial Rome*, in: Keay 2012a, 33–67
- Keay 2012a: S. Keay (ed.), *Rome, Portus and the Mediterranean* (London 2012)
- Keay 2020: S. Keay, *The Context of Roman Mediterranean Port Societies. An Introduction to the Portuslimes Project*, in: Arnaud – Keay 2020a, 1–35
- Keay 2021: S. Keay, *Reflections Upon the Challenges in Documenting Portus Romae. The Maritime Port of Imperial Rome*, in: L. Chioffi – M. Kajava – S. Örmä (eds.), *Documenting Port Cities* (Rome 2021) 51–70
- LaGroue 2008: L. LaGroue, *Human Labor and Harbor Capacity at Rome* (Chapel Hill 2008)
- Lanciani 1881: R. Lanciani, *Roma*, *NSc*, 1881, 89–91
- Lanciani 1885: R. Lanciani, *Roma*, *NSc*, 1885, 186–191
- Lanciani 1901: R. Lanciani, *Forma Urbis Romae* (Milan 1901)
- Lanciani – Borsari 1885: R. Lanciani – L. Borsari, *Roma*, *NSc*, 1885, 154–159
- Le Gall 1953: J. Le Gall, *Le Tibre. Fleuve de Rome dans l’antiquité* (Paris 1953)
- Lee 2000: W. R. Lee, *From Guild Membership to Casualization. Dockworkers in Bremen 1860–1939*, in: Davies et al. 2000, 342–364
- Liverani 2020: P. Liverani, *Il Tevere, i ponti e l’annona*, in: M. T. D’Alessio – C. M. Marchetti (eds.), *RAC in Rome. Atti della 12a Roman Archaeology Conference* (2016). *Le sessioni di Roma* (Rome 2020) 19–27

- Maischberger 1997: M. Maischberger, *Marmor in Rom. Anlieferung, Lager- und Werkplätze in der Kaiserzeit* (Wiesbaden 1997)
- Malmberg 2015: S. Malmberg, *Ships Are Seen Gliding Swiftly Along the Sacred Tiber. The River as an Artery of Urban Movement and Development*, in: I. Östenberg – S. Malmberg – J. Bjørnebye (eds.), *The Moving City. Processions, Passages and Promenades in Ancient Rome* (London 2015) 187–201
- Malmberg 2021: S. Malmberg, *Understanding Rome as a Port City*, in: F. Vermeulen – A. Zuiderhoek (eds.), *Space, Movement and the Economy in Roman Cities in Italy and Beyond* (London 2021) 315–372
- Malmberg, in press: S. Malmberg, *A Millennium of Resilience at Rome*, in: S. Malmberg – E. Seland – K. Aavitsland (eds.), *City, Hinterland and Environment. Urban Resilience During the First Millennium Transition*, *ActaAArtHist* 34 (Rome, in press)
- Mankelov 2000: R. Mankelov, *The Port of London. 1790–1970*, in: Davies et al. 2000, 365–385.
- Marchetti 1889: D. Marchetti, *Prati di Castello*, *NSc*, 1889, 188 f.
- Marchetti 1890: D. Marchetti, *Prati di Castello*, *NSc*, 1890, 82–88
- Marder 1975: T. A. Marder, *The Porto di Ripetta in Rome* (New York 1975)
- Marder 1980: T. A. Marder, *The Porto di Ripetta in Rome*, *Journal of the Society of Architectural Historians* 39, 1980, 28–56
- Mira 1954: G. Mira, *Note sui trasporti fluviali nell'economia dello Stato Pontificio nel XVIII secolo*, *Archivio delle Società Romana di Storia Patria* 77, 1954, 27–44
- Mocchegiani Carpano 1975/76: C. Mocchegiani Carpano, *Rapporto preliminare sulle indagini nel tratto urbano del Tevere*, *RendPontAc* 48, 1975/76, 239–262
- Mocchegiani Carpano 1981: C. Mocchegiani Carpano, *Indagini archeologiche nel Tevere*, *Archeologia Laziale* 4, 1981, 142–155
- Muzzioli 2015: M. P. Muzzioli, *La riva destra del Tevere tra i ponti Cavour e Margherita*, in: A. Serra (ed.), *Humanitas. Studi per Patrizia Serafin* (Rome 2015) 163–174
- Nicolai 1829: N. M. Nicolai, *Sulla presidenza delle strade ed acque e sua giurisdizione economica II* (Rome 1829)
- Palmer 1981: R. Palmer, *The Topography and Social History of Rome's Trastevere (Southern Sector)*, *Proceedings of the American Philosophical Society* 125, 1981, 368–397
- Poirier 2005: G. Poirier, *A Contagion at the Source of Discourse on Sexualities. Syphilis During the French Renaissance*, in: C. L. Carlin (ed.), *Imagining Contagion in Early Modern Europe* (Berlin 2005) 157–176
- Quilici 1986: L. Quilici, *Il Tevere e l'Aniene come vie d'acqua a monte di Roma in età imperiale*, *Archeologia Laziale* 7, 1986, 198–217
- Rakob 1987: F. Rakob, *Die Urbanisierung des nördlichen Marsfeldes. Neue Forschungen im Areal des Horologium Augusti*, in: *Centre national de la recherche scientifique* (ed.), *L'Urbs. Espace urbain et histoire (Ier siècle av. J.-C.-IIIe siècle ap. J.-C.)*. Actes du colloque international organisé par le Centre national de la recherche scientifique et l'École française de Rome (Rome, 8–12 mai 1985), *CEFR* 98 (Rome 1987) 687–712
- Rodocanacchi 1894: E. Rodocanacchi, *Les corporations ouvrières à Rome depuis la chute de l'empire romain* (Paris 1894)
- Rossetti – Tella 1991: C. Rossetti – F. Tella, *Roma. Affreschi e mosaici dal porto fluviale di San Paolo*, *Bollettino di Archeologia* 11/12, 1991, 223–236
- Rougier 2020: H. Rougier, *Port Occupations and Social Hierarchies. A Comparative Study through Inscriptions from Hispalis, Arelate, Lugdunum, Narbo Maius, Ostia-Portus and Aquileia*, in: Arnaud and Keay 2020a, 132–151
- Sediari 1997: M. Sediari, *La topografia della Regio IX di Roma in età severiana*, *BCom* 98, 1997, 215–248
- Sirks 1991: B. Sirks, *Food for Rome. The Legal Structure of the Transportation and Processing of Supplies for the Imperial Distribution in Rome and Constantinople* (Amsterdam 1991)
- Steinby 1974/75: E. M. Steinby, *La cronologia delle figlinae doliari urbane dalla fine dell'età repubblicana fino all'inizio del III sec.*, *BCom* 84, 1974/75, 7–132
- Suttles 1972: G. D. Suttles, *The Social Construction of Communities* (Chicago 1972)
- Taja 1705: A. M. Taja, *Lettera, e poetici componimenti, in ragguaglio, e in encomio delle nuova ripa presso al sepolcro de' Cesari in Roma* (Rome 1705)
- Taylor 2000: R. Taylor, *Public Needs and Private Pleasures. Water Distribution, the Tiber River and the Urban Development of Ancient Rome* (Rome 2000)
- Tran 2020: N. Tran, *Boatmen and their Corpora in the Great Ports of the Roman West. Second and Third Centuries AD*, in: Arnaud – Keay 2020a, 85–106
- Virlouvet 2020: C. Virlouvet, *Warehouse Societies*, in: Arnaud – Keay 2020a, 152–177