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Cover illustration: Hypothetical reconstruction of Comacchio in the Early Middle Ages. © InkLink.

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# Table of Contents

List of Illustrations 7

**Rubina Raja and Søren M. Sindbæk**
Embattled Cities: The Urban Reinvention of History – Editorial 11

**Axel Christophersen**
High-Definition Archaeology, Small-Scale Narratives, and Monetary Practice in Medieval Scandinavian Urbanization 15

**Nathanael Andrade and Rubina Raja**
Alternative Urban Economies: The Case of Roman Palmyra 31

**Katherine A. Crawford**
Displaying Rituals: Simulating Potential Routes of the *navigium Isidis* Procession 49

**Leslie Anne Warden**
Interpreting Rubbish in the Archaeological Record: A Case Study of Floor and Fill Deposits in House 169 on Elephantine Island, Egypt 71

**Richard Hodges**
Becoming Europe: Retracing the Origin of Medieval Cities from Comacchio and Oegstgeest 87

**Sauro Gelichi**
Comacchio and Early Medieval Urbanism in Italy 111

**Margherita Ferri**
The Comacchio Glass Workshop: A Late Seventh-Century Urban Production Site of the North Adriatic 127

*The Backfill*
List of Illustrations

High-Definition Archaeology, Small-Scale Narratives, and Monetary Practice in Medieval Scandinavian Urbanization — Axel Christophersen

Figure 2.1. The distribution of coins and weights in the settlement zone, from the second half of the eleventh century. Trädgårdsmästaren 9 and 10, Sigtuna. 17

Figure 2.2. Graphic representation of exchange practices and use of coins in Sigtuna and Trondheim c. AD 1000–1150. 18

Figure 2.3. Fragments of casting moulds from Library site, Trondheim. c. AD 1075–1125. 18

Figure 2.4. Section of the booths along Kaupmannastretet, Library site, Trondheim, phase 4, AD 1050–1100 and phase 6, AD 1150–1175. 19

Figure 2.5. Finds of coins from c. AD 1050–1100 in the booths and at Kaupmannastretet, Trondheim. 20

Figure 2.6. ‘Vertical time’: archaeological contexts follow each other in dependent time sequences. ‘Horizontal time’: fragments of social practice patterns (‘events’) entangles in complexes through performative actions. 23

Figure 2.7. Javier Tapia, ‘A Time for Seeds’ (collage), from the exhibition in 2015, High Density: Fragments Stories and Traditions. 25

Alternative Urban Economies: The Case of Roman Palmyra — Nathanael Andrade and Rubina Raja

Figure 3.1. View of Palmyra with the oasis in the background. 32

Figure 3.2. Aerial view of Palmyra from the 1920s. 32

Figure 3.3. Map of Palmyra and the surrounding area. 33

Figure 3.4. Sarcophagus fragment depicting a camel and a man with a ship in his left hand. Palmyra, Palmyra Museum, inv. no. 1046/2249. Third century AD. 34

Figure 3.5. Palmyrene Tax Law. St Petersburg, State Hermitage Museum, inv. no. 1B-4187. AD 137. 36

Figure 3.6. Tower Tombs on the fringe of Palmyra. 37

Figure 3.7. Goat herding with ruins of tower tombs in Palmyra in the background, 1920s. 38

Figure 3.8. Limestone portrait of Palmyrene man. The sculpture imitates bronze sculptural technique. Copenhagen, Ny Carlsberg Glyptotek, IN 1093. AD 100. 42

Figure 3.9. Sarcophagus from the hypogeum of Malku. Damascus, National Museum of Damascus, inv. no. 10.941. AD 220–240. 42
Displaying Rituals: Simulating Potential Routes of the navigium Isidis Procession — Katherine A. Crawford

Figure 4.1. Map showing street names and buildings within the surroundings of the Serapeum. 50

Figure 4.2. Plan of Ostia in the late second century AD showing building classifications and the city's street network. 55

Figure 4.3. Plan of Ostia showing streets with a high street width and porticoes. 56

Figure 4.4. Example of the simulation background showing how the reverse distance gradient to the seafront and the building attraction values are computed and combined to create a total movement gradient along the street network. 57

Figure 4.5. Unweighted processional route beginning at the Serapeum and ending at the seafront. 58

Figure 4.6. Processional routes weighted by commercial spaces. 59

Figure 4.7. Processional routes weighted by residential spaces. 59

Figure 4.8. Processional routes weighted by public spaces. 60

Figure 4.9. Processional routes weighted by religious spaces. 60

Figure 4.10. Unweighted processional route beginning at the Serapeum and ending at the river harbour. 61

Figure 4.11. Processional routes weighted by commercial spaces. 63

Figure 4.12. Map showing possible processional movement routes travelling from the Serapeum to the seafront or the river harbour. 63

Table 4.1. Parameter constants for the simulation runs reported. 58

Interpreting Rubbish in the Archaeological Record: A Case Study of Floor and Fill Deposits in House 169 on Elephantine Island, Egypt — Leslie Anne Warden

Figure 5.1. Elephantine Island, Egypt: the area of ‘Realities of Life’ (RoL) settlement excavations. 73

Figure 5.2. House 169, mid-13th Dynasty (phase E2). 74

Figure 5.3. Ceramic wares at Elephantine H169. 74

Figure 5.4. H169 floor/fill sample: sherd totals. 76

Figure 5.5. Histogram of H169 diagnostic-sherd preservation. 76

Figure 5.6. Patterns of slip by deposition type. 77

Figure 5.7. Form types identified by deposition type. 78

Figure 5.8. Patterns of blackening on sherds, by deposition type. 78
Figure 5.9. The relationship between blackening patterns and ware type, H169 full sample. 79
Figure 5.10. Blackening by slip colour and position, H169 floors and fills. 80
Figure 5.11. Sherd ware distribution by deposition type. 81
Figure 5.12. Distribution of vessel types, accounting for only diagnostic sherds, found only in floor contexts. 82
Figure 5.13. Ceramic wares by room in H169. 82
Figure 5.14. Presence and position of blackening by vessel shape. 83
Figure 5.15. Ware distribution by vessel shape. 83
Table 5.1. Organization of vessel typology for RoL ceramic analysis. 80

Becoming Europe: Retracing the Origin of Medieval Cities from Comacchio and Oegstgeest — Richard Hodges

Figure 6.1. Poster for Henri Pirenne’s lectures at the University of California, 1922. 88
Figure 6.2. Map showing the principal places mentioned. 91
Figure 6.3. Map showing the principal trade routes to and around north-west Europe in the sixth to ninth centuries. 101

Comacchio and Early Medieval Urbanism in Italy — Sauro Gelichi

Figure 7.1. Location of Comacchio. 112
Figure 7.2. Aerial photo of Comacchio showing the two areas investigated between 2006 and 2009. 113
Figure 7.3. Stratigraphic section based on archaeological data from the 1996 excavations in Villaggio San Francesco, Comacchio. 114
Figure 7.4. Overview of the archaeological excavation in Piazza XX Settembre, Comacchio. 115
Figure 7.5. Hypothetical reconstruction of Comacchio in the Early Middle Ages. 116
Figure 7.6. Functional interpretation of settlement spaces in Comacchio in the Early Middle Ages. 116
Figure 7.7. The early medieval cemetery, Comacchio, Piazza XX Settembre. 117
Figure 7.8. Wooden structure (storeroom?) near a canal, Comacchio, Villaggio San Francesco. Eighth to ninth centuries. 118
Figure 7.9. Comacchio, Villaggio San Francesco. Wooden structure near a canal (eighth to ninth centuries): a 3D hypothetical reconstruction. 119
Figure 7.10. Two-tone glass cameo matrix from Comacchio, Piazza XX Settembre. Comacchio, Museo Delta Antico. Last quarter of the seventh century. 119
Figure 7.11. a) Globular amphorae of Aegean origin found in Comacchio, Villaggio San Francesco. b) A model of circulation of goods from the Aegean to the northern Adriatic during the Early Middle Ages based on amphora evidence. 120

Figure 7.12. Household goods from early medieval Comacchio. 122

Figure 7.13. Early medieval residential buildings in a lagoon area. 123

Figure 7.14. Sarcophagus of Stephen, Comacchio, Museo Delta Antico. Ninth century. 123

Figure 7.15. Fifth-century boat being excavated at Comacchio, Motta della Girata. 123

Figure 7.16. The territory of Comacchio. The ancient fluvial courses recognized by aerial photography and location of the settlement of Motta della Girata. 124

The Comacchio Glass Workshop: A Late Seventh-Century Urban Production Site of the North Adriatic — Margherita Ferri

Figure 8.1. Plan of the early phase of the glass workshop in Comacchio. 128

Figure 8.2. Reconstruction of the glass workshop in the earliest period. 128

Figure 8.3. Plan of the reorganization of the glass workshop in Comacchio. 130

Figure 8.4. Reconstruction of the glass workshop in the middle period. 130

Figure 8.5. Water-powered air compressor. A. Della Fratta, Bologna 1678. 130

Figure 8.6. Plan of the last phase of the glass workshop in Comacchio. 131

Figure 8.7. Glass-ware from Comacchio. 133

Figure 8.8. A matrix for cameos, a mould for a letter from Comacchio, and a capsella from Cividale del Friuli. 133

Figure 8.9. Glass waste from Comacchio. 134

Figure 8.10. Plan, photo, and soap-stone crucibles of the Torcello workshop. 136

Table 8.1. Quantities of identifiable objects, non-identified objects, and waste fragments. 131

Table 8.2. Quantities of ornamental objects, tesserae and windowpanes, glasses and goblets, bottles, and lamps. 131

Table 8.3. Quantities of vessels and glass objects found by period. 132

Table 8.4. Quantities and typology of glass-working waste. 134
Comacchio and Early Medieval Urbanism in Italy

ABSTRACT 2021 saw the release of the final publication on the excavations carried out at Comacchio. This presents an opportunity to briefly illustrate the most notable data from these excavations, but also to discuss the role of this new settlement in the context of Italian early medieval urbanism. Furthermore, the paper traces the lines of the debate that has developed in Italy since the 1980s, highlighting the peculiarities of a phenomenon that has no comparison in the Italian peninsula. The various stages of the archaeological project and strategies are discussed. A summary of the settlement sequence found in two main excavation areas is then presented, and the main results are highlighted. Comacchio's functions in relation to the Adriatic and Po Plain economies and its relations with Venice are also analysed. Finally, possible future research developments are proposed, which essentially concern the formation of the settlement, the functioning of the structures dedicated to commercial activities, and the material structure of the settlement as a whole.

KEYWORDS Comacchio; archaeology; urbanism; trade; Early Middle Ages

Introduction

In 2009, for the opening of the conference From One Sea to Another — Trading Places in the European and Mediterranean Early Middle Ages (Gelichi and Hodges 2012, 7), I wrote with Richard Hodges: ‘The discovery of an early medieval emporium, at the mouth of the river Po, towards the northern end of the Adriatic Sea has altered the debate about the role of the emporia and wics in this area.’

Comacchio was not an unknown settlement in Italian early medieval historiography (although it was soon overshadowed by the hunger of a cumbersome neighbour) (Fig. 7.1): but there were too few written sources about it and very evanescent (and equally poor) archaeological data. Comacchio was only a name (or little more). Yet Comacchio was one of the new and few early medieval towns in the northern Adriatic (the other, even more famous, was Venice), and so investigating this site meant introducing a key element into the debate on post-antique urbanism. Moreover, investigating Comacchio meant testing one of the key sites for better understanding the economic and commercial dynamics of early medieval Italy. The settlement had developed at about the same time as emporia in northern Europe were flourishing (and in a similar ecological space), so the question arose whether there could be any relationship between the two phenomena.

Between 2004 and 2009 it was possible to plan a series of archaeological excavations in the historic centre of Comacchio and its suburbs with this research revealing a much more complex and intriguing reality than we had expected. In 2021, the final volume on this archaeological research was published, so we now have more data to try to answer those ear-

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1 I am referring mainly to Venice (or, in the Early Middle Ages, to all those settlements in and around the Venetian Lagoon).

2 The phenomenon of northern European emporia has been at the centre of historical archaeological debate for decades, a debate that has also developed as a result of important and significant archaeological research projects concerned with these sites. The bibliography on the subject is extensive. For an archaeological synthesis on the subject, Hodges 1989 is still fundamental (to which we can add the more recent Hodges 2012, where the case of Comacchio also appears: pp. 109–10). Using written sources, Lebecq (2011) addresses this issue, the phenomenon of northern European emporia. Many papers published in Gelichi and Hodges 2012 and the more recent Gautier and Malbos 2020 address these issues.
lier posed questions or to resume the discussion (Gelichi, Negrelli, and Grandi 2021).

In short, this contribution intends to present the case of Comacchio, but also to explain the role it plays within the debate on early medieval Italian urbanism. The settlement of Comacchio (like that of Venice) shows some peculiarities (essentially of an ecological nature) that find few other comparisons within the phenomenon of urbanism in the Italic Early Middle Ages. These peculiarities gave rise to communities which, interacting with the powers of the time, developed an early commercial activity. Tracing the history of Comacchio through archaeology means dealing with crucial moments in the economic history of the Lombard and Carolingian periods. Moreover, the characteristics of this settlement make it similar, from many points of view, to the phenomenon of the emporia of northern Europe. Comacchio presents an opportunity to connect and establish a dialogue between northern and southern Europe in the Early Middle Ages.

Comacchio and the Debate on Post-Antique Urbanism in Italy

The debate on post-ante urbanism in Italy accelerated in the 1980s, when the practice of urban archaeology and an archaeological focus on post-ante contexts became widespread, most prominently in cities in northern Italy. The debate was made possible by the widespread introduction of the stratigraphic approach in urban areas and the increase of interventions in cities with continuity of life. This gave rise to a discussion that, until then, excavations had only been led by historians. However, the discussion focused mainly on the appreciation of the ‘continuity’ or ‘discontinuity’ aspects of the ancient city. There has been plenty of research also in the south of the peninsula; however, it is still primarily the large-scale excavations in northern Italy in the 1980s and 1990s that have produced many of the generalizing patterns and interpretations.

3 The main syntheses on these issues, which summarize and critically discuss the debate that took place between the 1980s and the 1990s, are Brogiolo and Gelichi 1998 and Brogiolo 2011. It is interesting to read Ward-Perkins’s (1997) perspective on this debate.
In this debate, essentially two types of towns have been analysed: ancient towns that endured (from Roman or even pre-Roman times) into medieval and modern times; and those that became deserted and so no longer correspond to a modern town or city. These two categories of cities have been studied using different archaeological approaches.\footnote{For an up-to-date discussion on these issues, see Gelichi 2020.}

Surprisingly, deserted towns have enjoyed less fortune and have been less investigated. Precisely because they no longer exist as modern towns, they have been the subject of a limited number of planned research projects. Generally speaking, however, the main purpose of such planned archaeological fieldwork was to uncover the ancient — that is, the classical — city; as a result, this has in many cases sadly caused the (near) total erasure of late antique, post-classical, and medieval deposits.

New post-Roman urban foundations were for a long time less attractive to researchers. The phenomenon of the founding of new towns was not unknown in the Middle Ages, but these were generally modest in number and significance.

However, the northern Adriatic arc was in particular affected by the emergence of new settlements in the Early Middle Ages (c. sixth to eighth centuries AD) in peripheral locations (lagoons) previously occupied by scattered settlement. These settlements were all founded in very similar ecological spaces (near the coast, along river routes, at river mouths, or in lagoon areas) and at junctions of maritime and river communications.\footnote{For a general overview of the phenomenon, see Gelichi 2021a.}

These new settlements are sometimes referred to as towns in written sources, although other terms are also used, demonstrating a lexical difficulty of ancient origin adapted to completely new situations.\footnote{On the problem of lexical variability in indicating these new settlements, see Gelichi 2007, 83–84.} Not all of these settlements survived into the Middle Ages and modern times. Especially in...
the area of the Venetian Lagoon and its neighbouring areas, some of them were subsequently deserted, such as Torcello, Metamauco, Cittanova, and Equilo, although they had also been institutional seats (ducal and/or episcopal seats). Other settlements were not completely deserted, but remained minor centres, such as Grado (Marano 2022), Caorle (Fozzati 2007), and Comacchio itself.

The analysis of these new settlements, within a limited geographical area, raises several questions: Why this particular flowering of new centres in an area stretching from Ravenna to Istria? What function did they play, apart from being, at the time, institutional seats, at least on a religious level? Beyond the individual narrations, was it possible to establish some common connection to this phenomenon? Why did they decline to a greater or lesser extent? And above all, when and how?

The phenomenon of the new cities in the northeastern Adriatic arc had until recently been overshadowed by the only true example of a ‘winning site’, namely Venice. A winning site to such an extent that it cancelled out all the other settlements in the lagoon area that had developed in the Early Middle Ages or downgraded the role of others in the same area. Unfortunately, the archaeology practised in Venice in the last thirty years is not planned and, in general, is not of good quality (Gelichi 2010). Little data has been published, and many questions concerning the formative phases of the lagoon settlement remain unanswered. For these reasons, the possibility of being able to investigate one of the other lagoon sites (not completely abandoned, but certainly reduced in size during the Middle Ages), such as Comacchio, represented a great opportunity.

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7. The archaeological approaches to these different settlements have differed in time and in the quality of the results. As far as Torcello is concerned, a recent synthesis is in Calaon 2013. The exact location of Metamauco has not yet been identified, but it does not seem to correspond to the medieval site of Malamocco (see Fozzati and Pizzinato 2009). Cittanova and Equilo are two settlements that developed in the Early Middle Ages on the edges of the northern lagoon. Cittanova was the subject of archaeological research in the 1980s (for a review of this research, see Negrelli in Cadamuro, Cianciosi, and Negrelli 2015, 168–81). Finally, Equilo, a settlement at the mouth of a river (Piave Vecchia) and within coastal lagoons, is being researched by the Università Ca’ Foscari, on which see a first anticipation in Gelichi, Cadamuro, and Cianciosi 2018.
Planning Archaeological Research in Comacchio

In 2003, our research group was involved in the curation of an exhibition on Comacchio and its territory (Berti and others 2007). This was the first opportunity to deal directly with the archaeology of this site and, at the same time, to have access to previously published and unpublished archaeological documentation. Of the few excavations carried out in the past at Comacchio, only the trenches made in 1996 in an area at the outskirts of the town (Villaggio San Francesco) were of good quality (Calaon 2007) (Fig. 7.2); moreover, they described a particularly interesting situation in terms of the type of structures that emerged and the objects found. They showed that a large part of the area to the west of the historic centre had been occupied in the Early Middle Ages by port-type infrastructure, including wooden bank protection, platforms, gangways, and warehouses (Fig. 7.3). The archaeological finds collected on those occasions supported this interpretation: there was an almost total absence of domestic artefacts, but amphorae and soap-stone containers (i.e. imported objects) made up the bulk of the finds. The area of Villaggio San Francesco had introduced us for the first time to one of the key points of early medieval Comacchio’s history.

The second opportunity to investigate the archaeological sequences of Comacchio came to us during the renovation work around the cathedral church (Piazza XX Settembre) (Fig. 7.4). The Municipal Administration accepted our project to investigate this area in greater depth than was necessary for the restoration of the pavement, and it was therefore possible to open a large urban excavation right in the historic centre, in contiguity with what was once the bishopric. During the same period, we also had the opportunity to carry out new archaeological tests directly in the area of Villaggio San Francesco, which confirmed what we had already assumed about the functions of that area.

Between 2004 and 2009, therefore, we were able to process all the previous archaeological documentation on Comacchio and to open two archaeological ‘windows’ in two areas of the settlement. The choice had been partly conditioned by chance; however, for the first time it was possible to analyse a quantity of fresh, high-quality data on this settlement and thus attempt to answer at least some of the questions we had posed.

Figure 7.4. Overview of the archaeological excavation in Piazza XX Settembre, Comacchio. © LAMVe.

Archaeological Excavations: Sequences and Chronology

The two archaeological sequences identified describe two different narratives, because they are linked to spaces that performed significantly different functions in the Early Middle Ages. The excavation in Piazza XX Settembre is in an area that belonged to the bishopric of Comacchio (at least from the eighth century onwards). The excavation in Villaggio San Francesco, on the other hand, is in an area of port nature. Although they do not overlap, not even from a chronological point of view (the sequence in Villaggio San Francesco begins a couple of centuries later), the two contexts are able to give a relatively clear picture of the physiognomy of the Comacchio settlement and its community between the sixth and tenth centuries.
Figure 7.5. Hypothetical reconstruction of Comacchio in the Early Middle Ages. © InkLink.

Figure 7.6. Functional interpretation of settlement spaces in Comacchio in the Early Middle Ages. © LAMVe.
The settlement of Comacchio must have been built on a group of small islands within a lagoon area not too far from the mouth of the most important Italian river, the Po (Fig. 7.5). It is not possible at present to establish how much of this space was settled or what the density of occupation was. We can only assume that the main structures that made up the area are those that have survived, fossilized, to this day: a central islet (where there is evidence of an episcopal presence from the eighth century), an island to the south of this, and two further islands, one to the east and one to the west, being roughly oblong in shape (Fig. 7.6). In the Early Middle Ages, two monasteries (Santa Maria in Aula Regia and San Mauro) stood at the ends of these islands. Such a settlement could not have been surrounded by walls or have a clearly defined perimeter. It is possible that some sort of fortified perimeter with posts surrounded the episcopal space, but excavation was not able to clarify this. In any case it would be a rather late structure (tenth–eleventh century?). The absence of fortifications is obviously explained by the topographical characteristics of the place and is a characteristic feature of this type of settlement (as also seen at Venice and Equilo), as opposed to ancient or eleventh–twelfth-century cities.

Comacchio was known, according to the few early medieval sources that mention it, because its inhabitants towards the beginning of the eighth century had made a pact with the Lombards regarding trade along the Po (Hartmann 1904; Fasoli 1978; Montanari 1986). From the pact, which was published by Ludo Moritz Hartmann (1904), we learn that the community was represented by a presbiter, two comites, and a magister militum, and that the Comacchiesi were required to pay tolls for salt, deniers, oil, garum, and spices at various stations along the main Po rivers. This document tells us what goods (especially foodstuffs) they were in possession of. Subsequent documents (from the eighth, ninth, and tenth centuries) confirm this commercial vocation of the Comacchio people, although their influence in the Po Valley seems to have been joined shortly after by that of the Venetics. A chronicle of the beginning of the eleventh century, the Istoria Veneticorum (III. 12, III. 28, and III. 44), attributed to Giovanni Diacono, speaks on more than one occasion of the conflict between the Venetics and the Comacchiesi and of the repeated defeats of the latter.

The two excavations do not contradict the historical sequence of events. There are no significant remains prior to the sixth century in either context. However, the area where the bishopric developed shows an important change as early as the seventh century, when an artisan’s workshop was established (see Ferri in this volume). Also in this area, in the eighth century, there is a notable functional change (a cemetery was created on the levels of abandonment and levelling after the craft workshop) (Fig. 7.7), while, in the following phases, there are no other significant functional changes. The situation in the Villaggio San Francesco is different. In this area, a series of excavation trenches has confirmed a relatively similar sequence: the presence of wooden structures connected with the storage and handling

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9 For the possible fortification remains found in the excavations, see Grandi 2021, 69–77.
of goods during the eighth century (Figs 7.8–7.9) and its defunctionalization and abandonment during the late ninth century. Basically, the occupation of this area on the western edge of the settlement took place at a later stage and lasted for a couple of centuries. This is explained by the fact that the area of Villaggio San Francesco was used for port activity, which declined drastically (if not ceased almost completely) after the ninth century.

After the ninth century, Comacchio survived as an episcopal seat and settlement. However, its function as a commercial hub, mentioned in the sources but also confirmed by archaeological evidence, disappeared. The territory of Comacchio was again exploited essentially for salt production and eel fishing.

What Have We Learnt from Comacchio?

The archaeological research carried out in Comacchio has so far highlighted some problems.

In terms of the settlement sequence, Comacchio emerged between the end of the sixth and the beginning of the seventh centuries. It is only during the seventh century that we have clear evidence of a developed economic and commercial function, testified to by the importation of amphorae, vessels in soap-stone, and, above all, the presence of a glass workshop. The presence of this workshop for the production of glass objects (even sophisticated ones) (Fig. 7.10) indicates the arrival of raw materials (semi-finished products) from outside. The presence of

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10 Comacchio is currently the site in northern Italy that has returned the largest number of amphorae from the Mediterranean between the eighth and ninth centuries.
tools for processing, such as soap-stone crucibles, and the same location of the workshop, in a place not previously settled, tell us that it must have been a non-temporary workshop, not strictly linked to the recycling system. Even recycling, when present (e.g. glass-paste tesserae), presupposes the import of waste material and therefore its commercialization. All this contributes to the idea that Comacchio was already in this period a nodal point with developed commercial functions. A comparison with the emporia of northern Europe is plausible from a functional perspective. Comacchio would resemble type B in Hodges’s (1989, 51–52) classification. The difference is that there seems to be no clear founding action of the settlement. This is currently only confirmed by written sources.

Economic and political relations between Ravenna and Comacchio are poorly and indirectly documented in written sources. The only connection is a giudicato by Eutychius (Gasparri 2015) and an epigraph referring to the private sphere of the exarch Isacius (Guillou 1969, 116; Bollini 1975, 44–45; Gelichi 2018, 150–51). In the early eighth-century capitulary (see Hartmann 1904), the first known act referring to the Comacchio community, this community is represented by figures referring to the Byzantine-type administrative framework (magister militum), while the ecclesiastical component is represented by a presbyter. Comacchio became an episcopal see only a few years later. From this, it can be deduced that Comacchio was able to represent itself as an autonomous political subject in relation to the Lombards. No founding act is therefore known, nor do the surviving written sources suggest a substantial, if not formal, dependence of this community on the powers that resided in Ravenna (exarch and archbishop).

The excavations then demonstrated a commercial flourishing between the last quarter of the seventh and the eighth century. This flourishing is shown by the conspicuous presence of soap-stone vessels, but above all of amphorae of Mediterranean origin.
Archaeologically speaking, a reflection of this situation can be seen in the colonization of the area to the west of the settlement (Villaggio San Francesco). The construction of port infrastructures during this period confirms the economic vitality achieved by this centre.

The growth of Comacchio as a commercial hub between the hinterland and the Adriatic and Mediterranean Seas was functional to the policies of the Lombard Kingdom and its economy. As the early eighth-century capitulary (from 715 or 730) makes clear, the Comacchio people traded in foodstuffs that are difficult to identify archaeologically, such as salt and spices. But they also traded in oil, *garum*, and, as we learn only from archaeological sources, wine. Almost all of the amphora containers found in Comacchio are of Aegean origin and were probably used to transport wine. However, it is probable that the people of Comacchio traded in other things as well, apart from the goods mentioned in the capitulary and those which can be identified archaeologically (such as soap-stone and amphorae). In this sense, Comacchio is unquestionably a specialized centre, which did not derive its livelihood from the control of land (land ownership) but, at least for a certain period, from trade.

Local trade or long-distance trade? Trade for a small elite or more socially widespread trade? The first question can be answered: long-distance trade, although it was not necessarily the people of Comacchio who followed all the routes from the places of production to the centres of the Adriatic Sea. | 11 For a typological analysis of the amphorae and a proposal on their provenance, the contribution of Negrelli 2021 is fundamental.
But Comacchio was certainly part of a system involving the circulation of international goods traded over long distances (Fig. 7.11b). The second question is a false problem: regardless of who these goods reached (Aegean wine, oil, garum), they testify to the existence of a system through which other foodstuffs (such as salt) and what are known as bulk utilitarian commodities could be transported, as in fact they were.

The decline of Comacchio (between the ninth and tenth centuries) is attributable to various factors, including ecological factors, but above all political ones. Comacchio was a functional emporium for the economic policies of the Lombard Kingdom, but evidently less so for those of the Frankish Kingdom. The Franks soon recognized the Venetian Lagoon aristocracies as their interlocutors, first by trying to conquer the lagoon, then by coming to terms with them. It was the Venetians who already at the time of Ludovic the Pious struck the new silver denarii; it was they who managed to insert themselves in a political dynamic that seemed to exclude, almost immediately, the Comacchio people.

The reason may lie in the different origins of the two communities. According to written sources, the Venetians seem to have a fleet at an early stage and were therefore able to act directly in the Adriatic and the Mediterranean. Nothing of the kind can be assumed for the people of Comacchio at the moment, although there is evidence of people from Comacchio in Alexandria in the ninth century.12

These data lead us to think, at the moment, that Comacchio was an arrival point for goods coming also from the Mediterranean, but that the habitatores Comaclenses acted only as mediators towards areas inland.

Comacchio is therefore an emporium in the sense that we usually attribute to this term (i.e. of a place that had a distinct and prevalent function of a commercial nature), although the term never appears in written sources referring to Comacchio.

Returning to the initial problem, namely a reflection on early medieval urbanism, the excavation of Comacchio has shown the characteristics of a newly founded city that do not reflect the ‘canons’ of the ancient city (or, if you prefer, of a ‘normal city’). This is partially due to the characteristics of the ecological space in which this settlement was founded, but perhaps this is not the only reason.13 Working on the contexts of the newly founded cities offers the advantage of overcoming some of the paradigms that have served to qualify early medieval urbanism up until now (settlement patterns or civic institutions). These paradigms are, however, the cause of the impoverishment of the current debate (almost always played, case by case, on the mechanical identification of those paradigms, in a substantial game of subtraction). For example, studying one settlement (Comacchio) has allowed us to shift our attention towards urbanism as social networks (Raja and Sindbæk 2020, 9–10),14 enhancing the analysis of the interactions between community and environment (also in terms of resource use) and between community and other communities (for example in relation to the modalities of exchange). In addition, this allowed us to think about the social and cultural specificities originating from that context and qualifying it in terms of identity too. This type of approach has then made it possible to better plan future research, indicating specific and more performative analyses that can better describe and explain these phenomena (as will be highlighted below in relation to organization of river navigation).

### The Future of Comacchio

The archaeological research carried out in Comacchio has helped us to better understand the material forms of at least one of the new settlements that developed between the sixth and tenth centuries in the northern Adriatic. These characteristics cannot be assumed to be typical of all these new settlements (including Venice), although several analogies seem

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12 The episode concerns a certain Dominic of Comacchio who, around 828, on his way back from his pilgrimage to Jerusalem via Alexandria, boarded one of the ten Venetian merchant ships stationed in the port, McCormick 2001, 272.

13 There is no ‘model’ of an ancient city, and therefore a categorization in this sense is not correct either. However, from written

14 On a conceptualization of premedieval urbanism and the theoretical tools to be used to make a comparison that goes beyond stereotypes, see Smith 2020, 16–30.
to be discernible at the moment. These analogies concern the forms of organization of the settlement and components qualifying cultural identity, such as the composition of household goods (Fig. 7.12), the architectural shape of housing (Fig. 7.13), and the self-representation of the elite through specific modes of funerary ritual (such as the use of the sarcophagus) (Fig. 7.14). The similarities also concern the social and political structure of the communities, from what we can understand from the written sources.

It is interesting to note that another element that seems to be common to almost all these settlements in the northern Adriatic is their commercial vocation, whether it is a generating component of the settlement (as seems to be the case in Comacchio, for example), or a subsequent consequence (as is thought to be the case in Venice). The fortunes of these new foundations, therefore, seem to be linked above all to their ability to become subjects capable of building ‘economic systems’ or to contribute to building them.

The example of Comacchio is important in this respect. The excavations give us, for example, a rough estimate of the number of amphorae that may have been imported (and considering the capacity of the amphorae of that period, also the litres of wine traded). Equally important are the studies being conducted on river vessels, particularly on a boat recently excavated near Comacchio, along the old course of the Po (Beltrame and Costa 2016) (Fig. 7.15). This boat is datable to the fifth century, but also on the basis of other comparisons outside Italy it can be assumed that this type was present in early medieval contexts.

From the survey of the boat, it is possible to carry out hydrostatic analyses (plant species used, tonnage, composition of the load) and to make a simulation of the distribution of the load itself. Experimental analyses of daily travel times are being carried out: when sailing outward using the tow-path (i.e. against the current), and when returning (i.e. with the sail). The same is being done for the logboat, an early medieval vessel we have a more substantial archaeological record for (Lucchini and Bernabei 2020). Another line of work, again on boats, is the study of the so-called lateen sail, introduced certainly before the arrival of the Arabs in the Mediterranean (with whom it was traditionally associated). The lateen sail could be manoeuvred by a smaller crew in comparison to the square sail, meaning the sail created a more economical method of sailing.

All these data will be important to consider when reconstructing the actual size of the ‘economic system’ within which Comacchio was located, but also when investigating the timing and modalities of the economic system.

Several questions remain open. The first concerns the problem of the foundation of the settlement. The excavations carried out in Comacchio have clarified a general chronological sequence, but, on their own, they are not sufficient for us to understand exactly when and, above all, in what forms and for what reasons this demographic aggregation and this community came into being. Continuing to

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15 On the use of sarcophagi in this part of the Adriatic during the ninth and tenth centuries (as a specific mode of self-representation of the elite), see Gelichi, Ferri, and Moine 2017, 177–24.

16 There is no consensus on this issue. Gasparri (2019), for example, is inclined to believe that Venice’s vocation for commerce occurred at a very late stage in the Early Middle Ages.

17 On the problem of the capacity of early medieval amphorae in the Po Valley area, see some preliminary remarks in Gelichi 2021b.
Figure 7.13. Early medieval residential buildings in a lagoon area. © Francesca Zamberlini and LAMVe.

Figure 7.14. Sarcophagus of Stephen, Comacchio, Museo Delta Antico (former cathedral choir). Ninth century. Photos by the Soprintendenza Ravenna.

Figure 7.15. Fifth-century boat being excavated at Comacchio, Motta della Girata. Photo by Carlo Beltrame.
dig in Comacchio may be useful, but it is not sufficient. From this point of view, a look at the transformations of this territory from the late Roman age onwards, using modern investigation strategies, is fundamental. The results of the old excavations, concentrated in the sites of Roman villas/farms, are by no means clarifying. In addition, there are other key sites, which seem to have produced some form of aggregation of people (communities?) already in Late Antiquity, which have been little or badly investigated. The most important of these is the settlement of Motta della Girata, located just five kilometres south-east of the town of Comacchio, at a key junction between the ancient course of the Po (the so-called Padus Vetus), but still navigable, and a canal (largely artificial) that connected the river with the area west of Comacchio (Fig. 7.16).

Here, towards the end of the 1950s, a church with a baptistery and a cemetery with more than 250 graves were excavated. The church was dated to the sixth century (because it was identified with a building constructed by the archbishop of Ravenna, Aurelian), while the cemetery was dated to the sixth to seventh centuries (on the basis of the grave goods found, which, however, only constitute a low percentage of the entire necropolis). More recent investigations have demonstrated the existence of a concentration of archaeological finds (especially amphorae) from the fifth to sixth centuries near the cemetery and along the Padus Vetus, where the presence of a settlement may be hypothesized. The presence of a structured settlement phase below the ecclesiastical structures is datable to the fifth and sixth centuries and is therefore prior to the church. This site indisputably constitutes a pivotal point for understanding the transition, in this area, from late antique to early medieval settlement and seems to indicate, in Padus Vetus, an active and decisive way of commercial communication, at least until the sixth century. Understanding its evolution is also crucial when...
seeking to understand its relationship with the future settlement of Comacchio. Indeed, what relationship exists between this site and Comacchio? When exactly did the use of the cemetery end (and following this, how did the settlement evolve)? Does Comacchio really have attractive features in relation to the settlement of this area which, until the sixth century, had developed by still using spaces of ancient foundation?

A second issue that needs to be addressed concerns the town of Comacchio itself. There are two main aspects that are still unclear. First, a more precise chronology of its evolution, since the data currently in our possession refer only to two areas of the settlement; second, a more thorough knowledge of the settlement itself (extension, density, characterization). For these reasons, archaeological investigations were resumed in the area of the historic centre of Comacchio in 2021. Cores, small shovel tests, and, above all, an open trench on the eastern outskirts of the town (in the little-known area of the late medieval monastery of Sant’Agostino) returned an undisturbed sequence of levels datable between the seventh and tenth centuries. From this area, and from other more limited areas of the investigated ancient settlement, we can expect that significant data will provide more adequate answers to the last two questions posed.

The context in which this data should be considered is beginning to be fairly well defined and the main historical-archaeological questions brought into focus. In order to try to connect Comacchio with the other new northern Adriatic settlements and to connect these settlements with the developments of the European and Mediterranean early medieval economy (of which they are unquestionably a part), it is necessary to go even deeper into the research, along the lines outlined here. The need for increased depth is relevant for Comacchio, but it is even more valid for the settlements of the Venetian Lagoon as well as those that developed to both the south and north.

**Abbreviations**

LAMVe: Laboratorio di Archeologia medievale
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**Works Cited**

**Primary Sources**


**Secondary Studies**

——. 2013. *Quando Torcello era abitata* (Venice: La Tipografica).

Gelichi, S. 2012. ‘From the Late Antique City to the Early Medieval Town in Central and Northern Italy: Models and Narratives from Debates over the Last Thirty Years’, in A. Carmelo, N. Christie, and P. Diarte-Blasco (eds), Urban Transformations in the Late Antique West: Materials, Agents, and Models (Coimbra: Coimbra University Press), pp. 45–59.


