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3

FROM ONE SEA TO ANOTHER
TRADING PLACES IN THE EUROPEAN
AND MEDITERRANEAN EARLY MIDDLE AGES

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BREPOLS

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The history of a forgotten town: Comacchio and its archaeology

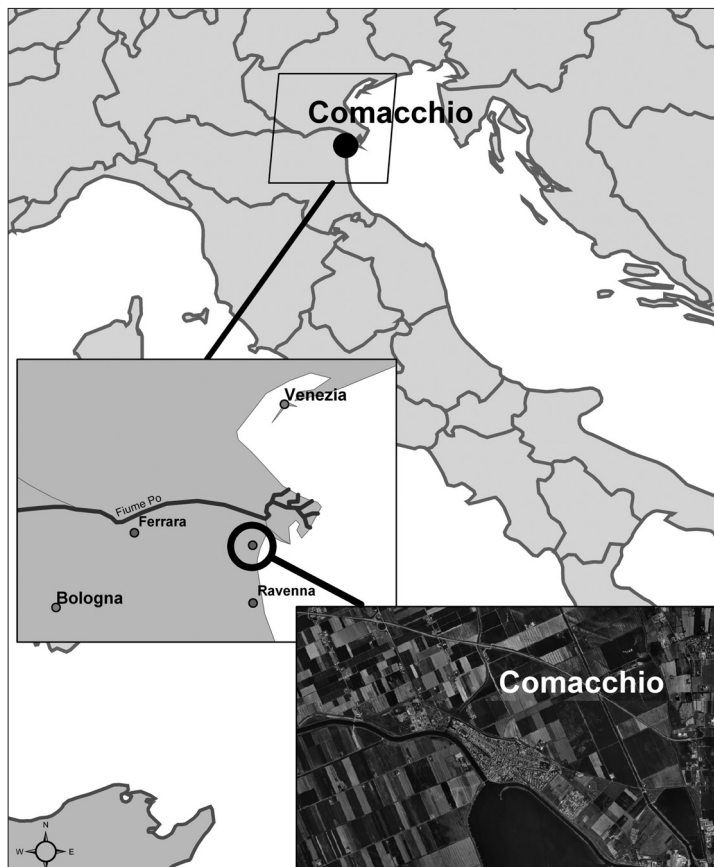
I An 'old story' (S.G., C.N.)

Comacchio today is a small town in the province of Ferrara, on the south side of the present estuary of the river Po (fig. 1). It is an early medieval settlement, well-known because of the presence in this territory of a several Etruscan cemeteries. These cemeteries (particularly those at Valle Trebba and the Valle Pega) were mainly explored during the major drainage works, which, early in the last century, made it possible to reclaim large parts of ground from the marshes of the lagoon.

These cemeteries provide the best material evidence in this territory of an important emporium which existed between the 6th and 3rd centuries BC, also documented by ancient sources¹. Even if mentions of post-Roman contexts including objects of special interest² were frequent, the very first excavations which investigated medieval contexts were not undertaken until the 1960s at the site of the origins of Motta della Girata (fig. 2).

¹ The bibliography concerning early Comacchio is great, but this is not the right occasion to reconsider it; for the excavations see: N. Alfieri, «La ricerca e la scoperta di Spina», in *Spina. Storia di una città tra Greci ed Etruschi*, eds. F. Berti, P. Guzzo, Ferrara, 1993, p. 3-19. This exhibition catalogue contains updated and useful information about the cemetery, the settlement and its history.

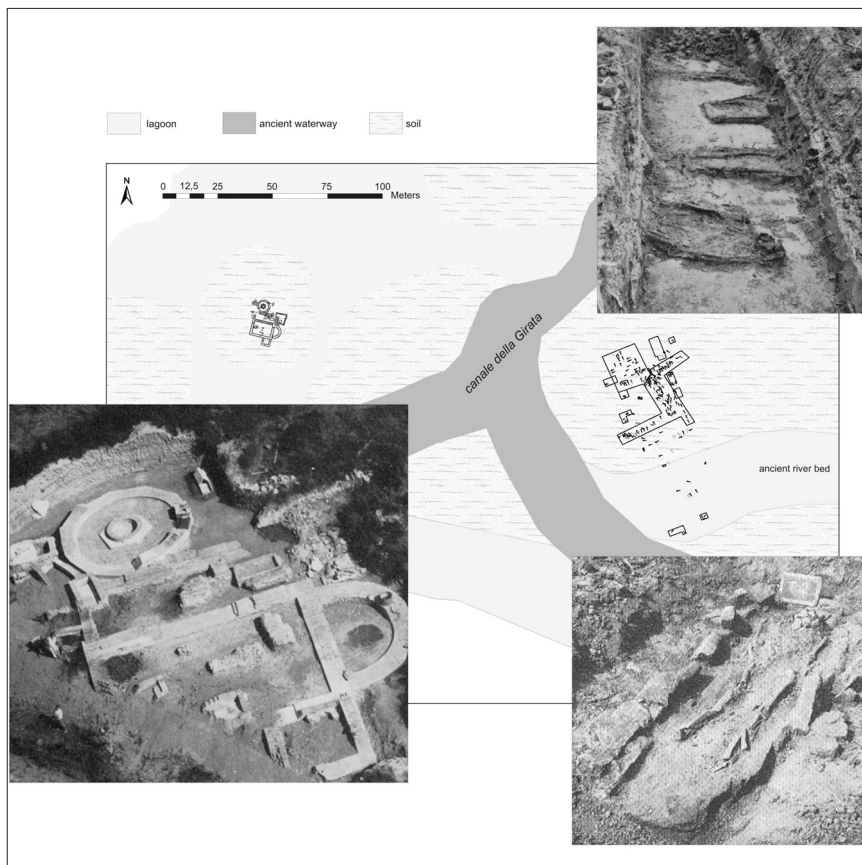
² We are referring to the discoveries, some of which are dated to the early medieval period, carried out during the drainage works of Valle Ponti (west of the modern Comacchio town), where numerous stone fragments of liturgical furniture came to light that are now dispersed in different private collections, see: P. Porta, «Comacchio dalla Tarda Antichità all'Alto Medioevo: spunti per uno studio sui resti scultorei», in *Genti nel delta da Spina a Comacchio. Uomini, territorio e culto dall'antichità all'alto medioevo*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, Ferrara, 2007, p. 473-475. From the territory of Comacchio a famous disc brooch – today at the Walters Art Gallery in Baltimore – appeared in a Roman antiquarian market in the 1930s: R. Farioli Campanati, «Una scheda sulla fibula di Comacchio», in *La Civiltà Comacchiese e Pomposiana dalle origini preistoriche al tardo medioevo* (Atti del Convegno nazionale di studi storici, Comacchio 1984), Bologna, 1986, p. 455-459.



1. Location of Comacchio.

Nereo Alfieri brought to light the remains of a church with a nave, together with a bell-tower and a baptistery, which he identified as the *ecclesia beatae Mariae in Padovetere* mentioned in the *Liber Pontificalis*, in the section about the life of Bishop Aurelian (519-521)³. A small group of burials were excavated near the church and its baptistery, while a larger cemetery comprising 244 tombs, generally inhumations directly within the ground

³ Andrea Agnello, *Liber Pontificalis*, 53. For the excavations see: C. Corti, «Santa Maria in Padovetere: la chiesa, la necropoli e l'insediamento circostante», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 531-563 (with updated bibliography). The remains of the buildings recovered at Motta della Girata are thought by some, but not all scholars, to be possibly the church which Aurelian built: see its ample examination in *Eadem*, p. 532-541.



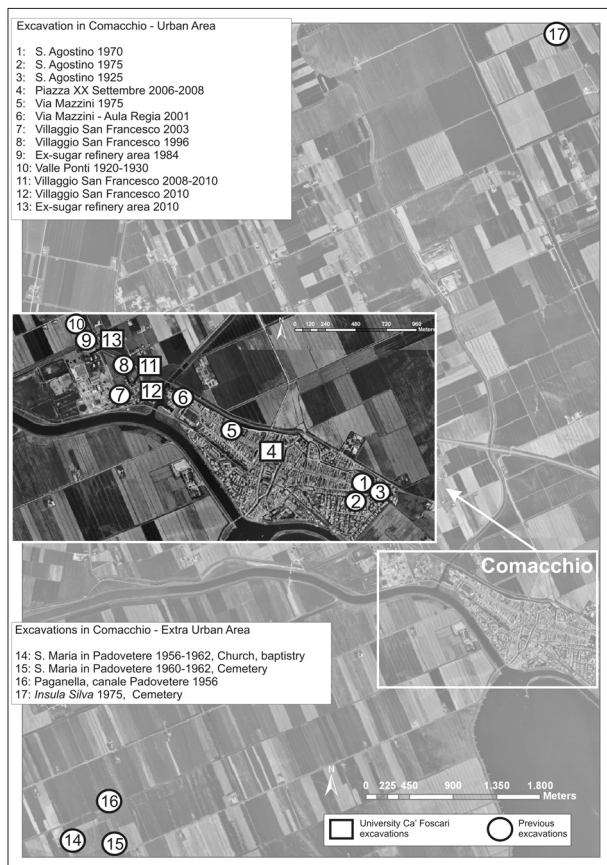
2. Santa Maria in Padovetere. Ecclesiastical complex and cemetery: location and photos of the excavation.

(though occasionally in wooden coffins or in amphoras) has been investigated further to the east of the church⁴.

A channel (at Motta della Girata), which today has been filled in, would have divided the ecclesiastical site from the second cemetery. Even if this complex was not in a direct relationship with the later settlement of Comacchio (see *infra*), the Motta della Girata excavations represent the very first archaeological investigation undertaken to discover post-classical contexts in this territory.

After Alfieri's excavations, subsequent investigations considered areas closer to Comacchio itself (fig. 3). In 1975, during trenching for a sewer

⁴ In this case see: C. Corti, «Santa Maria in Padovetere», p. 541-549.



3. Location of the excavations carried out in Comacchio.

along Via Mazzini, several tombs made of bricks coffins were discovered⁵. Moreover during the 1970s, a number of trenches were excavated close to the church of Sant'Agostino (the area should be where the early medieval monastery of San Mauro was established in Comacchio). These excavations

⁵ The excavation which covered the centre of the street with a one metre wide trench (1.5 metres deep), started from the cathedral and ran towards the Capuccini church (identified as the early medieval monastic complex of Santa Maria in Aula Regia). Only two burials from this excavation have been documented archaeologically: S. Patitucci Uggeri, «Testimonianze archeologiche del 'castrum Comiacum'. Relazione preliminare degli scavi 1975», *Archeologia Medievale*, 3 (1976), p. 283-291; *Eadem*, «Il 'castrum Cumiacli': evidenze archeologiche e problemi storico-topografici», in *La Civiltà Comacchiese*, p. 263-302.

brought to light remains of wooden poles and a semicircular masonry structure, considered to be the apse of the medieval monastic church⁶.

An increase in research covering the post-Roman period began in the 1990s with trenches in the site of Villaggio San Francesco⁷, again in 2003⁸, and finally in Via Mazzini, in the square facing the church of Santa Maria in Aula Regia⁹. These chance discoveries from rescue excavations, mostly of indifferent quality, led to a single interpretative model, presented on several occasions by Stella Patitucci¹⁰.

This model followed a standard historical interpretation, ascribing the rise of this town to two main elements: the foundation of the *castrum* by the Byzantines around the beginning of the 7th century, for essentially anti-Lombard purposes; and an economy based largely upon the salt trade, starting in the 8th century at the time that the celebrated Liutprand's Capitulary was drafted which stated the rules by which the citizens of Comacchio managed shipping on the river Po and its tributaries. In common with Venice, therefore, the history of the origins of Comacchio was on the one hand closely linked to Byzantine interests (mainly as a military stronghold), and on the other hand with an economic development almost exclusively con-

⁶ S. Patitucci Uggeri, «Testimonianze archeologiche del 'castrum Comiacium'», p. 273. About these investigations see also: D. Calaon, E. Grandi, «Gli scavi urbani di Comacchio altomedievale», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 565-567.

⁷ The excavations have been published by D. Calaon, «Lo scavo di Villaggio San Francesco 1996 (COM 96). Le strutture portuali di Comacchio», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 505-530.

⁸ G. Bucci, «COM 03. Villaggio San Francesco», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 553-556.

⁹ G. Bucci, «COM 01, via Mazzini», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 557-563.

¹⁰ Stella Patitucci, final editor also of the report on the Motta della Girata cemetery (S. Patitucci, «Comacchio (Valle Pega). Necropoli presso 'l'ecclisia beatae Mariae in Padovetere'», *Notizie degli Scavi di Antichità*, s. 8, 24 (1970), p. 69-121), has published many historical-archaeological contributions concerning Comacchio. The most important ones are as follows: S. Patitucci Uggeri, «Il sarcofago del vescovo-duca Stefano. Contributo alla storia di Comacchio», *Analecta Pomposiana*, 5 (1980), p. 7-23; *Eadem*, «I 'castra' e l'insediamento sparso tra V e VII secolo», in *Storia di Ferrara* III.ii, 1989, p. 408-516; *Eadem*, «Problemi storico-topografici di Comacchio tra tardoantico e altomedioevo: gli scavi di Valle Ponti», in *Actes du XI Congrès International d'Archéologie Chrétienne* (Lyon, Vienne, Grenoble, Genève et Aoste 1986), III, Rome, 1989, p. 2301-2315; *Eadem*, «Il Delta padano nell'età dei goti», in *Ravenna e l'Italia fra Goti e Longobardi* (XXXVI Corso di Cultura sull'Arte Ravennate e Bizantina), 36 (1989), p. 269-322.

nected to the salt trade¹¹. The archaeology, it was assumed, would be able only to illustrate these circumstances as well as their chronology.

Patitucci's hypothesis also links these territories to a sentence written by Cassiodorus, in which the author refers to the reconstruction of the Imperial fleet thanks to Theodoric¹², as well as to one which recognizes Comacchio as the settlement where John's troops, marching in AD 539 from Romagna towards Milan, used rafts to cross the river Po¹³. The archaeological model over the last 20 years restricted itself to confirming the historical sources, pushing the origins of Comacchio back more than a century.

The collation of the fragmentary documentation, which with new discoveries slowly became significant, seemed to justify an interpretation which aimed to push back the date of certain economic but mainly the military roles of Comacchio. Certainly, these territories had a strategic importance during the period of the Goths and some finds recovered in this territory from that period bear witness to their presence¹⁴. However, the presence of materials and contexts dated to this period does not demonstrate anything by itself. Instead, it establishes only a sort of settlement continuity which needs to be better correlated to precise structures¹⁵.

The birth of the new centre, Comacchio, now needs to be explained within other paradigms and as a result of a different archaeological approach. A critical step has been taken as a result of the new archaeological excavations carried out since 2006, with the excavations around the cathedral of San Cassiano¹⁶ followed by the investigations in the area of Villaggio San Francesco (2008-2010)¹⁷. Due to the importance of these interventions,

¹¹ For this historiography uniting the two towns, see: S. Gelichi, «Tra Comacchio e Venezia. Economia, società e insediamenti nell'arco adriatico durante l'Alto Medioevo», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 368-373.

¹² Cassiodorus, *Variae*, V-16, 17, 18 e 19; see also: S. Cosentino, «Re Teoderico costruttore di navi», *Antiquité Tardive*, 12 (2004), p. 347-356.

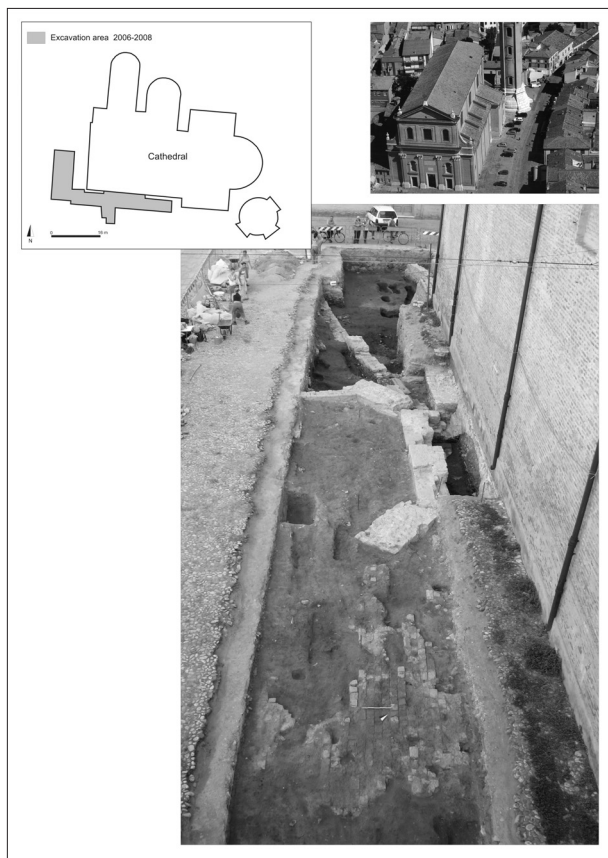
¹³ The river is likely to be the Po; the episode is clearly referred to it during the period of the Gothic war (*Guerra Gotica*, II, 21).

¹⁴ S. Patitucci Uggeri, «Il Delta padano», *passim*.

¹⁵ For a critique of these interpretations see: S. Gelichi, D. Calaon, «Comacchio: la storia di un emporio sul delta del Po», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 387-394.

¹⁶ For these excavations see: S. Gelichi (ed.), *L'isola del Vescovo. Gli scavi archeologici intorno alla Cattedrale di Comacchio*, Firenze, 2009.

¹⁷ The investigations were carried out thanks to support from the local authorities within a research project dedicated to Medieval Comacchio. These were conducted by a team from Ca' Foscari University of Venice and the Soprintendenza per i Beni Archeologici per l'Emilia Romagna, under the scientific direction of Sauro Gelichi and Luigi Malnati.



4. Comacchio, Piazza XX Settembre. Location and excavation photo (view from the bell tower) and photo of the modern San Cassiano cathedral.

the results will be considered in detail, before a new interpretative model is proposed for the rise of this new settlement.

2 A new history. The excavations around the cathedral: from a craft quarter to the centre of a bishop's power (E.G.)

The excavations beside Comacchio cathedral offer us an important view of the town's history (from the 6th century to the modern period). The investigation, carried out between 2006 and 2008 thanks to the refurbishment works of Piazza XX Settembre, focussed upon part of the sacristy of the modern cathedral of San Cassiano and occupied a total of 180 square metres, in places reaching a depth of 3 metres (fig. 4). In the following section we will present an overview of the early medieval phases.

2.1 *The first settlement (second half of the 6th-beginning of the 7th centuries)*

The first traces of occupation of the site can be dated with security to the end of the 6th century; no earlier residual material was found. A wooden building with a hearth belongs to this phase, associated with a great deal of cooking pottery and amphorae. Due to the high water table only a part of the building was excavated, impeding the acquisition of a complete plan. However, it was of quadrangular shape and was supported by poles. Its walls were made of planks and wattle, while its floor consisted of clean clays laid over a deposit of natural sand. In fact, the first phase of this building lies above a fluvial outcrop/island in the marshy environment, modestly prominent in the lagoon between the southern branches of the Po delta.

It is important to emphasize the geo-pedological and topographical character of the place which, in the 6th century, was not readily suitable for a settlement. The ground level at this time would have been at the same height as the medium tidal level. The attraction of the place, though, was probably the large lagoon which was evolving in this area from the late imperial period onwards.

The lagoon separated from the sea by sand bars, yet fed by salty water, helped internal navigability, fishing and, as Cassiodorus recorded, also made it possible to produce salt¹⁸. However, the limited extent of the excavation did not allow us to obtain a more precise idea of the scale of the community which settled this island or its main activities.

Nevertheless, on the basis of the African Red Slip Ware, Mediterranean and Aegean amphorae and Central Adriatic Painted pottery, it is possible to pinpoint the economic system within which this community seems to have been inserted¹⁹. Its economy is based upon Mediterranean exchange, similar to certain other Adriatic cities as well as a number of contemporary settlements in the Venetian lagoon²⁰.

¹⁸ Cassiodorus, *Variae*, XII-23. The passage from Cassiodorus generically refers to people of the Veneto; some scholars contend that he was referring also to inhabitants of the territory of Comacchio: A. Samaritani, *Medievalia e altri studi*, Codigoro, 1970, p. 20-21, n. 3.

¹⁹ See: C. Negrelli, «Produzione, circolazione e consumo tra VI e IX secolo dal territorio del Padovetere a Comacchio», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 437-442.

²⁰ For the Venetian lagoon see: E. Grandi, «Ceramiche fini da mensa dall'area lagunare», in *La circolazione delle ceramiche nell'Adriatico tra tarda antichità ed altomedioevo*, Atti del III incontro di studio Cer. Am. Is. (Venezia, 24-25 giugno 2004), eds. S. Gelichi, C. Negrelli, Mantova, 2007 (Documenti di archeologia 43), p. 127-153; *Eadem*,

2.2 *The craft quarter (second half of the 7^b-beginning of the 8^b centuries)*

In the second half of the 7th century a remarkable change occurred in the use of the area: in place of the houses a craft quarter was established here (fig. 5, Colour Plates). The new structure had an important extension: the excavated portion corresponds to little more than a quarter of the building (8 x 4 metres in size), which in its entirety would have occupied 120 square metres. The building technique differed from the earlier one, perhaps because the structure had a different function. The wooden elements (the walls and the central supporting poles) were combined with masonry elements. The outer walls were supported by a foundation of reused bricks, probably taken from the late antique villas located in the territory and mostly abandoned from the 4th-5th centuries AD²¹. This building was articulated around a large central fireplace, with which two secondary hearths – each much smaller in size – were associated.

The ground floor was made of a thick yellow re-deposited pure clay layer, useful both to seal the humid lower sands and to ensure the stability of the building over the lower soft sands, and finally to disperse the high temperatures produced in the fireplaces. On the outside of the building a shallow drainage channel was used to ensure the controlled outflow of waste effluent from its production activities as well as to keep the floor dry when the tidal waters were high. The main element identified in the sequence is therefore the large central fireplace: it was a semicircular brick-built kiln, constructed against the perimeter wall.

In the workshop metals and glass were being worked. The layers contained iron waste, glass and metal debris distributed throughout the building and numerous crucibles for glass production. It is difficult to say precisely when and for how long the workshop was in operation, we only know that the phase identified in the archaeological sequence spanned about 70 years.

Glass production is demonstrable thanks to the numerous fragments of crucibles of *pietra ollare* containing thick traces of molten glass in their

«Late antique and first medieval (V-VII cent. A.D.) fine pottery from Venice lagoon», in *Çanak – Late Antique and Medieval Pottery in Mediterranean Archaeological Contexts*, eds. B. Böhlendorf-Arslan, A.O. Uysal, J. Witte-Orr, 2007, (Byzas 7), pp.1-24; A. Toniolo, «Anfore dall'area lagunare», in *La circolazione delle ceramiche*, eds. S. Gelichi, C. Negrelli, p. 91-106. See in this volume the article by Claudio Negrelli, «Towards a definition of early medieval pottery: amphorae and other vessels in the northern Adriatic between the 7th and the 8th centuries».

²¹ D. Calaon in S. Gelichi, D. Calaon, «Comacchio: la storia», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 395-410.

interiors. The crucibles were recovered with blown glass fragments, small necks and small drops from glass blowing²². Among the glass remains are both fragments of cullet which contain small transparent grains of possible quartz as well as crystals²³.

The evidence suggests that the glass-makers were making frit from the sand. If true, we can deduce that the whole cycle of glass production was being undertaken in Comacchio between the 7th and the beginning of the 8th century²⁴. Judging from glass fragments, the finished products were mainly goblets²⁵.

Among the objects found in the workshop was a bronze mould depicting the left profile of a young male figure with curly hair (fig. 6, Colour Plates). It is a mould for melted glass cameos of a type familiar in northern Italy, whose closest match is a cameo inserted within a capsella preserved in the Diocesan Museum of Cividale del Friuli. Recent studies of this group of cameos ascribe it to a northern Italy production area and date it to the end of the 7th century²⁶: such a chronology perfectly fits the excavation data.

²² M. Ferri, «La produzione del vetro», in *L'isola del Vescovo*, ed. S. Gelichi, p. 33-35.

²³ Those analyses have been carried out by Bruno Messiga and Maria Pia Riccardi of the Department of Scienze della Terra of the Pavia University. For the glass production, see some preliminary data presented as a poster at the VI Congresso Nazionale di Archeometria: E. Basso, M. Ferri, B. Messiga, M.P. Riccardi, «Rinvenimenti vitrei di Comacchio altomedievale», in *VI Congresso Nazionale di Archeometria – Scienza e Beni Culturali* (Pavia, 15-18 febbraio 2010), in press.

²⁴ More and detailed analyses employing electronic microscopy are required, as presently the Comacchio kiln appears to be unique. Other known productive centres were in fact involved in secondary activities, including semi-finished objects. The semicircular shape is unlike the later ones recovered in Torcello: L. Leciejewicz, E. Tabaczyńska, S. Tabaczyński, *Torcello. Scavi 1961-1962*, Roma, 1977, p. 94-104; L. Leciejewicz, «Italian-Polish researches into the origin of Venice», *Archaeologia Polona*, 40 (2002), p. 51-71. In excavations at Recópolis, Spain, a glass kiln against the wall of the workshop room (kiln 1) belonging to between the 6th and the mid of the 7th centuries, possesses a similar shape and has the same dimension to this one at Comacchio; see: M. Castro Priego, A. Gómez de la Torre-Verejo, «La actividad artesanal en Recópolis: la producción de vidrio», in *Zona Arqueológica. Recópolis y la ciudad en la época visigoda*, Alcalá de Henares, 2008, p. 120-122.

²⁵ Goblets similar to the examples found during the excavations of the Comacchio cathedral, have come to light in the excavation at Villaggio San Francesco (2008-2009), where the port structures of Comacchio were located. It is therefore possible that goblets produced here were then traded inland to places on the Po Plain (M. Ferri personal communication). M. Ferri, «Reperti vitrei altomedievali dalle isole di Torcello e San Francesco del Deserto – Venezia», *Journal of Glass Studies*, 48 (2006), p. 173-191.

²⁶ E. Galletti, «'Ex romano vitro splendentes lapilli'. Ricezione di iconografie della glittica ellenistico-romana in cammei vitrei altomedievali», in *Sertum Perusinum Gemmae*

2.3 *The 8th-century church of the bishop*

During the 8th century a second important change of use occurred: the kiln was completely demolished and the area was occupied by a cemetery, probably to accompany the new church. This coincides too with the first documentary evidence for the presence of a bishop in Comacchio²⁷. It would seem that much of this part of the island was now given over to buildings and activities associated with the bishop.

Whether the artisanal activities were moved elsewhere is presently not known. Clearly, the new cathedral imposed a complete urban redefinition upon the area. The excavations also involved investigating a part of the cemetery as well as the sacristy of the church but not its nave, which is located underneath the modern cathedral and oriented on the same axis as the present one²⁸ (fig. 7).

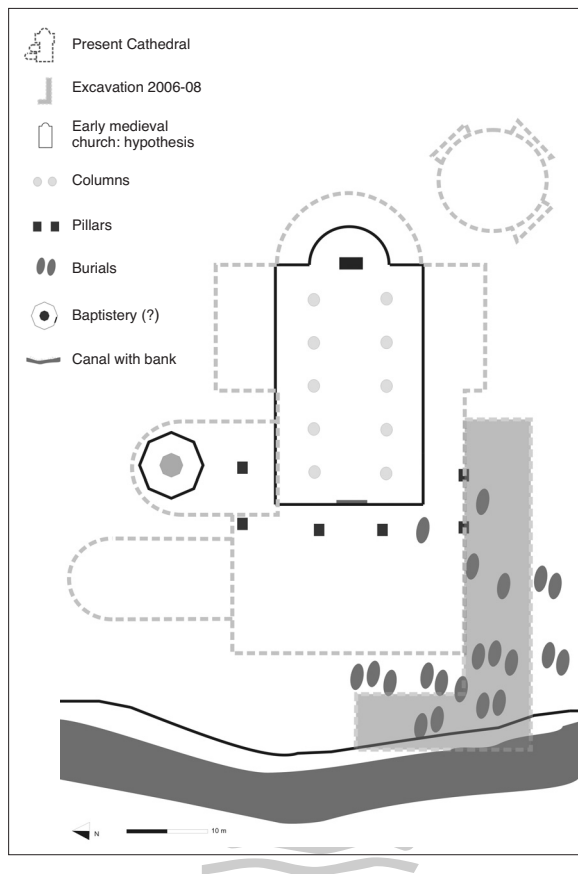
It is nevertheless possible to construct an initial hypothesis about its structural and decorative components thanks to some spolia recovered within the levels connected to the 10th-century demolition of the church and in the walls of its Romanesque successor building. These included small columns, small pillars and capitals recovered in association with fragments of slabs and trabeations (fig. 8): altogether about 150 fragments, a small percentage of which (10-15%) dated to Late Antiquity. These suggest a cathedral plan with a nave separated from flanking aisles by columns and a rather elaborate sculptural decoration where older spolia were employed.

During the 9th century the decorative programme of the church was enriched by a presbyterial enclosure, commissioned for the building judging from the unity of the elements including slabs, capitals, small pillars and

Oblatum. Docenti e allievi del dottorato di Perugia in onore di Gemma Sena Chiesa, ed. S. Fortunelli, Napoli, 2007, p. 161-196. On this issue see the preliminary considerations in S. Gelichi, «Venice, Comacchio and the Adriatic Emporia between the Lombard and Carolingian Ages», in *Dorestad in an International Framework*, Turnhout, 2010, p. 153-156.

²⁷ The first document mentioning a bishop at Comacchio is a dubious inscription, in which an *episcopus* Vincentius is mentioned, living at the same time as Felix, bishop of Ravenna (the inscription dates to AD 709): E. Grandi, «La cristianizzazione del territorio», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 417-436 and bibliography. Doubts about the figure of this bishop and the correct reading of the inscription, are discussed with erudition by A. Samaritani, *Medievalia*, p. 78-82.

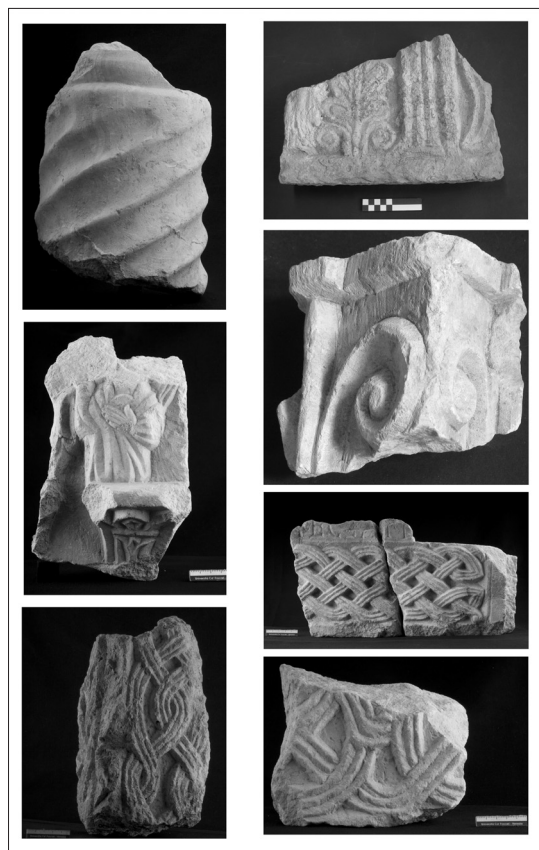
²⁸ S. Gelichi, D. Calaon, E. Grandi, S. Lora, C. Negrelli, «Uno scavo scomposto. Un accesso alla storia di Comacchio attraverso le indagini presso la Cattedrale», in *Missioni Archeologiche e progetti di ricerca e scavo dell'Università Ca' Foscari - Venezia*, (IV Giornata di Studio, Venezia 12 maggio 2008), ed. S. Gelichi, Venezia, 2008, p. 167-178.



7. Comacchio, Piazza XX Settembre. Location of the early medieval burials and suggested reconstruction of the early medieval church underneath the modern San Cassiano Cathedral.

fragments of trabeation. Some of these spolia fragments bear letters of inscriptions²⁹. The quality of these materials, together with numerous white or black marble mosaic tesserae, some crustae and marble small slabs, suggest the presence of a high status donor, able to invest in this major building project. Indeed, the other evidence (see below) also testifies to the fact

²⁹ R. Belcari, «Il reimpiego di materiali lapidei tardo antichi e altomedievali», in *L'isola del Vesovo*, ed. S. Gelichi, p. 60-62; S. Gelichi, R. Belcari, D. Calzon, E. Grandi, «Spolia in contesto. Il riuso nell'episcopio medievale di Comacchio», in *Spolia in Late Antiquity and the Middle Ages: Ideology, Aesthetics and Artist*, Proceeding of the 17th International IRCLAMA Colloquium (3th-5th June 2010, Motovun-HR), 2011, p. 49-59.



8. Stone elements of furniture utilised as reused material in the Romanic structures recovered in the excavation.

that in the 9th century Comacchio had become a flourishing lagoonal centre, ruled by the bishop.

3 A 'new story'. The excavations in the area of Villaggio San Francesco: from the late antique settlement to the structures of an early medieval emporium

3.1 Towards Comacchio (E.G.)

A number of trenches completed in the north-west area of the modern settlement (Villaggio San Francesco, an ex-sugar refinery), together with the re-examination of the finds found during previous surveys and excavations, have made it possible to identify some lines of the settlement process which in its final form led directly to the formation of Comacchio.

The area closest to Comacchio where late antique levels have been found is west of the modern centre of Comacchio close to an ex-sugar refinery (fig. 9, Colour Plates).

The finds recovered in this area date to between the Imperial period and the 5th to 6th centuries. During Late Antiquity the settlement model in the 'Comacchio territory' is based upon the *villae* system, some of which were being progressively abandoned³⁰. To understand their final phase and whether or not these might have formed parts of new centres of aggregation between the 6th and the 7th centuries, we need to comprehend the character of the entire area from this period onwards.

In this framework, the remains of a villa recovered during a rescue investigation are especially important³¹. The villa was hypothetically located close to the dunes which during the Roman period formed part of the coastline.

A cemetery located about 250 metres to the north, in the area known as Baro Ponti or Baro delle Pietre, is almost certainly associated with this villa. Found during drainage works in the 1920s and 1930s, this cemetery has been ascribed generically to the Late Roman period³².

On the surface of the area occupied by the villa, rare fragments of early medieval amphorae and pietra ollare have been discovered. Accordingly, we can assume that some presence in the area continued in this period, which is apparently confirmed by evidence from trenches excavated in 2010 in a field next to the villa. The remains of wooden structures (walkways

³⁰ D. Calaon in S. Gelichi, D. Calaon, «Comacchio: la storia»; S. Gelichi, C. Negrelli, D. Calaon, E. Grandi, «Comacchio tra IV e X secolo: territorio, abitato e infrastrutture», in *Atti del IV Congresso Nazionale di Archeologia Medievale* (Chiusdino – SI, 26-30 settembre 2006), eds. R. Francovich, M. Valenti, Firenze, 2006, p. 114-123.

³¹ M. T. Pelliccioni in P. Saronio, *Relazione sul saggio di scavo eseguito a San Giovanni di Ostellato e sui sopralluoghi effettuati sul percorso dell'acquedotto dei Lidi Ferraresi*, Archivio Museo Archeologico Nazionale di Ferrara, Soprintendenza Archeologica per l'Emilia Romagna, cartella 'Ostellato' 1984, p. 1-3.

³² F. Proni, *Giornale di Scavo di Valle Trebba, VIII, Copia della relazione inviata al Regio Soprintendente alle Antichità per il sopralluogo eseguito in Valle Ponti il 5/08/1921 al Baro dei Ponti (Baro delle Pietre)*, Comacchio, Manuscript, Archivio del Museo Archeologico Nazionale di Ferrara, Soprintendenza Archeologica per l'Emilia Romagna, 1921, p. 262-265; *Idem*, *Giornale di Scavo di Valle Trebba, I, La Valle Trebba e la Valle Ponti. Baro dei Ponti (Baro delle Pietre)*, Manuscript, Archivio del Museo Archeologico Nazionale di Ferrara, Soprintendenza Archeologica per l'Emilia Romagna, 1922, p. 3, 17; *Idem*, *Giornale di Scavo di Valle Trebba, VII, Visita in Valle Ponti*, Manuscript, Archivio del Museo Archeologico Nazionale di Ferrara, Soprintendenza Archeologica per l'Emilia Romagna, 1927, p. 239.

and poles), as well as natural deposits originated in a wetland environment allow us to reconstruct this as an undulating landscape with modest outcrops lands where little fragments of amphorae, bone-combs, faunal remains and pietra ollare are probably to be connected to the nearby settlement located in the area of the villa. In addition, within the Late Roman cemetery, sherds of early medieval amphorae and three pieces of a carved stone, dating to the 8th-9th centuries have been found³³.

More substantive evidence of an early medieval settlement exists slightly south-east of the ex-sugar refinery, near Villaggio San Francesco, where several trenches were excavated in 2008-2009 to check the records of earlier excavations carried out in 1996³⁴.

A first investigation, focused in the area which we have to imagine as an island close to the monastery of Santa Maria in Aula Regia, identified the remains of settlement dated to the 7th century. No more than a household, this was only partially investigated. The foundation of the building consisted of sleeper beams supported upon wooden poles, above which were timber walls, and a floor of reused clay laid upon the natural sand (fig. 10).

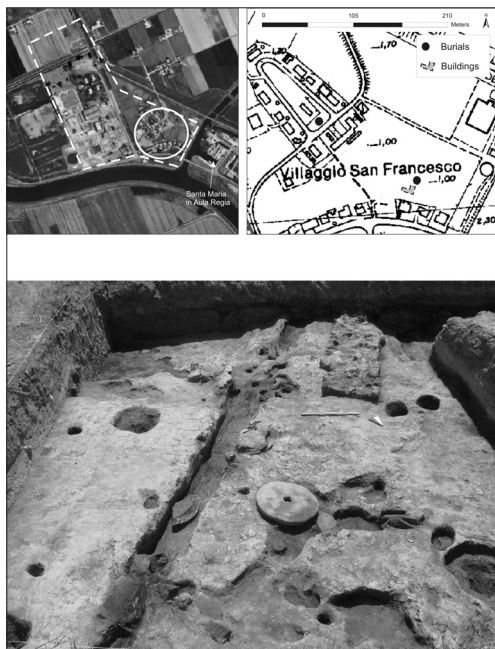
The building was in use during the second half of the 7th century. Another wall structure, made of brick fragments, was erected over it and in close proximity there is evidence of a brick burial. Though the small numbers of associated finds do not offer a precise chronological sequence, around the 8th century the function of the area shifted from housing to religious.

Other burials, dated to the 9th century, have been recorded in a new trench, located 70 metres to the west. The nature of the deposits has led us to speculate whether there were two cemeteries occupying different islands. As yet the location of an associated church remains unknown.

Critical to the comprehension of the centrality of this area at the beginning of the Middle Ages is the evidence from Villaggio San Francesco where port structures articulated on two islands, partly linked to the area of Baro Ponti, have been recovered. The results of the research, although fragmentary, emphasize the settlement complexity and significance.

³³ S. Patitucci Uggeri, «I 'castra' e l'insediamento sparso», p. 451; P. Porta, «Comacchio dalla Tarda Antichità», p. 473-484.

³⁴ P. Mazzavillani, *Relazione. Sorveglianza archeologica in occasione di interventi fognario-depurativi (n. 174) a Comacchio (FE), zona A: villaggio San Francesco e San Carlo. Impresa De Luca Picione Costruzioni Generali srl*, giungo-luglio 1996, Tecne srl, Archivio del Museo Archeologico Nazionale di Ferrara, Soprintendenza Archeologica per l'Emilia Romagna, 1996.



10. Comacchio: Villaggio San Francesco: location of the trenches and a view of the excavations.

The presence of the villa deserves special attention. In this area, it represents an important settlement focus and it is necessary to clarify what the late antique phase represents, of which little is known. It is also essential in understanding the process by which village agglomeration took shape, perhaps representing some continuity with the earlier landed property. More specific data on the development of the settlement, testified by the evidence of Baro Ponti cemetery, need further investigation. Presently we can only postulate the presence of a coastal settlement whose economy was probably based on fishing and on river and seaborne commercial activities³⁵.

³⁵ In the 1st century BC a hundred metres from the villa a ship without a mast and with a flat base was wrecked. The vessel, wrecked on a beach with its cargo, was probably destined for the inner lagoon: F. Berti (ed.), *Fortuna Maris: la nave romana di Comacchio*, Bologna, 1990; C. Beltrame, «Imbarcazioni lungo il litorale altoadriatico occidentale in età romana. Sistema viario, tecniche costruttive e tipi navali», in *Strutture portuali e rotte marittime nell'Adriatico di età romana*, (Antichità Altoadriatiche 46), 2001, p. 431-449; *Idem*, «Investigating Processes of Wreck Formation: Wrecks on the Beach Environment in the Mediterranean Sea», *Archeologia subacquea, studi, ricerche e documenti*, 3 (2002), p. 381-398.



12. Comacchio: Valle Ponti. Photos taken during the excavation works of the drainage channel with the recovery of wooden poles and planking pertinent to the port structures.

The early medieval settlement, as a result, warrants detailed analysis site as coastal nodal point³⁶ to better understand the link between the 7th-8th centuries (fig. 11, Colour Plates). Indeed, in the 8th century this lagoonal settlement shows clear involvement in trade as well as industrial activities. It is already clear, too, that the expansion of the early medieval settlement coincided with the growth of the centre of Comacchio into a bishop's seat.

3.2 *Comacchio emporium: the port installation* (D.C.)

In these areas the excavations of the 1920s and the 1930s brought to light a large number of vertical poles and horizontal wooden planks above a lagoon type environment (fig. 12). These were interpreted as the wooden

³⁶ D. Calaon in S. Gelichi, D. Calaon, «Comacchio: la storia», p. 406; *Idem*, «Lo scavo di Villaggio San Francesco 1996», p. 521-527.

structures as big lagoon pile-dwellings houses³⁷. In these reconstructions something was completely wrong: the majority (90%) of the potsherds was constituted by amphora and container fragments. There was almost no evidence of cooking or table pots, generally quite plentiful in other similar settlements.

A new working hypothesis is starting to take shape: the area was probably an harbour area with large wooden platforms. The substantial amount of amphorae discovered was the direct result of a huge commercial activity: large quantities of goods (wine, oil and maybe fish) were shipped in amphorae and amphorae-like containers.

The recent archaeological excavations and trenches carried out in 2008-2010 have confirmed the centrality of the area and the specifics of the structures present there (fig. 13). The site located west of the modern town of Comacchio during the early medieval period was placed within an area between a large navigable tidal way, a branch of the Po delta, and an artificial channel (the channel of Motta della Girata).

The harbour was in direct communication with the Adriatic/Mediterranean sea routes: the route to the Adriatic sea was no longer than one nautical mile. Ravenna and the Venetian lagoon, in the same way, were each approximately the same distance: artificial and natural channels provided the possibility to sail to the ancient capital without leaving the safe inner lagoon. The river Po, finally, interconnected the site with routes towards Pavia and Milan. The sand dunes which constituted the origin of the Comacchio harbour, placed in the centre of this crossroads, naturally protected by water, constituted a perfect point for redistributing goods coming by way of the sea routes which were then assigned to internal river routes, along the river Po and its tributaries³⁸.

3.3 *The structures* (D.C.)

The site developed on two distinct areas, probably two *insulae*, divided by a large channel. The harbour site occupied an estimated total surface area of about 80.000 square metres³⁹ (fig. 14, Colour Plates). The pattern of the distribution of the poles offers a picture of regularly arranged infrastructure extending out from the two main sand islands into the navigable lagoon channel.

³⁷ S. Patitucci Uggeri, «Il 'castrum Cumiacli': evidenze archeologiche», p. 270-271; *Eadem*, «I 'castra' e l'insediamento sparso», p. 452.

³⁸ D. Calaon, «Lo scavo di Villaggio San Francesco 1996».

³⁹ For a complete and detailed examination of the structures see D. Calaon, «Lo scavo di Villaggio San Francesco 2006».



13. Comacchio: Valle Ponti and Villaggio San Francesco.
Location of the drainage works and trenches
in which the port structures were found.

Some of these platforms were probably as long as 80 metres and in certain cases up to 30-40 metres wide. These wooden structures had to serve for the docking of seaborne ships as well as their counterparts, the riverine vessels that unloaded and stored cargoes here. Alongside these platforms the ships were both made and maintained in dedicated shipyards.

The recent archaeological investigations verified a part of these structures: big circular poles supported large wooden beams and wooden planking (fig. 15-16, Colour Plates). These wooden ground surfaces were used for loading and unloading ships. The geo-pedological analyses of the layers below the wooden remains showed that the lagoon level had been low with weak bathymetric variations. The purpose of these wooden landing jetties was double: on the one hand the platforms reached out to the deepest part of the lagoon channels,

and on other hand they provided a wide dry surface where goods might be temporarily stockpiled. Underneath the collapsed wooden planking were numerous sherds of amphorae and unglazed pottery vessels⁴⁰, some soapstone anchors, wooden barrels and stones, presumably used as ballast⁴¹. This group of vessels precisely dates the port installations and clarifies their function.

In 2009, in a large trench located in the centre of the harbour area, a long wooden waterfront was discovered. Under the mud the archaeologists uncovered well-preserved poles standing vertically in the ground. Horizontal planks were fixed on the exterior side in order to create a regular landing bank or quayside. The inner part the bank was reinforced with perpendicular rows of poles and beams regularly arranged every 5 metres. The waterfront was restored, reinforced and raised after a certain lapse of time: in this yard substantial amounts of ceramics (amphorae, containers, etc...) were used as drainage and consolidation materials (fig. 17, Colour Plates).

The line of the waterfront was interrupted by the presence of a small slipway. The slipway, constructed of horizontal wooden boards, was abundantly stained with pitch to ensure that vessels of small size could readily slip down the incline (fig. 18, Colour Plates). Moreover, a series of preserved horizontal poles were used as supports for the hulls when they were beaching small boats. Evidently, shipwrights were quite active in the area and we suppose, they had also infrastructure for repairing big ships.

The buildings uncovered adjacent to the waterfront were completely made of wood, probably with roofs made of hurdling. In one case, the presence of abundant transport vessels suggests that these buildings were used as warehouses.

The pottery recovered in the last excavations is still under examination, but a preliminary analysis provides quantitative values similar to those recovered from the examination of the finds made in 1996. Almost all the finds, mostly ceramics, relate to long-distance transportation. Some 89% of the ceramics comprise closed shapes, of which 55% are early medieval globular amphorae, similar to those found in the area of the church associated with the bishopric⁴².

⁴⁰ C. Negrelli, G. Bucci, V. Coppola, «Villaggio San Francesco 1996», in S. Gelichi, C. Negrelli, G. Bucci, V. Coppola, C. Capelli, «I materiali da Comacchio», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 601-608.

⁴¹ D. Calaon, «Lo scavo di Villaggio San Francesco 1996», p. 517.

⁴² S. Gelichi, D. Calaon, E. Grandi, C. Negrelli, «Il quartiere episcopale di un emporio altomedievale. Gli scavi nel centro storico di Comacchio e la sequenza dei materiali», in *Terre di Mare. L'archeologia dei paesaggi costieri e le variazioni climatiche*, eds. R. Auriemma, S. Karinja, Trieste, 2009, p. 416-426.

The port structures seem to have been conceived in a unitary and uniform project: those who invested in the construction activity of the harbour were certainly able to coordinate human activities and were able to invest significant capital for specific economic objectives.

Moreover the constant natural changes to the line of the channel compelled regular and expensive maintenance works: just as at the riverside harbours of Dorestad regular dredging and cleaning works were essential⁴³. Many wooden platforms were reconstructed during the time, with new extensions following the changing course of the channels.

3.4 *The end of the structures* (D.C.)

Notwithstanding that only a small sample of the large port area has been excavated, it is quite clear that the site ended with a fire. This fire can be dated to the late 9th century: the pottery assemblage uncovered beneath the collapsed wooden planking is definitely no more recent than the 10th century⁴⁴.

After the fire, the archaeological sequence showed no stable occupation of the site, either on the lagoon area, or over the sand dunes.

Environmental changes, also, determined a gradual impoverishment of water on the southern branches of the Po delta: the harbour area of Comacchio started to become obsolete.

3.5 *The potential of the archaeology* (D.C.)

Summarizing, the total extent of the settlement seems to have been about 8 hectares. Furthermore, from the analyses of the aerial photos, the waterfront seems to have been 200-300 metres long. Of this, only a small section has so far been excavated (the trench measures ca. 4x10 metres). Despite this small sample, data now exists concerning a slipway, a probable shipyard, river banks, warehouses and finally the traces of the fire: the archaeological potential of an extensive excavation are obvious. Equally interesting would be an extensive investigation of the area next to the port where – as we have seen in other areas – households, a cemetery and possibly a church have been recovered.

⁴³ W.A. van Es, W.J.H. Verwers, *Excavations at Dorestad. The Harbour: Hoogstraat I*, Amersfoort, 1980, p. 27-31; W.A. van Es, W.J.H. Verwers, *Excavations at Dorestad 3. Hoogstraat 0, II-IV*, Amersfoort, 2009; S. Kalmring, «Dorestad Hoogstraat from a Hedeby/Schleswig point of view», in *Dorestad in an International Framework*, eds. A. Willemsen, H. Kik p. 69-81.

⁴⁴ Both the Glazed Wares 'tipo Sant'Alberto' and the amphorae of a later period are absent.

4 *Rewriting history: the birth of an emporium?* (S.G.)4.1 *What is Comacchio?*

In the few written sources before the 10th century, Comacchio is defined as a place using various words, however almost never was it described as a town⁴⁵. In various episodes Comacchio is termed *insula*, *castrum* and *villa*⁴⁶. Of course, the use of these terms in the written sources depends on the type of text and upon the significance that these terms assumed for the writers and the readers of these documents⁴⁷. Of course, finally, the absence of the mention of a town as such may be due to the fact that this type of settlement at this time was not easily described or readily understood.

The ambiguity (and maybe also the ambivalence) of the terms town/castle, which seem to describe similar settlement types (or even at the same place in time)⁴⁸, are part of this case study. Actually, it is the idea of town as such (or the opposite) during these centuries which may be misleading⁴⁹. Therefore, to define Comacchio only using the written sources would be misleading.

It is therefore preferable to understand the nature of Comacchio by using other indices. The first concerns its topographical location and its spatial articulation. The extent of this site is not precisely determinable, and may never be. Here physical barriers do not exist, which might help to define

⁴⁵ See: A. Samaritani, *Medievalia*, p. 15-16.

⁴⁶ See for instance: John the Deacon, *Istoria Veneticorum*, III, 44, III, 28 and III, 12.

⁴⁷ See the meaning of the term *κάστρον* in the Byzantine written sources between the 6th and 9th centuries (and the corresponding term *castrum* in some areas of the peninsula): T. Lazzari, «Campagne senza città e territori senza centro», in *Città e campagna nei secoli altomedievali*, LVI Settimana di Studi sull'alto medioevo, (Spoleto, 27 marzo – 1 aprile 2008), Spoleto 2009, p. 630-635.

⁴⁸ As described in the Greek sources, while in the Latin sources the term *castrum* has a military connotation: see again T. Lazzari, «Campagne senza città», p. 633. However in some areas we know of examples in which the same settlement evidence has been differently identified using these two words: see for instance the case of the town of Leopoli/Cencelle, founded by Leo IV in northern Latium, which assumed a different name in the written sources following its foundation: F. Bougard in F. Bougard, L. Pani Ermini, «Leopolis – Castrum Centumcellae. Cencelle: trois ans de recherches archéologiques», in *Castrum 7*, Rome-Madrid, 2001, p. 134.

⁴⁹ S. Gelichi, «Alla fine di una transizione? L'Italia settentrionale nel primo Alto Medioevo tra città, villaggi e economie», in *Territorio, Sociedad y Poder*, Anejo 2 (2009), p. 146-151; *Idem*, «La città in Italia tra VI e VIII secolo: riflessioni dopo un trentennio di dibattito archeologico», in *Espacios urbanos en el Occidente Mediterráneo (s. VI-VIII)*, Toledo, 2009, in press.

something outside and inside the settlement (even if we cannot exclude that some spaces would have been protected at that time, as for instance the episcopal nucleus in the 10th century)⁵⁰. This is the opposite to how ancient towns are defined.

From this consideration emerges an interesting element, characteristic of other 'new Adriatic' centres, such as Venice itself, that differentiates these from what existed in earlier periods. Specifically, these places possessed a dispersed nature, which does not mean that at that time they were not conceived as a single unit. In fact, while composed of different elements, the term *habitatores comaclenses* – as it appears in agreement with the Lombards – emphasizes that this place was perceived as unified.

However, within these different spaces a hierarchy of functions is evident: areas were assigned to the ecclesiastical aristocracy (the bishop) (located where the present town exists) and other ecclesiastical institutions (monasteries on the east and west sides of the present historic centre), as well as to economic activities (fig. 19, Colour Plates). The economic activities comprised: an area of the salt-working (on the east side of the modern historic centre), an area dedicated to port and commercial activities (to the west of the present town), and finally the community who traded, transported and fished here, we deduce, would have been located on the many little islands in the lagoon.

The majority of the buildings were constructed in timber. So, too, were the piers, platforms and warehouses made of wood. This is not surprising, considering the wealth of timber in this area⁵¹ as well as the scarcity of reusable ancient materials. Durable materials such as lime and brick (and reused spolia) were almost certainly employed in the 8th-century church, in the foundations of the 7th-to 8th-century workshop (Piazza XX Settembre) and in a building found near Villaggio San Francesco (*supra*, 3.1). Little is known about the architecture of other northern Adriatic settlements of this period, but buildings similar to those found at Comacchio are likely to have existed at Cittanova and Venice⁵².

⁵⁰ The excavations indicate that in this period a fenced enclosure existed on the island where the bishop's seat was located (see: S. Gelichi (ed.), *L'isola del Vescovo*, p. 58-59).

⁵¹ The woodland comprised abundant oak and holm oak, of which archaeological evidence exists: G. Uggeri, *La romanizzazione dell'antico delta padano*, Ferrara, 1975, p. 128-129.

⁵² For Venice see some considerations on household building in S. Gelichi, «L'archeologia nella laguna veneziana e la nascita di una nuova città», in *Reti Medievali*, 9 (2010/2), p. 8-9, Fig. 8; *Idem*, «Venice, Comacchio and the Adriatic Emporia», p. 150-153, Fig. 126. About Cittanova see: D. Calaon, «Cittanova (VE): analisi GIS», in *IV Congresso Nazionale di Archeologia Medievale*, eds. R. Francovich, M. Valenti, Firenze, 2006, p. 216-224.

Another important factor is the economic significance of this settlement. We have recently identified 8th-century amphorae: these are significant indices of Comacchio's role in long-distance trade, as well as of other centres in the northern Adriatic arc where they are also attested⁵³. Another important index consists of a class of unglazed wares that occur in only one fabric in different forms. These are small and medium double handled vessels, with flat bases (fig. 20). The wares occur in large quantities in Comacchio⁵⁴, leading us to believe that these formed part of a local production of trade vessels, designed with flat bases for the shallow river craft that transported goods inland.

Yet another ceramic index is the single fired glazed vessels, often with applied decoration, similar to Forum Ware. But petrological analyses show that these are not imports from Latium or Rome. These 9th-to 10th-century Glazed Wares also occur in other centres of the Romagna and the Venice lagoon⁵⁵.

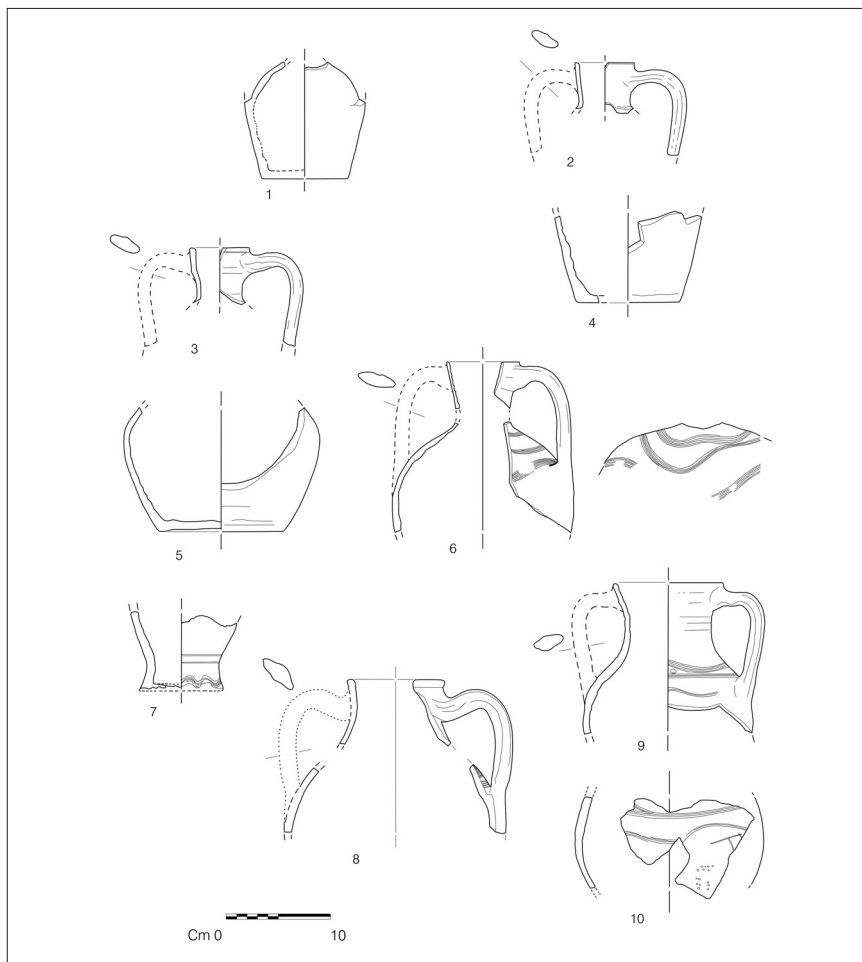
The production centre for these Glazed Wares remains unknown but is likely to be somewhere at either Comacchio within the Po delta area or in the Venetian lagoon.

A further indication of the economic importance of Comacchio is the presence of specialised craft activities. The glass kiln found at Comacchio, like

⁵³ See: S. Gelichi, C. Negrelli, «Anfore e commerci nell'alto adriatico tra VIII e IX secolo», in *Mélanges de l'École Française de Rome. Les destinées de l'Illyricum méridional pendant le haut Moyen Âge*, 120-2, 2008, p. 308-326; *Idem*, «Ceramica e circolazione delle merci nell'Adriatico tra VII e X secolo», in *Actas del VIII Congreso Internacional de Cerámica Medieval*, Ciudad Real, I, 2009, p. 49-62. See also the paper of Claudio Negrelli in this volume.

⁵⁴ This is demonstrated by petrographical analyses made of a number of samples: C. Capelli, «Analisi archeometriche», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 643.

⁵⁵ On these ceramics: S. Gelichi, «Ceramica invetriata», in *Genti nel delta da Spina*, eds. F. Berti, M. Bollini, S. Gelichi, J. Ortalli, p. 632-638. For similar pottery recovered in the Venice Lagoon see: L. Paroli, I. De Luca, F. Sbarra, M. Bortoletto, «La ceramica invetriata altomedievale in Italia: un aggiornamento», in *VII^e Congrès International sur la Céramique Médiévale en Méditerranée*, ed. Ch. Bakirtzis, Tesseloniki 1999, Athens 2003, p. 485-486. This type belongs to a different period and is technically dissimilar from the 'tipo Sant'Alberto' found in the same area: S. Gelichi, M.G. Maioli, «La ceramica invetriata tardo-antica e altomedievale dall'Emilia-Romagna», in *La ceramica invetriata tardoantica e altomedievale in Italia*, ed. L. Paroli, Siena 1990, Firenze 1992, p. 257-259. For a general framework about this type see: G.P. Brogiolo, S. Gelichi, «La ceramica invetriata tardo-antica e medioevale nel nord Italia», in *La ceramica invetriata tardoantica*, p. 29-30 and furthermore S. Gelichi, F. Sbarra, «La tavola di San Gerardo. Ceramica tra X e XI secolo nel nord Italia: importazioni e produzioni locali», in *Rivista di Archeologia*, 27 (2003), p. 123-124.



20. Unglazed wares from the Comacchio excavations.

the celebrated kiln investigated at Torcello in the Venetian lagoon in the 1960s⁵⁶, suggests such artisanal activities were a hallmark of these centres.

Comacchio was clearly economically specialised. This was based on production (salt-working and fishing), as well as the trans-shipment trade. The balance between these two activities is not yet clear. The shaping of an inhospitable lagoon context for an organised and stratified settlement seems to be another characteristic of Comacchio and similar centres. A third

⁵⁶ On the Torcello kiln see: E. Tabaczyńska, «L'officina vetraria», in L. Leciejewicz, E. Tabaczyńska, S. Tabaczyński, *Torcello*, p. 89-153.

feature is the combination of institutions: a civic authority⁵⁷ as well as an ecclesiastical one⁵⁸.

Given these characteristics, it is hardly surprising to conclude that Comacchio bears strong similarity to north European emporia of the type B in Richard Hodges's classification: that is, a permanent settlement dedicated to mercantile activities⁵⁹.

4.2 *The timespan of the earliest emporia*

Recently Michael McCormick has argued that the period of formation and development of the mercantile structures in Venice occurred rapidly⁶⁰. Clearly, the origins of this process cannot be pinpointed to a single moment in time⁶¹, but perhaps to a short period. This should be apparent in

⁵⁷ For the social organization of this settlement there is only the indirect evidence contained in the Capitulary, in which the people from Comacchio are represented by two *comites* (Mauro and Stefano) and by a *magister militum* (Bertarene). It is not clear what the status of these titles was, though note the following on similar social issues at Venice: S. Gasparri, «Venezia fra i secoli VIII e IX. Una riflessione sulle fonti», in *Studi offerti in onore di Gaetano Cozzi*, s. l. 1992, p. 3-18 and F. Borri, «Duces e magistri militum nell'Italia esarcale (VI-VIII secolo)», in *Reti medievali*, 6 (2005/2), p. 1-47.

⁵⁸ The first mention of a bishop is Vincentius who at the time of Felix, archbishop of Ravenna, helped to build the church of San Cassiano. The name of this alleged bishop is known from an inscription of uncertain authenticity. The difficulty in reading the name of the bishop is compounded by the fact that the Liutprand's Capitulary makes no mention of any bishop among the rulers of the Comacchio people, only of a presbyter (*Lupicinus*). Samaritani proposes to untie the characters which are the abbreviation of the title in the inscription of AD 709 (EPC for *episcopus* or *episcopalem*) interpreting this figure as a builder of a presbyteral college (A. Samaritani, *Medievalia*, p. 78-82). However, by AD 781 bishop Vitale is (securely) mentioned for the first time.

⁵⁹ R. Hodges, *Dark Age Economics. The Origin of Towns and Trade. AD 600-1000*, London, 1982, p. 50-52. Of course the debate on the northern European emporia continued after this volume, with many observations on the merits of the classification and on their economic significance: see: R. Samson, «Illusory emporia and mad economic theories», in *Anglo-Saxon Trading Centres. Beyond the Emporia*, ed. M. Anderton, Glasgow, 1999, p. 76-90.

⁶⁰ "... at Venice the tempo of growth and the geographic structures of trade probably changed quickly, even within a space of decades": M. McCormick, «Where do trading towns come from? Early medieval Venice and the northern emporia», in *Post-roman Towns, Trade and Settlement in Europe and Byzantium. I. The Heirs of the Roman West*, ed. J. Henning, Berlin – New York, 2007, p. 44.

⁶¹ *Ibidem*, p. 42.

the archaeological record. Understanding this remains difficult for Venice⁶², due to the conditions in the lagoon⁶³. The same assumption could be applied to Comacchio, where the archaeology has been better defined in three specific interventions: the area around the modern cathedral (Piazza XX Settembre), the area of Villaggio San Francesco/ex-sugar refinery and finally the area beside the monastery of S. Maria in Aula Regia (in the Via Mazzini).

In Piazza XX Settembre no traces of a permanent settlement existed before the 6th century, while the trenches made in the Via Mazzini, close to the monastery of S. Maria in Aula Regia, showed no phases preceding the 7th century⁶⁴. On the other hand, 5th-to 6th-century remains, as we have seen, were found in the area of the ex-sugar refinery (*supra*).

So how did a settlement articulated by several households become a major nucleus, hierarchically arranged in spatial terms? The evidence from at least two trenches indicates a rapid transformation, possibly encompassing

⁶² Unfortunately at the moment we do not have specific data concerning the most ancient phases of the settlement around Rivo Alto which took the name of Venice. In the excavations of the Ca' Vendramin Calergi court, a site which is not too distant from Rialto, the most ancient phases identified belong to the 8th century and consist of a household (V. Gobbo, «Lo scavo d'emergenza nel cortile occidentale di Ca' Vendramin Calergi», in *Ca' Vendramin Calergi. Archeologia urbana lungo il Canal Grande di Venezia*, ed. L. Fozzati, Venezia, p. 41-57). Older levels have been discovered in the area of S. Pietro di Castello in Olivolo, where during the 8th century the bishop established his seat (S. Tuzzato, «Venezia. Gli scavi a San Pietro di Castello (Olivolo). Nota preliminare sulle campagne 1986-1989», in *Quaderni di Archeologia del Veneto*, 7 (1991), p. 92-103; *Idem*, «Le strutture lignee altomedievali a Olivolo (San Pietro di Castello – Venezia)», in *Studi di archeologia della X Regio in ricordo di Michele Tombolani*, Roma, p. 479-485; S. Tuzzato *et alii*, «San Pietro di Castello a Venezia. Nota preliminare dopo la campagna 1992», in *Quaderni di Archeologia del Veneto*, 9 (2001), p. 72-80). On the basis of the evidence of church foundation scholars have suggested that the grow of this settlement happened during the 8th century (M. McCormick, *Origins of the European Economy. Communications and Commerce. AD 300-900*, Cambridge, 2001, p. 523-531; *Idem*, «Where do trading towns comes from?», p. 49-50), but this documentary evidence raises a number of issues: F. Baudo, *Stato degli studi, linee di ricerca e prospettive future per l'archeologia dell'edilizia religiosa altomedievale nella laguna di Venezia*, PhD dissertation, Venice 2006; S. Gelichi, «L'archeologia nella laguna veneziana», p. 6-8, Fig. 4.

⁶³ For a general framework of research activities in the lagoon see the recent S. Gelichi, «The future of Venice's Past and the Archaeology of the north-eastern Adriatic Emporia during the Early Middle Ages», in *Studies in the Archaeology of the Medieval Mediterranean*, ed. J.G. Schryver, Leiden, 2010, p. 175-210.

⁶⁴ G. Bucci, «COM 01, via Mazzini», p. 557-558.

little more than a few decades. Between the end of the 7th and the beginning of the 8th centuries, important changes occurred in the area of Piazza XX Settembre (with the construction of a workshop) whereas at Villaggio San Francesco at the same time the structures for the river traffic, including platforms and warehouses, were constructed. This coincides with the date of the celebrated Capitulary (either AD 715 or AD 730)⁶⁵ which confirms the existence of Comacchio as a nucleus with a significant civic identity (see *infra*).

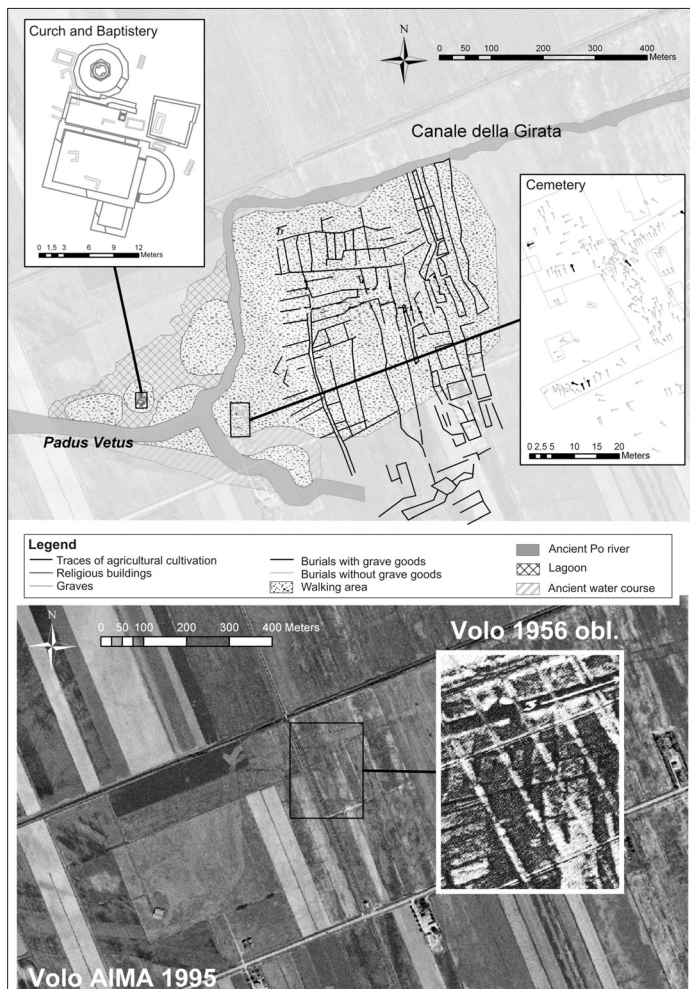
In short, as for Venice, so for Comacchio: in both places the archaeology provides the impression of rapid change.

4.3 *The modes. Comacchio and other settlements in the territory of Ferrara*

In the territory of Ferrara the settlement sequence suggests now continuity from the Imperial Roman period to Late Antiquity, judging from the villa and associated cemetery described above, which then was re-located to form a new nucleus concentrated upon the lagoon, the dunes and coast. A similar process of settlement aggregation during the 7th to 8th centuries has been identified at Santa Maria in Padovetere or Vaccolino, nearby the Insula Silva. Here, too, the location and the associated cemetery suggest an emphasis upon fishing as well as farming⁶⁶ (fig. 21).

⁶⁵ Some scholars, particularly Mor (G.C. Mor, «Un'ipotesi sulla data del *pactum* c.d. Liutprandino con i *milites* di Comacchio relativo alla navigazione sul Po», in *Archivio Storico Italiano*, 135 (1977), p. 493-502) suggested that the *pactum* might reflect a situation which pre-dates the 8th century (as the *pactum* explicitly refers to ancient customs). This does not modify the perception that it is only between the last quarter of the 7th century and the first quarter of the 8th century that Comacchio and its economy became specialised.

⁶⁶ This is the interpretation of linear features clearly visible in aerial photos situated north-east of the ecclesiastical complex of Santa Maria in Padovetere. A comparison for such hydraulic-agrarian systems within the inland of the Venetian lagoon can be found at the site of Cittanova-Eraclea: D. Calaon in S. Gelichi, «Flourishing Places in north-eastern Italy. Towns and emporia between Late Antiquity and Carolingian Age», in *Post – Roman Towns and Trade in Europe, Byzantium and the Near East. Vol. I. The Heirs of Roman West*, ed. J. Henning, Berlin – New York, 2007, p. 88-93; *Idem*, «Cittanova (VE): analisi GIS», p. 216-224. Sulla necropoli dell'Insula Silvia vd. S. Patitucci Uggeri, «La necropoli medievale dell'insula silva sulla via Romea», in *Atti e Memorie della Deputazione provinciale ferrarese di storia patria*, s. III, 21 (1975), p. 1-32, in particular p. 26-29; M. Simoni, *Le valli del comacchiese – Trasformazioni morfologiche e insediative dal Bronzo Finale all'Alto Medioevo*, Ferrara, 2001, p. 87; C. Corti, «Santa Maria in Padovetere», p. 549-552; D. Calaon in S. Gelichi, D. Calaon, «Comacchio: la storia», p. 407-410.



21. Santa Maria in Padovetere: a survey of the field systems (above) also visible in an aerial photograph (below).

This is a general framework for a lagoonal area of some considerable instability in Late Antiquity. This however is only one of the geographical prisms through which we can analyse these processes. An alternative prism is the micro-scale: the short time-span of the main mercantile structures at Comacchio in comparison to but perhaps culminating in a substantial cult centre, the cathedral.

A key to understanding the timeframe may perhaps be the construction of the artificial channel, known as the Motta della Girata, which led directly from the Po di Primaro to the inner lagoon. This is almost certainly

another index of the increasing economic importance of this settlement. Clearly, this construction in common with the settlement as a whole merits more investigation.

Presently, the evidence amounts to a settlement focus in the far western part of the lagoon (the late antique villa)⁶⁷ and the presence, of more or less contemporary traces of structures (6th century), still in the western part (Villaggio San Francesco), and in the eastern sector (in the Piazza XX Settembre, again beginning in the 6th century). Moreover, in the area of Villaggio San Francesco traces of a cemetery and early medieval finds including liturgical furniture⁶⁸ have been found indicating the existence of a church hereabouts. Both this cemetery and the liturgical furniture, it should be noted, may belong to a later phase of the settlement history here and therefore do not yet demonstrate an early church⁶⁹.

The last analysis of the settlement dynamics at Comacchio is the inter-regional scale encompassing the north Adriatic region. This has been previously reviewed⁷⁰: Comacchio entered into a commercial competition involving the entire Adriatic arc. Its history and fortunes (or misfortunes) cannot be comprehended if they are not considered in this larger context. Nevertheless, its *raison d'être* (and the motives for its origin and development) resembles a series of new (or renewed) settlement centres around the northern Adriatic coast including Adria and the settlements of the Venice lagoon, Cittanova and Jesolo, Caorle and Grado and also the new Istria centres of Capodistria and Isola.

⁶⁷ The presence of a villa in this locality is based upon surface finds brought to light during construction works in 1986 (M. T. Pelliccioni in P. Saronio, *Relazione sul saggi*). However, the date of the villa and its relationship to the settlement of the 6th century which took shape at that time on the coastal dune has to be established.

⁶⁸ Some of these have been republished by P. Porta, «Comacchio dalla Tarda Antichità all'Alto Medioevo», p. 474, Figg. 1-3. For other finds of sculpture from the same area, later found in walls in Comacchio or else known from old photos, see: S. Gelichi in S. Gelichi, D. Calzani, «Comacchio: la storia», p. 387-394, Figs. 4-7.

⁶⁹ For a long time the existence of two churches has been proposed on the basis of the recovery of two octagonal structures, interpreted as part of a baptistery, in this area (S. Patitucci Uggeri, «I 'castra' e l'insediamento sparso tra V e VII secolo», p. 448-452). This though has now been challenged: see: E. Grandi, «La cristianizzazione del territorio», p. 426-431.

⁷⁰ S. Gelichi, «The eels of Venice. The long eighth century of the emporia of northern region along the Adriatic coast», in 774. *Ipotesi su una transizione*, ed. S. Gasparri, Pogibonsi 2006, Turnhout 2008, p. 107-112.

4.4 *The motives for founding Comacchio*

The written sources do not mention any foundation act for the origin of Comacchio. This seems to be characteristic of other northern Adriatic centres including Venice⁷¹. This may explain the necessity to link the beginnings of Comacchio with the creation of an anti-Lombard defensive system in the early 7th century (though the written sources do not explicitly mention it)⁷².

Comacchio, which was formally under Byzantine control⁷³, seems to be governed by its own local authority, as the celebrated 8th-century Capitulary declares. A presbyter is mentioned; there were also a *magister militum* and two *comites*, which seem not to have been involved with either the exarch or archbishop of Ravenna, who had interests here⁷⁴. How this community took shape as well as how its civil and ecclesiastical powers were established and evolved is not yet clear.

However, Liutprand's Capitulary defines the town's existence, indicating its partial autonomy which may have been a decisive factor in favouring its growth as a commercial centre. Quite how this occurred within the political circumstances needs to be considered.

Comacchio, judging from the archaeological evidence, represented a point where local goods (salt) and imported ones (oil, wine, spices, maybe

⁷¹ "Venice was certainly not founded by a king": McCormick, «Where do trading towns come from?», p. 44.

⁷² The military foundation of Comacchio by the Byzantines might be supported by the fact that this site is sometimes called a *castrum* in the written sources and its inhabitants sometimes are defined as *militēs*: see: S. Patitucci Uggeri, «Testimonianze archeologiche del 'castrum Comiaculum'», in *Archeologia Medievale*, 3 (1976), p. 283-291; *Eadem*, «Il 'castrum Comiaculum': evidenze archeologiche e storico-topografiche», in *La Civiltà Comacchiese*, p. 263-302; and more in general *Eadem*, «I 'castra' e l'insediamento sparso». But *militēs* as people is a common definition in Byzantine Italy.

⁷³ M. Montanari, «Il capitolare di Liutprando: note di storia dell'economia e dell'alimentazione», in *La Civiltà Comacchiese*, p. 462.

⁷⁴ See the presence of the archbishop Aurelian in the foundation (ca. AD 540) of the nearby *monasterium* (here equivalent to *ecclesia*, later a baptismal church) of Santa Maria in Padovetere. To further illustrate this renewed interest of the Ravenna archdiocese in these territories mention must be made of another important foundation, the church of San Giorgio di Argenta completed by Agnellus, archbishop from Ravenna, in ca. AD 570. See also the possible association with Archbishop Felix of Ravenna described in footnote 63.

textiles) were trans-shipped and dispatched inland. Two elements made this possible: the goods circulating in the Adriatic (or more generally in the east Mediterranean) were acquired in return for other goods, or perhaps some forms of coined payments that guaranteed and sustained this commercial transaction. Its existence can only be explained by its access to a surplus generated by inland territories in contact with the traders of Comacchio by way of a web of rivers.

How was this system managed? One clue appears to be the presence here of monastic foundations, directly (or indirectly) promoted by the Lombard kings (and aristocrats). This patronage was motivated both by religious and commercial reasoning. These monasteries quickly became places (together with the towns) which might manage agricultural resources, converting them into a surplus. Unsurprisingly the limited written sources available indicate that these monasteries owned warehouses and imposed tolls within the towns and ports.

Ross Balzaretti, analysing this phenomenon, recognised this conjunction of interests in the creation of Comacchio, but he defined this as a consequence of local circumstances (contingent upon the nature and dimension of the commercial traffic) and used the archaeological sources to support his hypothesis⁷⁵. We have discussed elsewhere the reasoning for a negative evaluation of the archaeological urban record in this period⁷⁶. This certainly needs to be revisited⁷⁷.

The same issue exists for the archaeology of monasteries in this region as is shown by the results of the recent excavations in Nonantola, a royal monastery founded towards the mid of the 8th century between Modena and Bologna. The earliest phases of this *coenobium* demonstrate not only its important economic wealth, but also that it was inserted immediately within this economic system, as can be shown by the presence of glob-

⁷⁵ R. Balzaretti, «Cities, Emporia and Monasteries: Local Economies in the Po Valley, c. AD 700-875», in *Towns in transition. Urban Evolution in Late Antiquity and the Early Middle Ages*, eds. N. Christie, S.T. Loseby London 1996, p. 213-234.

⁷⁶ S. Gelichi, «The eels of Venice», p. 84-85.

⁷⁷ Where the archaeology has been of a higher standard we can today appreciate the opportunity to contribute to a larger historical discourse. See, for example, the case of the excavations of the Piazza Ferrari, Rimini where 8th-century contexts have been brought to light (C. Negrelli, *Rimini capitale. Strutture insediative, sociali ed economiche tra V e VIII secolo*, Firenze, 2008, in particular p. 42-44 and 86-102). For a revision of the circulation of the amphorae in these later periods in Milan, Brescia e Verona, see: S. Gelichi, C. Negrelli, «Anfore e commerci», p. 307-326.

ular amphorae or the trade vessels of other types distributed within Comacchio⁷⁸ (fig. 22).

Furthermore, a revision of the published data of finds from other monastic contexts offers interesting results as is apparent, for example, in the case of San Salvatore a Brescia⁷⁹. A further aspect which should not be underestimated is the frequent mention of *negotiantes*, both in the juridical sources⁸⁰ and the private documents of this period. From what we can comprehend these constituted social groups that were not directly linked to the king, but characterised by a discrete territorial patrimony. Moreover, these groups normally used coins in economic transactions⁸¹ and possessed sufficient wealth to invest in representational structures, such as private chapels⁸².

⁷⁸ For the archaeology of Nonantola see: S. Gelichi, M. Librenti (eds.), *Nonantola I. Ricerche archeologiche su una grande abbazia dell'altomedioevo italiano*, Firenze, 2005; S. Gelichi, M. Librenti, A. Cianciosi, *Nonantola e l'abbazia di San Silvestro alla luce dell'archeologia. Ricerche 2002-2006*, Carpi, 2006; S. Gelichi, «Costruire territori. Il monastero di Nonantola e le sue terre nell'altomedioevo», in *Hortus Artium Medievalium*, 14 (2008), p. 63-79.

⁷⁹ For the finds from the excavations of S. Salvatore at Brescia see: G.P. Brogiolo (ed.), *S. Giulia a Brescia. Gli scavi dal 1980 al 1993. Reperti preromani, romani e alto medievali*, Firenze 1999. The trade amphorae have been published by B. Bruno and S. Bocchio, «Le anfore da trasporto», in G. P. Brogiolo (ed.) *S. Giulia a Brescia*, p. 231-260. A number of sherds are illustrated in plate C7-8 (these are residual finds in 10th-century deposits) could be 8th-century globular amphorae (these sherds have typological elements similar to the globular amphoras found in Comacchio). Another fragment, a base of a globular amphora published in plate CII, was found within a context which has been not inserted in the sequence. Some fragments of globular amphoras (Tav. C6) were found in a level occupied by a Lombard house dated to the 7th century. From the same chronological context (Period IIIB ascribed to AD 680) there are also Unglazed Wares (CI.1), with a light fabric similar to Comacchio examples. Therefore it is proposed here that Period IIIB may be later, and possibly belongs to the first decades of the 8th century. Thanks to Claudio Negrelli for the detailed information relating to the contexts from San Salvatore at Brescia.

⁸⁰ For the acts of Astolfus: S. Gasparri, C. Azzara (eds.), *Le leggi dei Longobardi. Storia, memoria e diritto di un popolo germanico*, Milano, 1992, p. 250-251.

⁸¹ “Un ceto di possessori nella cui ricchezza entrava in modo significativo il denaro”: in this way they are defined by S. Gasparri, «Mercanti o possessori? Profilo di un ceto dominante in un'età di transizione», in *Carte di famiglia. Strategie, rappresentazione e memoria del gruppo familiare di Totone di Campione (721-877)*, eds. S. Gasparri, C. La Rocca, Roma, 2005, p. 161.

⁸² The social group most similar to the *negotiantes* is represented by the Totone family, recorded in a large number of documents, which inform us about their economic conditions and their strategies, see: S. Gasparri, C. La Rocca (eds.), *Carte di famiglia*. This

A third and final clue is the existence of places such as Comacchio itself: its archaeological importance between the second half of the 7th and the first half of the 8th century cannot be understated. Such a place could not have been supported by the salt trade on its own. Was it and indeed were similar centres like Venice founded to support the increasing trade in prestige goods within closed aristocratic circles? The goods themselves are partly known: salt made locally and garum, oil and spices from the east Mediterranean. Judging from amphorae found in Piazza XX Settembre excavations wine was also being traded, as perhaps were textiles.

And what did the people of Comacchio obtain in return? There are three different possibilities: money, slaves and other prestige goods.

The citizens of Comacchio collected customs tolls which, as was noted above, became a significant part of the wealth of the Lombard *negotiantes*⁸³. Such moneys circulated within the Lombard territories, although these are seldom found in archaeological contexts⁸⁴.

The trade in slaves is a more difficult issue. Michael McCormick identified the slave trade as the motive for the growth of emporia like Venice⁸⁵. Paolo Delogu has now cast doubt upon this hypothesis⁸⁶, and his fellow historian, Stefano Gasparri, reviewing the sources for the Totone family where slaves are mentioned, suggests that this should be considered more a 'movement' of peoples and not a real trade⁸⁷.

As to other goods that the community at Comacchio received, the only obvious item, evident from our excavations, and produced in the Alps is pietra ollare. Pietra ollare was in use throughout the Middle Ages, and being highly visible represents others that have not survived. So, for example, if, as we have suggested, the origins of this economic system are linked to a better organisation of the landed properties and concomitant resource management, we might add to the list of goods

family built a chapel erected in Campione and recently investigated: P. Blockey *et alii*, «Campione d'Italia. Scavi archeologici nella ex chiesa di San Zeno», in S. Gasparri, C. La Rocca (eds.), *Carte di famiglia*, p. 29-80. For a general analysis of these issues see also S. Gelichi, «La ricchezza nella società longobarda», in *Les Élités et la Richesse au Haut Moyen Age*, eds. J.P. Devroey, L. Feller, R. Le Jan, Turnhout, 2010, p. 157-181.

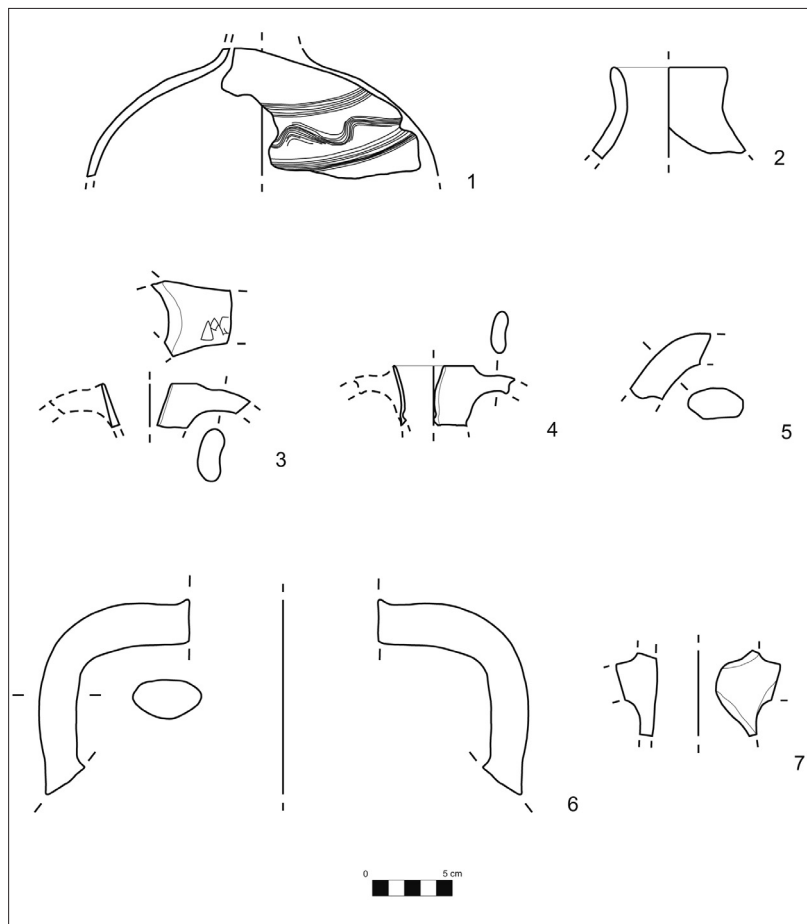
⁸³ See: S. Gasparri, «Mercanti o possessori?», p. 157.

⁸⁴ Above all the lack of coins used for the smaller necessities is indicative, particularly in the period from AD 700 and 780: P. Toubert, *Dalla terra ai castelli. Paesaggio, agricoltura e poteri nell'Italia medievale*, Torino, 1995, p. 235.

⁸⁵ M. McCormick, *Origins of the European Economy*.

⁸⁶ See: Paolo Delogu's paper in this volume.

⁸⁷ S. Gasparri, «Mercanti o possessori?», p. 157.



22. Pottery from the excavations of the monastery at Nonantola (MO):
1-4: unglazed wares; 5-7: globular amphorae.

flowing around this system agricultural products such as wood and perhaps minerals.

Finally the transport employed by the people of Comacchio merits consideration. Unfortunately we do not have archaeological information on the boats used here, bearing in mind that these were vessels adapted to shallow lagoon environments. The important number of river boats – *monossili* – recovered in this region (and datable to the Middle Ages), clearly provides an important indication of the kind of vessels in use. Moreover, we have no information on whether traders from Comacchio ventured to the Adriatic and the Mediterranean. Slightly later written sources never mention people from Comacchio, for instance, in Levantine ports. It is

likely that traders belonging to other groups, under Byzantine auspices, transported goods from these regions to Comacchio.

4.5 *Decline*

Today Comacchio is a pleasant town of low houses beside channels and located on the margins of a lagoon. This is a place which drainage works of the last century transformed from an island into a seaside tourist centre. Nothing of what is visible today offers any clue of its early medieval past. As Frederic Lane commented, Comacchio did not become Venice and this has indisputably been its destiny⁸⁸.

The dual relationship with Venice is important, especially in the narratives of which the pre-eminent is the *Historia Veneticorum*. In three passages, two belonging to the 9th century and one to the early 10th century, Comacchio was the object of attacks by the Saracens and the Venetians. The last description recorded an episode with a definitive outcome⁸⁹. Apparently, the settlement was burnt and the people of Comacchio were deported to Venice. Hence, the diverse yet indifferent written sources suggest a competition between the centres in the northern Adriatic area which culminated in the physical elimination of Comacchio.

Certainly, we cannot associate the decline of Comacchio with the conquest of the Lombard kingdoms by the Franks (and the probable transition of these territories within a new comital districts, a subdivision introduced by the Carolingians)⁹⁰. Comacchio, after all, continued to be mentioned in the written sources during the 9th century, when Carolingian hegemony held sway here, sometimes in association with the Venetians. So, the *pactum Lotharii* of AD 840 provided the Venetians with the opportunity to move freely around the Po plain and instructed that their fleet help defend the kingdom, but nevertheless the people of Comacchio continued to enjoy confirmation of the prerogatives established by King Liutprand. Interestingly, though, in the second half of the 9th century, the inventories of the

⁸⁸ F.C. Lane, *Venice. A Maritime Republic*, Baltimore-London, 1973, p. 6.

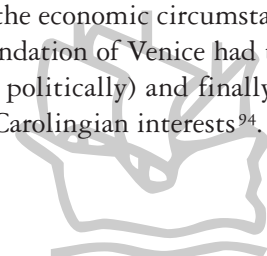
⁸⁹ John the Deacon, *Istoria Veneticorum*, III, 12 records that Comacchio in AD 875 was damaged by a Saracen incursion. In the early Carolingian period, between AD 808 and AD 809, Comacchio was caught up in the conflict between Franks and Byzantines, and on that occasion a Byzantine fleet attempted to attack it in vain (R. Cessi, *Venezia ducale. I. Le origini*, Padova, 1927, p. 151). In AD 881 Comacchio was attacked by Venice for the first time (John the Deacon, *Istoria Veneticorum*, III, 28) and in AD 932 a second and final attack occurred leading to the defeat of Comacchio: see: *ibidem*, 44.

⁹⁰ A. Carile, «L'area alto-adriatica», p. 383.

monastery of Bobbio record a tribute in pepper and cinnamon paid to the port of *Mantua* by Venetians, while the people from Comacchio were to be paid in coins and salt⁹¹.

This fact, Cinzio Violante believed, is proof that control of the spice trade was now monopolized by the Venetians⁹². The archaeological evidence seems to sustain this conclusion. The uppermost sequences of Villaggio San Francesco documented in the excavations of 2008-2009 identified structures (bridges, banks and warehouses) that had been dismantled after a fire and were not restored. The area was then abandoned and covered by a thick sediment of alluvial origin. The fire, destruction and abandonment, may well derive from the sack of AD 932. Note should be taken, though, of the evidence from the excavation of Piazza XX Settembre, where traces of a 10th-to 11th-century palisade were found, presumably to defend the island and in particular to protect the bishop's church⁹³.

These violent acts belong to the final result of a process and do not necessarily explain the reasons for the internecine warfare between these centres. Essentially, the decline of Comacchio was a result of its progressive marginalization within the economic circumstances of the northern Adriatic area, as the new foundation of Venice had to appear more functional, efficient (militarily and politically) and finally more aggressive to serve first Frankish and then Carolingian interests⁹⁴.



⁹¹ *Inventari altomedievali di terre, coloni e redditi*, eds. A. Castagnetti, M. Luzzati, G. Pasquali, A. Vasina, Roma, 1979, p. 138.

⁹² C. Violante, *La società milanese in età precomunale*, Bari, 1972, p. 10. Montanari, has observed that the monopoly of the supply of salt passed into Venetian control early in its history: M. Montanari, «Il Capitolare di Liutprando», p. 470.

⁹³ *L'isola del Vescovo*, ed. S. Gelichi, p. 58-59. See also: S. Gelichi, R. Belcari, D. Calaon, E. Grandi, «Spolia in contesto», in *Hortus Artium Medievalium*, p. 50-51.

⁹⁴ See S. Gelichi in S. Gelichi, D. Calaon, «Comacchio: la storia di un emporio», p. 413-414; S. Gelichi, «The eels of Venice», p. 102-107.