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### AN OFFPRINT FROM

# FORTIFIED SETTLEMENTS IN EARLY MEDIEVAL EUROPE

DEFENDED COMMUNITIES OF THE 8TH-10TH CENTURIES

Edited by

NEIL CHRISTIE & HAJNALKA HEROLD

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## Castles on the Water? Defences in Venice and Comacchio during the Early Middle Ages

### Sauro Gelichi

Aquis pro muro munitur ('Defended by the waters as if by a wall') Giovan Battista Cipelli detto 'L'Egnazio', c. 1478–1533¹

### Fortified Lagoons?

To defend oneself is not necessarily equivalent to fortifying oneself. Etymologically speaking, to defend (oneself) means 'to keep someone distant', while to fortify is equivalent to 'making stronger, more stable or more resistant'. Of course, being fortified means that one is also able to defend oneself better, but defence is possible even in the absence of built fortifications.

Lagoons are special spaces. They are the 'empty spaces' of the mainland (the word 'lagoon' comes from the Latin *lacuna*), of varying environmental/geophysical character; they are spaces that, over time, have been exploited and inhabited by man and have thus constituted places that were presumably necessary to protect for their resources or for the people living/working there. But to defend a lagoon does not necessarily imply its fortification (even though this may well have occurred).

Starting from these presuppositions, I asked myself whether the repeated references in the traditional historiography to the presence of castles and fortifications in two of the most important lagoons of northern Italy during the Early Middle Ages, those of Venice and of Comacchio (Fig. 19.1), were based on real facts and structures or whether they are the product of errors or misrepresentations, such as in the interpretation of written sources. Furthermore, since it was certainly necessary to defend a lagoon (or to defend oneself within the lagoon), I also asked myself whether the building of walls and castles was necessary for this (as the ambiguous written sources seem to indicate) or whether other 'systems' or provisions, perhaps simpler,

were relied upon that were more efficacious yet distinct. This paper explores what we are told, what we can trace and what we cannot see of these lagoonal 'defences'.

### Natural Defence/Artificial Defence: The Venetian Lagoon and the *castra*

'Venice was a city whose walls were saltwater' wrote Crouzet-Pavan (1999, 31–32), referring to an important topos of the Descriptions and the Itineraries of the Modern Age (Calabi 2003, 7), themselves taken from the documents produced by the Savi alle Acque (the Magistrates of the Waters). Indeed, Egnazio, a 16th-century humanist, wrote that the city of Venice was defended, since it was 'founded in the water, surrounded by water, as if these waters were a wall' ('Venetorum urbs/..../in aquis fondata/ aquarum ambitu circumsepta/aquis pro muro munitur') (cited by Tiepolo 1983, 17, n. 4).

Certainly, navigating within the lagoon has always been problematic. Anyone wanting to access the various inhabited islands, which constituted the irregular-shaped archipelago since at least Late Antiquity, would have had to overcome the immense problems posed by the shallow waters, the innumerable shoals and the limited landmarks (Marzo 2012). These difficulties did not lessen with time, and it was particularly challenging if one actually wanted to reach the archipelago that was to become a city from the 9th century AD onwards: the *civitas aput Rivoaltum* – 'the city at Rivoalto' (Gelichi 2015). In addition, one can draw upon the long-held myth of the lagoon as a natural refuge and

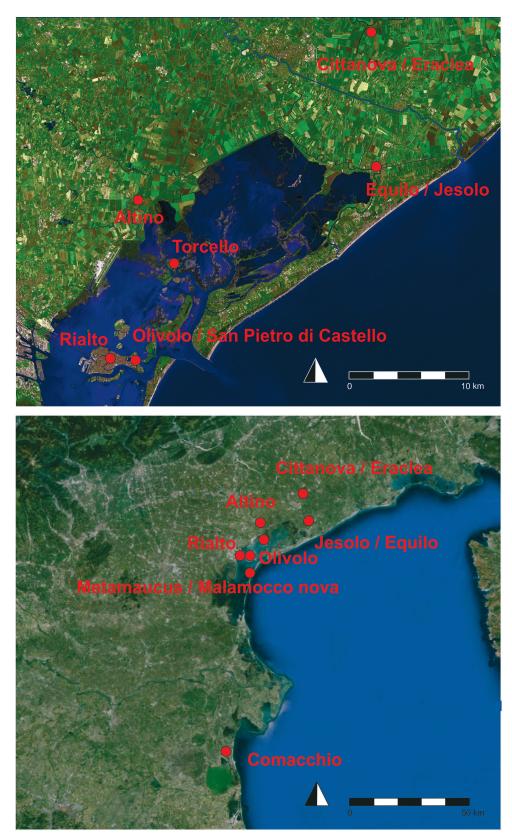


Figure 19.1. Location of the Venice lagoon and Comacchio, in particular, Venice, Olivolo and Rivoalto (Image by University of Ca' Foscari, Venice).

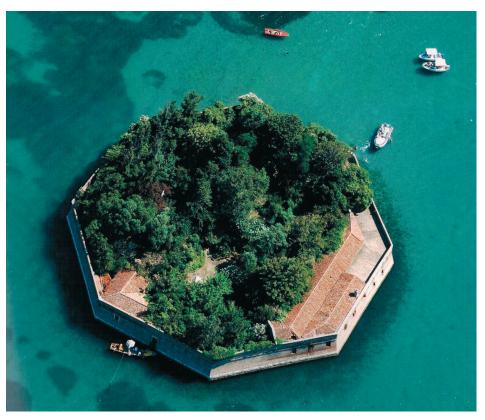


Figure 19.2. Aerial view of the Austrian fortification 'Ottagono Alberoni' in the Venice lagoon (Image from Colamussi and Tozzo Netti, 2007, 27).

shelter for large numbers of people displaced from mainland Italy in face of barbarian invasions, notably that of Attila in the mid-5th century – an image portrayed early on by John the Deacon (Giovanni diacono), the probable author of the *Istoria Veneticorum* and the *Origo civitatum Italiae seu venetiarum. Chronicon altinate et Chronicon gradense.* Whether these incursions and this flight of refugees first prompted the colonisation of the lagoon between the 5th and 6th centuries AD is, however, a different issue (La Rocca 1994; Gelichi 2006).

In light of these presuppositions, it is not surprising that very few fortifications have been documented in the Venetian Lagoon, at least up until the modern era (Concina 1995), even though the Serenissima (Venice) revived (or reinforced) a defensive project for its boundaries from the late 13th century, in the wake of a changed politico-military situation. This project comprised the articulation of a well-structured system of fortifications (towers or small castles), defending the main points of access into the lagoon's navigable canals or, rather, protecting/overseeing the net of inhabited areas located along the edge of the lagoon. This system saw progressive expansion, starting from the early 16th century; hence, at the fall of the Republic in 1797, the lagoon was almost completely enclosed by a series of fortifications on artificial islets. It was further reinforced

under Austrian and French dominations (Moro 2001) and inherited by the Italian Army in the 19th century. Thus, anyone who crosses the lagoon today may well chance upon the remains of these imposing fortifications (many adapted over time to sustain the fire of new artillery); and the natural impression may arise of a decidedly, and perhaps long-fortified lagoon (Fig. 19.2).

However, in more than one circumstance, the historiography (and not only the local one) speaks about the existence of a series of fortifications and castles built at various moments in the lagoon's history, and especially during the Early Middle Ages. In some cases, castles or fortresses were directly cited from written sources; or in other cases, their presence was hypothesised on the basis of toponymic approaches or simply on the principle of plausibility. It is useful to address this subject in order to bring clarity – as far as is possible – to the issue. Indeed, the concept of a fortified lagoon is a topos that has been hard to extinguish, despite the weakness of many of the hypotheses, as will be seen. This topos has entered directly into that kind of 'basic history' of the lagoon that poorly researched archaeology (sadly true for the lagoon until very recently) has tended to call upon and use to explain the findings discovered (and not vice versa). In this way, a form of circular reasoning has been produced that seems

to contain everything, including castles rising up out of treacherous waters.

In sum, three categories of castle or fortified structures are postulated in the Venetian Lagoon: (i) those sites based on toponymic traces; (ii) those attested through seemingly explicit citations in the written sources; and (iii) those hypothesised on the basis of 'historical plausibility' (i.e. a fortification should be in a certain place). Below we explore and debate each of these postulated types.

An example of the first category, where the place name signifies or supports a form of fortification, coincides today with a district of Venice. The existence of a castle in this area, specifically on the island of Olivolo (which became the bishop's seat in c. AD 750: Istoria Veneticorum II, 19; Cessi 1963, 119, n 3) is purely based on the place name Castello. Traces of a large wall were identified in the 19th century on the isola delle Vergini ('island of virgins'), but it is not clear if this was related to a fortification (Casoni 1856). The castle toponym, however, may not pre-date the 11th century. When John the Deacon spoke about the episcopal seat he always referred to it as Olivolo (e.g. Istoria Veneticorum II, 21, 24, 44). Indeed, in his time (the very start of the 11th century), the castle toponym was associated with a canal: thus in a passage about the walls of Venice he wrote 'a capite rivuli de Castello' ('rivolo' = small waterway) (III, 39) (see below). The first use of Castello not associated with a canal is found in a document dated 1034: de rivo de Geminies qui discorruit ad Castellum (see Cessi 1965, 132, n. 1: the waterway in question is that of San Francesco de la Vigna, then de Arsenatu: Dorigo 2003, 28, 675). After AD 1050, the bishops of Olivolo were called 'di castello' (or 'castellani') (Cessi 1965, 132). What then are the origins of this toponym? Some scholars link it with the city walls (these being the castle walls); others connect it to the Byzantine fortification that perhaps existed in Rivoalto before the establishment of the Ducal Palace (Dorigo 1983, 534–545; but see below on the palace/castrum). Yet excavations on the island of Olivolo, near the location of the episcopal seat (Tuzzato 1991 and 1994; Tuzzato et al. 1993) have revealed no trace of any defensive structure. It remains obscure why local written traces and the castle toponym itself reference a possible fortification such a long time after it would have been functional.

However, if we place the documentary references to the toponym in chronological order, we observe a transition from a small waterway (*rivulus de Castello*: start of 11th century) to place ('castello': 1034) and then to the episcopal seat (second half of the 11th century). Furthermore, the toponym *castellum* had many meanings in this period – for example, relating to the presence of antique ruins within a city (Settia 1997, 818, 827, 830; Gelichi 1998). One could also observe that in Byzantine Greece the verb καστελλόω could mean 'to furnish with a battlement top or tops, like a ship of war' (*Greek Lexicon, sub voce*, 632); moreover,

the contemporary word καστελλάτος meant 'a castellated ship of war' – from which the Latin term *navi castellate* originates, signifying heavily fortified ships with 'castle-like timber towers' at both bow and stern – and such vessels were perhaps in use in Venice during the 9th century (Ray Martin 2001, 173, 282–285, 404, 448).

Just as the term κάστελλος (from the Latin *castellum*) is a polysemic word, so too is the term κάστρον (from the Latin *castrum*) (Lazzari 2009, 630–635). In particular, from the 6th century onwards, in the Byzantine-controlled areas of Venice and Ravenna (and southern Italy), castrum also seems to have assumed 'an ambiguous meaning that is not observed elsewhere' (ibid., 635). Analysis of John the Deacon's Istoria Veneticorum has already underlined the 'casual' use of this term to indicate places that were of institutional and structural equivalence (Gelichi 2007, 83–84, fig. 5). Establishing the ratio of this usage to other meanings of the word is difficult, since this ratio likely changes even within the work itself according to the narrative circumstances and, most probably, the sources from which John drew his information (cf. Berto 2001, 208–232). This issue is important, if primarily to highlight the insidious danger associated with translating it in its most common form in medieval Latin, i.e. castle. This observation should apply to other works that have heavily influenced the construction of the legend of Venice's origins, including the Origo. However, a translation 'to the letter' represents the most popular option taken, thereby generating towers and castles to populate the lagoon's early medieval (and Byzantine) landscape.

This militarised representation of the lagoon appears confirmed by another source, namely a 10th-century text, written in Constantinople: the De Administrando Imperio of the Emperor Constantine VII Porphyrogenitus composed between 948 and 952. In this text (De Administrando Imperio, 27/90-95), settlements like Murano, but also Venice itself (better referred to as 'civitas aput Rivoaltum'), are defined as κάστρα (but with Torcello an exception, being called εμπόριον μέγα or 'grand emporium'), as well as other localities less easily identifiable (Cessi 1963). However, once again, the trap is even more evident. As noted, κάστρον in Byzantine sources can assume various meanings: a military stronghold; a settlement protected by a wall, equipped, or not, with jurisdiction on the surrounding territory; a territory or district (Lazzari 2009, 631, 642). In essence, it seems that the word continues to lose its military connotation, and to assume instead a more generic value as 'settlement', whose specific meaning needs to be researched according to the context in which it is used. For example, Paul Arthur sustains that the κάστρα of Byzantine date in rural areas can be likened to those settlements that geographers call agro-towns and that archaeologists call small towns (Arthur 2006: 28) - in other words nuclear settlements that possess a sufficient agricultural workforce and in which a series of services are present to support, for example, a market town. Finally, in other contexts, still within a Byzantine orbit, κάστρον is the equivalent of 'town' (von Falkenhausen 1978; Palmieri 1996, 57; and translated thus for the *De administrando Imperio* in the passages related to Venice). In substance, between the 6th–10th centuries, at least in Greek sources, any settlement could be defined as κάστρον or *civitas* (Lazzari 2009, 633).

Inevitably, this discussion requires us to reconsider the concept of 'town' in the Early Middle Ages, especially when ancient vocabulary was in use (not without its difficulties) to describe new realities. This also makes defining what constituted a town between the 6th and 10th centuries problematic; after all there are issues in attempting to apply a basic hierarchy of terms to material realities, which the archaeologists should instead construct and classify themselves (and not vice versa).

From the above reflections, we can propose that the interpretation of those written sources relative to the lagoon, whether in Greek or Latin, of an essentially narrative or geographic-descriptive character (from 10th century onwards) are in reality of limited use for reconstructing the material reality of the structures that would form the settlement in the Venetian Lagoon. On this basis, Cessi, drawing on a particular passage by John the Deacon (Istoria Veneticorum I, 5), argued that the lagoon zone witnessed something that could be likened to the phenomenon nowadays defined as 'incastellamento' - a formation of castle sites (Cessi 1963, 107–108). This hypothesis has been rightly rejected (Castagnetti 1992), but not to the point of wholly abandoning the idea of castles here (in essence, he rejects the idea of defended sites promoted by the nobility of the time, not the existence of military castles). This does not exclude some form of fortification existing in the lagoon, but it does mean that the written sources will not prove this. Instead, it is essential to look to archaeology to verify where castles are claimed/postulated. We can begin with the famous example of San Lorenzo Ammiana.

The 1980s and 1991 excavations (Fersuoch et al. 1989; Brogiolo 1996) on what remains of the island of San Lorenzo di Ammiana, located in the northern lagoon, identified traces of a fortification in the settlement sequence, identified as the Byzantine fort of 'Castratium', which was built over a former church dedicated to San Lorenzo (Brogiolo 1996, 44; and, more recently, with new irrelevant hypotheses, see Canal 2013, 366-406). This interpretation sees a fortress built on the most central of the islands forming the Ammiana archipelago, in the context 'of a greater defence organisation along the lagoons of the Upper Adriatic' (Fersuoch et al. 1989, 93-94). But reappraisal of earlier research (Moine 2011) plus further fieldwork conducted during recent excavation activities (Gelichi and Moine 2012) have revised the settlement sequence on the island. This starts approximately in the 4th century AD with a building possibly of commercial scope (e.g. a warehouse) and likely of discontinuous use. From the 7th century, after some funerary activity, the space fell out of use and here and elsewhere on the island no new occupation levels prior to the 10th century are known. Re-examination of some of the supposed material evidence of a Byzantine military stronghold (Fig. 19.3), primarily comprising wall structures of different typologies, indicates much later dates and thus severely weakens the hypothesis of a Byzantine base (Moine 2011, 82–86; Gelichi and Moine 2012, 42–43). Thus, no Byzantine castle can be sited on this isolated patch of ground; instead, only traces of discontinuous and functionally diverse occupancy are evident, which are easier to explain considering the complex population dynamics of the northern lagoon than relying decidedly misleading written sources.

The last aspect to examine here relates to fortifications hypothesised on the basis of the principle of plausibility. Some scholars propose that such fortifications (Byzantine, if not even Roman: Dorigo 1983) would have been reused by the noble family of the Partecipazi at the transfer of the seat of Duchy to Rivoalto, around AD 800 (Istoria Veneticorum II, 29). The site of the original palace is much debated: in the 19th century, the remains of masonry structures were uncovered that were attributed to a primitive structure of the 9th century (Gallo 1889) (Fig. 19.4) – a date simplistically linked to the written sources and one certainly needing modern archaeological verification. The historical-narrative sources provide very little information on the ducal complex palace: John the Deacon says that it was the only building that could be defined as a *palatium*; we might assume that it was a protected and defended structure (Berto 2001, 200–201, 204). One detail comes in relation to a secret visit made by the Holy Roman Emperor Otto III to Venice, during which Otto lodged in this palace with two members of his entourage in its east tower (Istoria Veneticorum IV, 57). There is reason to question the words of the chronicler in this case. The *palatium* was clearly stone- (or brick-) built, equipped with defensive structures (e.g. towers) that would have given it prominence and protection; this protection was seemingly geared more against Venetians and not against foreign enemies, as shown in the revolt against Pietro IV (Veneticorum IV, 12: 'Palatium tamen, qui a bellicosi licet paucis militibus illu stipatum noverant, nulla ratione usi sunt [i.e. the Venetians] penetrare' - '[The Venetians], however, did not dare to enter the palace at all, since they knew it was protected by few but fearsome soldiers'). These Venetians contrived a cunning plan: they set fire to some (presumably wooden) houses in front of the palace and on the other side of the canal, hoping that the flames would become high enough to reach the palace and set it alight (the actions in fact caused damage to many churches in the vicinity and to fully 300 houses). One claim is that this Ducal Palace was built over or within a Byzantine castle; but no

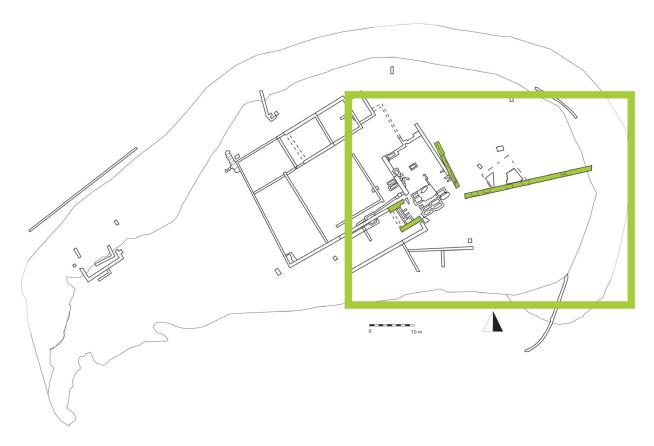


Figure 19.3. Plan of San Lorenzo di Ammiana indicating the presumed walls of the castrum (Image by University of Ca' Foscari, Venice).

sources point to this and just because the ducal palace was fortress-like, does this necessarily mean that it was preceded by a fortification? Could this have been the reason that pushed the Duke to transfer the ducal seat to Rivoalto? In my opinion, they constitute no sound argument: and yet the *castrum*/palace complex has become, even in specialised and informed literature, an accepted 'fact' (Agazzi 1991, 13–17).

### **Defence against the Hungarians: The City Walls of Venice**

The only source that speaks of Venice's city wall is John the Deacon, who recounts two specific moments in relation to the city's foundation. The first coincides with the noted transfer of the ducal seat to Rivoalto (810–811) and the construction of the *palatium* (*Istoria Veneticorum* II, 29); the second dates to the time of Duke Pietro Tribuno (–911) (III, 39), to whom the text explicitly attributes building works ('edificare cepit') – and it is only here in the *Istoria* that John refers to the settlement as a *civitas* ('civitas aput rivoaltum') (Cessi 1963, 305). This building activity was a collective effort, by Pietro Tribuno with his subjects ('cum

suis') and involved construction of a wall stretching from the canal located near a place named 'the Castle' ('a capite rivuli de Castello': see above) as far as the church of S. Maria di Zobenigo ('Predicte vero civitatis murus a capite rivuli de Castello usque ad ecclesiam sancte Marie, que de Iubiniaco dicitur; estendebatur' – 'That city wall runs from the side of the Castle canal up to the church of Holy Mary which is also called Iubiniaco'). In addition, an extremely large iron chain was placed across the canal at S. Maria di Zobenigo, attached at one end to the outer face of the city walls and, at the other, to the side of the church of S. Gregorio.

Various hypotheses exist regarding the wall's course, summarised in Figure 19.5, but we must immediately stress that no material evidence of this exists, despite the various 'archaeological objects' accredited to it over the years (such as the wall discovered in 1822 near Olivolo: Casoni 1856, 209–234). Thus, we only know about its basic arrangement—one that, frankly, raises doubts about its capacity to defend, especially against any sizeable and concerted assault. We can cite John the Deacon's reference to one main episode, namely the pillaging by the Hungarians and their (failed) attempt to enter Malamocco and Rivoalto (*Istoria* 

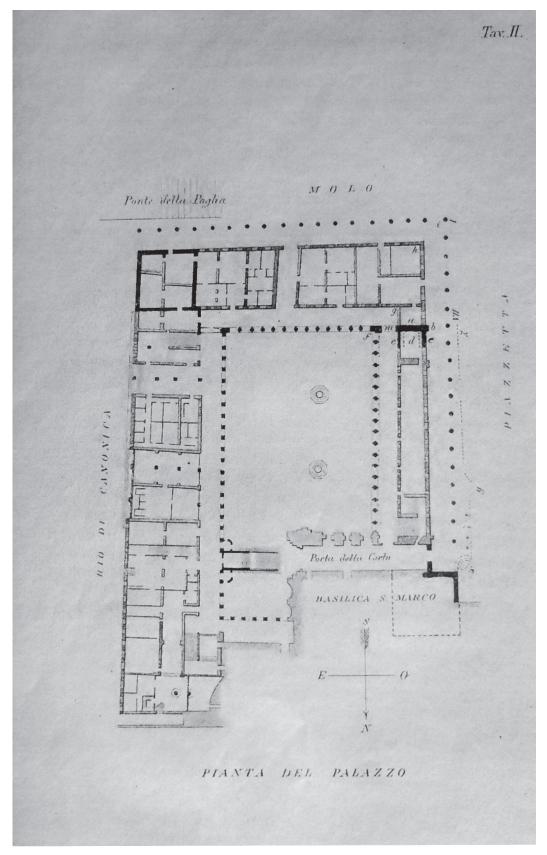


Figure 19.4. Ducal Palace, Venice: possible wall structures (shown in black) of the early medieval palace (Image by Gallo 1889).

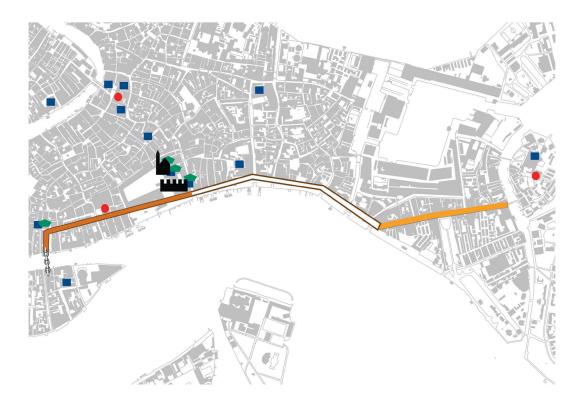
Veneticorum III, 37), curtly stating that the Hungarians, after destroying various settlements around the lagoon, such as Equilo, Chioggia and Cittanova, were repulsed by Duke Peter with ships.

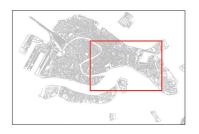
We might observe that the wall and the iron chain along the *Canal Grande* represent a brazen reference to the Constantinopolitan model (Djurić 1995, 195) and accordingly appear more strongly impregnated with ideology than forming an efficient fortification system to the growing city. Interestingly, John the Deacon seems to suggest that a city/*civitas* only comes into being when it has city walls. At this point, their existence and their actual extension become facts of secondary importance. They are significant because, together with other episodes, such as the theft of the relics of Saint Mark in Alexandria in 828, under Giustiniano Particiaco (*Istoria Veneticorum* II, 39), their function was to affirm and confirm a new status.

namely in making this place a city, one far more prominent than a 'normal' city.

### **Defence against Enemies: Palisades and the Fleet**

Moving back in time, the turbulent early 9th century is marked by (vain) efforts by the Carolingian Franks under King Pepin the Short to overthrow the Venetians and to conquer the islands of the lagoon (Cessi 1963, 150–151). These events are described in various sources but rarely in any detail, with the sources more concerned with outlining the political and institutional scenarios within which the conflict transpired, rather than describing battles. In this regard, the cited *De Administrando Imperio* offers a more valuable guide to the episode. The entire sequence of events is, for obvious reasons, centred on Malamocco and on the southern lagoon (note that the events preceded the ducal





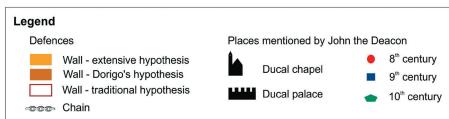


Figure 19.5. Map indicating the line of Venice's hypothetical city walls (Image by University of Ca' Foscari, Venice).



Figure 19.6. Vision of Comacchio during the Early Middle Ages (Image by University of Ca' Foscari, Venice and Riccardo Merlo).

transfer to Rivoalto by a few years). In this text, the desire to stress the tight bond between the Byzantine Empire and the Venetians is clear – King Pepin asked the Venetians to surrender because he claimed that they were on his land, but the Venetians responded by saying that they were subjects of the emperor (De Administrando Imperio 28). Prior to this exchange, Constantine VII Porphyrogenitus recounts that King Pepin and his army had stopped on the mainland at a place called Άειβόλας, at the point of passage (a canal?) towards the islands. When the Venetians became aware of their presence and of preparations to steer a ship loaded with cavalry towards the island of Metamauco (an island relatively close to the mainland and, at that time, the seat of the duke), they took countermeasures: they built palisades (staked-walls) and defences along the entire passage ('βαλόντες κερατάρια, άπαν το πέραμα εναπέφραξαν'), thereby forcing the Carolingians to remain where they were for a good six months (since there was no other place from which they could transfer), with skirmishes taking place almost daily. In fact, the Venetians took up position in warships behind the palisades closing the access, and from here shot arrows and launched javelins against the enemy ('μετά τοξείας καί ριπταρίων').

In substance, the Venetian defensive measures comprised temporary palisades blocking water-borne access into the lagoon from the mainland (confirming that the lagoon could only be navigated using defined canals) and the arming of ships. No permanent fortification was evident prior to this; rather, fairly limited measures could be installed at short notice to hold off even a well-equipped army like that of King Pepin.

An efficient fleet clearly could pay high dividends for the Venetians, not just in terms of defending their lagoon and settlements, but more widely in securing their

economic interests in the Adriatic and, increasingly, in the Mediterranean. During the course of the 9th century – as Rivoalto became the seat of power and Venice gained economic and political sway - references to the fleet and its functions become increasingly frequent in historicalnarrative sources (in particular, the Istoria Veneticorum). Not only did the fleet play a decisive role in defeating neighbouring enemies (such as the Comacchians; see below) and those further afield, but it also assumed a political role, since the fleet helped ensure that the Venetians would become an active player on the complex chessboard of alliances. One notable example relates to the appeal made in Venice in 840 by Theodosios Baboutzikos, an ambassador of the Byzantine Emperor Theophilos, who was on a diplomatic mission in the West to seek help for the Empire against the Arabs (*Istoria Veneticorum* II, 50 – in the event a disastrous war). Theodosios requested, and obtained, from Duke Pietro Tradonico, 60 warships to help to raise the Saracen siege of Taranto. Thus, even at this relatively early stage Venice's fleet was perceived as a powerful military vehicle, and one adapting to innovations emerging in the Byzantine world (Pryor and Jeffreys 2006): another episode in the time of Duke Pietro Tradonico relates the construction of two large warships (in Greek, zelandriae), defined by John the Deacon as 'bellicosas', the likes of which had never been seen before (Istoria Veneticorum II, 55). One possibility is that the Byzantine ambassador Theodosios contributed to this - perhaps he had a blueprint or had brought one such vessel with him (Shepard 1995, 55-60); the idea is strengthened if we identify the Theodosios used by the emperor with the Theodosius associated with three lead seals found in northern Europe, who is defined as Chartoularios tou Bestiariou, i.e. an individual with specific knowledge of warships (Shepard and Cheynet 2014, 88-89).

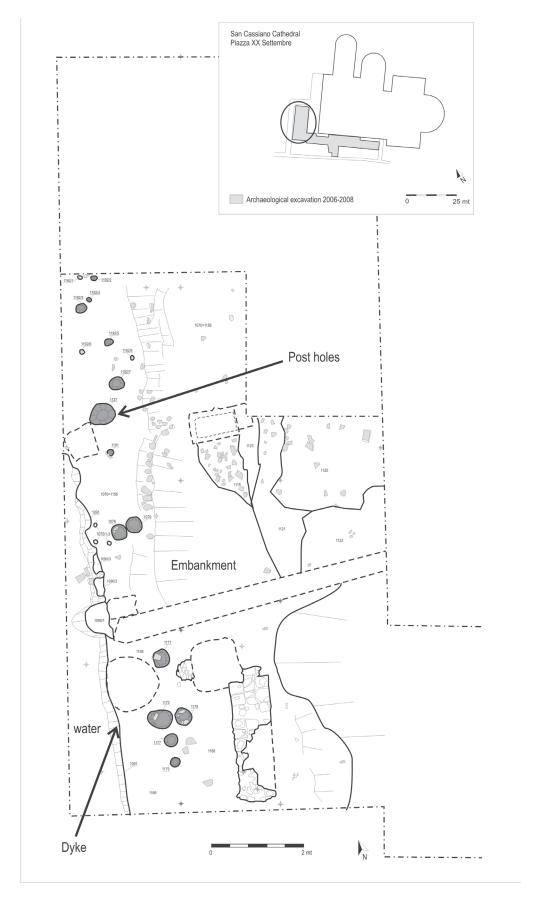


Figure 19.7. Archaeological plan showing the phases and the castrum at Comacchio. (Image by University of Ca' Foscari, Venice).

### Defence against the Venetians: the *castrum Comiacli*

According to written sources, Comacchio was besieged, damaged or even destroyed, on more than one occasion: by Saracens in 875 (Istoria Veneticorum III, 12), by Byzantines in 808/809 (when, during the conflict between the Franks and Byzantines, a fleet vainly attacked the settlement – see Cessi 1963, 151), and by the Venetians in both 881 (Istoria Veneticorum III, 28) and 932 (this a seemingly definitive action: Istoria Veneticorum III, 44). Although labelled by the written sources as a castrum, Comacchio's defences rarely appear effective. In fact, one might legitimately suspect that these biased sources stressed the victories of the Venetians and emphasised the defeats of the Comacchians. Nevertheless, most scholars interpret the appellation castrum (= castle) to the letter, and so include Comacchio in the group of Byzantine fortresses built in response to Lombard aggression under King Agilulf in the early 7th century. Since finds have also been discovered in and around Comacchio dating to the Ostrogothic period (earlier 6th century), one might postulate a fortification established in the context of the Gothic-Byzantine Wars of the 530s-540s (Patitucci Uggeri 1989).

But what fortifications characterised early medieval Comacchio? A new era in archaeological research here (since 2004) has led to a clearer definition of the site and context of Comacchio and the characterisation of the key elements of its chronological sequence (Gelichi et al. 2012). The picture is far from complete, but some data seem clear: the settlement did not develop before the end of the 6th century but underwent significant, accelerated growth in the 7th century, centred on trade and artisanal activities. In the early 8th century, Comacchio even became an episcopal seat (Gelichi 2013); perhaps in this phase the settlement and its community saw an economic peak. Tensions with the Venetians were yet to emerge and a privileged rapport with the Lombard Kingdom made Comacchio, almost a free port, the first great emporium of the Italian Early Middle Ages (Gelichi et al. 2012). The situation started to change from the earliest 9th century when, as seen, Venetian power had been consolidated both physically and politically, and Venice had emerged, in a changed politico-economic international context, as more suited for the needs of the Carolingian market than the small town of Comacchio at the mouth of the Po (Gelichi 2008). Perhaps inevitably, this century sees the first attacks upon Comacchio (see below).

For Comacchio, the idea of a fortification (or a series of fortifications) is not very plausible considering the town's configuration and location (Fig. 19.6). Even if the extent of the lagoon has perhaps been slightly overestimated in a recent reconstruction (Rucco 2015; in press), Comacchio as a settlement based on small islands separated by canals,

like Rivoalto, remains an unlikely hypothesis. As yet, no secure remains of structures that could be attributed to urban fortification works have been found. However, recent excavations around the present cathedral (Gelichi 2009) traced a series of robust upright wooden poles (30-50 cm in diameter) in association with a series of smaller poles (dating to Period 5, phase 2: Grandi, in press) (Fig. 19.7), close to a structure interpreted as a canal bank (and thus a boundary element to the small island upon which the episcopal seat would be built). Since the timbers seem more substantial than would have been required simply to act as a perimeter to the area, hence a potential defensive function is suspected, designed to reinforce the natural defences of the archipelago. Their dating to the 10th century would in fact fit a period when there was a need to protect the institutional centre, i.e. the episcopal area, rather than the whole town; this was a time when Comacchio faced, according to textual sources, continual external pressures (For defences at other, mainland episcopal seats in this era, see Brogiolo and Gelichi 1998, 72-73).

Comacchio indeed became a threatened and increasingly isolated site. It was attacked in 809 by a Byzantine fleet, albeit without success (*Annales Francorum*); another assault, a joint Venetian and Byzantine venture came in the last quarter of the 9th century under Duke John (Giovanni diacono III, 28) and slightly earlier, there is reference to a sack of Comacchio by Saracen raiders during the dukedom of padre Orso (III 12). The decisive attack came under Pietro II Candiano (duke/doge from AD 931) (Giovanni diacono III, 44).

### **Conclusions: Lagoons and Defences**

The case studies analysed above are certainly not the only examples of fortified lagoons, even in northern Italy (for example, other interesting instances of *castra* in lagoons include Grado and Caorle), but they constitute two exemplary cases for considering the issue from a more general viewpoint. What are the key observations we can draw from this our analysis of texts and archaeology?

The first observation is that the erection of fortifications in the lagoon was not necessary. This does not mean that it did not happen, but rather that it was a decision that was neither useful nor (above all) economical. If the function of a fortification is to keep enemies at bay, this could be achieved in the lagoon through other, more efficient means. In this regard, the case of Venice is a classic example. In one of the rare explicit references by an early medieval source to defences implemented by the Venetians, these comprised the installation of temporary structures and the engagement of an armed fleet. The act of closing a passage was sufficient to counter the threat of raids (analogous is the sinking of five ships by the Danes at the entrance to the fjord at Roskilde in the 11th century: Crumlin-Pedersen and Olsen 1978). Thus,

guarding or closing access routes and not the fortifying of the settled islands themselves seems to have met the needs of the inhabitants of Rivoalto and others before them. And quite probably the Venetians used comparable tactics against the Hungarians, as and when were needed.

But these measures presuppose the presence and development of an efficient and well-equipped military fleet, which could combine both defensive and offensive operations. It is not by chance that the Venetians paid great attention to ship construction and that already in the 9th century Venice was, in the eyes of the Byzantine emperors, the prime source for requesting the assistance of a sizeable and well equipped flotilla. Equally noticeable is the clear reference to the construction of new 'bellicosas' ships, indicating that in this era Venice was busily investing in new boat designs to aid her growing mastery of the sea.

Secondly, the existence of city walls, of which only John the Deacon speaks, is improbable and a likely invention of the chronicler; at best, there may have been some walls of demarcation, but not a solid and continuous military circuit.

Thus, after considering the available evidence, we should feel rather disturbed about the 'created idea' of a lagoon fortified with towers and castles – one gathered up, often incautiously, from the historical-narrative sources, from which has also come a desire to push this defensive landscape further into the past, to the Roman era. This can easily be compared to the topos regarding the flight of displaced inhabitants from the mainland to the islands of the lagoon in fear of assaults by the barbarians (whether Huns or Lombards): such folk fled to the islands, remained 'Byzantine' and defended themselves with *castra*, analogous to what prevailed on the mainland under very different conditions (yet in a context that often, even here, leaves room for misinterpretations). As seen, thus far, the archaeological evidence, when not interpreted on the basis of written sources, has yielded no good traces of such fortifications. And if no future proof is forthcoming, then I believe that we should abandon this idea of an early fortified lagoon forever.

The situation for Comacchio is relatively similar, although the environmental context is not identical and the dimensions involved are different. However, once again, the discrepancy between the vocabulary of the written and the archaeological sources is just as clear. Only in the 10th-century phases is it possible to trace something that could be equated, tentatively, to a fortification – but wooden and not extensive. But here we are talking about an episode chronologically much later than the traditional dating of *castrum Comiacli* (often set to the 6th century), linked to the protection of well-defined spaces (episcopal) and in any case referable to just one of the many small islands making up the Comacchio archipelago.

Even if Venice's lagoon was not studded with castles and fortifications, in the same way that the town of Comacchio was not a castle in the technical sense of the word, that

does not mean that no structures or constructions were ever built in these spaces with pronounced military and, above all, defensive characteristics. As seen, in the Early Middle Ages, routes of access into the Venice lagoon started to be fortified and protected. But it may also have occurred earlier, as appears likely for the ducal palatium, a palace undoubtedly built in stone or/and brick, and seemingly well defended and endowed with towers. Here the existence of a palace-fortress/citadel is very plausible: it was a symbol of the duke's power and the hub of authority and was thus an inherently military-civilian focus; it needed to represent, as well as to protect. It was strong enough to defend itself against the citizens - an internal and not an external enemy. The palace-fortress on Rivoalto, together with the chapel which held the prized relics of San Marco, must necessarily have been distinctive and solid features, magnificent enough to denote, in a town that would remain largely timber-built for a long time to come, the emergence of a major power.

#### Note

An inscription of 1505 now at the Museo Correr di Venezia. Inscribed on black marble with gilded incised letters, set above the offices of the MAGISTRATI ALLE ACQUE IN RIO ALTO MAGISTRATURA ISTITUITA DALLA REPVBBLICA ISOLE VENEXIA NEL 1505.

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