

Harbours of Byzantium

The Archaeology of Coastal Infrastructures

Edited by

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Cover: Southwestern harbour of Byzantine Kassandreia in Chalkidiki, Greece (A. Ginalis)

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Editor's Preface

Christianity, Roman tradition and ideology, as well as Greek cultural heritage, have been labelled as the pillars of the Byzantine Empire. In fact, the real crux and enabler of power in an empire that combined the Occident with the Orient was its control over the seas. As such, seafaring constituted the formula of success for dominance of the Mediterranean, playing a key role in communication, military activities, and, especially, economic exchange. But how does one get from land to water? The linking gates are coastal installations, i.e. ports, harbours, and other infrastructures. These function as economic hubs, cultural and social meeting points, as well as gateways for communication and connection.

Even though the study of harbour sites and port networks of the Byzantine Empire constitutes a relatively new research field, it has nevertheless received significant attention over the last few years, as we can see from the instigation of various projects and the staging of conferences. However, attention is rarely paid to analyses of physical harbour remains and their impact on the general development of Late Antique and Medieval architecture, economy, or trade networks.

As such, in 2018, an international conference on the *Harbours of Byzantium* was organised at the Institute for Advanced Study of the Hanse-Wissenschaftskolleg in Delmenhorst, Germany. This event was intended to focus particularly on the archaeology of Byzantine coastal sites, including both harbour infrastructures *per se*, as well as associated facilities and affected landscapes. Leading scholars in the field from twelve different countries presented new material and data with which to understand the development of harbour architecture and coastal activities from Late Antiquity to the Middle Ages. The papers set out to cover sites from all provinces of the Byzantine Empire, stretching from Italy in the West to the Levantine coast in the East, and the Black Sea in the North to Egypt in the South. This allowed a general overview for comparative analyses and discussions on various aspects of Byzantine harbour networks and maritime connectivity.

Accordingly, the current volume provides a series of scientific papers deriving from presentations given at the conference. Beyond general approaches to the study of Byzantine harbour archaeology, the contributions offer a representative picture of harbour activities across the historical and geographical boundaries of the Byzantine Empire. Although it is impossible to reflect a comprehensive picture of the entire sweep of coastal landscapes, this work hopefully provides a basis for future comparative research in Byzantine harbour studies – on a local, regional, and supra-regional level.

The conference programme is included in the Appendices. The differences between the conference programme and the final version of this volume are explained by the fact that some scholars who submitted abstracts were ultimately unable to attend, and some who did attend and gave their papers did not submit them for publication. Fortunately, other colleagues agreed to contribute to this volume and I am most grateful to them for so doing.

I would like to express my deepest gratitude to all participants in the Delmenhorst Conference for presenting papers that provided unique insights, not just into ongoing excavations and investigations related to harbour installations, but also into hitherto understudied aspects of coastal infrastructures. It has been a considerable challenge to assemble this volume, and I am therefore particularly indebted to all authors who contributed and enriched this publication. Bearing in mind the time-consuming work of editing and unifying the papers, etc., as well as the difficulties brought on by the COVID pandemic, I have done my best to ensure as prompt a publication as possible.

Thanks must go here to Dr Susanne Fuchs and her team from the Institute for Advanced Study of the Hanse-Wissenschaftskolleg for their support in organising the conference in Delmenhorst. I am also sincerely grateful to David Davison and Mike Schurer from Archaeopress for agreeing to publish this volume and for guiding this work through to publication, their technical help, and the quick production of the printed version.

Alkiviadis Ginalis

3. Ports, Harbours, and Landings of the Byzantine Terra d'Otranto

Paul Arthur

Following the Lombard invasion of Italy in AD 568 and the Slav/Avar conquest of much of Greece shortly later, Byzantium struggled to keep hold of its Western possessions. By the end of the 6th century AD Byzantine territory was becoming a patchwork, and with the passing of time it became ever more concentrated in the south of the peninsula (Fig. 3.1). Ravenna, Rome, and Naples remained Byzantine into the mid 8th century. The ever-reduced territory in southern Italy continued until the later 9th century AD when, through a concerted military effort under the emperor Basil I (AD 867-886), Byzantium was able to retake much of the south. In the meantime, however, the island of Sicily had substantially fallen to the Arabs. To reach the Tyrrhenian coast and Rome, or the grain lands of Sicily, possessions even farther afield such as Sardinia, Malta or the Balearic Islands, or indeed the upper Adriatic (particularly Ravenna), would have required passage across the Strait of Otranto and navigation of parts of the Salento. It was fundamental that naval supply routes remained open to help maintain these various far-flung possessions of a diminishing empire. This required the maintenance of a series of ports and safe havens for shipping between East and West, some of which were even guarded by forts in Early Byzantine times. Egnatia, near modern Fasano (BR), for instance, appears to have been equipped with a square fort (Fig. 3.2), possibly under Maurice Tiberius (AD 582-602). The town may have come to grief at the hands of the Lombards, if the fire destruction levels found in various parts of the site are indicative (Cassano 2009: 33). In the following centuries Byzantine power in much of Italy waned, as the economic base was mainly in the hands of provincial landowners, not all having allegiance towards Constantinople. Indeed, during the course of the 8th century provincial powers helped lead to the breakaway of Byzantine towns and territories in the northern and central parts of the country (Ravenna, Rome, Naples), so much so that, to maintain a foothold west of the Adriatic, the empire resolved to further invest in Syracuse, which had even been briefly nominated to the role of capital some 100 years earlier under Constans II (AD 641-668). The increasingly important function of Syracuse and, indeed, of much of Sicily, must have led to a strengthening of the maritime network in southern Italy, although how much the coast was linked to inland territories is debatable. Despite the re-conquest of land in the south of Italy under



Figure 3.1: Italy c. the early 7th century AD. Approximate Byzantine territories are shaded (after Zanini 1998).

Basil I, the maritime network gradually fell evermore into the hands of commercial powers, beginning with the state of Amalfi (Gaglione 2014) and later Venice (e.g. Guillou 1977: 45). Amalfitan merchants were already active in Apulia by AD 839, when they were apparently selling pottery and other items as a cover to infiltrate Taranto, which at that time was in Lombard hands (McCormick 2001: 627). An Amalfitan *Archon* is attested in Constantinople under patriarch Nicholas I Mystikos (AD 901-907 and AD 912-925), and Amalfitans even founded a monastery on Mount Athos in the 10th century AD (Muresu 2017; Martin 2000: 630).

In the context of the Byzantine Empire, the *Terra d'Otranto* was not particularly significant for its agricultural surplus, although it did provide some wine and olive oil. Indeed, for much of its history it has been generally considered to be a relatively poor land with limited natural resources. Nonetheless, its geographical



Figure 3.2: The square fort and harbour at Egnazia (Fasano, BR) (Google Earth).

position opened the way to far richer lands, both along the Adriatic and the Tyrrhenian, as well as to the granary that was Sicily, and provided a link to the then erstwhile although ever symbolic capital that was Rome. Thus, its function in Byzantine connectivity was of paramount importance. Ports and harbours reflect the necessities of their hinterlands, whether for export or import or both, but can also serve as stations and nodes for maritime traffic (Fig. 3.3). With a declining population until the 9th century AD, and the new priorities in supply and maintenance, changing geographies of consumption and communication will have led to changes in port structure and location. Brindisi and Otranto are together a case in point (Arthur 2012a).

In Roman times, Brundisium (Brindisi) had been the main port in south-eastern Italy, as terminal of the *Via Appia* from Rome and connection to Dyrrhachium (modern Durrës in Albania) and the *Via Egnatia* leading to Constantinople and the East. The Lombard expansion in Italy, the cutting of the *Via Egnatia* by the Slavs in the Balkans, and environmental changes in the hinterland of Brindisi, as well as the town's apparent

lack of defences, led to its decline (Von Falkenhausen 2007; Martin 1994: 140; Brown 1992). Thus, already during Justinian's Gothic war in the second quarter of the 6th century, its conditions favoured the rise of the smaller port of Otranto, located further south. Only in the early 11th century AD, shortly before its capture by the Normans, did Brindisi once again begin to assume the role of a major port to the East, as is evidenced by an inscription of the *Protospatharios* Lupus on one of the bases of the two famous Roman columns that signalled the end of the *Via Appia* (Fig. 3.4) (see Alaggio 2009). Otranto was the nearest point for Byzantine ships, which thus needed to sail less than 72 km across the strait. According to the Arab geographer Al-Idrisi, in just one day it was apparently possible to sail from Corfu to Otranto (McCormick 2001: 462-464; Jaubert 1836-40: 121). The port-town rapidly developed into a fundamental communication hub and centre of Byzantine state and ecclesiastical administration, remaining a principal connector to the Byzantine east into the 12th century AD (see below). It was also a gateway port to the most fertile part of the Salento peninsula, testified to by the numerous villages that lie in its territory, many of which were founded by

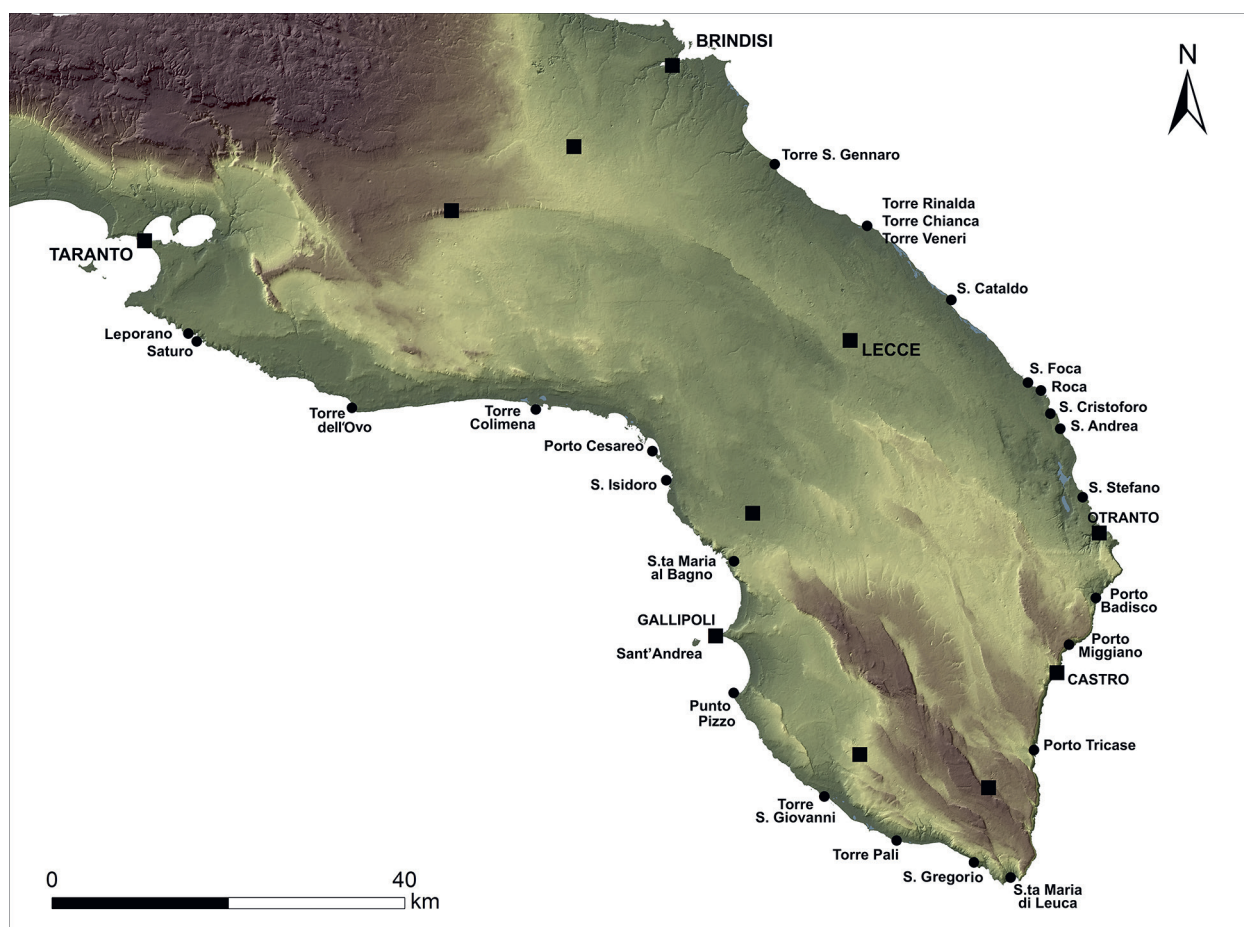


Figure 3.3: Ports, harbours, and landings of Byzantine southern Apulia (P. Arthur).

the 8th century AD – although none appear to have participated in a market economy until well into the following century (Arthur 2012b).

The discovery of kilns producing commercial transport amphorae at Otranto during the early Middle Ages not only indicates exportation of local surplus (perhaps both wine and olive oil), but the globular form of the vessels produced there shows that they are to be included within a Byzantine ‘idealtypus’ manufactured and distributed throughout the empire during the later 7th to early 9th centuries on sites as far as Ephesus in western Asia Minor and Chersonesos in Crimea. Network analysis of these amphorae, and other roughly contemporary Byzantine artefacts from Otranto, illustrates how it was an important communication hub at the time (Arthur *et al.* 2018). Some 7th-century Byzantine coins, which are otherwise extremely rare in the Salent^o, also attest to a certain amount of monetary movement ease the total disappearance of Byzantine coinage in the 8th century AD, and include two bronze *folles* of Heraclius (AD 610–641), a gold *solidus* of Constans II, and a bronze *follis* of Justinian II (AD 685–695).

By the later 9th century AD, another maritime transport amphora type became popular, although its precise area

of manufacture is still debated. Its very high incidence on sites and contexts in the Salento from the end of the 9th until the 12th century AD suggests that it was produced somewhere in or around Otranto, although Guy Sanders (*pers. comm.*) suggests that it came from around Corinth. Perhaps the type was made in both areas, although the relative rarity of other ceramics from the Corinth area in the Salento does suggest that those found here are prevalently local. Its extensive distribution, particularly up and across the Adriatic, from Jesolo, Torcello and other sites in the Venetian lagoon to Butrint in Albania and around Staribar in Montenegro (Gelichi *et al.* 2017: 63–68), illustrates the development of maritime exchange by the end of the first millennium that must have favoured the improvement of harbours and infrastructures of trade.

Indeed, without Otranto, I believe that Byzantium would have been extremely hard-pushed to have been able to maintain a reliable communication network with the West. At Otranto, both a massive masonry structure, as well as two large ditches dated to the 9th or 10th century AD found during excavations, seem to have been linked to investment in the port or in the urban defences, both of which suggest a concern by the central or local administration in the well-being of



Figure 3.4: Brindisi columns (the missing column is now in Lecce) in a 1778 sketch by Louis Ducros, and the inscription of Lupus Protospatharios.

the town (Melissano 1996; Wilkinson 1992: 51). Perhaps slightly later, according to ¹⁴C dating (AD 1150-1280), in Norman or Svebian times, the port was enhanced by the construction of a large mole in conglomerate, recently documented by Rita Auriemma (2012: 544-545; Cossa and Auriemma 2016).

To the south of Otranto lay the old classical town of Castro, also located on the sea, where a surprisingly high number of transport amphorae seem to have still been

imported from the Byzantine East in the later 7th and 8th centuries AD (Leo Imperiale 2015). The importance of the site by the 10th century AD is indicated by the presence of a Byzantine cross-in-square church, similar to the one in Otranto, preserved to the side of the existing cathedral (Bruno 2004).

Instead, on the northernmost part of the Ionian coast of the Salento lay the major port of Taranto, which served as a link to Calabria, Sicily, and the Tyrrhenian

coast. Like Brindisi on the Adriatic, it too fell to Lombard aggression in the later 7th century AD. Its role in connections across the Mediterranean is shown for instance by the voyage of the pilgrim and later bishop of Eichstätt, Willibald of Wessex, in AD 723-724 (McCormick 2001: 129-134). In the 840s, the town was conquered by the Saracens and used as a shipping base for slaves captured inland. It was only towards the end of the 9th century that first Bari (in AD 876) and then Taranto (in AD 880) were retaken by Byzantine forces during what is sometimes known as the Byzantine reconquest of southern Italy by emperor Basil I.

Apart from the undeniable major ports of Otranto and Taranto, various other old towns must have possessed relatively important harbour structures during Byzantine domination. Practically nothing is known about the island *Castrum* of Gallipoli (Martin 1993: 154-155, 386-387 and *passim*; Jacob 1989), bishopric from AD 551, which must have been an important Byzantine base on the Ionian Sea, almost 79 km to the south-east of Taranto. However, in AD 709 pope Constantine I stopped there on his way from Sicily to Otranto and the East (Martin 1993: 165, n. 29). After the Arabs sacked *Hydruntum* (Ugento) in AD 876 and deported its inhabitants to Carthage, Basil I reinforced the town, bringing Greeks from Heraclea Pontica on the northwest coast of Asia Minor (Skylitzes 151). The scarce archaeological evidence is suggestive of continuity of occupation on the island of Gallipoli during the early Middle Ages (Bruno and Tinelli 2012).

Other towns, presumably much reduced in size and population by Early Byzantine times, were Ugento itself (*supra*) and Nardò, both lying c. 6 km inland and served by their respective harbours at Torre San Giovanni and S. Maria al Bagno. The former, already employed as a harbour in the Iron Age, has provided archaeological finds from a pit dating to the 7th or, perhaps more probably, the 8th century AD (Vitolo 2016; D'Andria 1979; 1977). This has helped to put into doubt the chronology of a structure constructed of squared masonry blocks thought to be of pre-Roman date that may rather date to Byzantine times, making use of earlier building material (Arthur 2003: 657). The small Roman town of *Veretum* would appear to have had its harbour at San Gregorio (*portus Sallentinus* – mentioned in the *Tabula Peutingeriana*: De Mitri 2010: 40), where massive limestone blocks signal the presence of a mole of classical date.

The remaining town or 'large' nucleated settlement to be considered in this contribution is *Lupiae* (Lecce), which in Byzantine times seems to have been a shadow of its former self, with its population reduced to living in the ancient Roman amphitheatre. Its old Roman port with a well-preserved mole (Fig. 3.5), was known as the

port of San Cataldo in later medieval times (Sammarco and Marchi 2014), clearly referring to Saint Cataldo (d. c. AD 685), an Irish pilgrim-Saint who became bishop of Taranto, in which town he was buried. The reporting of Byzantine finds from Lecce has been infrequent. When compared to the port of San Cataldo, the more protected southerly port of San Foca, entitled to an oriental Byzantine saint, that lay c. 13 km down the coast, may have been that upon which Byzantine Lecce relied for a part of its existence. It would probably have been more secure during the 7th and 8th centuries AD when there was increasing risk of Lombard incursions. Finds from San Foca, resulting from small-scale and substantially unpublished excavations, appear somewhat more enticing than those from San Cataldo, although it has been estimated that half of the original site has been lost to coastal erosion. The excavations revealed a Roman Imperial fishing settlement, apparently abandoned in mid Imperial times (Auriemma 2004: 179; D'Andria 1980). The site was certainly reoccupied during the Middle Ages, as is explicitly shown by the construction of a small church with wall paintings that was later destroyed, perhaps during a Saracen raid in the 12th or 13th century AD. Slightly to the south of San Foca lies the impressive archaeological site of Roca Vecchia (Fig. 3.6), which may also have served Lecce. Although an important Bronze Age site, later refortified towards the end of the Middle Ages, it has also yielded a small quantity of Late Antique/Byzantine finds, including a small church with associated burials. Lecce survived as a nucleated settlement, even if we do not yet know exactly how (perhaps as a *castrum* based on its old Roman amphitheatre) and to what degree, although it was able to resist some Norman attacks during c. the mid 11th century AD (Corsi 1993: 40-41). Other inland towns presumably had to create their own more restricted communication networks, as their relative importance declined when access to their ports deteriorated.

There must have been some measure of official and premeditated governance of the larger ports, which were linked to the towns of the area, both for political, military, and economic needs, although we have yet little evidence in the form of citations, lead seals, or similar. Obviously, they were used for the import and export of people and goods. Some, quite clearly including the afore-mentioned ports at Otranto and Ugento, were apparently associated with the export of wine or oil in globular amphorae. Others may have been of even more specialised nature, such as the small harbour at Torre Colimena (Manduria) in an area of extensive salt extraction. Few, including both Otranto and Taranto, are mentioned in administrative documents. On the other hand, many of the smaller landings may have been improvised structures by merchants, landowners, monasteries, or other small settlements, or even of



Figure 3.5: The small port of Lecce at San Cataldo (courtesy of Giuseppe Ceraudo).



Figure 3.6: The medieval settlement and inlets at Roca Vecchia (courtesy of Theodoro Scarano).

a temporary nature, serving specific needs such as fishing.

Even if we possess rare documentary evidence for Byzantine-period monasteries, many of the monasteries attested in the 13th and 14th century AD dated *Rationes decimarum Italiae* and other late medieval sources (Lunardi *et al.* 1986; Vendola 1939) have proved to lie on archaeological sites where there is material evidence for late antique or Byzantine occupation. A monastery of Sant'Andrea at Gallipoli is even cited by Pope Gregory the Great and may have been located on the island of Sant'Andrea, where abundant late antique material has been found (*ex inf.* C. Pagliara). Thus, the discovery of late antique material on various medieval monastic sites in the Salento suggests that eastern monasticism may have begun to spread in the area by the 6th century AD. Furthermore, Western pilgrimage to eastern monastic sites is suggested by the distribution of St Menas ampullae in Italy – particularly along the Adriatic, including Otranto (Anderson 2007).

Such is patently clear for the well-known Italo-Greek monasteries of both S. Maria di Cerrate (Lecce) and S. Nicola di Casole (Otranto). It is thus quite possible that various of these religious foundations were created prior to their first mention in the written sources. On the Adriatic coast, the small harbours of Porto Badisco and Porto Miggiano may, respectively, have been directly connected to the Italo-Greek monasteries of San Giovanni Malcantone, with its abundant late antique and Byzantine remains, and Santo Stefano. On the Ionian coast, where monastic possessions concentrated, various lay in the hinterland of the ports of Gallipoli as well as to its north around Santa Maria del Bagno. Near Porto Cesareo lay the monastery of Santa Maria di Cesarea, whilst the monastery of San Pietro di Bevagna may have used a harbour at Torre Colimena to its east, if it did not connect directly with another harbour structure. The last monastery was a Benedictine possession that was placed under the jurisdiction of the important monastery of S. Lorenzo di Aversa in Campania under the Normans in AD 1095 (Lunardi 1993: 22-23; Poso, 1988: 180; Coco 1915: 182-184, doc. III). The enigmatic monastery of S. Nicolo Scundi, instead, appears to have been sited very close to the harbour of Sant'Isidoro (Nardò), where a bronze follis of Constantine VII dating to AD 945 has been recovered.

Thus, until the later 9th century AD, Byzantine Apulia was centred substantially on the territory of the Salento region with its major port of Otranto, a relatively large port at Gallipoli on the eastern Ionian Sea coast, and some 25 or more smaller harbours and havens (*Skalae*) of varying sizes and characters, for which historical and archaeological data is somewhat varying (for such

minor sites in Roman times, see Auriemma 2001). Such a large number of landings is not surprising if we recall the more than 100 *Skalae* or harbours that dotted the coasts of the Chalkidiki Peninsula.¹ The Appendix and Fig. 3.3 illustrate the 24 proved and probable ports and havens of the Byzantine Salento.

Between the harbours from Brindisi to Porto Saturo, the average sailing distance from each other would not be more than 9.5 km and sometimes even more than half as much. If, all things considered (normal winds, currents, etc.), we estimate a ship at sailing at a speed of 3.5 knots (Laiou and Morrisson 2007: 82-84; Casson 1951), the average sailing time between one harbour and another would be c. 1.5 hrs. The longest voyage between Torre San Giovanni (the port of Ugento) to Gallipoli would be 23 km, although there may have been some landings along the way, perhaps including Punto Pizzo. Thus, the Salento was very well connected along the coast. From the coastal sites to inland sites may have been quite another matter. Indeed, archaeology has so far provided little evidence of Byzantine period imports in inland areas, and few fish appear to have been traded to inland villages in medieval times, given the rarity of such remains at the excavated sites of Byzantine and later villages.

Some harbours in the Salento might never be identified. Indeed, beach landings and simple anchorages are particularly difficult to recognise (Fig. 3.7), even though the presence of such sites might be hypothesised through archaeological finds and areas where vessels could surely have landed. Even the port installations of major central places are often somewhat ephemeral when compared to classical times, as the evidence from the important ports at both Naples and Classe (the port of Ravenna) testifies (for Naples, see Giampaola 2010; for Classe/Ravenna, see Augenti 2012).

Many of the smaller landings may have been used by the Saracen (and other) invaders of southern Apulia – careful to avoid being seen arriving on Italian shores. For instance, the official construction of numerous coastal towers by the Spanish government during the 16th century was occasioned by the need to be forewarned of the arrival of invading Ottoman Turks or pirates, and their distribution may equally be telling of potential Byzantine-period landings (Bruno *et al.* 1977; Pasanis 1926). As far as we know, similar lookout posts did not generally exist in Byzantine times, and so it might be interesting to attempt a viewshed analysis of the ports and harbours dotting the coast to see if they may have been sufficient for tactical purposes.

The site of San Cristoforo (Melendugno), not far from Torre dell'Orso, may indeed have been one of such

¹ On the Chalkidiki peninsula, see Flora Karagianni in this volume.



Figure 3.7: An old photograph of stacked ceramic vessels ready to be loaded onto a cargo ship at the Greek island of Skyros. Similar landings may have existed in the Italian Salento region (photographer unknown).

minor landing sites. It possesses a rocky cliff, its face pierced by caves dropping down to a sandy beach and to the Adriatic Sea. The dedication of one of the caves to St Christopher is telling in itself. The cave appears to have been used since at least the 4th century BC for offerings and supplications to deities and saints in the hope of a safe voyage, attested by both Byzantine and earlier inscriptions (Figs 3.8-3.9) (Cossa 2017: 219-223; Jacob 2014). On the rock face is also a Jewish inscription accompanied by a *menorah*. The site finds parallels at the similarly named coastal site of Baia dell'Orso across the Adriatic in Albania. Further along the Albanian coast to the south lies the next harbour of Grammata, which likewise presents numerous inscriptions, one even referring to John V Palaeologus, who crossed the Adriatic on his way to visit the pope in Rome in August 1369 (Turchiano 2017a; 2017b). It would thus appear that some of these sites served both as junctures in coastal cabotage as well as nodes serving the short Adriatic Sea crossing.

We do not possess the same sort of evidence for other Byzantine ports and harbours in the Salento, as at



Figure 3.8: San Cristoforo (Melendugno), looking out over the beach, from where a cave appears to have been used for offerings and supplications to deities and saints in the hope of a safe voyage (courtesy of Stefano Calò).

many of these sites Byzantine period artefacts are few and far between (or have not been recognised), even if some general observations may be obtained from the sum and variety of evidence (see Appendix).



Figure 3.9: San Cristoforo (Melendugno), looking towards the interior of the cave (courtesy of Stefano Calò).

First, the majority of known harbours along the Salento coastline dot the western Adriatic coast. Not only did it represent the most immediate landing area for anyone coming or going from the eastern Adriatic coast and from the Eastern Mediterranean in general, but its hinterland is characterised by both its higher agricultural fertility and its density of occupation when compared to the eastern Salento.

In the region of the Alimini lakes (Fig. 3.10) for instance, tradition has it that the Ottoman fleet used one stretch of coast during its invasion of Otranto in AD 1480, today known as the Bay of the Turks. A little further south (close to the Alimini lakes) Frassanito or S. Giovanni a Frassanito may have been the ‘San Giovanni a Mare’ or S. Giovanni *M. rtub.li* attested in the documents (Congedo 1961: 16, sites it at the *Edificio Idrovoro*; see also Arditì 1879: 66). The same stretch of coast has yielded a well-carved Greek inscription dating to AD 1042 (Fig. 3.11), when a tower was built there by Constantine, the *topotèrètès* or commander of the Imperial fleet, in the fight against the usurper George Maniakes, holed-up in Otranto to the south (Jacob 2007). This was an area of various possible havens, including the northernmost of the two Alimini lakes, which was connected to the Adriatic Sea by a short, navigable channel. A significant Byzantine and later medieval site, which includes a

cave-church apparently dedicated to St Nicholas, has been found on a hillock near the water’s edge in the northernmost of the Alimini lakes in the location of Pagliarone; it may well have been reached by the sea.

Several of the small harbours were able to take advantage of the inlets formed by the rocky coasts of a good part of the Salento. Some, however, probably had to make do with beachhead landings or very ephemeral receiving structures. The one at San Foca, for instance, was provided with a small church that appears to have been deliberately destroyed during an attack in the 12th or 13th century AD (Auriemma 2004: 179).

Few harbour sites, however, have yielded as much and as enticing and enigmatic archaeological evidence as the area of various small havens around Porto Cesareo (Fig. 3.12), which some have suggested was the ancient site of Sasina; the *Senum* mentioned by Pliny. We know of the site as the foundation of *Cesarea Augusta* by Frederick II in 1239 (Martin 1995). Indeed, a 13th-/14th-century settlement that may have been part of the new foundation is located on a narrow peninsula known as La Strea that encloses the bay of Porto Cesareo (Fig. 3.13). The site, which we have surveyed, consists of at least 24 buildings, and is dated on the basis of the associated pottery gathered during the

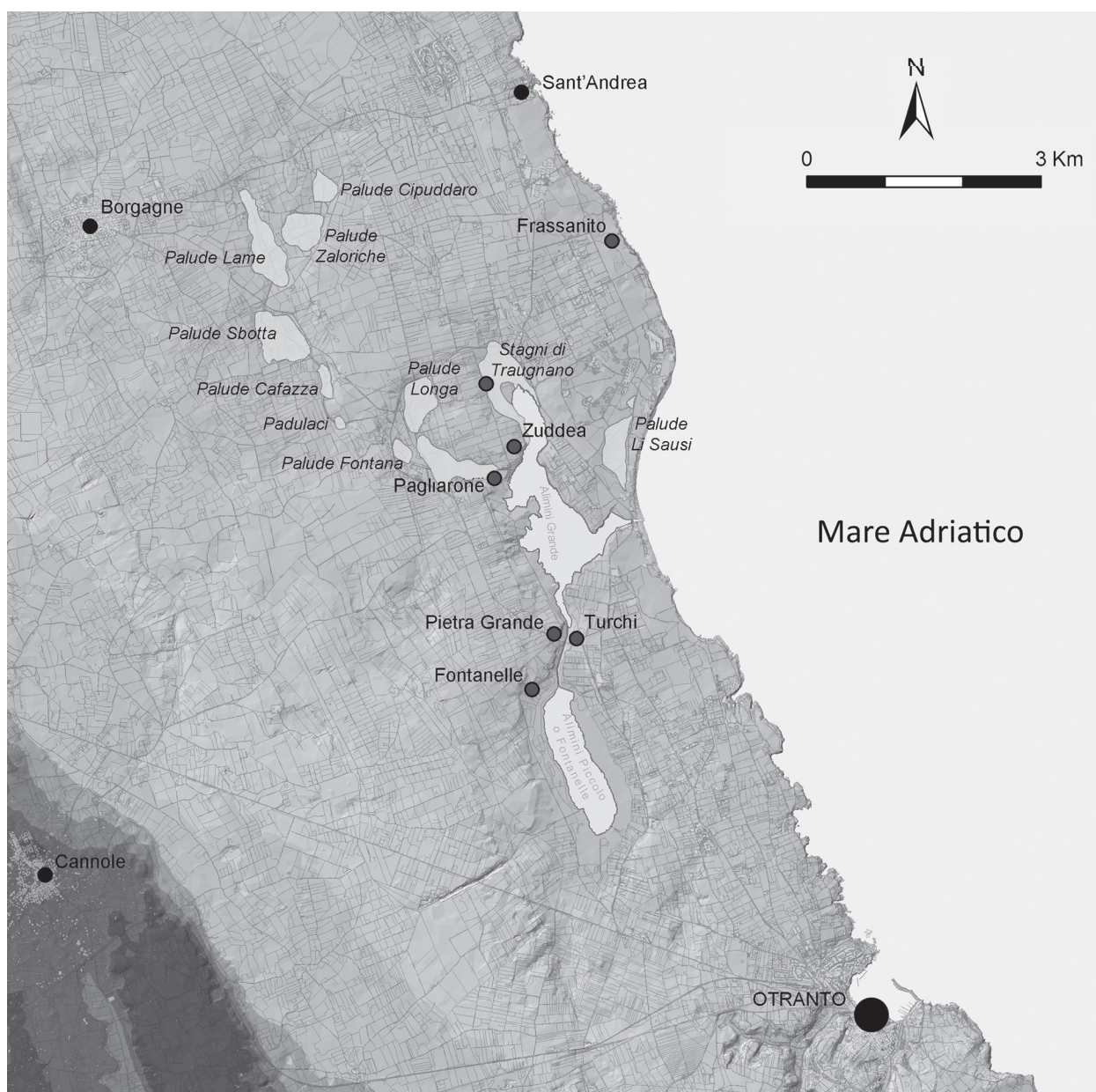


Figure 3.10: The two large and interconnected Alimini Lakes. Previous marshes or lagoonal areas with toponyms and abandoned Byzantine sites have been added (Giuseppe Muci, LAM).

survey. There does not appear to be anything that dates earlier than the 13th century AD, although we did find an anonymous Byzantine bronze follis near Torre Squillace, on the approach to the peninsula.

Within the bay enclosed by La Strea, the present maximum ship's draft is 2 m on the landward side, which would have been more than adequate for most ancient shipping. Although, given an estimated rise of sea level of around 1 m since the late 1st millennium, much of the bay would have been inadequate for ships, even as small as the 7th-century Yassi Ada wreck (Auriemma and Solinas 2009), it could have been used for shallow-draft boats. Instead, the draft on the northern side of the

present town of Porto Cesareo reaches 4 m, which would have been more than adequate and might suggest an early settlement beneath the modern buildings – where archaeology is totally absent. Along the coast to the north are a series of inlets where many archaeological discoveries have been made: of prehistoric, classical, and even medieval date. Cristiano Alfonso, in particular, found much archaeological material in the southern inlet of the Isola Grande which may be relevant.

Thus, it is not hard to envisage that Porto Cesareo, and areas located particularly to the northwest of the present town, served as harbours in Antiquity and through the Middle Ages, perhaps as Lecce's western



Figure 3.11: Byzantine inscription recording a maritime watch tower in 1042 (after Jacob 2007).

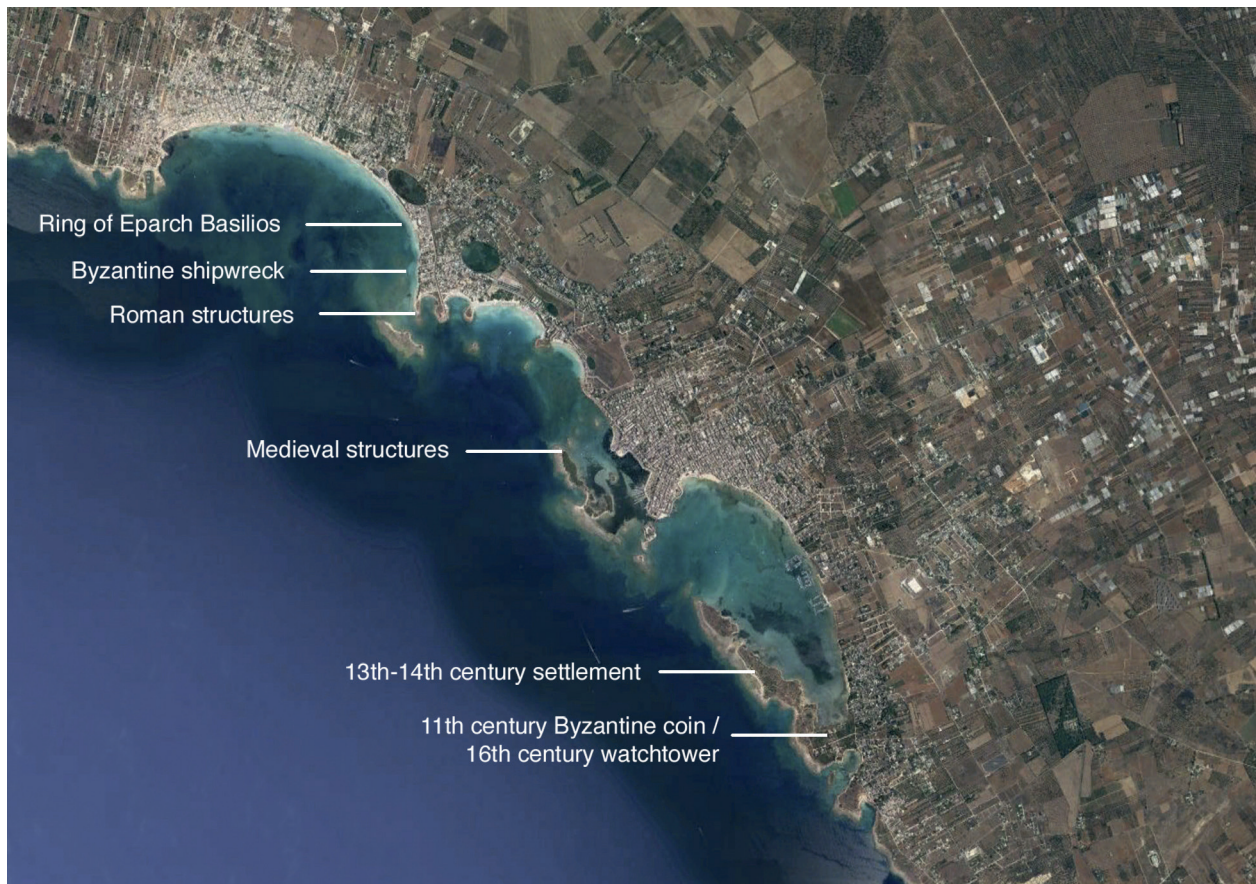


Figure 3.12: The archaeological evidence around Porto Cesareo (based on Google Earth, with additions, LAM).



Figure 3.13: La Strea peninsula, with abundant later Medieval remains – perhaps 13th century AD (Giuseppe Gravili, LAM).

maritime outlet. This might explain the various discoveries in the waters of Porto Cesareo – from ceramics, to the remains of a Roman wreck at Scala du Furnu/Torre Chianca (transporting columns), and medieval structures concentrated to the northwest of the town (Auriemma 2004: Vol. II, 13).

There are also a fair number of Byzantine finds from the area, including ceramics and coins. One of the most recent and intriguing discoveries is that of a gold ring found underwater by a fisherman in front of Porto Cesareo (Fig. 3.14). The ring shows the bust of Christ Pantocrator encircled by an inscription of a certain Basilios, who was apparently *Protospatharios* and eparch of Constantinople between AD 862 and 866. In AD 867, he appears to have been a member of an embassy from Basil I to pope Nicholas I in search of allegiance, hoping to substitute the patriarch Ignatios, sustained by the Roman Church, by Photius (Arthur 2020: 229; Martindale 2001). The discovery of such an important object lost in the waters at Porto Cesareo is quite intriguing. It may seem more than a coincidence that the research by Rita Auriemma has led to the excavation of what was a medium-sized cargo ship nearby (carriage of c. 20 tons) in 2014 (Fig 3.15), which has yielded a ¹⁴C date of between AD 770 and 1020 (*ex inf.* Rita Auriemma; Auriemma 2012). It is also interesting that Auriemma considers the wreck to have some technical characteristics of Levantine ships comparable with some of the Tantura/Dor shipwrecks in Israel that date to the same period (Barkai and Kahanov 2007).

Thus, the gradually accumulating evidence suggests that Porto Cesareo had become a particularly significant Byzantine and later medieval harbour, or rather set of harbours and landings on the Ionian side of the Salento. In Byzantine times, this might be partly explained as a result of the Arab/Saracen occupation of Taranto and its port from AD 840 to 880, rendering the latter unsafe for much Byzantine shipping, which needed to be diverted further south. Porto Cesareo would not only have served as the western port of Lecce, although lying c. 36 km away, but could also have been a useful stopover on the way to Gallipoli, as well as providing a point of departure for the important Calabrian port city of Croton in Calabria, c. 143 km across the Ionian Sea (Corrado 2001).

In many respects, the archaeology of Byzantine ports and harbours, at least until the end of the 1st millennium, is something of a trace archaeology. Even the most important Byzantine towns such as Naples and Ravenna/Classe have yielded relatively little in terms of monumental structures and, until recently, even the artefacts were difficult to categorise. In the Salento there is certainly very much more to do both as regards archaeology and the questions of sea levels and



Figure 3.14: Gold signet ring of the eparch Basilios (LAM).

coastal change throughout the centuries, building upon the fundamental work of Rita Auriemma. Whatever the case, there is little doubt about the importance of the entire coast as a form of extended harbour facility, providing food, water, and shelter to seafarers, essential goods to the Byzantine administration and the Church, the means of exchange with merchants, and a stopover to Byzantine possessions in Calabria, Sicily, and elsewhere in the Western Mediterranean.

The abundant graffiti of ships and invocations found incised on buildings and in caves in much of the Salento would seem to underline the significant role of the sea and the extended coastline in providing numerous landing sites (cf. Cossa 2017). Similarly suggestive are the numerous sallies effected by the Saracens, between the 8th and 12th centuries AD, on various towns and villages in southern Italy and further afield, often recorded in local traditions, but sometimes supported by reliable documentary sources, as in the cases of both Ugento and Oria.

In conclusion, in the context of the Byzantine Terra D'Otranto, it is somewhat difficult to accept a similar argument to Philipp Niewöhner's recent conclusions in his splendid volume on the archaeology of Byzantine Anatolia, where he states that 'the inland gained in importance relative to the harbour cities, as many of their former overseas connections were severed and the centre of gravity shifted from the Mediterranean Sea to the Anatolian landmass' (Niewöhner 2017: 5). If I tend to disagree, it is because I see both textual and archaeological evidence aligning with those who see the Middle Sea as a continuous stage for connectivity throughout Antiquity and the Middle Ages (Broodbank 2013; Wickham 2005; Horden and Purcell 2000). It is only the minor rural sites, with little access to coastal or inland markets, that may have suffered disproportionately.

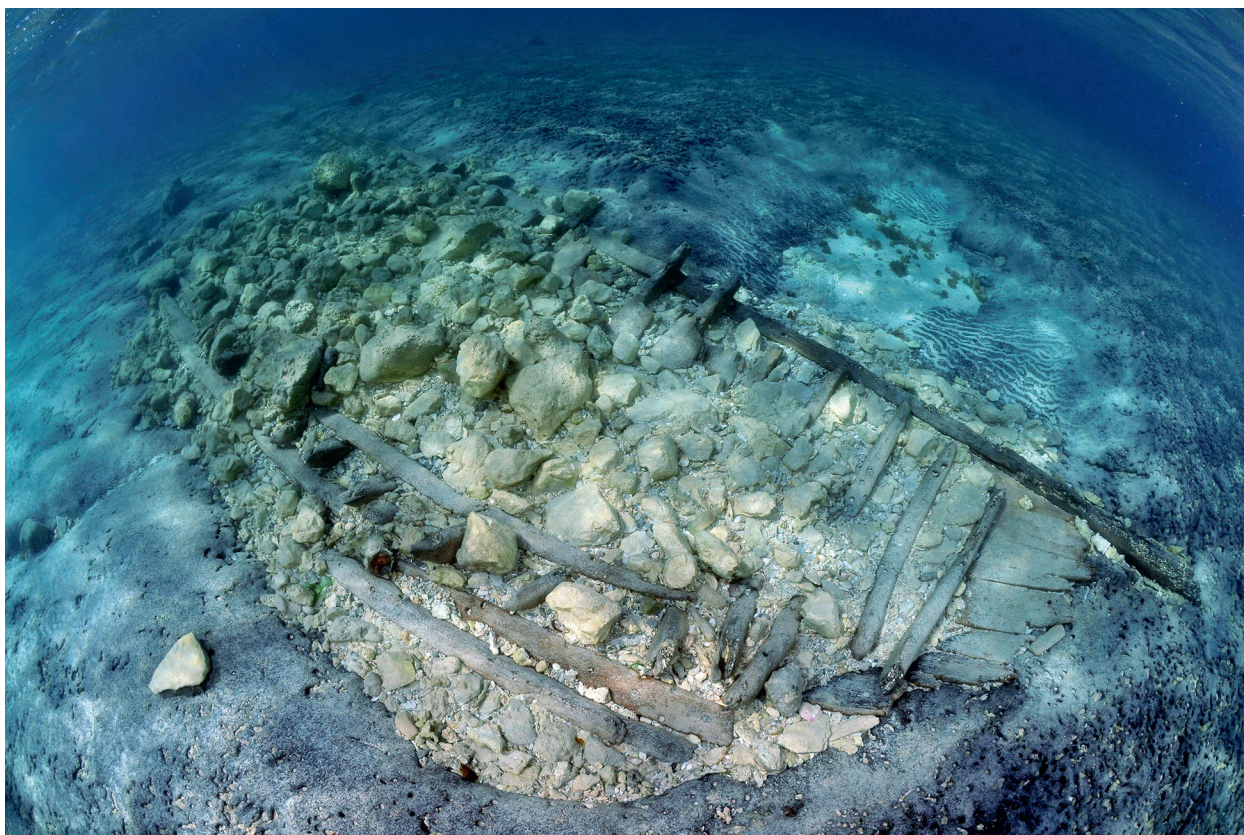


Figure 3.15: The Byzantine wreck of Porto Cesareo (courtesy of Rita Auriemma).

In our quest for ancient harbours and landings, we should look for two types of structures: main harbours often adapted from earlier Roman ports on the one hand, and apparently inconsequential landings on the other. State and principal commercial shipments will have favoured the former, although tramping or cabotage may likely have taken into consideration the latter. Archaeologically speaking, structured ports or harbours will be easier to find and document. Unfortunately, however, our discipline has often been directed by the most evident, if not necessarily, the most eloquent material remains. Clearly, the best way forward in our research will need to be based on the formulation of specific questions rather than on the simple gathering of raw data, however essential the latter may be.

Appendix

Byzantine ports, harbours, havens, and landings in Byzantine southern Apulia:

East Coast

Brindisi: Textual documentation (Alaggio 2009). Byzantine finds, including Otranto type amphorae. De Mitri suggests that the port was obstructed by silting during Late Antiquity (De Mitri 2010: 130).

Torre San Gennaro: Otranto-type amphorae.

Torre Rinalda/Torre Chianca/Torre Veneri: Roman burials, Byzantine finds, Otranto-type amphorae.

San Cataldo, Lecce: Roman mole. Byzantine finds, Otranto-type amphorae (Merico and Sammarco 2014).

San Foca: Byzantine finds, Otranto-type amphorae, *folles* of Leo VI (AD 886-912) (Degaspero 2000; D'Andria, 1980).

Roca Vecchia, Melendugno: Byzantine finds including a *folles* of Phocas (AD 602-604) (Travaglini 1982: 170, Museo di Lecce, nr. Inv. 2782) and various others dating from the reigns of Leo VI (AD 886-912) and Constantine VII (AD 919-920), two anonymous *folles* of the 10th and 11th centuries AD (Auriemma and Degaspero 1998).

San Cristoforo (Torre dell'Orso): Byzantine finds, Otranto-type amphorae, excavations within the main cave from June 1983 revealed medieval finds dating from the 12th century AD (*ex inf.* I. Blattman).

Torre Sant'Andrea: A coastal cave settlement exists in this area, which is likely to have been inhabited in Byzantine times (Fonseca *et al.* 1979: 118). An almost intact Byzantine chafing dish comes from the waters in front of the site.

Alimini lake area (S. Giovanni a Frassanito, S. Stefano and Baia dei Turchi): An area of various possible havens, including the northernmost of the two Alimini lakes. Perhaps this was the area of 'San Giovanni a Mare' and the S. Giovanni *M. rtub.li* mentioned by the Arab geographer al-Idrisi in the 12th century AD (Congedo 1961: 16; Arditi 1879: 66), Byzantine finds, Otranto-type amphorae.

Otranto: Textual documentation (Von Falkenhausen 2007). Abundant Byzantine finds, Otranto-type amphorae. The 7th century AD is documented by various ceramics and by four coins, including two *folles* of Heraclius, a gold *solidus* of Constans II and a *follis* of Justinian II (AD 685-695). By the 8th century AD (if not earlier), the town began to produce ceramics and transport amphorae at the Mitello kiln site (Leo Imperiale 2004).

Porto Badisco and nearby loc. La Fraula: Byzantine finds, Otranto-type amphorae, including a fine Sgraffito Ware bowl from the 11th/12th century (Arthur 2007: 248, Fig. 6).

Porto Miggiano: No known Byzantine remains.

Castro (probably *castrum Minervae*, which is very hard to believe did not have a port: Martin 1993: 127): Byzantine finds, globular and Otranto-type amphorae (Leo Imperiale 2015).

Porto Tricase: Various Byzantine period sites in the hinterland.

West Coast

Leuca: Apparently attacked by the Saracens in the 9th/10th centuries AD, later mentioned by Al-Idrisi (Visceglia 1988: 35).

San Gregorio, Patù: Remains of a mole of ashlar blocks.

Torre Pali, Salve: No known Byzantine remains on land. Off the coast lies a shipwreck with c. 9th-century amphorae similar to class 1 examples from the Bozburun wreck off the coast of south-west Turkey, suggested as being from the Crimea (Auriemma 2004: II, 44; Hocker 1998; Hocker *et al.* 1995).

Punto Pizzo: Byzantine finds (including Otranto-type amphorae) in the area known as 'il Campo' in the immediate hinterland of Punto Pizzo (*ex. Inf.* R. Auriemma).

Torre San Giovanni, Ugento: Byzantine finds, 7th-century AD Alpine soapstone, globular and Otranto-type amphorae; many in a pit located just a few metres

from the water's edge. (Vitolo 2016; Sannazaro 1994: 269; D'Andria 1979).

Gallipoli: Textual documentation (Martin 1993; Jacob 1989; Guillou 1974). Byzantine finds (Bruno and Tinelli 2012). Survey by Rita Auriemma and her team have brought to light abundant late antique finds on the adjoining island of Sant'Andrea, some of which may date to the 7th/8th centuries AD.

Santa Maria al Bagno (the *emporium Nauna* of Roman times): see *CIL* IX, 10 = ILS 6113. Bronze *follis* of Romanus I (AD 920-944) (Degaspero 2000).

Sant'Isidoro: A bronze coin of Constantine VII dating to AD 945 was found immediately to the east of Torre S. Isidoro (Travaglini 1992: n. 135). Roman and later (?) pottery sherds are to be found on the beachfront.

Porto Cesareo: Byzantine finds at Porto Cesareo and between Capo S. Vito and Leporano (TA) (Auriemma 2004: Vol. II, p. 174, Figs 27, 27A, 28). A Byzantine anonymous *follis* was found in front of Torre Squillace to the immediate south of La Strea.

Torre Colimena and San Pietro in Bevagna: An ancient mole (Hellenistic or Roman?) of large, square blocks has been discovered underwater at San Pietro in Bevagna by Fabio Maccacchia in August 2018.

Torre dell'Ovo (Torricella): Submerged moles that have been identified as being of ancient Greek date (I know not on what evidence) are clearly visible on Google Earth. The site is claimed to have been significant for tuna fishing.

Porto Perrone (TA): (De Mitri 2010: 104).

Porto Saturo (TA): Close to a large Roman villa (De Mitri 2010: 104-105, with bibliography; Auriemma 2004: Vol. II). In early medieval times, apparently 6th/7th century AD, the area was used for burials (D'Angela 2003: 22; Enzo Lippolis, pers. comm.). Unfortunately, little is known about the post-classical occupation of the site.

Leporano (TA): Various Byzantine amphorae found along the coast between Leporano and San Vito (Disantarosa 2002).

Taranto: For textual documentation (Von Falkenhausen 1968). Abundant Byzantine archaeological finds, Ganos- and Otranto-type amphorae, largely unpublished (Pace 2009).

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