

SEMINARI DEL CENTRO INTERUNIVERSITARIO  
PER LA STORIA E L'ARCHEOLOGIA DELL'ALTO MEDIOEVO

3

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

PROCEEDINGS OF THE INTERNATIONAL CONFERENCE  
COMACCHIO 27TH-29TH MARCH 2009

EDITED BY SAURO GELICHI AND RICHARD HODGES



BREPOLS

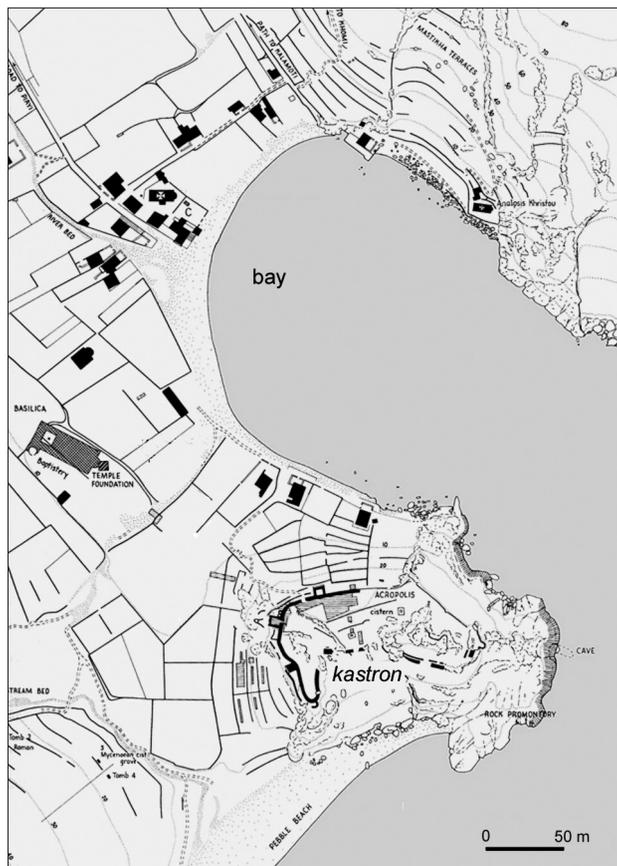
PAUL ARTHUR

## From Italy to the Aegean and back – notes on the archaeology of Byzantine maritime trade

Whenever I leaf through the fourth report on the excavations at Emporio, with memory of my visit to the site, I imagine a flurry of people that had gathered in the intimate cove just north of Mavros Gialos to watch the docking of a small sailing ship filled with foreign goods, foreign faces and foreign news<sup>1</sup> (fig. 1). Emporio was a fortified site overlooking the Aegean, on the southern end of the island of Chios. It was virtually at the entrance to the gulf of Smyrna and from there into the Anatolian heartlands. In the sea to the south, forty-seven nautical miles away, lies Samos, whilst Constantinople lies some two hundred nautical miles to the north. In Byzantine times, both Smirne and Samos must have been well within a days sailing in good weather, whilst Constantinople could probably have been reached in four or five days. The quantity and types of finds from the Emporio excavations illustrate the range of activities and contacts that the small fortified citadel enjoyed well into the late 7<sup>th</sup> century, with table wares and commercial *amphorae* being imported from Tunisia, Cyprus, Palestine, and from the nearby Turkish coastlands. Coins and presumably other artefacts came from Constantinople.

The material from the so-called reoccupation of Emporio, dated by the excavators to the 9<sup>th</sup> century, stands in stark contrast to the earlier picture. Only eight ceramics were deemed distinctive enough to warrant publication, whilst coin finds comprised only one bronze issue of Emperor Nicephorus I (802-811) and one of Leo V (813-820). Given the relative frequency of later 9<sup>th</sup>-century coins in circulation through the Empire, their absence at Emporio makes it likely that the 'reoccupation' period dates to the earlier part of the century, if it had not began earlier, and it is indeed possible that there was continuity of occupation between the two recognised periods of the later 7<sup>th</sup> and early 9<sup>th</sup> century. The comparison between the finds representing the two periods at the site would seem to support

<sup>1</sup> M. Ballance, J. Boardman, S. Corbett, S. Hood, *Excavations in Chios 1952-1955: Byzantine Emporio*, ABSA Supp. vol. 20, Oxford, 1989.



1. The site of Emporio, Chios (from Ballance, Boardman, Corbett, Hood 1989, with modifications).

the idea of a severe contraction in trans-Mediterranean trade in the intervening years. Whilst it should be said that Emporio is only one small site, undoubtedly with its own distinct history, and cannot therefore stand as exemplar for early medieval maritime trade in general, it is somewhat curious that a site in such an apparently pivotal area of Byzantium should yield so little in traded items after the 7<sup>th</sup> century.

The theme of the present conference, 'From one sea to another', lets us move from Emporio in the Aegean to Comacchio in the northern Adriatic, as some small trading ships may well have done in and around the 8<sup>th</sup> century. Like Emporio, Comacchio lived largely from the sea, with fishing as a significant part of the local economy. But, unlike Emporio, whose significance should perhaps be largely framed within the concept of the de-

fence of the eastern capital, Comacchio appears to have been principally a trading site, perhaps even possessing some of the characteristics of the northern *emporìa*. As Sauro Gelichi has so clearly illustrated, Comacchio, like Venice, both lacking adjoining agricultural land, appeared as an intermediary between the Mediterranean and the Po valley and between a largely Byzantine-controlled coast and a Lombard and later Carolingian hinterland. As Mike McCormick might put it, it lay in a zone of ecological transition that required different transport infrastructures<sup>2</sup> The same could be said for Ravenna and its thriving port of Classe in late antiquity, as archaeology is so clearly demonstrating, although unlike Comacchio their existence was required above all for political control as capital of Byzantine interests in northern Italy<sup>3</sup>. The substantial loss of Byzantine power in the upper Adriatic by the mid-8<sup>th</sup> century was followed by the decline of Ravenna and its port, and the growth of alternative political and commercial coastal loci, first and foremost of which was to become Venice<sup>4</sup>.

The purpose of this contribution is to consider some archaeological evidence for Byzantine sites and materials involved in the communications network of which Comacchio itself was both a part and, perhaps, somewhat of a precursor to the fundamental role that Venice was to play in exchange and interchange between Europe and the Mediterranean. My examination will concentrate on the 8<sup>th</sup> to 10<sup>th</sup> centuries, for which archaeological evidence, particularly for the early part of the time-range, is at an all-time low. There are, nonetheless, a series of sites and artefacts that have come to light across the Mediterranean that suggest a certain common intent and cultural unity on a number of differing levels across and within Byzantine controlled territory (fig. 2). This has been pointed out by a number of scholars over the last few years and moves forward from the solely text-based views permissible before the recent archaeology<sup>5</sup>.

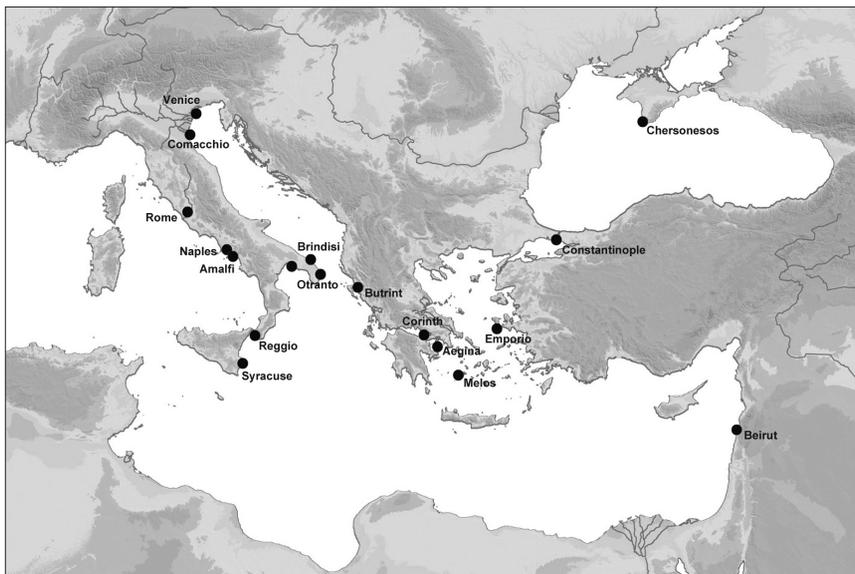
It is clear that during the considered timeframe there was already a some-

<sup>2</sup> S. Gelichi (ed.), «Comacchio e il suo territorio tra la tarda antichità e l'alto medioevo», in *Genti nel Delta da Spina a Comacchio*, Ferrara, 2007; 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, vol. 1: The Heirs of the Roman West*, Millennium Studies, vol. 5/11, ed. J. Henning, Berlin/New York, 2007, p. 48.

<sup>3</sup> A. Augenti, «A Tale of Two Cities. Rome and Ravenna Between 7<sup>th</sup> and 9<sup>th</sup> Century AD», in 774. *Ipotesi su una transizione*, ed. S. Gasparri, Turnhout, 2008, p. 175-98.

<sup>4</sup> e.g. R. Hodges, «Aistulf and the Adriatic Sea», *Acta Archaeologica* 79 (2008), p. 274-81.

<sup>5</sup> H. Ahrweiler, «Les ports byzantins (VII<sup>e</sup>-IX<sup>e</sup> siècles)», in *La navigazione mediterranea nell'alto medioevo, Atti XXV settimana di studio*, Spoleto, 1978, p. 259-83.



2. Sites discussed in the text (base-map © 2000–2004, Ancient World Mapping Center).

what informal hierarchy of sites involved in trading, sometimes with recognisable functionaries. Unlike the *emporía* of the North however, their principle *raison d'être* was perhaps less to do with commercial exchange and more with preserving what was left of an empire. The very presence of these sites, nonetheless, provided a vector for trans-Mediterranean commerce, a few of them of highly significant proportions.

Naples together with its enclosing bay, for instance, was not only centre of a quite substantial political power, but a producer, consumer and trader, and it must have possessed a relatively large and articulated society throughout the early Middle Ages. It appears to have been one of the most highly structured areas both during Byzantine domination and after, gaining its independence in the mid-8<sup>th</sup> century<sup>6</sup>, when control by the Eastern capital was waning in various parts of the Mediterranean. Naples' early medieval economic complexity is partly indicated by the production of wine at Misenum, Ischia and probably elsewhere in its bay, suitably bottled in locally made *amphorae* which appear to have been exported as far as Rome, and perhaps even to Sicily<sup>7</sup>. Part of this production was likely under

<sup>6</sup> P. Arthur, *Naples from Roman Town to City-State: an archaeological perspective*, The British School at Rome monograph series no. 12, London, 2002.

<sup>7</sup> G. De Rossi, «La fornace di Misenum (Napoli) ed i suoi prodotti ceramici: caratteri

the strict control of the Church, which was clearly, and probably quite profitably, involved in maritime trade and even ship building in earlier times<sup>8</sup>. The facilities at Misenum may have been favoured by antique structures that had been created to house the old Roman fleet. The quantities of early medieval finds from the site are considerable, but do not seem to have lasted the Saracen raids of 846 or thereabouts. In Naples itself, recent excavations at Piazza Giovanni Bovio have brought to light storerooms brimming with goods, suitably located on the water's edge of the early medieval town<sup>9</sup> (fig. 3). The buildings appear to have been intimately linked with the production of both glass and metal objects. Finds include local and imported globular *amphorae*, glazed ware (jugs and chafing-dishes), local and perhaps imported painted pottery similar to examples from the Crypta



3. Early medieval storerooms at Piazza Giovanni Bovio, Naples  
(from Giampaola 2004, with modifications).

e diffusione», in *La Ceramica Altomedievale in Italia*, ed. S. Patitucci Uggeri, Florence, 2004, p. 253-64.

<sup>8</sup> S. Cosentino, «Credito e finanza a Napoli in una lettera di papa Gregorio Magno», in *Mare et litora: Essays presented to Sergei Karpov for his 60<sup>th</sup> birthday*, ed. R. Shukurov, Moscow, 2009, p. 149-55.

<sup>9</sup> D. Giampaola, «Dagli studi di Bartolomeo Capasso agli scavi della metropolitana: ricerche sulle mura di Napoli e sull'evoluzione del paesaggio costiero», *Napoli Nobilissima* 5.5 (2004), p. 50-2; D. Giampaola (ed.), *Napoli la città e il mare: Piazza Bovio tra romani e bizantini*, Verona, 2010.

Balbi in Rome, a quite significant silver coin of the Byzantine emperor Constantine V (741-775) and a bronze coin of the Neapolitan duke Stephen III (821-832). The complex was abandoned in the late 9<sup>th</sup> or 10<sup>th</sup> century. It is interesting that the development of this site may have followed the demise of the classical port sited in a small bay beneath modern Piazza Municipio, that appears to have silted-up during the 6<sup>th</sup> century AD<sup>10</sup>. Naples was clearly a highly important site, strategically, for its own political merits as the capital of a city-state from the mid-8<sup>th</sup> century, and economically, especially for its role as intermediary. Its significance, already in late Roman times, is illustrated by the ever-increasing investment in a series of *castra* or forts, positioned both in the hinterland and on the islands, leading to what might be defined as an independent thalassocracy. It controlled both production within its sizeable bay and trade along the Tyrrhenian coast, and certainly interacted with Rome and Byzantium, and with Lombard Benevento and the Saracens, as is indicated *inter alia* by the *Pactum Sicardi* of 836. The treaty has an entire section devoted to Amalfi, whose fortunes, far more so than the multifarious interests of Naples, were based almost exclusively on its role as *emporium*.

Amalfi is one of those sites for which archaeological evidence is almost totally lacking yet highly desirable, given the site's role in early medieval exchange evidenced through the texts. Reggio, Syracuse and Taranto are others. For all of these, written sources and material remains reveal tantalising bits of information. Reggio was object of a very large rescue excavation that, sadly, has hardly been published<sup>11</sup>. As in Naples, Byzantine waterfront contexts, apparently also relating to artisanal production, yielded Forum Ware<sup>12</sup> and much else. Hopping onto the nearby island of Sicily, Syracuse is likewise beginning to yield some archaeological finds that hint to its significance, especially underscored in the mid-7<sup>th</sup> century, when it had been elected capital for a short time under the Byzantine emperor Constans II (641-668), himself assassinated in the city. Contact between Reggio, Syracuse and the east necessitated sailing around the Ionian Sea, up the eastern coast of Calabria, passing Crotona and Capo Rizzuto<sup>13</sup>, and down the western coast of Apulia, a stretch of water dominated by the large town of Taranto.

<sup>10</sup> D. Giampaola *et alii*, «La scoperta del porto di Neapolis: dalla ricostruzione topografica allo scavo e al recupero dei relitti», *Archaeologia Maritima Mediterranea* 2 (2005), p. 62.

<sup>11</sup> R. Spadea, «Lo scavo della 'Stazione Lido' (Reggio Calabria)», *MEFRM* 103.2 (1991), p. 689-707.

<sup>12</sup> A. Racheli, «Osservazioni su alcune classi di materiali rinvenuti in territorio calabrese», *MEFRM* 103 (1991), p. 726-27.

<sup>13</sup> M. Corrado, «Nuovi dati sul limes marittimo bizantino del Bruttium», *Archeologia Medievale* 28 (2001), 533-69.

For Taranto, archaeology has not so far yielded any data for this period, despite various intriguing textual references. In 839, for instance, merchants from Amalfi were apparently selling pottery and other wares in the town<sup>14</sup>. Between the years 842 and 880 the coastal town was also a Saracen logistical base for assembling people captured in the hinterland to be sent as slaves to North Africa, and was a stopover for ships travelling between the Tyrrhenian and the East. In 867 the monk Bernard, whilst using the port to travel to the Holy Land, supposedly saw six large ships containing nine thousand Beneventan prisoners being sent to North Africa as slaves. When archaeology begins to come to our aid, it shows us, for the 10<sup>th</sup> century, a town full of imported goods. Excavations carried out in 1987-8 by Pasquale Favia for the Soprintendenza Archeologica in Largo San Martino<sup>15</sup> have yielded layers with foreign *amphorae*, including type Gunsenin I that carried wine from Ganos<sup>16</sup>. This is surely a result of two or three centuries of effective maritime activity suggested by the written sources.

Sailing around the Salento coast lay Otranto, which had taken over the role of the ancient gateway-port of *Brundisium* (Brindisi) by the late 6<sup>th</sup> century. The latter site, terminal of the Via Appia, was intimately linked to the east through the Via Egnatia across the sea, which led to Thessalonica. The 'Slavic' invasions of much of Greece in the late 6<sup>th</sup> and early 7<sup>th</sup> centuries interrupted the route, thus curtailing the importance of Brindisi, and must have favoured the alternative sea routes to Corinth or around the Peloponnese, together with the more southerly port of Otranto. Furthermore, Brindisi was more exposed than Otranto to attacks by land from the north, and its once rich agricultural hinterland appears to have suffered increasing problems from climatic deterioration and encroaching marshes, likely boosting malaria.

Otranto's new significance may be indicated by what appears to have been the placing of a large site in the locality of Pagliarone, overlooking the Alimini lakes and close to the old road from *Lupiae* (Lecce), possibly during the first half of the 7<sup>th</sup> century. At Otranto, thankfully, archaeology has been forthcoming. Excavations by the British School at Rome and by the University of Lecce, have illustrated the port-town's significance in trans-Mediterranean trade<sup>17</sup>. The town may have reached an all-time low

<sup>14</sup> M. McCormick, *Origins of the European Economy: Communications and Commerce, A.D. 300-900*, Cambridge, 2001, p. 627.

<sup>15</sup> P. Favia, «Largo San Martino, via Pentite», *Taras* (1988), p. 119-20, 122-3.

<sup>16</sup> D. Pace, *Taranto: la ceramica tra il periodo tardo-bizantino e normanno da Largo San Martino*, Post-graduate thesis, University of Salento, 2009.

<sup>17</sup> D. Michaelides, D. Wilkinson (eds.), *Excavations at Otranto, volume I: The Excavation*, London, 1992.

by the later 7<sup>th</sup> to early 8<sup>th</sup> centuries, and it is in this period that the few known architectural fragments, from the area of the cathedral, appear to align with finds from the Adriatic zone and peninsular Italy. Nonetheless, the town and its hinterland do not seem to have been long in picking up again. As in the Bay of Naples, in and around the 8<sup>th</sup> century, Otranto was responsible for manufacturing globular transport *amphorae* on a kiln site close to the port, probably to export wine from grapes growing in its hinterland<sup>18</sup>. Their overseas distribution is yet to be recognized, though they are well represented on sites in eastern Salento. Recent research shows that the 8<sup>th</sup> century or thereabouts also witnessed a substantial growth in olive cultivation around the Alimini lakes just to the north of Otranto, following early medieval land clearance<sup>19</sup>.

The walls of Otranto were strong according to the *Strategikon* of Kekaumenos, and may even have been reinforced during the 9<sup>th</sup> or 10<sup>th</sup> centuries. The BSR excavations close to the seafront yielded possible traces of fortification, perhaps even with a *proteichisma*. Further excavations, also close to the sea and not far from the ceramic production site, brought to light two ditches, one of which was some three metres wide, which may also have been defensive. Despite the manufacture of *amphorae*, it was not until the latter half of the 10<sup>th</sup> century that imported goods started to appear in quantity in the town, also reaching the surrounding villages, albeit in limited number.

Across the sea in what is now Albania, and close to the island of Corfu, lay Butrint. In the early Middle Ages the old Roman town was apparently defended by at least two towers of the late antique walls that were burnt down in an attack during the 8<sup>th</sup> or early 9<sup>th</sup> centuries<sup>20</sup>. Their destruction assemblages yielded ceramic data somewhat similar to that from Otranto, with some pottery perhaps even imported from the Salento. Nonetheless, the lesser quantity of comparable Byzantine ceramics at Butrint suggests that it witnessed reduced commercial activity<sup>21</sup>. Not only was its hinterland less pro-

<sup>18</sup> M. Leo Imperiale, «Otranto, cantiere Mitello: un centro produttivo nel Mediterraneo bizantino», *La Ceramica Altomedievale in Italia*, ed. S. Patitucci Uggeri, Florence, 2004, p. 327-42.

<sup>19</sup> F. Di Rita, D. Magri, «Holocene drought, deforestation and evergreen vegetation development in the central Mediterranean: a 5500 year record from Lago Alimini Piccolo, Apulia, southeast Italy», *The Holocene* 19.2 (2009), p. 295-306.

<sup>20</sup> R. Hodges, S. Kamani, M. Logue, J. Vroom, «The sack of Butrint, c. AD 800», *Antiquity* 83.320 (2009), p. 158-60.

<sup>21</sup> See: J. Vroom, «Dishing-up history: early medieval ceramic finds from the Triconch Palace in Butrint», *MEFRM* 120.2 (2008), p. 291-305.

ductive than Salento, but Butrint also opened onto a territory that was not under strict Byzantine control. Indeed, the site may appear to have been more of an enclave linked to Byzantium, functioning for strategic reasons and for aiding coastal traffic along the eastern Adriatic, rather than as an intermediary between inland Albania and the Mediterranean. Richard Hodges suggests the presence of a periodic market sited by the shore of the Vivari channel below the acropolis, with relatively intense overseas exchange taking place around the 10<sup>th</sup> century, when it had very close links to Otranto<sup>22</sup>.

Both Otranto and Butrint had necessarily to deal with Corinth in maintaining contacts with the Byzantine heartlands. Corinth appears, indeed, to present a closely matching material culture to both sites<sup>23</sup>, though understandably with closer and more direct contacts to Constantinople and the Aegean world. There is little to gauge Corinth's exchange activity during the 8<sup>th</sup> and 9<sup>th</sup> centuries, though the fact that by the 10<sup>th</sup> century the area appears to have shared a tradition of cooking pot types with Otranto, may suggest fairly strong communications (not necessarily commercial exchange) even earlier, and the same may hold true for Athens<sup>24</sup>. All these sites, in common with much of the Aegean, are at a loss for coins from the later 6<sup>th</sup> century, indicating, as Ward-Perkins<sup>25</sup> stresses, a receding economic complexity, until a pervasive monetary economy begins to pick up again in the 9<sup>th</sup> century.

Sailing into the Aegean, archaeological data, as for much of southern Italy, is likewise unsatisfactory, but nonetheless beguiling. Along with Asia Minor, the Aegean constituted the heartland of the early medieval Byzantine Empire. Long-term Austrian excavations on the island of Aegina have revealed traces of its occupation during the later first millennium. The earlier finds from the acropolis, which became the site of the Byzantine *kastron*, were published by Felten in 1975<sup>26</sup>. The ceramics closely resemble finds

<sup>22</sup> R. Hodges, *Eternal Butrint. A UNESCO World Heritage Site in Albania*, London, 2006, p. 158-60.

<sup>23</sup> G.D.R. Sanders, «An overview of the new chronology for 9<sup>th</sup> to 13<sup>th</sup> century pottery at Corinth», in *Actes VIIe Congrès International sur la Céramique Médiévale en Méditerranée, Thessaloniki 1999*, ed. C. Bakirtzis, Athens, 2003, p. 35-43.

<sup>24</sup> P. Arthur, «Riflessioni intorno alla produzione e circolazione della ceramica nel basso Adriatico», in *Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry. Comparison between Western and Eastern Mediterranean, Vol. I /II*, eds S. Menchelli, S. Santoro, M. Pasquinucci, G. Guiducci, BAR International Series, in press.

<sup>25</sup> B. Ward-Perkins, *The Fall of Rome and the End of Civilization*, Oxford, 2005, p. 116-7.

<sup>26</sup> F. Felten, «Die Christliche Siedlung», in *Alt-Aegina I, 2. Die spatromische Akropolismauer*, ed. H. Walter, Mainz, 1975, p. 55-80.

from Otranto and from many rural sites in Salento, as well as from Corinth. More recent excavations at Aegina have revealed a substantial group of material from a well at the site of Kolonna, over the ancient classical ruins by the sea<sup>27</sup>. Evidently, dating of the finds, which stretches from the 7<sup>th</sup> to 10<sup>th</sup> centuries, needs to be refined, but the items supplement the evidence for the long-distance contacts of the material culture of Aegina, both East and West. As far as I am aware, we do not yet have the same quality of evidence from other Aegean island or coastal sites, with the exclusion of Emporio (Chios), cited above, which already appears to represent a slightly different, perhaps more eastern Byzantine, cultural assemblage. Indirect evidence in the form of the distribution of rotary querns may, instead, reveal a great importance for the island of Melos with its lava-stone quarries at Rema. I would not be surprised if the island was centre of a considerable commerce in volcanic millstones from Byzantine to later times, as is well-attested for the Eifel area of Germany in the Middle Ages, given that there are large areas in the Mediterranean where the geology was simply not suitable for their manufacture and that they were of primary importance to the agrarian economy<sup>28</sup>.

Instead, published archaeological evidence from the historically important island of Samos, so far, tends to die out by the mid-7<sup>th</sup> century<sup>29</sup>.

The 9<sup>th</sup>-century shipwreck of Bozburun, off the south-west coast of Turkey, quite possibly points to travel from the north (Black Sea *amphorae*?), down the Aegean and heading eastwards along the coast of Asia Minor. Certainly Byzantine globular *amphorae*, perhaps of Cypriot manufacture, have come to light in Umayyad contexts dating to the first half of the 8<sup>th</sup> century as far to the east as Beirut, which also had access to an Arab, Egyptian and Near Eastern, trade network<sup>30</sup>. Cyprus has been shown to have been

<sup>27</sup> B. Witte, «Die byzantinische Keramik aus einem ziegelschacht in Agina Kolonna», in B. Böhlendorf-Arslan, A.O. Uysal, J. Witte-Orr, Çanak, *BYZAS* 7 (2007), p. 363-82.

<sup>28</sup> P. Arthur, «Macine intorno al Mille: Aspetti del commercio dalla Grecia e dalla Sicilia in età medievale», in *2 Congresso Nazionale di Archeologia Medievale*, ed. G.P. Brogiolo, Florence, 2000, p. 485-9.

<sup>29</sup> e.g. C. Steckner, «Les amphores LR 1 et LR 2 en relation avec le pressoir du complexe ecclésiastique des thermes de Samos», in *Recherches sur la Céramique Byzantine*, eds V. Déroche, J.-M. Spieser, *BCH Supp.* 18 (1989), p. 57-71.

<sup>30</sup> P. Reynolds, «Pottery and the economy in 8<sup>th</sup> century Beirut: an Umayyad assemblage from the Roman Imperial baths (Bey 045)», *Actes de VII<sup>e</sup> Congrès International sur la céramique médiévale en Méditerranée (Ministère de la Culture caisse des recettes archéologiques), Thessaloniki, 11-16 octobre 1999*, Athens, 2003, p. 725-34; cf. C. Wickham, *Framing the early Middle Ages, Europe and the Mediterranean, 400-800*, Oxford, 2005, p. 774.

a producer of Byzantine globular *amphorae*, as has Crete, particularly through the evidence from the large-scale excavations at Gortyn.

Constantinople, of course, is visibly in the thick of things. Hayes' substantial Saraçhane pottery report vividly illustrates the capital's magnetism and some of its material requirements through the 4<sup>th</sup> century onwards<sup>31</sup>. Imported *amphorae* appear in mid-8<sup>th</sup> to 9<sup>th</sup>-century deposits, and though unfortunately they are generally not attributable to provenance, their variety suggests a diversity of origins. The ongoing project on the Byzantine port at Yenikapi, which was filled-in by silt by the 10<sup>th</sup> century, should help to reveal the scale of trade through its discovery of ships laden with *amphorae* and other merchandise<sup>32</sup>. The capital's trading contacts stretched not only into the Aegean and the Mediterranean, but also north into the Black Sea and well beyond.

Indeed, one of the major northern trading sites was Byzantine Chersonesos on the south-western coast of the Crimean peninsula. It is one of the most thoroughly excavated and published sites of Byzantine times, with excavations since the early 19<sup>th</sup> century and detailed finds reports stretching back to the publications of Yakobsen from the 1950's onwards<sup>33</sup>. Finds illustrate its role as intermediary with the steppes, and up the Dnieper river, past Kiev and into the Baltic; Ganos wine *amphorae* have even come to light in Sweden<sup>34</sup>. Chersonesos itself, however, was also a producer of surplus, including wine, which is eloquently illustrated by local *amphorae* produced at Quarantine Bay<sup>35</sup> and Pesochnoiy Bay<sup>36</sup> by at least the 9<sup>th</sup> century. Some ceramics dating to the first half of the 9<sup>th</sup> century from a large Roman reser-

<sup>31</sup> J.W. Hayes, *Excavations at Saraçhane in Istanbul, volume 2: The Pottery*, Princeton University Press and Dumbarton Oaks Research Library and Collection, Princeton/ Oxford, 1992.

<sup>32</sup> U. Kocabaş (ed.), *The Old Ships of the New Gate / Yenikapi'nin Eski Gemileri*, Istanbul, 2008.

<sup>33</sup> A.L. Yakobson, «Srednevekovie Amfori Severnogo Prichernomor'ya», *Sovetskaya Arkeologiya* 15 (1951), p. 325-44; cfr. A.L. Yakobson, *Keramika i keramiceskos proizvodstvo srednevekovoy Tavriki*, Leningrad, 1979.

<sup>34</sup> M. Roslund, «Crumbs from the rich man's table: Byzantine finds in Lund and Sigtuna, c. 980-1250», in *Visions of the Past. Trends and traditions in Swedish Medieval Archaeology*, eds H. Anderson, P. Carelli, L. Ersgård, Lund Studies in Medieval Archaeology 19, Riksantikvarieämbetet Arkeologiska undersökningar Skrifter 24, Central Board of National Antiquities, Stockholm, 1997, p. 239-97.

<sup>35</sup> M.I. Zolotarev, «Hersoneskiy goncharnyy kompleks VIII-IX vv», in *Antichnaya Drevnost' i Srednie veka*, Sverdlovsk, 1982, p. 145-8.

<sup>36</sup> V.V. Borisova, «Srednevekovaya goncharnaya pech'», *Soobshcheniya Hersonesskogo Muzeya*, Simferopol, 1969, p. 42-6.

voir bear a striking resemblance to contemporary pottery from Naples and Rome<sup>37</sup>. Curiously, the same period saw a diffusion of Byzantine coins from the Sicilian mint of Syracuse. Not only did these coins reach Chersonesos, but also the Balkans, having been found in five graves at Biskupija<sup>38</sup>, at Dubravice, near Skradin<sup>39</sup> and elsewhere. Perhaps they were dispersed by troops who had served in Italy and in the defense of Sicily against the Arabs.

All the above is quite clearly a minor part of a very big story, yet to be retold. Nonetheless, it should serve as a rough pointer to what was going on. What is to be read in all this evidence, quantitatively unsatisfactory as it may be? Though, sadly, we do not yet possess enough information to confidently define the nature of much of the exchange seen through archaeology, ceramics appear to be an eloquent indicator of directions of movement, as has frequently been remarked. They not only show continuing contact and exchange across the centuries of the early Middle Ages through the Byzantine Mediterranean, but should increasingly indicate privileged connections between specific areas. Most recently, work has been conducted on defining the ubiquitous globular *amphorae*, which clearly represent a number of manufacturing areas in the Byzantine Mediterranean and Black Sea. Ongoing work is aimed at defining the mineralogical characteristics of the various productions. For instance, Negrelli's analyses of Comacchio globular *amphorae* of mainly 8<sup>th</sup>- to 9<sup>th</sup>-century date suggest that various came from Aegean-Anatolian regions, though not from the Otranto kilns or the Adriatic<sup>40</sup>. Similar *amphorae* were not only produced in the Bay of Naples, but possibly in Sicily and Calabria, and perhaps in many areas in and around the Aegean and the Black Sea, including Ephesus and the islands. Coarse wares, and the finer table-wares which, unfortunately, rarefy after the 7<sup>th</sup> century, are much more susceptible to local variation. Indeed, the rather preliminary ceramic evidence might suggest that there were a

<sup>37</sup> L.V. Sedikova, «Stolovaia posuda I poloviny IX v. iz zasypi vodokhranilisha v Kheronesose» [Fineware of the first half of the 9<sup>th</sup> century from the reservoir fill in Chersonesos], *Materialy po arkeologii, istorii i etnografii Tavrii* 3, Simferopol, 1993; L.V. Sedikova, «Keramicheskii Komplex I poloviny IX v. iz raskopok vodokhranilisha v Kheronesose [Ceramic Assemblage of the first half of the 9<sup>th</sup> century from excavations in the reservoir in Chersonesos]», *Rossiyskaya Arkeologiya* 2, Moscow, 1995, p. 170-7.

<sup>38</sup> cf. F. Curta, «Byzantium in Dark-Age Greece (the numismatic evidence in its Balkan context)», *Byzantine and Modern Greek Studies* 29.2 (2005), p. 113-46.

<sup>39</sup> Z. Gunjaca, «Dubravice kod Skradina. Ranosrednjekovno groblje. Early medieval cemetery», *Arheoloski pregled – Archaeological reports (Ljubljana)*, 1987, 1989, p. 148-9.

<sup>40</sup> C. Negrelli, «Produzione, circolazione e consumo tra VI e IX secolo: dal territorio del Padovetere a Comacchio», in *Comacchio e il suo territorio tra la tarda antichità e l'alto medioevo, Genti nel Delta da Spina a Comacchio*, ed. S. Gelichi, Ferrara, 2007, p. 454-67, 468.

number of interlocking exchange networks, such as the Adriatic zone, a western Byzantine zone (Salento, Corinth, coastal Peleponnese), an Aegean zone, a Black Sea zone and so forth, which may have been managed, however informally, by a number of nodes by way of their location. Corinth, for instance, almost certainly acted as a node between the Adriatic and the Aegean and Constantinople. Furthermore, on the basis of a recent re-examination of Cypriot Red Slip table-wares, Pamela Armstrong has argued for an 8<sup>th</sup>-century date for some examples, which distribution indicates “an extensive trade network operating between Cyprus and the Asia Minor coast, including the islands as far as Chios, along the Levantine coast and inland into Syria, Jordan and Palestine”, these last areas being under Umayyad control<sup>41</sup>.

The archaeological sites once identified as ‘isles of refuge’ during the 6<sup>th</sup>-7<sup>th</sup> centuries<sup>42</sup>, together with the places mentioned in the Chronicle of Monemvasia, that include southern Italy and Sicily, has suggested that the Byzantine State was also particularly concerned about maintaining a communications network from Constantinople to the West<sup>43</sup>, as well as a series of citadels to protect what was perceived as a Byzantine sea, despite the Saracens and piracy. Political communication certainly continued and if the routes it took were based on established stations, it is quite probable that many of the same sites were used as vehicles for commerce. Ceramics are going to be our most likely indicators for this and other forms of contact, and ceramic analysis is thus clearly worth developing, though much more work is needed to characterise the various *amphora* productions for the comprehension of Mediterranean-wide trade, and to characterise coarse wares so as to understand local or regional movements.

Even if the early medieval economy was substantially less complex, at least in scale, than that of both earlier and later times, it is obvious that one of its most distinctive characters was its variability across the globe, suggesting an abundance of individual and often localised reactions to general economic decline rather than the dominance of any grand strategy. Wickham<sup>44</sup> discusses much of the available evidence for Aegean maritime connectivity through the later 7<sup>th</sup> and 8<sup>th</sup> centuries, contrasting the relatively far-reaching contacts of the islands and coastal sites to the mar-

<sup>41</sup> P. Armstrong, «Trade in the East Mediterranean in the 8<sup>th</sup> century», in *Byzantine Trade (4<sup>th</sup> – 12<sup>th</sup> centuries): Recent Archaeology of Local, Regional and International Exchange*, ed. Mundell Mango, Aldershot, 2009, p. 171.

<sup>42</sup> S. Hood, «Isles of refuge in the early Byzantine period», *ABSA* 65 (1970), p. 37-46.

<sup>43</sup> P. Armstrong, «Trade in the East Mediterranean», p. 177.

<sup>44</sup> C. Wickham, *Framing the early Middle Ages*, p. 187-93.

ginality and closure of many inland areas. Across Byzantium one need only compare the professionally made pottery and the continuous circulation of coinage at Constantinople to areas characterised by hand-made pottery and total absence of coinage in some areas of the Peloponnese, Cyprus or elsewhere, with an entire spectrum of conditions in-between<sup>45</sup>. Politics, location, environment, and fertility, all helped in establishing the relative level of economic success and interaction with other areas of the Mediterranean.

Returning to Italy, and specifically Salento, almost twenty years of research, field survey and excavation is starting to show significant disparities that apparently existed over relatively small areas during the early Middle Ages. When, during the 8<sup>th</sup> century, Otranto was manufacturing transport *amphorae* to support the shipment of a budding agricultural surplus (wine, and possibly oil), a small village near Supersano, some twenty-five kilometres to the south-west, was apparently quite isolated and largely self-sufficient. The abundant pottery was wheel-turned and all made in kilns lying only a few kilometres away, indicating a local exchange system. Only a glass chalice (probably from northern Italy) and a volcanic millstone (perhaps from Melos) show extra-regional contact, which may have been sporadic and, perhaps, rather high-status, lying outside of regular market mechanisms. Nonetheless, archaeobotanical remains from the excavation of a well may broaden the picture. They included grape seeds that on DNA analysis proved to have their closest link to modern Greek cultivars, probably indicating cultivation of similar varieties in the two areas<sup>46</sup>, though when the variety reached southern Italy is hard to say.

There are still a number of stumbling blocks to our interpretations, one of the principal being the difficulty of fitting historical with archaeological chronologies, which should improve with greater care in dating material evidence and improvements in dating methods. Our material evidence needs to be calibrated with the ever-increasing data for both global and localised environmental change in a human ecology approach. Last but not least, we are still suffering a scarcity of material evidence,

<sup>45</sup> *ibidem*, p. 786-87; P. Arthur, «Form, function and technology in pottery production from Late Antiquity to the early Middle Ages», in *Technology in Transition A.D. 300-650*, eds L. Lavan, E. Zanini, A. Sarantis, Leiden, 2007, p. 159-186.

<sup>46</sup> E. Cappellini, M.T.P. Gilbert, F. Geuna, G. Fiorentino, A. Hall, J. Thomas-Oates, J.P. Ashton, M. Thomas, D.A. Ashford, P. Arthur, P.F. Campos, J. Kool, E. Willerseeley, M. Collins, «A multidisciplinary study of archaeological grape seeds», *Naturwissenschaften* 97 (2010), p. 205-17.

with clear disparity between regions and between the archaeological evidence from major sites and port sites on the one hand, and minor sites and inland sites on the other. This is especially the case in the Byzantine Mediterranean, and will only be resolved with more Francovich-Tuscany style regional approaches, which representativeness has been called into doubt but which, until further such work is published, stands out as a unique paradigm<sup>47</sup>.

#### *Acknowledgements*

I should like to thank Richard Reece for having read and commented on this paper.



<sup>47</sup> A.E. Laiou, «The Early Medieval Economy: Data, Production, Exchange and Demand», in *The Long Morning of Medieval Europe. New Directions in Early Medieval Studies*, eds J.R. Davis, M. McCormick, Surrey, 2008, p. 100.