The Adriatic within the Mediterranean: some characteristic shipwrecks from the Roman period

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Abstract

Many underwater archaeological sites along the eastern Adriatic coast, as well as those on land, bear witness to the importance of the Adriatic in intensive maritime trade in the Mediterranean during the period of Roman dominion. Several hundred underwater sites registered in the area to the present confirm the connections between the eastern Adriatic, the Adriatic as a whole, and the rest of the Mediterranean. While finds dating to the time of the Roman Republic point to a dynamic local exchange of goods and indicate established links between the two Adriatic coasts, the finds from the Imperial periods suggest imports from remote provinces of the Roman Empire. It should, however, be kept in mind that all our conclusions come primarily from amphorae as the basic form of packaging for the maritime transport of goods. Even though the Adriatic incorrectly remains absent from nautical charts of ancient sailing routes in the Mediterranean, the results of investigation and research testify to the existence of numerous sailing routes and a thriving commerce and economy during the entire Roman period.

1 Introduction

The geographic characteristic of the eastern Adriatic coast, particularly its Croatian section, which with more than 1000 islands, islets, and reefs has the second most indented coastline in Europe, and the mild climate and moderate
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winds, favored attempts to sail across the sea, settle the island, and establish maritime connections with the other parts of the Mediterranean. From the prehistoric age to the period of Greek colonization, innumerable indirect evidence speaks of a safe maritime exchange of goods (or perhaps military operations or pirate attacks), with which the local inhabitants came into the possession of raw material and objects discovered and produced in overseas countries.

2 The archaeological facts

Unfortunately, the direct proof of navigation, i.e. underwater finds such as sunken cargo from ships, are extremely rare from that period. Only the occasional archaic stone anchor or small shipwreck from the period of classical Greece have been recorded to date in Croatian waters. The traditional eastern Adriatic navigation was manifested both in written sources and in underwater finds only from the period of the founding of the Greek colonies of Issa and Pharos at the beginning of the 4th century BC. Diodorus of Sicily recorded that after the founding of Pharos, the local population rebelled, calling for help from fellow natives from the mainland and neighboring islands, who quickly arrived in “many small vessels” [1], and Polybius account of the Roman-Illyrian wars in the period of King Agron and his wife and heir Teuta [2], accuses the Illyrians of relentless piracy in the Adriatic and Ionian Seas. With this, as well as the information that the Macedonian king Philip V had ordered from the Illyrians as many as 100 lemboi (i.e. small and fast illirian boats) in his preparations for the first conflict with the Romans, Polybius lucidly shows the already well developed Illyrian maritime skills. The very fact that Rome entered into military operations against the Illyrians with a fleet of 200 ships indicates how fearful they were of a clash with the nimble Illyrian navy.

While the historical sources offer exclusively reports of geographic, military, and political character, the eastern Adriatic waters in the period of the penetration of Greek, and shortly afterwards, Roman civilization, finally offer data about the everyday life and economy of the Adriatic inhabitants. Apparently up to that time, the majority of the cargo hauled by the merchant ships moving through the Adriatic was exclusively or at least primarily of organic character, which cannot be traced today. Baskets, skins, bags, wooden vessels, and other similar containers could not be preserved on the rocky sea floor, and if by chance they were preserved under sand, all traces of them have been lost. The modest dimensions of the Illyrian crafts (often mentioned by classical writers) [3] and hence also their cargoes makes the search for any eventual sunken remains even more difficult.

The great political powers of the time, the Phoenicians, Greeks, and Etruscans, who during the first half of the 1st millennium BC adopted the idea of the amphora, born in the eastern Mediterranean, as the basic packaging for the maritime transport of goods did not enter into any major trade or political activities in the Adriatic that would leave traces underwater prior to the 5th century BC. Naturally, this does not mean that the Adriatic was unknown or
inaccessible to them, as data from Homer onwards in Greek written sources indicate Greek knowledge of this sea and its inhabitants [4].

It has already been mentioned that up to the period of the Greek colonization of the island of Vis at the beginning of the 4th century BC, only rare isolated finds are known. The first complex cargoes appear from the 3rd century BC onwards, and they can easily be recognized from the characteristic Graeco-Italic amphorae. Recently the inadequacy of this term has been debated, but these certainly are amphorae related to the Greek inhabitants of the region of Magna Graecia, and together with the Greeks they arrived in the other surrounding colonized areas, where local production then began [5]. These amphorae were adopted by the local Italic tribes [6], and they gradually began to form them according to their own needs and desires.

Figure 1. Vela Svitnja Cove, the island of Vis: late Greco-Italic and Lamboglia 2 amphorae.
This transition from Greek to Roman types has been documented at a dozen shipwrecks in Croatian waters. One of the characteristic examples is the shipwreck of a small trading vessel near the islet of Sapun at Donji Školji near Lastovo [7], with a cargo of elongated amphorae that are often called late Graeco-Italic, representing a phase of development towards the well known Roman Republican, amphorae of the Lamboglia 2 type. Through underwater survey of the finds, however, the presence was also noted of amphorae whose bodies are more similar to the bag-like bodies of the Lamboglia 2 type, proving the contemporaneity of both forms. A very similar site was discovered in 1989 on the western side of the island of Lastovo, at Baški Rat [8]. At this site it was also possible to note a mixture of late Graeco-Italic amphorae and early forms of the Lamboglia 2 type, so the shipwreck probably occurred at a time close to the previous one.


The most characteristic amphorae found underwater in Croatia, the Lamboglia 2 type amphorae and their successors the Dressel 6 A type, continue to be the most frequent and common underwater finds (Fig. 2, 3). Local divers humorously call them “tipo uno” (type 1), to emphasize their exceptional quantitative dominance. They have been documented at ca. 100 underwater sites [9], including shipwrecks, anchorages, and individual finds. As a rule, they represent the only cargo of a ship, and only in one isolated case did they appear with amphorae of Dressel 1 type [10]. All of the sites have been devastated to a great extent, and the greatest number of recorded and removed specimens is 634 amphorae from the shipwreck in Vela Svitnja Bay on the island of Vis [11],
A large quantity of the earliest examples of Lamboglia 2 type amphorae was discovered in Stari Stani Cove in the Pakleni Islands near Hvar [12], and the site at Veli Porat Cove on the small island of Šćedro, although thoroughly destroyed, resulted in a considerable amount of finds of ship equipment and gear, along with amphorae [13]. The site at Čavlin Bay on the island of Murter has proven very interesting; it has not yet been investigated fully, but various forms of amphorae have been noted in the cargo that would correspond to the entire proposed developmental line of these types [14].

Amphorae of the Lamboglia 2 and Dressel 6 A types best reflect the increase in Roman economic and political influence in the period between the first conflicts with the Illyrian tribes and the complete pacification of the situation on the eastern coast of the Adriatic through the victory over the Illyrians in 8–9 AD. The numerous shipwrecks from the 2nd and 1st centuries BC are the best reflection of the unstable political situation that did not allow for secure navigation, and at the same time promote consideration of the inadequate familiarity of inexperienced Roman traders with the eastern Adriatic coast [15].

Octavian's actions against piracy, the institution of order through the organization of the Roman province of Dalmatia, and, in the end, the final victory over the Illyrians considerably reduced the danger from shipwrecks, but did not entirely eliminate them. Thus in the following centuries, traces can be found of ships sinking, reflecting the constantly increasing participation of the Adriatic in the affairs of the Mediterranean.
An interesting shipwreck with a miscellaneous cargo from the 1st century AD was found near Cape Glavat on the island of Mljet [16]. Along with Hispanic amphorae of the Beltran IIa type and amphorae of the Richborough 527 type, probably from Lipari, the ship's cargo included a large quantity of simple cooking vessels, Pompeiian red plates, lumps of raw glass from workshops in the Near East [17], and lead minerals and half-finished products [18], most probably from the rich mines in the interior of the province of Dalmatia, and intended for the production of pure lead, and lead glazes and paints used in wall painting (Fig. 4). Other finds included the wooden remains of the ship, protective lead sheet metal, and numerous items of ship equipment and gear. Hispanic amphorae from the 1st and 2nd centuries are present at several other underwater sites, but these are mostly rare examples remaining after comprehensive robbery [19].

A well preserved site was discovered, documented, and protected with an iron mesh in 1998 in Koromašna Bay on the northern side of the island of Žirje [20], (Fig. 3). The underwater survey of the material, as well as several whole examples and characteristic fragments that were brought up, indicate an eastern Mediterranean cargo composed of late Rhodian and several Cretan types of amphorae [21].

Two shipwrecks with cargoes of pottery vessels from the first half of the 2nd century, one near Viganj on the Pelješac peninsula [22], and the other near Cape Izmetišće in the Pakleni Islands near Hvar [23], also carried a cargo of presumed eastern Mediterranean origin. The origin of the cargo was determined by the researchers on the basis of finds of vessels that can be attributed to what is known as Eastern Sigillata B and Eastern Coarse Ware, as well as several Koan type amphorae. Whether this was really the case or whether the cargo was at least partially of local production will be shown by analysis of the modest but significant pottery material originating from the pottery workshops of Issa [24]. In any case, this is an impressive quantity of pottery vessels, assessed as at least
6000 pieces at the site near Cape Izmetišče. After many years of robbery, some 2500 whole pottery vessels were extracted during rescue excavations, while a significant quantity of fragments was left on the seabed [25].

Cylindrical northern African amphorae of varied types were transported through the eastern Adriatic region throughout all the centuries of the Empire, while in the 3rd, 4th and 5th centuries, along with several Aegean amphora types, they represent almost the only goods that have been preserved on the seabed. The site in Duboka Bay on the northwestern side of Hvar [26], the site in Sobra Bay on Mljet [27], and the untouched site protected by an iron mesh at the islet of Supetar near Cavtat [28], are evident examples of late Roman North African and Aegean imports.

3 Conclusion

In the case of Croatian underwater finds from the Roman period, all of our conclusions are owed in most cases to amphorae or pottery vessels. It should be kept in mind, naturally, that the popularity of amphorae began to decline on the Italian peninsula from as early as the 2nd century, and that in the eastern Adriatic they were never actually accepted by the local population. Their production can be tied exclusively to Greek, and subsequently Roman colonies and/or agricultural estates in the period of the Roman Republic and the early Empire [29]. North Africa retained this ceramic form of packaging the longest, and even today, in a somewhat changed form, it is used in everyday life. Barrels, which...
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have been noted in Gaul from as early as the 1st century BC [30], gradually displaced amphorae, in this manner depriving us of valuable testimony to the dynamics of the Mediterranean maritime economy. Regions that continued to use amphorae play major roles in the underwater archaeology scene.

In the past decade, the majority of sites, and particularly the intact ones, have been protected in situ by covering them with an iron mesh, as is the case with several of the sites described in the text above. This procedure is in accordance with Article 2.5 of the Convention on the Protection of the Underwater Cultural Heritage (UNESCO, Paris, 2 November 2001), and the aim is the underwater presentation of the site or offering efficacious protection until funding can be ensured for systematic excavations and suitable protection, preservation, and presentation of the excavated objects.

Figure 6. Sobra Bay, the island of Mljet, North African amphorae. Figure 7. Mali Brod, the island of Lastovo, a diver showing the axe left on the site by the robbers.

Notes
The site was protected with an iron mesh in 1993. Radić 1990; Radić 1991, 158–159.


J Parker noted 24 shipwrecks on the territory of Croatia with finds of Lamboglia 2 and Dressel 6 A amphorae: Parker 1992.


All the finds were removed in three excavation campaigns (1971, 1972, and 1977). The results have not been published completely to the present.

The site was excavated in 1987. Orlić–Jurišić 1989.

The remains of a thoroughly robbed site were excavated in 1985. Orlić–Jurišić 1993.

The rescue excavations begun in 2002. The results have not yet been published.

Juvenal, Satire, ILX, 292–297.


Analyses were made by Dr. M. Verità, Stazione Sperimentale del Vetro, Murano, Venice, Italy.

PbS (galenite, PbCO₃ (cerusite), and Pb₂O₃ (minium). Radić–Jurišić 1993, 119, 122.

Jurišić 2000, 70/No. 53, 71/No. 62.


In 1998 a protective iron mesh was placed around the site. Mesić 1999, 76; Jurišić 2000, 67/No. 30, Pl. 23.

For a brief description and bibliography: Jurišić 2000, 74/No. 73, Pl. 26.

For a brief description and bibliography: Jurišić 2000, 65/No. 20, Pl. 22.

This is an as yet unpublished find from the collections of the Archaeological Museum in Split.

On a rocky slope above the main concentration of finds, at a depth of 12–15 m, ten semi-worked stone blocks had sunk, one of them of green granite, and the other nine of limestone.

The results have been published in the form of a preliminary report: Jurišić 1998, 81.


An intact site discovered, documented, and protected with an iron mesh in 1999. The results have been published merely in the form of a preliminary report: Mesić 2000, 54–56.

So far, the production of Graeco-Italic amphorae has been proven in the area of the Greek colony of Pharos on the island of Hvar (Katić 1999/2000), as has the production of the Dressel 6 B type in the region of Istria (extensive bibliography in Bezeczky 1998).

Laubenheimer 1990., 147, 149
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References


