

## 10. Ganos wine and its circulation in the 11<sup>th</sup> century

Nergis Günsenin

For the Byzantine Trade symposium, Marlia Mango asked me to discuss the scope of the wine trade radiating from the north shore of the Sea of Marmara, in particular that centred on the monastery of Ganos (modern Gaziköy)<sup>1</sup> near Raideostos (modern Tekirdag), an area of wine production as confirmed by Ottoman documents. In fact, until then my research on 'Ganos wine' had focused on trying to find places that it had not reached! Given the perceived role of nearby Constantinople in its distribution and the possible extent of its circulation, the Ganos wine trade can be viewed as both regional and international. Before embarking on this subject, it is necessary to clarify what we mean by 'Ganos wine', and before that to place it within an historical tradition.

### *Wine*

Wine has always been one of the more easily portable of consumables. From earliest times, the wine of some regions was preferred above others; for example, the Persians had a preference for Syrian wine. Gradually, Christianity became established and monasticism became an important feature of that religion. The organization of monastic communities involved production of their own food, and included wine: 'Le moine byzantin, même inactif, consomme quotidiennement plus d'un litre d'un vin qui, vu l'ensoleillement, devait atteindre un titre alcoolique honorable ...'.<sup>2</sup> Their agricultural production quickly turned into surplus produce, and monasteries became an economic force in the agricultural-producing world. They were particularly involved in wine production.

Much evidence exists in the form of written texts for wine production and its trade by monasteries. The evidence concerning Mt Athos is particularly well preserved in local documents, where we learn about their vineyards, their ships and harbours, and the destination of their wine throughout the Empire. Although Athos is well documented,

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<sup>1</sup> N. Günsenin, 'Medieval trade in the Sea of Marmara: the evidence of shipwrecks', in R. Macrides, ed., *Travel in the Byzantine World* (Aldershot, 2002), 127, and note 6 below.

<sup>2</sup> M. Kaplan, *Hommes et le terre à Byzance du VIe au XIe siècle* (Paris, 1992), 33.

similar situations existed for most monasteries.<sup>3</sup> As an archaeologist, my approach to the written documents has been continuously to seek concrete material evidence to support them. It seemed to me that, if there were monasteries, there must have been wine production. If there was wine production, there must have been a means of transporting it, which indicates ships. If there were ships to carry wine, the wine must have been put in transport containers – that is, amphorae. So, the archaeologist can ask: given all the documentation for Athonite ships sailing with cargoes of wine, can we identify an Athonite amphora? Has any Athonite shipyard been investigated?

### *Amphorae*

The wine produced in antiquity was mostly transported in amphorae. These ceramic transport containers, of mass production, provide the clues to trade networks in the ancient world. Study of the production of amphorae and their trade has long been a prevailing topic relating to the wine-producing countries of ancient times. Currently, much importance is attached to research into the workshops and kilns of these commercial ceramic containers.

Amphorae are referred to by their Greek name *amphiphoreus* or *amphoreus* on clay tablets of the Mycenaean period, spelled out in the characters of the Linear B syllabary, often accompanied by an ideogram or small identifying sketch. Homer uses the word, for instance for the wine jars carried by Telemachos on his voyage from Ithaka to Pylos. By derivation, it means something that can be carried from both sides. There is a variety of shapes, but they have in common a mouth narrow enough to be corked, a pair of opposing vertical handles, and at the base usually a tip or knob that serves as a third handle, below the weight, needed when one inverts a heavy vessel to pour from it.<sup>4</sup> In contrast to earlier amphorae, medieval Byzantine amphorae tended to be less heavy, and so did not require the third handle; instead, they developed rounded bases, frequently with inward-pointing dimples. Amphorae have plied all round the Mediterranean from the time when people first started to trade. Canaanites, then Phoenicians or Egyptians, brought them to the Greeks,

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<sup>3</sup> For monastic life, see A. Harvey, *Economic Expansion in the Byzantine Empire 900–1200* (Cambridge, 1989), and K. Smyrlis, *Une puissance économique: les grands monasteres a Byzance, de la fin du Xe au milieu du XIVe siecle* (Paris, 2002).

<sup>4</sup> V.R. Grace, *Amphoras and the Ancient Wine Trade* (Athens, 1979).

and amphorae continued to be used down to the present day, but were for the most part replaced with wooden barrels after the 13<sup>th</sup> century.<sup>5</sup>

### *Ganos Amphorae*

One type of amphora can be associated with Ganos wine (see below). These are mainly small-sized piriform amphorae (28–48cm average height), without toes (fig. 10.2), unlike the ones in Greek and Roman times. The different capacities of the Ganos amphorae may be multiples of some standard unit of capacity, as are the capacities of the Byzantine amphorae found in the Serçe Limanı shipwreck (see below). Excavated kiln evidence suggests that Ganos and the neighbouring village of Chora (modern Hoşkøy) were producers of this type of amphora (fig. 10.1). Two other kiln areas, apparently producing amphorae like those made at Ganos, were identified on Marmara Island (Proconessos), one on the north coast at Saraylar and the other on the south-east coast, at Topagaç (fig. 10.1).<sup>6</sup> Other kilns producing Günsenin I, known as/or associated with Ganos amphorae, were probably located elsewhere in the wine-producing region along the north coast of the Sea of Marmara, outside the immediate Ganos area.

### *Chronology of Ganos Amphorae*

In the course of research for my doctoral thesis on medieval Byzantine amphorae (see note 10 below), I visited nearly all the museums on the coast of Turkey. The material that I catalogued and used as the basis for my typology was either from unprovenanced collections in museum storerooms, or isolated finds somewhere in the vicinity. Lacking dated contexts, it was not possible to establish an exact chronology for the four main types of medieval amphorae: Günsenin types I–IV. Subsequently, an important excavation provided necessary information to contribute to the chronology of Günsenin type I, namely the amphora known at Ganos. This important excavation was that of the Serçe Limanı shipwreck, excavated off the south-west coast of Turkey. This contained – in addition to a three-ton cargo of glass cullet – 56 Günsenin type I amphorae out of 104; ‘the

<sup>5</sup> N. Günsenin, ‘A 13<sup>th</sup>-century wine carrier: Çamaltı Burnu, Turkey’, in G. Bass, ed., *Archaeology Beneath the Seven Seas* (London, 2005), 120.

<sup>6</sup> For the amphora production research at Ganos, see N. Günsenin, ‘Ganos: centre de production d’amphores à l’époque byzantine’, *AnatAnt* 2 (1993), 193–201; N. Günsenin, ‘Ganos: résultats des campagnes de 1992 et 1993’, *AnatAnt* 3 (1995), 165–78; N. Günsenin and H. Hatcher, ‘Analyses chimiques comparatives des amphores de Ganos, de l’île de Marmara et de l’épave de Serçe Limanı (glass wreck)’, *AnatAnt* 5 (1997), 249–60.



Figure 10.1 Map showing the locations of Ganos (Gaziköy), Chora (Hoşköy), Constantinople, and the Serçe Limanı shipwreck. Inset map: Marmara Island (Proconessos) and the location of kiln sites at Saraylar and Topağaç.

Serçe Limanı amphoras of the Günsenin I type all have fabrics very similar to that of Günsenin I jars from the Ganos kilns, although differences in the fineness of and the amount and composition of inclusions in the fabrics do occur.<sup>7</sup> Many of these bore Bulgarian-type graffiti, and in one case the abbreviation MIR (Miroslav). This, combined with other Bulgarian ethnic elements on the ship, allowed Frederick van Doorninck, Jr., to determine that the crew of the ship that sank at Serçe Limanı were Hellenized Bulgarians who lived somewhere on the shore of the Sea of Marmara.

<sup>7</sup> F. van Doorninck, Jr., personal communication.

Van Doorninck also observed that those amphorae had already been used many times over, and concluded that the owners had repeatedly used them to transport wine, but had sold only the wine, keeping the amphorae for future cargoes. Among the finds on the wreck were 16 glass disks that had served as weights for pan balances, whose *terminus ante quem* was either AD 1024/25 or AD 1021/22. The ship must have sunk not long after. This is the only fixed date for the use of Günşenin I amphorae, and may therefore be relevant to the circulation of Ganos wine.<sup>8</sup> But what about the duration of its circulation?

The salvage excavation of a kiln at Ganos, mentioned above, showed that it had been constructed to produce wine amphorae, and continued in operation for a long, but unspecified time.<sup>9</sup> So from that we cannot obtain any precise measure of the duration of the amphora production itself at Ganos. In addition to the Serçe Liman excavation, other excavations confirm the 11<sup>th</sup>-century date for the circulation of Günşenin I amphorae (see below). One exception that extends the chronology comes from excavations in the Athenian Agora. Günşenin I amphorae were found in sealed strata dated by coins of the 11<sup>th</sup> century and others of Manuel I (1143–80).<sup>10</sup> It would be reasonable then to say that the Günşenin I amphorae produced in the Ganos region and ‘Ganos wine’ may have circulated into the 12<sup>th</sup> century.

#### *New Evidence for Ganos Wine at Constantinople*

In previous publications, I have claimed that most of the wine loaded at Ganos must have been intended for Constantinople nearby. The capital, besides requiring produce for its own consumption, was also an important distribution nexus for goods to other parts of the Empire and beyond. Günşenin I amphorae found during earlier excavations in Istanbul may bear witness to this trade.<sup>11</sup> However, the recent and important discoveries during 2005 in Istanbul in the Yenikapı district, namely the ancient *portus Theodosiacus*, made during the Marmaray Project to construct a new

<sup>8</sup> For the Serçe Limanı shipwreck, see F. van Doorninck, Jr., ‘The Byzantine ship at Serçe Limanı: an example of small-scale maritime commerce with Fatimid Syria in the early eleventh century’, in Macrides, ed., *Travel*, 125–35, 137–48; F. van Doorninck, Jr., ‘Solving a million-piece jigsaw puzzle: Serçe Limanı, Turkey’, in G.F. Bass, ed., *Archaeology Beneath the Seven Seas* (London, 2005), 106–17; and Bass et al., *Serçe Limanı*.

<sup>9</sup> Günşenin, ‘Ganos: résultats’, 165–78.

<sup>10</sup> N. Günşenin, *Les amphores byzantines (Xe–XIIIe siècles): typologie, production, circulation d’après les collections turques*, Université Paris I – Sorbonne, Paris (1990), Atelier national de reproduction des thèses de Lille III, 21–4; N. Günşenin, ‘Recherches sur les amphores byzantines dans les musées turcs’, in Déroche and Spieser, eds., *Recherches*, 267–76.

<sup>11</sup> Günşenin, *Les amphores*; Günşenin, ‘Recherches’, 270–71.

underground railway, showed once more that 'shipwrecks' can provide unique information about the past. Some of the 30-plus newly discovered shipwrecks correspond to those already noted by me in the deep waters of the Sea of Marmara.<sup>12</sup> Although the recently found shipwrecks were in the harbour at Constantinople, the latter had since silted up, so the ships are now the subject of a land excavation.<sup>13</sup> At least two of the ships were found still loaded with Günsenin I amphorae (Yenikapı 12) (see Figure A).<sup>14</sup> There were even two Y-shaped anchors (of the type found in the Serçe Limanı wreck) still *in situ* in one of them (Yenikapı 1).<sup>15</sup> At the excavation site, Günsenin I amphorae were recovered so often that the other ships may well have been loaded with them.<sup>16</sup> The Istanbul Archaeology Museum is carrying out the day-to-day excavation of the harbour, while Istanbul University's Department of Conservation and Restoration of Artefacts is responsible for the conservation and restoration of the shipwrecks, under my consultancy. This is not the place to provide details of the excavation, especially as it will be fully published, but to direct one's attention once more to how archaeological investigation continually enlightens historical knowledge. The amphorae present in the harbour of Theodosius may confirm the trade of Ganos wine to Constantinople. And, I am sure, by analyzing the wrecks, lying now at *portus Theodosiacus*, we can rewrite history.

*What was Ganos Wine Like, How was it Traded, and How Far did it circulate?*

As an archaeologist, my initial interest in surveying Ganos and Chora, the area in which the Ganos monastery lies, was to discover evidence of human activity.<sup>17</sup> The remains that I found included ceramic workshops, fragments of decorative marbles from the monasteries, and the remains of monastic buildings. The remains of the monasteries and fortifications reinforced what was known from written texts: Ganos was an important monastic centre. Regarding the amount of amphora production, both

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<sup>12</sup> For the Marmara shipwrecks, see N. Günsenin, 'From Ganos to Serçe Limanı: social and economic activities in the Propontis during medieval times, illuminated by recent archaeological and historical discoveries', *INA Quarterly* 26.3 (1999), 18–23. Günsenin, 'Medieval trade'

<sup>13</sup> U. Kocabaş, ed., *Yenikapı Shipwrecks, 'The Old Ships' of the 'New Gate'*, vol.1 (Istanbul 2008).

<sup>14</sup> *Ibid.*, 112–24.

<sup>15</sup> *Ibid.*, 9, 10, fig. 9a–c.

<sup>16</sup> *Ibid.*, 30, fig. 8; 35, fig. 11

<sup>17</sup> On the written sources concerning the monastery, see Günsenin, 'Ganos: centre de production', 195–6.

the field and underwater surveys that I have done have shown that an unexpectedly large amount of wine was produced at Ganos, and large numbers of amphorae were manufactured there to carry the wine to its final destinations.

However, the written texts do not reveal anything of the organization of viticulture at Ganos. Who was in charge of the production of wine? Who produced the amphorae? Who owned the ships that transported the wine? Ganos, famous for its library, has no surviving documentation for its wine trade, so the archaeological evidence is of prime importance. Contrast this with Athos, whose monastic centres always feature in the secondary literature concerned with the economic activities of monasteries simply because of the survival of the relevant archives. Yet, as pointed out above, none of the Athos trade is supported by archaeology.

So now I shall try to elucidate the wine affairs of Ganos as seen from the perspective of my own archaeological discoveries.

Ganos was once a large and influential monastic centre in Thrace. It was situated in a fertile and well-watered region. The monastery was on higher ground slightly inland; its dependent villages were down hill, closer to the sea. A large proportion of the monastery's income must have derived from wine. The whole situation of the monastery was very fortunate: the climate was particularly suited to viticulture; it was close to the coast for ease of convenience for exporting the produce; and the coastal strip happened to lie on deep clay beds from which the containers to hold the wine could be manufactured, close to their point of need. From analogy with other monastic estates, the monastery probably had its own ships, and possibly skilled ship-builders among the villagers. The monastery itself had a view over the harbour at Ganos,<sup>18</sup> and beyond to Marmara Island in the distance (fig. 10.1). On Marmara Island were a number of *metochia* belonging to the monastery, also devoted to viticulture. A further two kiln areas were identified on the island which produced Günseñin I amphorae, and it has been suggested, in the absence there of available suitable materials, that clay was carried to them from Ganos.<sup>19</sup>

Wine from the Ganos region, in Günseñin I amphorae, reached Constantinople, the huge and demanding market of the Empire. And there it was appreciated, for, as we read in Ptochoprodromos, Ganos wine was better than average: 'sweet wine from Ganos and Crete and Samos

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<sup>18</sup> The harbour of Ganos must have been at the first bay of Gazikoy, from where ships departed towards Tekirdag (to the north-east), as our underwater survey indicates; see Günseñin, 'Ganos: resultats', 177.

<sup>19</sup> See in Günseñin and Hatcher, 'Analyses chimiques'.

to moisten [the dry foods listed in the immediately preceding two lines] from their taste ...'.<sup>20</sup>

This 'sweet wine', produced in the Ganos region, whether transported by monastery ships or sold to middlemen, may have been consumed in almost all parts of the Empire and beyond. This can only be demonstrated by charting the containers used to transport the wine, namely the Günsenin I amphorae (fig. 10.2). These amphorae, identified in excavations, surveys, or simply in museum storerooms, were found, apart from those recorded in Constantinople and Athens mentioned above, across a wide area starting with the eight shipwrecks along the north coast of Marmara Island.<sup>21</sup> Further away, they occur around the coast of Byzantine Asia Minor and on Crete and Cyprus. Internationally, they reached Egypt, the Levant, southern Italy, countries bordering the Black Sea, and inland up to Sarkel, north into Russia at Kiev, and to Lund and Sigtuna in Sweden.<sup>22</sup> Did the ships carrying the Günsenin I amphorae to these destinations originate at Constantinople, at Ganos itself, or elsewhere? How big a part did the monastery itself play in the production of all the wine shipped? We cannot now say. Future scientific study of the fabric of the excavated amphorae cited here may help to determine what portion of Günsenin I amphorae was made at the monastery itself. In that way, the wine production and trade may be better quantified.

Ganos is a unique example of a bulk wine supplier complete with all the physical evidence for production and trade: the monasteries and *metochia*, vineyards, amphora kilns, harbour, shipwrecks laden with wine amphorae, a catalogue of destinations, and even shipwrecks with the loaded amphorae in the largest harbour of the capital city.

To the question, 'how far did Ganos wine travel?', my answer has led to many new archaeological discoveries that fill in gaps in our historical knowledge. Historians can once again appreciate the importance of physical evidence, and how it sheds light on historical documents.<sup>23</sup> I

<sup>20</sup> H. Eideneier, ed., *Ptochoprodromos* (Cologne, 1991), 157, line 332.

<sup>21</sup> See note 12 above.

<sup>22</sup> See in detail, in Günsenin, *Les amphores*; Günsenin, 'Recherches', 270-71. For the finds in Sweden, see M. Roslund, 'Brosamen vom Tisch der Reichen: Byzantinische Funde aus Lund und Sigtuna (c. 980-1250)', in M. Müller-Wille, ed., *Rom und Byzanz im Norden: Mission und Glaubenswechsel im Ostseeraum während des 8.-14. Jahrhunderts* (Stuttgart, 1997), 362-6, figs 20, 21.1-2. They were also found in Syria, in the Qal'at Sem'an excavations, personal communication from J.-P. Sodini; and in western Crete, in the region of Sphakia: P. Armstrong, 'The Byzantine, Venetian and Turkish pottery', in L. Nixon and S. Price, eds., *The Sphakia Survey* (forthcoming).

<sup>23</sup> M. McCormick explains this fact very clearly, citing my work at Ganos, in his introductory article, 'Byzantium on the move: imagining a communications history', in Macrides, ed., *Travel*, 13-14.





Figure 10.2 Map showing findspots of Günsenin I wine amphorae.

have already summarized my own journey on the Ganos trail in various articles.<sup>24</sup>

As for Ganos wine, it is still circulating. Today, many wineries, both major producers like Tekel (recently privatized as Mey) and Doluca, as well as small-scale local ones such as Melen and Ganos, are using the fertile land and the grapes of the Byzantine monks, and still exporting 'Ganos wine' to various parts of the world.<sup>25</sup>

<sup>24</sup> See above, notes 6, 10.

<sup>25</sup> I thank Pamela Armstrong and Frederick van Doorninck, Jr., for reading this paper and making helpful suggestions.