

Mediterranean Food and Wine for Constantinople: The Long-Distance Trade, Eleventh to Mid-Fifteenth Century

Constantinople, the largest city and major consumption center of Byzantium, drew its basic supplies in food and wine from the neighboring region.¹ However, the city's provisioning also required medium and long-distance transportation by land from the Balkans and by sea from Asia Minor, the Black Sea and the Mediterranean.² The present study surveys the Mediterranean facet of these supply networks and focuses on long-distance trade and shipping over four and a half centuries. 'Long-distance' stands here for traffic from the Peloponnesus, Crete, Rhodes and regions further removed from Constantinople.³ Considerations about short-range provisioning will highlight the specific nature of long-distance trade in some foodstuffs and especially in wine.

Byzantium reached its major expansion since the time of Justinian I in the early eleventh century, under the rule of Basil II. The following period to the mid-fifteenth century witnessed important changes in its territorial extent, the size of Constantinople's population, and the commercial function of the city. These developments were particularly marked from the early thirteenth century onward. The Empire's loss of large territories to the Latins in the wake of the Fourth Crusade undercut the economic centrality of its capital. This process was coupled with a partial re-orientation of eastern Mediterranean supply networks toward the West.⁴ Constantinople nevertheless maintained its function as major market as well as transit and transshipment station at the juncture of two vast commercial regions, the Mediterranean and the Black Sea, despite the intensification of direct trade and shipping between them from the mid-thirteenth century onward.⁵ It stands to reason, therefore, that the handling of Mediterranean foodstuffs and wine in the Black Sea region offers indirect, though fairly secure evidence about their marketing and consumption in Constantinople.

¹ The following abbreviations are used below:

Badoer, Libro = U. DORINI – T. BERTELE' (eds.), *Il libro dei conti di Giacomo Badoer (Costantinopoli, 1436–1440) (Il Nuovo Ramusio III)*. Roma 1956.

DCV = R. MOROZZO DELLA ROCCA – A. LOMBARDO (eds.), *Documenti del commercio veneziano nei secoli XI–XIII*. Torino 1940.
hyp. = hyperpyron.

ODB = A. KAZHDAN *et alii*, *The Oxford Dictionary of Byzantium*, I–III. New York–Oxford 1991.

Pegolotti, Pratica = Francesco Balducci Pegolotti, *La pratica della mercatura*, ed. A. EVANS. Cambridge, Mass. 1936.

TTh = G.L.Fr. TAFEL – G.M. THOMAS (eds.), *Urkunden zur älteren Handels- und Staatsgeschichte der Republik Venedig*, I–III (*Fontes rerum austriacarum, zweite Abteilung*, 12.–14. Band). Wien 1856–1857 (reprint Amsterdam 1964).

Zibaldone da Canal = A. STUSSI (ed.), *Zibaldone da Canal. Manoscritto mercantile del sec. XIV (Fonti per la storia di Venezia, Sez. V, Fondi vari)*. Venezia 1967.

In order to facilitate below comparisons in hyperpyra, weights and measures, I express all fractions in decimals.

² J. KODER, *Maritime Trade and the Food Supply for Constantinople in the Middle Ages*, in R. MACRIDES (ed.), *Travel in the Byzantine World (Society for the Promotion of Byzantine Studies. Publications 10)*. Aldershot 2002, 109–124.

³ I am not dealing here with grain, which reached Constantinople from Thrace, Macedonia and Thessaly, with the addition of Phocaea after 1261, as well as from the Black Sea. Spices also warrant a separate study.

⁴ See D. JACOBY, *Changing Economic Patterns in Latin Romania: The Impact of the West*, in A. E. LAIOU – R. P. MOTTAHEDEH (eds.), *The Crusades from the Perspective of Byzantium and the Muslim World*. Washington, D. C. 2001, 220–223 (reprint in D. JACOBY, *Commercial Exchange across the Mediterranean: Byzantium, the Crusader Levant, Egypt and Italy*. Aldershot 2005, IX). See also next note.

⁵ Direct shipping apparently began shortly before 1261: see D. JACOBY, *The Economy of Latin Constantinople, 1204–1261*, in: A. LAIOU (ed.), *Urbs capta. The Fourth Crusade and its Consequences/La IVe Croisade et ses conséquences (Réalités Byzantines 10)*. Paris 2005, 210–214.

It is common belief that until the Fourth Crusade Byzantium achieved self-supply in a broad range of commodities and that its economy was largely geared toward the supply of Constantinople. However, beginning in the early eleventh century there is increasing evidence of Latin merchants intruding into the Byzantine supply system and shipping foodstuffs and wine to Constantinople, both from distant provinces of the Empire and from foreign countries. The growing purchasing power of the social elite and the urban middle stratum in Constantinople provided the background to this development. It expressed itself in new consumption patterns in food, dress and other fields, which generated a growing and more diversified demand for agricultural, pastoral and manufactured commodities.⁶ This trend proceeded further in the twelfth century and was accompanied by more liberal and tolerant social attitudes, including toward consumption.⁷

Cheese was an important component of the Byzantine diet and was widely produced in the Empire. Imports from distant regions to Constantinople were primarily related to the life-style and taste of customers who could afford to purchase expensive varieties. In 1022 or somewhat earlier the Venetian Leone da Molin arrived in Constantinople with some 2,860 kg. cheese, the provenance of which is not stated.⁸ However, it is likely that this was high-grade Cretan cheese and that its import was not an isolated case. Venetian merchants visited Crete in the 1060s or 1070s in order to buy local products, while others were involved in 1110 or 1111 in the purchase of pastoral and agricultural commodities and in bringing cheese to Constantinople ten years later. Venetian trade in Crete expanded in the twelfth century, and by the second half of that period the Venetians may have acquired a monopoly in the supply of Cretan cheese to Constantinople. Some time before 1171 the so-called Ptochoprodromos stated that the Venetian quarter was the place where good-quality cheese may be bought.⁹

Despite the absence of continuous evidence, we may safely assume that the consumption of Cretan cheese in Constantinople continued in the thirteenth century.¹⁰ An anonymous Florentine commercial manual compiled around 1320 records the import of cheese from additional regions, namely, Apulia and Sicily.¹¹ A Greek account book dated to about 1360 mentions at several occasions Cretan and Venetian cheese. The editor of this text tenta-

⁶ Bibliography in D. JACOBY, Byzantine Trade with Egypt from the Mid-Tenth Century to the Fourth Crusade. *Thesaurismata* 30 (2000) 31 and n. 19 (reprint in IDEM, Commercial Exchange, I). The expanding demand for silks is a clear illustration of that process: see D. JACOBY, Silk in Western Byzantium before the Fourth Crusade. *BZ* 84/85 (1991/1992) 470–476 (reprint in IDEM, Trade, Commodities and Shipping in the Medieval Mediterranean. Aldershot 1997, VII). E. KISLINGER, Dall'ubriacone al krasopateras. Il consumo del vino a Bisanzio, in: G. ARCHETTI (ed.), La civiltà del vino. Fonti, temi e produzioni vitivinicole dal Medioevo al Novecento. Atti del convegno (Monticelli Brusati – Antica Fratta, 5–6 ottobre 2001). Brescia 2003, 158–160, overlooks the economic process mentioned here and ascribes the growing consumption to the territorial expansion of Byzantium under Basil II, which facilitated trade. However, as illustrated both before the period of Basil II and developments after the Fourth Crusade, political boundaries were not an impediment to trade, which as always was primarily fueled by demand. On wine consumption in Byzantium in the period considered here, see also E. KISLINGER, *Graecorum vinum* nel millenio bizantino, in: *Olio e vino nell'alto medioevo. Settimane di studio del Centro italiano di studi sull'alto medioevo LIV (Spoleto, 20–26 aprile 2006)*. Spoleto 2007, I 631–665, some views of whom I do not share.

⁷ On these attitudes, see KISLINGER, Dall'ubriacone al krasopateras 153–158.

⁸ DCV I 2, no. 2.

⁹ H. EIDENEIER, Ptochoprodromos. Einführung, kritische Ausgabe, deutsche Übersetzung, Glossar (*Neograeca mediae aevi* V). Köln 1991, 145 (IV, 109: τὸ τυρὶν τὸ κρητικόν, 120–122: ἐπὶ τοῦς Βενετικούς, a geographical context clearly pointing to the Venetian quarter), and 150 (IV, 210). Though Cretan cheese was generally considered a delicacy, the cheese appearing in the first of these instances was of poor quality, possibly because it was stale. For this whole paragraph, see D. JACOBY, Byzantine Crete in the Navigation and Trade Networks of Venice and Genoa, in: L. BALLETO (ed.), Oriente e Occidente tra medioevo ed età moderna. Studi in onore di Geo Pitarino (*Università degli Studi di Genova, Sede di Acqui Terme, Collana di Fonti e Studi* 1.1). Acqui Terme 1997, 521–529 (reprint in D. JACOBY, Byzantium, Latin Romania and the Mediterranean. Aldershot 2001, II). For the dating of Ptochoprodromos' poem and his suggested identification with Theodore Prodromos, see *ibidem* 527 and n. 38. On the latter issue, see A. KASHDAN in *ODB* III 1726–1727 and 1756.

¹⁰ On its production and marketing, see D. JACOBY, Cretan Cheese: A Neglected Aspect of Venetian Medieval Trade, in: E. E. KITTEL – Th. F. MADDEN (eds.), *Medieval and Renaissance Venice*. Urbana and Chicago 1999, 49–68 (reprint in D. JACOBY, Commercial Exchange, VIII).

¹¹ R.-H. BAUTIER, Les relations économiques des Occidentaux avec les pays d'Orient au Moyen Age. Points de vue et documents, in: M. MOLLAT (ed.), *Sociétés et compagnies de commerce en Orient et dans l'Océan indien* (= Actes du Huitième colloque international d'histoire maritime, Beyrouth 1966). Paris 1970, 313 (reprint in R.-H. BAUTIER, *Commerce méditerranéen et banquiers italiens au Moyen Age*. Aldershot 1992, IV), excerpt from the trade manual Firenze, Marucelliana, C 226, fol. 5r. I mention this shelf mark when referring below to unpublished sections of that manual.

tively locates its author in Herakleia of the Pontos and, therefore, assumes that the names of the cheeses do not refer to the latter's origin, but rather to the types after which they were locally made.¹² However, Constantinople definitely appears to be a more plausible site for the compilation of the account and, therefore, the cheese was a genuine Cretan product.¹³ At that time dry 'Muslim' cheese of unknown origin sold in sacks was also available in the city.¹⁴ In 1370 a Jew of Candia shipped Cretan kasher or Jewish cheese to Constantinople,¹⁵ which suggests the conveyance of other 'non-kasher' consignments. Incidentally, in 1402 Crete provided 2 ½ tons cheese for a Venetian naval expedition to Constantinople.¹⁶ It is impossible to determine whether the absence of later evidence regarding the import of Cretan cheese reflects the interruption of its shipping to the city, as a result of massive exports to Venice, Alexandria and other destinations.¹⁷

In the Empire olive trees grew mainly in a narrow strip along the Aegean coast of Asia Minor and continental Greece, especially in the southern Peloponnesus, as well as in some islands of the Aegean and in southern Italy. They were not as common as they are nowadays.¹⁸ Olive oil from these regions was presumably exported to Constantinople before the eleventh century. In that period Latin merchants intruded into the Empire's supply system, shipping oil from Apulia which was still Byzantine at that time. In 1051 a ship loaded with oil on its way to the city burned in open sea after leaving Bari.¹⁹ In 1062 three fully loaded ships apparently from Bari, also on their way to Constantinople, sank at Cape Malea, to the south of the Peloponnesus.²⁰ It is likely that they too carried oil, since agricultural commodities were the only products of Apulia that would have been exported to Constantinople at that time. A Venetian contract of 1089 refers to a journey to Constantinople with a stopover in Apulia, and a similar agreement of 1118 refers to Sicily.²¹ It is not impossible that oil was to be loaded in the ports of call of these two regions. In addition, it is not excluded that in the second half of the eleventh century Venetians purchased oil in the Peloponnesus and shipped it from Modon, a port of call on the way from Venice to Constantinople. This trade pattern is duly attested for the twelfth century, as shown below.

It would seem that the Venetians ousted the merchants of Bari from the oil trade to Constantinople, thanks to the commercial privileges they obtained in 1082 in the Empire, superior ship tonnage, and more sophisticated trading practices.²² By 1107 the Venetians were already using for some time their own weights and own measures for oil and wine in Constantinople. Doge Ordelafo Falier granted then a monopoly on their use

¹² P. SCHREINER, Texte zur spätbyzantinischen Finanz- und Wirtschaftsgeschichte in Handschriften der Biblioteca Vaticana (*StT* 344). Città del Vaticano 1991, 37–46, no. 1.

¹³ For the location in Constantinople, see below 145–147, Appendix A.

¹⁴ SCHREINER, Texte 43, no. 1, line 134.

¹⁵ S. BORSARI, Ricchi e poveri nelle comunità ebraiche di Candia e Negroponte (secc. XIII–XIV), in: Ch. A. MALTEZOU (ed.), Πλούσιοι και φτωχοί στην κοινωνία της έλληνολατινικής Ανατολής (= Ricchi e poveri nella società dell'Oriente grecolatino) (*Biblioteca dell'Istituto ellenico di Studi bizantini e postbizantini di Venezia* 19). Venezia 1998, 216, 217.

¹⁶ F. THIRIET (ed.), Duca di Candia. Ducali e lettere ricevute (1358–1360; 1401–1405) (*Fonti per la storia di venezia, Sez. I, Archivi pubblici*). Venezia 1978, 8–9 no. 5. See also JACOBY, Cretan Cheese, 55.

¹⁷ On which see *ibidem* 56–59, and D. JACOBY, Greeks in the Maritime Trade of Cyprus around the Mid-Fourteenth Century, in: Ch. MALTEZOU (ed.), Κύπρος–Βενετία. Κοινές ιστορικές τύχες (= Cipro – Venezia: Comuni sorti storiche) (Atti del simposio internazionale, Atene, 1–3 marzo 2001). Venezia 2002, 70–73, 78.

¹⁸ *ODB* III 1522–1523, s.v. Olive; E. MALAMUT, Les îles de l'Empire byzantin, VII^e–XII^e siècles, I–II (*Byzantina Sorbonensia* 8). Paris 1988, II 387.

¹⁹ Anonymi Barenensis Chronicon, in: Muratori, *Rerum Italicarum Scriptores*, V. Milano 1724, 151: an. 1051: *Et usta est navis in Penna, honerata oleo, pro ut hire in Constantinopolim*. V. VON FALKENHAUSEN, Bari bizantina: profilo di un capoluogo di provincia (secoli IX–XI), in: G. ROSSETTI (ed.), Spazio, società, potere nell'Italia dei Comuni. Napoli 1986, 211, n. 121, suggests that the ship sank close to the promontory of Monopoli, some 40 km. southeast of Bari, called Penna and Pinna. The record of the incident in a chronicle of Bari implies that the ship originated in that city.

²⁰ Anonymi Barenensis Chronicon, 152. an. 1062: *Perierunt tres naves que pergebant carricate Constantinopol[i] in qua obiit Kiria Maria, mater Ranno, in Malea*.

²¹ DCV I 22–23 no. 19, mentions Lombardia, yet in fact points to Apulia: see *ODB* II 1249–1250, s.v. Longobardia; DCV I 42–43 no. 40.

²² Latest studies supporting the date of 1082: Th.F. MADDEN, The Chrysobull of Alexius I Comnenus to the Venetians: the date and the debate. *Journal of Medieval History* 28 (2002) 23–41, D. JACOBY, The Chrysobull of Alexius I Comnenus to the Venetians: the Date and the Debate, *op.cit.* 199–204. A renewed attempt in favor of 1092 has been made by P. FRANKOPAN, Byzantine Trade Privileges to Venice in the Eleventh Century: the Chrysobull of 1092. *Journal of Medieval History* 30 (2004) 135–160, whose arguments are unconvincing. I shall return to the issue in the near future.

within the entire Venetian quarter to the patriarchate of Grado.²³ In Rhaidestos, called Rodosto by the Latins, a church belonging to the monastery of San Giorgio Maggiore in Venice obtained in 1145 a similar monopoly, all Venetians trading in the city being ordered to use its weights and measures. The decree was confirmed in 1147.²⁴ The reference to Greeks using Venetian weights and measures in Rhaidestos by that time reveals that the oil trade was not limited to transactions between Venetians or to internal consumption. Significantly, oil in wholesale and retail trade is the only commodity mentioned in the decree of 1147. It follows that the monopoly established in 1107 in Constantinople implies Venetian imports of oil to the city by that time.

The likely provenance of some of the oil is suggested by several deals concluded later in the twelfth century. In 1147 or 1148 a Venetian sent 400 metra or 3,640 liters oil purchased in Sparta to Constantinople.²⁵ In the winter of 1170–1171 two Venetians bought in Sparta a much larger consignment of 105 miliaria or 67,334 liters. Although no destination is mentioned, it is a safe guess that this oil, confiscated by the imperial authorities from the Venetian merchants in March 1171, was to be entirely or mostly shipped to Constantinople.²⁶ In June 1182 a Venetian ship sailing from Nauplia in the Peloponnesus to Constantinople changed course after the merchants were told that a massacre of Latins had taken place in April in the Empire's capital. The mixed cargo included oil most likely loaded in Nauplia. In order to convince the crew to sail to Alexandria, the merchants offered them various goods, including 67 miliaria or 42,965 liters oil.²⁷ It is unclear whether this was the entire oil cargo on board.²⁸ The Venetians were later joined by Pisans, who in 1192 obtained a marked reduction of taxation on their trade in the Empire.²⁹ In 1201 three of them sold in Modon 34 miliaria or 21,803 liters oil to a Venetian for export to the capital.³⁰ It is likely that Peloponnesian oil continued to reach Constantinople in the following period, although it is not attested until the fifteenth century.³¹

As reported around 1320, large quantities of oil were imported to Constantinople and Pera, its Genoese quarter, and some of it pursued its way to Caffa in the Crimea and Tana at the mouth of the Don River.³² The regulations of 1327 for the Venetian quarter in Constantinople state the tax rates for retail and wholesale deals in oil.³³ There were then multiple sources of supply in Italy and Spain. Italian oil travelled in wooden casks, all the other oil in jars, in any event until the first half of the fifteenth century.³⁴ The Florentine Francesco Balducci Pegolotti, author of a trade manual, lists “clear and yellow” oil, thus well refined and high-grade, coming from Venice, yet in fact it must have been shipped by Venetians from central and southern Italy. Oil from the Marche in central Italy came through Ancona, from Apulia through Brindisi and Manfredonia, as well as through Naples which also served as outlet for the region of Gaeta.³⁵ The Florentine trade manual of around 1320 and

²³ TTh I 67–74, esp. 68, and new ed. by L. LANFRANCHI, S. Giorgio Maggiore (*Fonti per la Storia di Venezia, Sez. II: Archivi ecclesiastici*). Venezia 1967–1986, II no. 224. In 1169 the patriarchate of Grado leased its weights and measures for six years to Romano Mairano: DCV I 238–239 no. 245.

²⁴ TTh I 103–105 and 107–109, the latter with reference to the miliarium or 1,000 measures and to retail trade.

²⁵ A. LOMBARDO – R. MOROZZO DELLA ROCCA (eds.), *Nuovi documenti del commercio veneto dei sec. XI–XIII*. Venezia 1953, 14, no. 11, issued in 1151, yet with a reference to the expedition of Roger II of Sicily to Greece in 1147. The same deal is mentioned *ibid.*, 11, no. 9, drafted in 1150. One metron oil represented 9.102 liters: E. SCHILBACH, *Byzantinische Metrologie*. München 1970, 116.

²⁶ DCV I 312–313, 316–317, 352–356, nos. 316, 320 (which states the total quantity), 358, 360 and 361, with references to Sparta and the arrest of the Venetians in the Empire in March 1171. The two Venetians resold portions of the purchased oil to other Venetians. The Venetian miliarium of oil was equivalent to 641.28 liters: SCHILBACH, *Byzantinische Metrologie* 117. Partial shipments to Venice and to Alexandria may have been envisaged: see below, n. 28.

²⁷ DCV I 326–327 no. 331. On the massacre, see Ch. M. BRAND, *Byzantium confronts the West, 1180–1204*. Cambridge, Mass. 1968, 41–42.

²⁸ Incidentally, this offer proves that Peloponnesian oil continued to be shipped to the Egyptian port. An earlier shipment is attested in 1135: DCV I 69, no. 65.

²⁹ D. JACOBY, *Italian Privileges and Trade in Byzantium before the Fourth Crusade: A Reconsideration*. *Anuario de estudios medievales* 24 (1994) 357–359, 366–367 (reprint in IDEM, *Trade*, no. II).

³⁰ DCV I 445–446 no. 456. The document was drafted in Constantinople.

³¹ See below 131.

³² BAUTIER, *Les relations économiques* 313–315 (excerpts from Firenze, Marucelliana, C 226, fol. 5r, 42v, 46r.)

³³ Ch. MALTEZOU, *Ὁ θεσμός τοῦ ἐν Κωνσταντινουπόλει βενετοῦ βαΐλου* (1268–1453). Athens 1970, 141, pars. 7 and 8, sales by the metron and by the cask respectively.

³⁴ See the sources cited below and H. ZUG TUCCI, *Un aspetto trascurato del commercio medievale del vino*, in: *Studi in memoria di Federigo Melis*. Napoli 1978, III 334.

³⁵ Pegolotti, *Pratica* 39, 45–47, 50–52, 162; on *chiaro*, *mosto* and *grosso*, respectively high-grade, coarse and unclarified oil, see *ibidem* 78, 125, 162–164, 271. Less details in Firenze, Marucelliana, C 226, fol. 5r. See also G. YVER, *Le commerce et les marchands*

Pegolotti some twenty years later record that oil from Seville and Majorca was being sent to Constantinople.³⁶ Oil from the region of Tarragona and from Majorca was shipped from Barcelona by Catalan merchants, as recorded in the accounts of Berenguer Benet in the early 1340s, thus contemporary of Pegolotti's manual. One shipment included 23,693 liters oil in jars.³⁷ Oil from these regions was also conveyed on a large scale to Constantinople in the first decade of the fifteenth century.³⁸ Genoese merchants shipped oil both from southern Italy and from Seville to Constantinople in the fourteenth century, yet their imports diminished around 1400, as suggested by the reduction of revenue from oil taxes in Pera.³⁹ Anconitan ships brought oil from the Marche in the late fourteenth and the first half of the fifteenth century.⁴⁰ The Venetian merchant Giacomo Badoer, who resided in Constantinople from September 1436 to February 1440, handled varying qualities of oil produced in several regions: *oio chiaro* and *non chiare* from Coron, unspecified oil from Modon and Messina, oil from Apulia, some of which was of poor quality, and three grades from Saragossa that arrived via Majorca, namely, *grosso*, *bruto* and *sentina*, the lowest.⁴¹ The six wooden casks from Coron contained 6,724 liters, the eleven from Modon 12,327, the four smaller ones from Apulia 1,740, and the shipment from Spain 48,517 liters.⁴²

Surprisingly, several species of dried fruits shipped to Constantinople from Byzantine or former Byzantine territories in the Aegean region were also imported to the city from remote foreign countries beginning in the eleventh century.⁴³ Some species, like almonds, were apparently not as common in the eastern Mediterranean as they are nowadays.⁴⁴

The Byzantine merchant ship that sank in the third decade of the eleventh century off Serçe Limani, on the southern Anatolian coast directly north of Rhodes, was most likely heading toward Constantinople, a major glassmaking center. This is suggested by the three metric tons of glass cullet from the coast of Fatimid Syria that it carried. It also had a substantial cargo of raisins, either from the same region or from Cilicia.⁴⁵ Raisins were also on board the Venetian ship that in 1182 was originally sailing to Constantinople before diverting its course. They had undoubtedly been loaded in the Peloponnesian port of Nauplia, at which the vessel had called.⁴⁶ The shipping of raisins from Syria and the Peloponnesus to the Empire's capital apparently continued in the following period. Around 1340 Constantinople imported them from several regions, as attested by Pegolotti, who specifically mentions Syria in that context. *Uve passe di Romania*, the name for Byzantine and former Byzantine regions, must have also reached the city at that time.⁴⁷ They most likely originated in the Peloponnesus, which produced and exported them on a large scale.⁴⁸ The Greek account book of ca. 1360

dans l'Italie méridionale au XIII^e et au XIV^e siècle (*Bibliothèque des Écoles françaises d'Athènes et de Rome* 88). Paris 1903, 104–105.

³⁶ Firenze, Marucelliana, C 226, fol. 5r., 19r., and Pegolotti, Pratica 39, 130.

³⁷ D. DURAN I DUELT, *Manual del viatge fet per Berenguer Benet a Romania. 1341–1342. Estudi e edició*. Barcelona 2002, 61, 82–83, 91–92, 95–96, 125, 214–215, 236–242, 262–264.

³⁸ M. DEL TREPPO, *I mercanti catalani e l'espansione della corona d'Aragona nel secolo XV*. Napoli 1972, 73–74.

³⁹ Pegolotti, Pratica 39, 52, 270–271, 273; M. BALARD, *La Romanie génoise (XII^e – début du XV^e siècle)* (*Bibliothèque des Écoles françaises d'Athènes et de Rome* 235). Rome 1978, I 413, and II 625, 846–847.

⁴⁰ E. ASHTOR, *Il commercio levantino di Ancona nel basso medioevo*. *Rivista storica italiana* 88 (1976) 227–229 (reprint in: E. ASHTOR, *Studies on the Levantine Trade in the Middle Ages*. London 1978, VIII). Oil is explicitly mentioned in several cases. Romania as destination clearly points to Constantinople.

⁴¹ Badoer, Libro 132.2 and 133.2.12, 350.17–18 (the Peloponnesus), 200.19, 380.2, 381.2–3 (Sicily and continental Italy), 743.24–25, 748.2–4 (Spain).

⁴² The volumes are expressed in *laina* or λαγήνιον oil of Constantinople, each containing 5,742 liters: SCHILBACH, *Byzantinische Metrologie* 118.

⁴³ J. KODER, *Aigaion Pelagos (Die nördliche Ägäis)*. (*TIB* 10). Wien 1998, 93–94.

⁴⁴ SCHREINER, *Texte* 361–362.

⁴⁵ F. VAN DOORNINCK JR., *The Byzantine Ship at Serçe Limani: an Example of Small-Scale Maritime Commerce with Fatimid Syria in the Early Eleventh Century*, in: MACRIDES, *Travel in the Byzantine World 137–148*, esp. 140–141. On vineyards in Syria, see below, 137. Cilicia, later included in the kingdom of Cilician Armenia, was known for its raisins: BAUTIER, *Les relations économiques* 318, excerpt from Firenze, Marucelliana, C 226, fol. 51r (“*uve secche che nascono nel paese d'Erminia*”); Pegolotti, Pratica 297 (“*uve passe d'Erminia*”).

⁴⁶ See above 130.

⁴⁷ Pegolotti, Pratica 33, 297.

⁴⁸ Export through Chiarenza around 1320: Zibaldone da Canal 58; evidence of 1365 for production at Basilicata (Hagios Vasilios), some 25 km. north of Nauplia: J. LONGNON – P. TOPPING (eds.), *Documents sur le régime des terres dans la principauté de Morée au XIV^e siècle* (*Documents et recherches* XI). Paris – La Haye 1969, 171–173, 175, 184; for production and export at a later period, see

compiled in Constantinople has six entries mentioning raisins, yet fails to state their provenance.⁴⁹ Asia Minor was yet another source of raisins, which were partly re-exported. In 1436 Giacomo Badoer obtained in a barter deal 63,5 cantars or some three metric tons raisins from a Turk of Nikomedia at the price of 127 hyp. He sent the raisins on board a ship sailing to the Black Sea ports of Simisso (Samsun) and Trebizond, and they were sold in Simisso at a gross profit of some 60.8%.⁵⁰

In 1290 several baskets of dried figs from Ventimiglia in Liguria were stored in Pera and expected in Caffa. Twenty sports of dried figs in baskets were to be sent from Caffa to Tana.⁵¹ The Florentine trade manual of ca. 1320 and Pegolotti some twenty years later refer to imports from Majorca and continental Spain, in fact Catalonia.⁵² Dried figs appear eleven times in the account book of ca. 1360, yet their provenance is not stated.⁵³ They may have been partly, if not all imported from the Peloponnesus, which produced them on a large scale.⁵⁴ An unpublished trade manual composed in Acre around 1270 records the export of dates from Alexandria to Romania.⁵⁵ Although not specifically mentioned, Constantinople was their most likely destination. Alexandria also appears as a source of dates in trade manuals, the Zibaldone da Canal and that of Pegolotti, who mentions the marketing of dates in Constantinople without stating their provenance.⁵⁶

By the twelfth century southern Italy had become a major source of several varieties of nuts and almonds, sometimes mentioned as “frutta” in Italian sources, which were exported to numerous destinations around the Mediterranean. The Venetian ship sailing toward Constantinople in 1182 carried a cargo of almonds, which in all likelihood had been picked up along the way in Apulia.⁵⁷ In the first half of the fourteenth century chestnuts, hazelnuts, walnuts, as well as almonds in shell, shelled or crushed were exported on a large scale from the Kingdom of Naples to numerous destinations, especially from Salerno, Naples and Apulia.⁵⁸ The commercial manual of ca. 1320 records the dispatch of ‘fruits’ from these regions to Caffa and Tana, yet fails to cite Constantinople in that respect.⁵⁹ On the other hand, around 1340 Pegolotti mentions the Empire’s capital.⁶⁰ Genoese documents of the second half of the fourteenth century record the continuation of these shipments.⁶¹

Apiculture was widespread and honey the main locally-produced sweetener in Byzantium.⁶² Still, a large urban center such as Constantinople could not rely only on the Empire’s internal supply. From the early tenth century onward the region extending from present-day Bulgaria to Tana was a major source of honey for the

J. CHRYSOSTOMIDES (ed.), *Monumenta Peloponnesiaca. Documents for the History of the Peloponnese in the 14th and 15th centuries.* Camberley, Surrey 1995, 660, *s.v.* uva passa, and 664, *s.v.* zizziba, wrongly identified as Chinese date. However, these sources do not document exports to Constantinople.

⁴⁹ SCHREINER, *Texte* 38–46, lines 19, 63, 73, 216, 229, 235.

⁵⁰ Badoer, *Libro* 84.14–15, 86.2–3, 88.2–8, 29–30: 63 cantars and 50 rotoli (= 63,5). The Venetian cantar weighed 47.700 kg., thus the total weight was 3,028.950 kg. On the deal, see J. LEFORT, Badoer et la Bithynie, in: *Mélanges Gilbert Dagron* (= *TM* 14). Paris 2002, 375–376.

⁵¹ M. BALARD, *Gênes et l’Outremer, I. Les actes de Caffa du notaire Lamberto di Sambuceto, 1289–1290 (Documents et recherches XII)*. Paris – La Haye 1973, 196, no. 534, and 373, no. 892.

⁵² Firenze, *Marucelliana*, C 226, fol. 4r; Pegolotti, *Pratica* 34, 123.

⁵³ SCHREINER, *Texte* 38–46, lines 19, 20, 52, 58, 63, 73, 82, 215, 219, 230, 232.

⁵⁴ CHRYSOSTOMIDES, *Monumenta Peloponnesiaca* 630, *s.v.* ficus.

⁵⁵ D. JACOBY, *A Venetian Manual of Commercial Practice from Crusader Acre*, in: G. AIRALDI – B. Z. KEDAR (eds.), *I comuni italiani nel regno crociato di Gerusalemme (Collana storica di fonti e studi 48)*. Genova 1986, 403–428 (reprint in: D. JACOBY, *Studies on the Crusader States and on Venetian Expansion*. Northampton 1989, VII).

⁵⁶ Zibaldone da Canal 65; Pegolotti, *Pratica* 38. For dates from Alexandria to Pisa and without precise destination: *ibidem* 207, 306; see also advice about the preservation of dates, *ibidem* 378.

⁵⁷ On that ship, see above, 130.

⁵⁸ Zibaldone da Canal 21, 53, 66; Pegolotti, *Pratica* 176–181, 185–186, and 416, 422–422, index of commodities, *s.v.* castagne, mandorle, noce, nocelle. Numerous chestnuts and hazelnut trees were planted in the region of Salerno in the tenth century: see B. M. KREUTZ, *Ghost Ships and Phantom Cargoes: reconstructing Early Amalfitan Trade. Journal of Medieval History* 20 (1994) 353–356.

⁵⁹ BAUTIER, *Les relations économiques* 314–315, excerpts from Firenze, *Marucelliana*, C 226, fol. 42v, 46r.

⁶⁰ Pegolotti, *Pratica* 33–34, 38, 51.

⁶¹ BALARD, *La Romanie génoise II* 848.

⁶² *ODB I* 130, *s.v.* Apiculture.

city, brought by Rus and Bulgarian merchants.⁶³ The large-scale exports of wax from that region to and via Constantinople, well attested from the second half of the thirteenth century onward, imply the production of abundant honey and suggest the continuation of the honey trade, although carried out by other merchants.⁶⁴ Constantinople nevertheless also imported some honey from Italy. There is no indication regarding the provenance of the honey shipped by a foreign merchant from Venice in 1303, yet it presumably originated in central Italy.⁶⁵ Honey from Ancona reached Constantinople around 1340.⁶⁶ Some consignments from Genoa are attested in Caffa in 1369–1370 and 1386.⁶⁷ Carobs growing in many regions of the Empire were a particularly cheap sweetener.⁶⁸ Around 1340 Cypriot carobs reached Pera, apparently on a large scale, as implied by the listing of weight equivalents for this commodity.⁶⁹

Little is known about sugar imports to Constantinople. In 1289 an Egyptian vessel carrying sugar, pepper and flax from Alexandria was caught by the Genoese Benedetto Zaccaria along the southern coast of Anatolia, not far from Candelor (Ayala).⁷⁰ Considering the cargo's composition, the ship was presumably on its way to Constantinople. This was clearly the destination of a Genoese ship attacked a few years later near Tenedos by the admiral Michele Balbi, a Genoese who apparently operated on behalf of Byzantium. In 1294 Genoa demanded compensation from the Empire for the violent seizure of the sugar cargo on board.⁷¹ Around 1340 Pegolotti noted, without stating their origin, that sugar and powdered sugar were sold in Constantinople in wooden boxes or casks, and that these containers were used for shipments from Egypt, Syria, Cyprus, Rhodes, and the region east of the Jordan River.⁷² It is likely that the sugar reaching Constantinople came from easily accessible ports, rather than from the latter region.

Cypriot sugar was increasingly exported to Italy from the late thirteenth century onward.⁷³ By the late fourteenth century it was still a luxury item and in rather limited use in Constantinople and in the Black Sea region.⁷⁴ The Genoese occupation of Famagusta from 1373 to 1464 may have furthered Genoese sugar exports from Cyprus, including to or through Constantinople. The official accounts of Genoese Caffa for 1381 and 1382 mention white and rose sugar without stating their origin.⁷⁵ The official accounts of Genoese Pera for 1390 and 1391 record several purchases of sugar each ranging from one to three pounds only, intended as presents to Ottoman dignitaries.⁷⁶ In addition, sugar entered in the often-mentioned confections also offered as presents both in Caffa and Pera.⁷⁷ In 1433 a Genoese merchant writing from Cyprus to his brother in Pera

⁶³ J. SHEPARD, Constantinople–Gateway to the North: The Russians, in: C. MANGO – G. DAGRON (eds.), Constantinople and its Hinterland. Papers from the Twenty-Seventh Spring Symposium of Byzantine Studies, Oxford 1993 (*Society for the Promotion of Byzantine Studies. Publications* 3). Aldershot 1995, 257; J. KODER, Das Eparchenbuch Leons des Weisen. Einführung, Edition, Übersetzung und Indices (*CFHB* XXXIII). Wien 1991, 108, chap. 9.6.

⁶⁴ On the wax, see BALARD, *La Romanie génoise* II 734–737.

⁶⁵ E. FAVARO (ed.), Cassiere della Bolla Ducale – Grazie – Novus Liber (1299–1305) (*Fonti per la storia di Venezia, Sez. I – Archivi pubblici*). Venezia 1962, 91–92 no. 394. The maritime re-export of goods brought to Venice by sea was common.

⁶⁶ Pegolotti, *Pratica* 51.

⁶⁷ BALARD, *La Romanie génoise* II 636, 847.

⁶⁸ MALAMUT, *Les îles de l'Empire byzantin* II 389.

⁶⁹ Pegolotti, *Pratica* 93.

⁷⁰ L. T. BELGRANO – C. IMPERIALE DI SANT'ANGELO (eds.), *Annali genovesi di Caffaro e de' suoi continuatori dal MXCIX al MCCXCIII*. Roma 1890–1929, V 95–96; W. HEYD, *Histoire du commerce du Levant au moyen-âge*. Leipzig 1885–1886, I 415–416.

⁷¹ G. BERLOTTI (ed.), Nuova serie di documenti sulle relazioni di Genova con l'Impero bizantino. *Atti della Società Ligure di Storia Patria* 28 (1897) 522, 543. The incident is not dated.

⁷² Pegolotti, *Pratica* 35, 45, 308–311, 362–365.

⁷³ D. JACOBY, Το εμπόριο και η οικονομία της Κύπρου (1191–1489), in: Th. ΠΑΠΑΔΟΠΟΥΛΛΟΣ (ed.), *Ιστορία της Κύπρου*. IV/1 Μεσαιωνικών βασιλείων – Ενετοκρατία (= Trade and the Economy of Cyprus [1191–1489], in: *History of Cyprus*, IV. The Medieval Kingdom, Venetian Rule), part I (*Archbishop Makarios III Foundation*). Nicosia 1995, 417–419, 426–427, 430, 432, 434, 436, 443–446, 449–453; N. COUREAS, Economy, in: A. NICOLAOU-KONNARI – Ch. SCHABEL, (eds.), *Cyprus. Society and Culture, 1191–1374*. Leiden–Boston 2005, 110–112, 139–146, 150–151, 153.

⁷⁴ Sugar is not recorded in the Genoese deeds examined by N. COUREAS, Commercial relations between Cyprus and the Genoese colonies of Pera and Caffa, 1297 to 1459. *Epeterida tou kentrou epistemonikon ereunon* 30 (2004) 153–169. However, this study is based on a small number of published documents and did not take into account the evidence adduced here.

⁷⁵ N. IORGA, Notes et extraits pour servir à l'histoire des croisades au XV^e siècle. *Revue de l'Orient latin* 4 (1896) 35–36. Rose sugar was obtained by the addition of rose water to the boiling juice extracted from the sugar cane.

⁷⁶ *Ibidem* 66–68, 70, 73, 75–76.

⁷⁷ *Ibidem* 39, 67–69, 73, 76–77, 79.

stated the price of high-grade twice and thrice-boiled Cypriot sugar, respectively 58–60 and 70 Cypriot hyp. per cantar, yet added that there was little demand for the latter and that no powdered sugar was available on the market.⁷⁸ In 1436, the first year of his stay in Constantinople, Badoer bought thrice-boiled Cypriot sugar, namely two cantars or some 95 kg. at 65 hyp. of Constantinople per cantar, a price clearly confirming that sugar was still a luxury item. The sugar had presumably been brought by a Genoese merchant, since it was weighed in Pera. Badoer shipped most of that consignment to Simisso and Trebizond in the Black Sea.⁷⁹ He also bought rose sugar and sugar syrup sent to him from Alexandria, the latter possibly made with myrobalan, a fruit considered having medicinal properties.⁸⁰ In addition, he purchased from local spice-dealers sugar syrup and manus Christi, a rose preserve, used as medicines when he and his assistant Antonio Bragadin were ill.⁸¹ Italian as well as Byzantine merchants, the latter on a much smaller scale, presumably conveyed sugar from Egypt, Cyprus and Rhodes to Constantinople.⁸²

Constantinople was a major consumer of wines. Its supply in this commodity is fairly well documented. Vineyards were common in the Empire, yet many peasants produced only small amounts of wine for their own household, as illustrated by the praktika of the monasteries of Mount Athos.⁸³ The Dominican friar Guillaume Adam, who stayed in Constantinople for some time in 1307, claimed that in regions suitable for the growing of grain the peasants of Romania avoid the large labor input required by vineyards and, therefore, limit production to self-consumption. However, elsewhere they produce abundant wine.⁸⁴ Indeed, large surpluses were available in Romania for the supply of urban centers.

Some residents and monasteries of Constantinople owned or cultivated vineyards in sparsely built-up areas within the urban walls or in the city's vicinity, others at some distance or in Bithynia on the other side of the Bosphoros.⁸⁵ The latter was the case of Michael Gabras, who in the first half of the fourteenth century brought to his home 80 metra or 820 liters wine from his vineyard in Chalkedon.⁸⁶ Other residents went to the countryside to buy must at the time of the grape gathering, whether for private consumption or to produce wine for sale, yet we do not know how far they travelled. According to a Venetian report of 1320, some Venetians

⁷⁸ L. T. BELGRANO (ed.), Prima serie di documenti riguardanti la colonia di Pera. *Atti della Società ligure di storia patria* 13 (1877–1884) 202.

⁷⁹ Badoer, Libro 86.19–25, 87.10–16, 89.18–24. He also dealt in sugar of unspecified nature: *ibid.*, 364.14–15, 420.8–9. The Genoese cantar used in Pera was equivalent to 47.65 kg, thus close to the Venetian cantar, on which see above, n. 50.

⁸⁰ Badoer, Libro 604.34–36. On varieties and colors of myrobalan syrup produced in Cyprus, see Pegolotti, *Pratica* 317.

⁸¹ Badoer, Libro 52.2–5, 61.11–14, 82.30, 280.28–29. See also J. LEFORT, La brève histoire du jeune Bragadin, in: I. ŠEVČENKO – I. HUTTER (eds.), *Aetos. Studies in Honour of Cyril Mango*. Stuttgart–Leipzig 1998, 210–219, esp. 215. An English recipe book, *The Queen's Closet Opened*, London, 1655, mentions the 'Vertue' of manus Christi: "The Stomach, Heart, and Bowels it cooleth, and hindereth vapours, the spiting of blood and corruption for the most part (being cold) it helpeth. It will keep many years".

⁸² On Byzantine merchants operating in Alexandria, Cyprus and Rhodes, see D. JACOBY, Byzantine Traders in Mamluk Egypt, in: A. AVRAMEA – A. LAIOU – E. CHRYSOS (eds.), *Byzantium, State and Society. In Memory of Nikos Oikonomides*. Athens 2003, 249–268; JACOBY, *Greeks in the Maritime Trade of Cyprus* 64–65, 75.

⁸³ P. SCHREINER, Die Produkte der byzantinischen Landwirtschaft nach den Quellen des 13.–15. Jh. *Bulgarian Historical Review* 10/2 (1982) 92; M. KAPLAN, La viticulture byzantine (VII^e–XI^e siècle), in: *Olio e vino nell'alto medioevo*. I 180–194.

⁸⁴ Guillaume Adam, *De modo Sarracenos extirpandi*, in: *Recueil des Historiens des Croisades, Documents arméniens*, II. Paris 1906, 538. This treatise was composed between 1316 and 1318: see the introduction by Ch. KOHLER, *ibidem* CLXXXIX–CXCIV. On the dating of the author's stay in Constantinople, see *ibidem* CXLVIII and [Pseudo-] Brocardus, *Directorium ad passagium faciendum, ibidem* 447–449. In fact, Guillaume Adam was also the author of this treatise, which he compiled in 1332: see the introduction by Ch. Kohler, *ibidem* CXLII–CLXXVI, and for the date, CXLIX, CLXII.

⁸⁵ On land cultivation within and beyond the urban walls, though without specific references to vineyards: Odo de Deuil, *De profec-tione Ludovici VII in Orientem*, ed. and tr. V. G. BERRY. New York 1948, 64; Nicholas Mesarites, *Description of the Church of the Holy Apostles at Constantinople*, ed. G. DOWNEY. *Transactions of the American Philosophical Society*, n. s. 47 (1957) 897; Georges Pachymères, *Relations historiques* II 27 (I 157 Failler). Vineyards in the city: KAPLAN, *La viticulture byzantine* 177–178; D. JACOBY, *Venetian Settlers in Latin Constantinople (1204–1261): Rich or Poor?* In: MALTEZOU, *Πλούσιοι και φτωχοί* 197, around 1240; *Das Register des Patriarchats von Konstantinopel*, III, ed. J. KODER – M. HINTERBERGER – O. KRESTEN (*CFHB* XIX/3). Wien 2001, 68, no. 184, verdict of 1351; F. MIKLOSICH – J. MÜLLER (eds.), *Acta et diplomata graeca medii aevi sacra et profana*. Vindobonae 1860–1890, II 349, 557–558, in the years 1397–1401; G. L. R. DE SINNER (ed.), *Christoph Bondelmontii Florentini Liber insularum Archipelagi*. Leipzig–Berlin 1824, 124; ca. 1420. Vineyards in the vicinity of Constantinople: KAPLAN, *La viticulture byzantine* 179–180.

⁸⁶ M. FATOUROS, *Die Briefe des Michael Gabras* (ca. 1290– nach 1350) (*WBS* 10). Wien 1973, II 457–459, epist. 295; see also 287, epist. 173. The wine metron of Constantinople contained 10.250 liters: see SCHILBACH, *Byzantinische Metrologie* 112–113.

acted that way.⁸⁷ These may have mostly been Greeks enjoying Venetian nationality who conducted business with peasants on their own behalf or as agents of Venetian wine dealers and innkeepers who were not fluent in Greek.⁸⁸

Constantinople imported a large variety of wines differing in nature, quality and taste from numerous regions. The chronology of these imports warrants close attention, since their nature evolved over time.⁸⁹ Guillaume Adam, who as noted above was in Constantinople in 1307, stated that many of the wines of Romania were of low quality, either because the peasants did not know how to grow their vines or because the wine was not fully aged. On the other hand, high-grade pungent wines were being produced in regions unsuitable for grain production.⁹⁰ Low-quality wine does not travel well.⁹¹ The members of the Byzantine elite disliked resinous wines, as stated by Michael Choniates and other authors.⁹² Some individuals preferred sweet, others dry wine.⁹³

Short-distance supplies came from around the Sea of Marmara. Wine from the extensive vineyards in the region of Ganos along the northern coast of the sea was shipped in earthen jars produced in the vicinity and in the island of Marmara. An eleventh-century ship found off Marmara Island (Tekmezar I wreck) is estimated to have carried some 20,000 amphoras, each containing seven to eight liters wine and thus a total cargo of 140,000 to 160,000 liters.⁹⁴ In the second half of the twelfth century Ptochoprodromos praised the sweet wine of Ganos.⁹⁵ The wine is also mentioned in a 'Lexikon' compiled between 1204 and 1253.⁹⁶ A small thirteenth-century ship that sank off Marmara island (Çamalti Burnu I wreck) carried some 800 amphoras, most of which were filled with wine presumably on its way to Constantinople.⁹⁷ In the first half of the fourteenth century Guillaume Adam referred to the abundant wine from Ganos.⁹⁸

Wine from Trigleia, on the southern coast of the Sea of Marmara, was sold in Pera by 1284, but must have already arrived earlier in Constantinople.⁹⁹ In the 1320s it was appreciated by Byzantine connoisseurs as much as the wine of Monemvasia, according to John Choumnos.¹⁰⁰ It continued to be marketed in the imperial city after the Turkish occupation of Trigleia in the 1330s.¹⁰¹ Around 1340 the wine of that region was available at

⁸⁷ G. M. THOMAS, ed., *Diplomatariū veneto-levantinū. Venetiis 1880–1899*, I 164 lines 2–3 from below. Constantinople is not expressly mentioned, yet is clearly implied in that context since the names of other localities appear in clauses dealing with them.

⁸⁸ On Greeks enjoying Venetian status involved in the wine trade of the city, see D. JACOBY, *Les Vénitiens naturalisés dans l'Empire byzantin: un aspect de l'expansion de Venise en Roumanie du XIII^e au milieu du XV^e siècle*. *TM* 8 (1981) 224–226 (reprint in *IDEM*, *Studies*, IX).

⁸⁹ I. GENOV, *Vorbereitung des Weins und Weinsorten in Byzanz. Études balkaniques* 25/2 (1989) 118–120, provides a list of wines drunk in the Empire, yet entirely disregards chronology.

⁹⁰ See above 134 and n. 84. In the Ottoman period young wine was accepted as tax payment in kind: see N. GÜNSENIN, *Medieval Trade in the Sea of Marmara: the Evidence of Shipwrecks*, in: MACRIDES, *Travel in the Byzantine World* 127. On young wine, see also below, n. 193.

⁹¹ As confirmed by Byzantine sources: A. KARPOZILOS, *Realia in Byzantine Epistolography XIII–XV c.* *BZ* 88 (1995) 72–73.

⁹² F. KOLOVOU, *Michaelis Choniatae Epistulae (CFHB XLI)*. Berlin–New York 2001, 22–23, epist. 19. Additional evidence in A. KARPOZELOS, *Realia in Byzantine Epistolography X–XIIc.* *BZ* 77 (1984) 26; KISLINGER, *Graecorum vinum nel millenio bizantino*, 649.

⁹³ KARPOZILOS, *Realia in Byzantine Epistolography XIII–XVc* 72–73.

⁹⁴ N. GÜNSENIN, *Le vin de Ganos: les amphores et la mer*, in: *Eupsychia. Mélanges offerts à Hélène Ahrweiler (Byzantina Sorbonensia 16)*. Paris 1998, 281–285; GÜNSENIN, *Medieval Trade* 125–135, esp. 129–131 (I wish to thank the author for information regarding the volume of wine that the Tekmezar I amphoras could contain).

⁹⁵ EIDENEIER, *Ptochoprodromos* 157 (IV 332): κρᾶσιν γλυκῶν γανίτικον. See also below, n. 118. For the dating of the poem, see above, n. 9.

⁹⁶ *Iohannis Zonarae Lexicon*, ed. I. A. H. TITMANN. Leipzig 1808, I col. 422, s.v. Γάνωϋ. The work mistakenly bears the name of Zonaras. For its authorship and dating, see H. HUNGER, *Die hochsprachliche profane Literatur der Byzantiner (Handbuch der Altertumswissenschaft XII V/2)*. München 1978, 42–43.

⁹⁷ GÜNSENIN, *Medieval Trade* 130–132. See also N. GÜNSENIN, *A 13th–Century Wine Carrier: Çamalti Burnu, Turkey*, in: G. BASS, *Beneath the Seven Seas. Adventures with the Institute of Nautical Archeology*. London 2005, 118–123, esp. 120.

⁹⁸ [Pseudo-] Brocardus, *Directorium*, 507. For the author and dating of this treatise, see above, n. 84.

⁹⁹ G. I. BRĂȚIANU (ed.), *Actes des notaires génois de Péra et de Caffa de la fin du treizième siècle (1281–1290)*. Bucarest 1927, 172 no. 151.

¹⁰⁰ J. Fr. BOISSONADE, *Anecdota nova*. Paris 1844, 216, epist. 6. For the dating of the letter, see KISLINGER, *Dall'ubriacone al krasopateras* 149–150.

¹⁰¹ Contrary to K.-P. MATSCHKE, *Cretan Malmsey and the Fall of Constantinople in 1453*, in: T. ΚΙΟΥΣΟΠΟΥΛΟΥ (ed.), *1453, Η άλωση της Κωνσταντινούπολης και η μετάβαση απο τους μεσαιωνικούς στους νεωτερούς χρόνους*. Iraklio 2005, 121. On the approximate

Tana and thus passed through Constantinople.¹⁰² In or shortly before 1350 a local Greek importer sold to a Venetian wholesaler in the city 832 metra or around 8,736 liters of the same wine for 565 hyp., thus at 0.68 per metron.¹⁰³ Trigleia wine was traded in 1381 and 1382 in Caffa, which implies that as before it was travelling through Constantinople by that time.¹⁰⁴

Local wines continued to be partly marketed in the city and re-exported in earthen jars well into the Ottoman period, as implied by the production and use of amphoras for wine in the Marmara region.¹⁰⁵ Günşenin wine amphoras in four sizes whose capacities range from 15.5 to 98.5 liters are known from the Çamalti Burnu I wreck of the thirteenth century.¹⁰⁶ Some Günşenin IV amphoras from the second half of the thirteenth or the fourteenth century with capacities of 15.5, 26.7, 46.35, 54.3 and 64.45 liters have been found in the Sea of Azov.¹⁰⁷ Pegolotti mentioned around 1340 the use of jars for *vino del paese*.¹⁰⁸ In 1437 Badoer bought in Constantinople two jars holding a total of 12 metra ‘Greek’ wine (*vin grivesco*), or 6 metra equivalent to 61.5 liters per jar.¹⁰⁹ Yet Pegolotti also noted the use of barrels for local wine. This is confirmed some two decades later by the storage of ‘Greek’ wine (*vinum gregeschum*) of unknown origin in wooden casks at Kilia in 1361.¹¹⁰

Several brands of wine arrived in Constantinople from distant regions beyond the Sea of Marmara. The Venetians shipping cheese from Crete to Constantinople in the eleventh and twelfth centuries may have also handled the island’s wine.¹¹¹ We have already noted the use of wine measures in the Venetian quarter of Constantinople by 1107, which implies import and wholesale trade.¹¹² Around 1150 the Venetian Stefano Capello owned a wine cellar at Halmyros, Thessaly, and traded with Constantinople, possibly also in Halmyros wine, although wine from that region is not mentioned among the varieties imported to the Byzantine capital.¹¹³ It is likely that the Venetian wine merchant established in the Empire’s capital in 1204, a friend of Niketas Choniates, was involved in the wholesale of wines imported on his own behalf or by other Venetian citizens.¹¹⁴ On the other hand, it is rather doubtful that the use of wine measures in the Pisan quarter well before 1162 points to a similar activity,¹¹⁵ since the Pisans paid at that time the full *kommerkion* or trade tax of ten percent on their commercial transactions within the Empire.¹¹⁶

dating of the Turkish occupation, see E. A. ZACHARIADOU, The Emirate of Karasi and that of the Ottomans: Two Rival States, in: EADEM, *The Ottoman Emirate (1300–1389) (Halcyon Days in Crete I. A Symposium Held in Rethymnon 1991)*. Rethymnon 1993, 228, 230.

¹⁰² Pegolotti, *Pratica* 24.

¹⁰³ A. E. LAIOU, Un notaire vénitien à Constantinople: Antonio Bresciano et le commerce international en 1350, in: M. BALARD – A. E. LAIOU – C. OTTEN-FROUX, *Les Italiens à Byzance (Byzantina Sorbonensia 6)*. Paris 1987, 122 no. 21. C. MORRISSON – J.-C. CHEYNET, Prices and Wages in the Byzantine World, in: A. E. LAIOU (ed.), *The Economic History of Byzantium. From the Seventh through the Fifteenth Century*, Washington, D. C. 2002, II 834, entry under 1350, refer to this document. However, they cite mistaken data for the quantity and for the wine measure, namely, *mistati* instead of *metra*, the volumes of which differed.

¹⁰⁴ IORGA, *Notes* 39: “pro (...) vino Trillie”.

¹⁰⁵ GÜNSENIN, *Medieval Trade* 127. Wine was already imported to Constantinople in barrels by the late twelfth century: see KISLINGER, *Graecorum vinum* 658–659. However, they did not entirely replace jars, contrary to KISLINGER, *Dall’ubriacone al krasopateras* 162.

¹⁰⁶ GÜNSENIN, *Medieval Trade* 130–131; N. GÜNSENIN, L’*épave de Çamalti Burnu I (l’île de Marmara, Proconnèse): résultats des campagnes 1998–2000*. *Anatolia Antiqua* 9 (2001) 117–133.

¹⁰⁷ Personal communication of N. Günşenin. However, in a personal communication of 19 March 2008 the Russian archaeologist I. Velkov, Moscow, expressed the view that these amphoras presumably originated in Trebizond rather than in the Sea of Marmara.

¹⁰⁸ Pegolotti, *Pratica* 40.

¹⁰⁹ Badoer, *Libro* 82.38–39. He paid 6 hyp. for an unspecified volume of Greek wine in three jars: *ibid.*, 201, 22–23. If we assume that the price was approximately the same, these containers must have been smaller.

¹¹⁰ G. PISTARINO (ed.), *Notai genovesi in Oltremare. Atti rogati a Chilia da Antonio di Ponzò (Collana storica di fonti e studi 12)*. Bordighera 1971, 170–171 no. 94.

¹¹¹ See above, 128.

¹¹² See above, 130.

¹¹³ D. JACOBY, *Migrations familiales et stratégies commerciales vénitienes aux XII^e et XIII^e siècles*, in: M. BALARD – A. DUCCELLIER (eds.), *Migrations et diasporas méditerranéennes, (X^e–XVI^e siècles) (Byzantina Sorbonensia 19)*. Paris 2002, 360–361.

¹¹⁴ Niketas Choniates, *Chronike diegesis* 588, lines 13–16, versions OL and b (VAN DIETEN).

¹¹⁵ G. MÜLLER (ed.), *Documenti sulle relazioni delle città toscane coll’Oriente cristiano e coi Turchi fino all’anno MDXXXI*. Firenze 1879, 10, no. 8.

¹¹⁶ See above 130 and n. 29.

In the twelfth century Theodore Prodromos refers to wine from Maroneia in Thrace and Chios,¹¹⁷ while Ptochoprodromos mentions high-grade wines from Chios, Crete and Samos, and a low-grade variety from Varna, Bulgaria.¹¹⁸ On a diplomatic mission in Constantinople in 1214 Nikolaos Mesarites was entertained at the Latin patriarchate, where he was offered a pungent wine from Euboea, others from Chios and Lesbos, the latter sweeter than honey, and the superior one from Monemvasia.¹¹⁹ It follows that imports from remote Byzantine and former Byzantine regions under Latin rule continued after the Fourth Crusade.¹²⁰ Emperor Theodore II Laskaris (r. 1254–1258) was fond of Samos wine.¹²¹ Wines from the northern coast of Asia Minor reached Pera in the second half of the thirteenth century.¹²² Guillaume Adam, who on his way to Constantinople in the early fourteenth century travelled along the Balkan coast, states that wine is abundant in the regions of Athens and Negroponte and praises the high quality of the wine of Macedonia. The variety from Maroneia in Thrace, which he cites, is also mentioned somewhat later by John Choumnos.¹²³

The Byzantine merchant ship that sank off the southern coast of Asia Minor at Serçe Limani in the third decade of the eleventh century carried around 1,000 liters wine. Like the glass cullet on board, the wine presumably came from the Syrian–Lebanese coast under Fatimid rule and was intended for sale in Constantinople.¹²⁴ The twelfth-century Theodore Prodromos mentions wine from Byblos, present-day Jubail in Lebanon, called Gibelet by the Franks.¹²⁵ Gibelet is not attested elsewhere as a source of wine, yet the region of Tripoli, somewhat to the north, and several other regions along the Levantine coast were known for their wines.¹²⁶ The export of Levantine wine to Constantinople must have been rather limited in the eleventh and twelfth century, and presumably ceased entirely in the following period as a result of growing wine consumption in the Frankish states.

As implied by Michael Psellos, the Falernian wine from the region south of Naples, renowned in the Roman period, and varieties from Sorrento, Rhegium, and Albania were imported to Constantinople by the eleventh century, presumably on a small scale only.¹²⁷ The twelfth-century John Tzetzes also knew *φαιερίνος* wine.¹²⁸ From that period onward Italian wines increasingly reached the Byzantine capital. According to a Pisan trade manual compiled in 1278, Pisan merchants were bringing wine to Constantinople, as implied by the equation of wine measures used respectively in their city and in the Byzantine capital.¹²⁹ They presumably handled vernaccia, originally produced in Liguria, and wines of southern Italy.¹³⁰ Genoese merchants must have also handled Ligurian wines.¹³¹ In addition, from the 1290s to the 1340s they shipped to the Black Sea region wine from Provence, some of which was marketed in Pera.¹³² These shipments apparently ceased as a result of competition from Italian wines.

¹¹⁷ Theodore Prodromos, Ἡ πενή σοφίην ἔλαχεν. *PG* CXXXIII col. 1314–1315.

¹¹⁸ EIDENEIER, Ptochoprodromos 148, 155, 157, 160 (IV, 181, 298, 332, 395–396). Variants for line 332 include wine from Mytilene (Lesbos) instead of Ganos and athiri for Cretan wine. On this variety, see also below, 139. On the suggested identification of this author with the previous one, see above, n. 9. On wine from present-day Bulgaria, see also KISLINGER, *Graecorum vinum* 649.

¹¹⁹ KISLINGER, Dall'ubriacone al krasopateras 146–147. On Lesbos wine, see also previous note and E. KISLINGER, Zum Weinhandel in frühbyzantinischer Zeit. *Tyche* 14 (1999) 150.

¹²⁰ Incidentally, their import attests indirectly to the economic recovery of Constantinople shortly after that event: see JACOBY, The Economy of Latin Constantinople 197–199.

¹²¹ N. FESTA (ed.), Theodori Ducae Lascaris epistulae ccxcvii. Firenze 1898, 81, epist. 54 lines 81–82, 94–95.

¹²² BALARD, La Romanie génoise II 843–844.

¹²³ [Pseudo-] Brocardus, Directorium 507–508, and above, 135. On Maroneia, see also above, n. 117.

¹²⁴ See above, 131.

¹²⁵ See above, n. 117.

¹²⁶ J. RICHARD, Agriculture in Frankish Syria, in: K.M. Setton (ed.), A History of the Crusades. Madison, Wisconsin 1969–1989, V 260–261.

¹²⁷ E. KURTZ – F. DREXL (eds.), Michaelis Pselli scripta minora. Milano 1936–1941, I 75, lines 12–15.

¹²⁸ A. PAPADOPOULOS-KERAMEUS (ed.), Varia graeca sacra. St. Petersburg 1909, 83.22.

¹²⁹ Edition by R. LOPEZ – G. AIRALDI, Il più antico manuale italiano di pratica della mercatura, in: Miscellanea di studi storici, II (*Collana storica di fonti e studi* 38). Genova 1983, 127: “Li VIII metri di vino di Gostantinopoli tornano in Pisa barile uno”. Despite this formulation, it is clear that the wine was exported to Constantinople.

¹³⁰ On vernaccia in Pisa, see Pegolotti, Pratica 211, and ZUG TUCCI, Un aspetto trascurato 315–316. On the equivalence of measures for south-Italian wines in Pisa and Naples, see Pegolotti, Pratica 188. On these wines, see also below.

¹³¹ As attested in 1388: ZUG TUCCI, Un aspetto trascurato 318.

¹³² BALARD, La Romanie génoise II 842–843. On the wines shipped from Marseilles in that period, see F. MELIS, I vini italiani nel medioevo, ed. A. AFFORTUNATI PARRINI. Firenze 1984, 83–84.

By the 1320s a large volume of *vini greci* and *vermigli* or red wines from the kingdom of Naples were being exported from Naples to Constantinople.¹³³ ‘Greek’ wines, originally produced in areas of Greek population in southern Italy, had a high level of alcohol and, therefore, were more resistant and travelled better than ‘Latin’ wines. The names had become denominations for wine types, regardless of the region in which they were produced.¹³⁴ Especially the Greek from Calabria and the red from Basilicata were high-grade products.¹³⁵

Some twenty years later Pegolotti offered a more detailed list of wines arriving in Constantinople. The varieties produced in several regions of southern Italy and Sicily appear to have dominated the imports. Tropea was a major market for the wines of Calabria, also shipped from Naples.¹³⁶ Genoese merchants and vessels sailing to Constantinople handled the bulk of these exports. Wine continued to be exported from Tropea to Pera by 1403.¹³⁷ Venetian merchants also participated in the export from eastern Calabria, presumably from Crotona, since the wine from Cotrone was partly shipped in wooden casks imported from Venice.¹³⁸ Wines produced in the Marche travelled via Ancona and were presumably sold in Anconitan taverns located along the southern shore of the Golden Horn.¹³⁹ In addition, Constantinople received wine from Romania bassa, the Venetian name for the Peloponnesus, Boetia and Attica, Negroponte, the islands of the Aegean and Crete, regions integrated within the Venetian trade network of the eastern Mediterranean.¹⁴⁰ The Romania bassa wine presumably came from Nauplia or Modon in the Peloponnesus, Crete, and possibly also from the region of Thebes and from Rhodes.¹⁴¹ Byzantine Monemvasia was not included in the Venetian definition of Romania bassa, and its wine appears as a distinct brand, as we shall see below. Genoese merchants and ships also exported high and low-grade Cretan wines to their quarter of Pera, as attested in 1339.¹⁴²

Constantinople served as transit station for ‘Greek’ and ‘Latin’ wines from Italy, Monemvasia and Crete on the way to Caffa and Tana.¹⁴³ An anticipated sale of forty casks of Tuscan wine at the price of 310 aspers for

¹³³ BAUTIER, *Les relations économiques* 313, excerpt from Firenze, Marucelliana, C 226, fol. 5r. The manual distinguishes between *vermigli* shipped to Constantinople and *rossi*, to the Black Sea ports. On the origin and nature of these wines, see MELIS, *I vini italiani* 21–23. See also next note.

¹³⁴ Pegolotti, *Pratica* 80, and ZUG TUCCI, *Un aspetto trascurato* 315–316, 325. The ‘Greek’ wines of southern Italy should not be confused with the *Graecorum vinum* which in the mid-tenth century Liutprand of Cremona found undrinkable because it tasted of gypsum or pitch: on this wine, see Th. WEBER, *Essen und Trinken im Konstantinopel des 10. Jahrhunderts, nach den Berichten Liutprands von Cremona*, in: J. KODER – Th. WEBER, *Liutprand von Cremona in Konstantinopel (BV XIII)*. Wien 1980, 76–81.

¹³⁵ YVER, *Le commerce* 105–106; G. ARCHETTI, *Tempus vindemie. Per la storia delle vigne e del vino nell’Europa medievale (Fonti e studi di storia bresciana. Fondamenta 4)*. Brescia 1998, 165. It has been mistakenly suggested that the *greco* was a heavy resinous wine of Greek type and the *latino* less resinous and lighter: Evans in Pegolotti, *Pratica* 433, s.v. However, retsina wines were considered of low-quality, as noted above, 135.

¹³⁶ Pegolotti, *Pratica* 39–40, 45, 51.

¹³⁷ BALARD, *La Romanie génoise* II 843; P. PIANA TONIOLO (ed.), *Notai genovesi in Oltremare. Atti rogati a Chio da Gregorio Panissaro (1403–1405) (Accademia Ligure di Scienze e Lettere, Serie Fonti 2)*. Genova 1995, 58–59, no. 9.

¹³⁸ Pegolotti, *Pratica* 39. Cotrone and Crotona are two different localities in Calabria. Wooden casks were also shipped from Venice to Candia in that period: ZUG TUCCI, *Un aspetto trascurato* 336–337, 339. Wine from Cotrone also reached Naples: Pegolotti, *Pratica* 188.

¹³⁹ Pegolotti, *Pratica* 40. On wines from the Marche, see MELIS, *I vini italiani* 20–21. The taverns in Constantinople are attested around 1320: THOMAS, *Diplomatarium* I 167. On Anconitan trade in Constantinople at that time, see *ibidem* I 168, and A. PERTUSI, *The Anconitan Colony in Constantinople and the Report of its Consul, Benvenuto, on the Fall of the City*, in: A. E. LAIOU-THOMADAKIS (ed.), *Charanis Studies. Essays in Honor of Peter Charanis*. New Brunswick, N. J. 1980, 200–201.

¹⁴⁰ Pegolotti, *Pratica* 40. Venetian definition of Romania bassa in F. THIRIET, *La Romanie vénitienne au Moyen Age. Le développement et l’exploitation du domaine colonial vénitien (XIIe–XVe siècles) (Bibliothèque des Écoles françaises d’Athènes et de Rome 193)*. Paris 1959, 4.

¹⁴¹ Nauplia exported wine to an unknown destination in 1272 and to Constantinople in 1370: see respectively TTh III 274–275, with dating by G. MORGAN, *The Venetian Claims Commission of 1278. BZ 69 (1976) 429, no. 60*, and S. BORSARI, *I movimenti del porto di Candia aa. 1369–1372 (Dal repertorio del notaio Giorgio Aymo)*. *Università di Macerata. Annali della Facoltà di Lettere e Filosofia* 30–31 (1997–1998) 332. Sale of Romania wine in Constantinople by a former resident of Modon established in Tana some time before May 1414: N.D. PROKOFIEVA, *Akty venecijskogo notaria v Tane Donato a Mano (1413–1419)*, in: S.P. KARPOV (ed.), *Pri Chernomor’e v srednie veka (= The Black Sea Region in the Middle Ages)*, IV. Sankt-Peterburg 2000, 53–54, no. 18. The wine probably came from Modon. On exports from that port, see below, 139. Pegolotti, *Pratica* 85, 118, mentions wine from Rhodes and Thebes, respectively, yet without reference to Constantinople.

¹⁴² Ch. GASPARES (ed.), *Franciscus de Cruce, νοτάριος στον Χάνδακα, 1338–1339 (Istituto ellenico di studi bizantini e postbizantini di Venezia, Graecolatinitas nostra, Fonti I)*. Venezia 1999, 314–315, no. 455.

¹⁴³ BAUTIER, *Les relations économiques* 314–315, excerpts from Firenze, Marucelliana, C 226, fol. 42v, 46r; Pegolotti, *Pratica* 24–25, 189; BALARD, *La Romanie génoise* II 845–846.

100 metra was concluded in October 1360 at Kilia. The wine was expected to arrive there before April 1361.¹⁴⁴ Wine from Romania was to be sent to Tana in 1413.¹⁴⁵ In 1417 three consignments including respectively 95, 36 and 20 wine casks of Romania wine from Modon containing 68,058 liters were sold to a single Venetian merchant in Tana. Another one received ten casks of malvasia in 1415, and three casks of that wine belonging to a merchant of Coron were robbed in 1444 on their way from Constantinople to Tana.¹⁴⁶ Genoese and Venetian merchants appear to have conducted trade in wine in specific regions of the Black Sea. The wine measure of Pera, the Genoese suburb of Constantinople, was used in Genoese Caffa, while the Constantinople measure was used in Tana, the seat of a Venetian outpost.¹⁴⁷

A major change occurred in the nature of wine imports to Constantinople in the second half of the fourteenth century, when wines produced in Crete acquired a large share of the Constantinopolitan market. The Irish monk Symeon Simeonis, who passed through Candia in 1323, noted with some exaggeration that the famous Cretan wine was carried all over the world.¹⁴⁸ In fact, however, Crete produced at that time several types of wine and these varied in quality.¹⁴⁹ Moreover, these wines did not yet include malvasia, which drew its name from Monemvasia in the Byzantine Peloponnesus.¹⁵⁰ It is noteworthy that until the 1340s Venetian documents differentiated between Cretan brands and the Monemvasia wine. A decree of 1314 prohibited the import of Monemvasia wine to Crete in order to prevent it from enjoying upon re-export the same preferential rate of taxation as Cretan wines leaving the island.¹⁵¹ Another decree issued in 1326 mentions the wines of Crete, Monemvasia and Romania.¹⁵² Around 1340 Pegolotti distinguished between *vini di Candia* and *vino di Malvagia*, and this was also the case of a Venetian decree issued in 1342 dealing with taxation according to the origin of the wine.¹⁵³ The same issue was raised once more in 1363, when the Venetian Senate referred to the export from Crete of ‘Cretan wine’ as distinct from that of *vinum Monavaxie*.¹⁵⁴

However, the decree of 1342 just mentioned reveals that by that time Crete was already producing malvasia wine equal in quality and taste to that of Monemvasia. As a result, it was impossible to determine the origin of the malvasia arriving in Venice.¹⁵⁵ The introduction of the malvasia variety to Crete from the Peloponnesus must have begun in the 1330s or somewhat earlier.¹⁵⁶ Malvasia vine-stocks appear in Crete next to athiri vine-plants as distinct species in newly established vineyards from the late 1330s onward, and the two varieties of wine they yielded are increasingly specified in later sale contracts.¹⁵⁷ The assumption that the Cretans appropri-

¹⁴⁴ M. BALARD (ed.), *Actes de Kilia du notaire Antonio di Ponzò, 1360*. Paris 1980, 140–141, no. 81, and 173–175, nos. 107–108. In the same year a Greek merchant imported ‘Greek’ wine from Constantinople to Kilia: see above, 136.

¹⁴⁵ A. A. TALYSINA, *Venecijskij notarij v Tane Cristoforo Rizzo (1411–1413)*, in: КАРПОВ, *Prichernomor’e v srednie veka*, IV 30–31, no. 8.

¹⁴⁶ PROKOFIEVA, *Akty*, 105–106, 107–108, 109–110, respectively nos. 105, 107, 112. If the Venetian system was applied in Modon, one bigoncia would have contained 150.25 liters ($\frac{1}{4}$ of the botte d’anfora). The three documents state that each cask should contain three bigoncie equal to 24 mistati of Modon. Hence the local mistato was equivalent to 18.780 liters ($[3 \times 150.25] : 24$). SCHILBACH, *Byzantinische Metrologie* 146 arrives at approximately the same result in one of his calculations, yet errs by referring to the metron. For malvasia in 1415: PROKOFIEVA, *Akty*, 122, no. 130; in 1444: I. MARKOURIS, *Σχεσεις ελληνων εμπορων με την Τανα (α μισο του 15ου αιωνα)*. *Thesaurismata* 36 (2006) 54.

¹⁴⁷ Pegolotti, *Pratica* 53.

¹⁴⁸ M. ESPOSITO (ed.), *Itinerarium Symonis Semeonis ab Hybernia ad Terram Sanctam (Scriptores latini Hyberniae IV)*. Dublin 1960, 42, par. 22.

¹⁴⁹ See above, 138, and below, n. 161. Note below the plural applied to Cretan wines, in contrast to the singular used for the wine of Monemvasia.

¹⁵⁰ Malvasia for the city is attested in a Venetian document of 1278: TTh III 240–241.

¹⁵¹ P. RATTI VIDULICH (ed.), *Duca di Candia. Bandi (Fonti per la storia di Venezia, Sez. I – Archivi pubblici)*. Venezia 1965, 22, no. 44.

¹⁵² S.M. THEOTOKES (ed.), *Ἀποφάσεις Μείζονος Συμβουλίου Βενετίας, 1255–1669 (Akademia Athenon. Mnemeia tes ellenikes istorias A/2)*. Athens 1933, 113, no. 3.

¹⁵³ Pegolotti, *Pratica* 24, and THEOTOKES, *Ἀποφάσεις* 122–123, no. 21, respectively.

¹⁵⁴ S.M. THEOTOKES (ed.), *Θεσπίσματα τῆς Βενετικῆς Γερουσίας, 1281–1385 (Akademia Athenon. Mnemeia tes ellenikes istorias B/1–2)*. Athens 1936–1937, II 105, pars. 5 and 6. Note that the decree referred to the city and not to the type of wine.

¹⁵⁵ THEOTOKES, *Ἀποφάσεις* 122–123, no. 21: *quia malvasia de Monovasia possit portari sub specie malvasie de Creta, cum una ab alia non cognoscatur*.

¹⁵⁶ P. TOPPING, *Viticulture in Venetian Crete (XIII c.)*, in: *Pepragmena tou D’ kretologikou synedriou*, II. Athens 1981, 509, suggested the thirteenth century, yet there is no evidence of local malvasia in Crete before the 1330s.

¹⁵⁷ See M. GALLINA, *Una società coloniale del Trecento. Creta fra Venezia e Bisanzio (Deputazione di storia patria per le Venezie, Miscellanea di studi e memorie XXVIII)*. Venezia 1989, 42 and n. 25, 98, 99, n. 18, 133–134; GASPARES, *Franciscus de Cruce* 105,

ated the name ‘malvasia’ for Cretan wines in order to further their exports may thus be safely rejected.¹⁵⁸ The production of high-grade wines in Crete was furthered by a substantial expansion of vineyards in response to a growing foreign market.¹⁵⁹ In turn, their export was stimulated by the use of wooden casks, the growing carrying capacity of vessels available for transportation, and lower freight costs across the Mediterranean.¹⁶⁰

From the mid-fourteenth century onward the high-grade Cretan malvasia acquired a growing share among the wines shipped over long distances to Constantinople.¹⁶¹ It was predominantly handled by Venetian citizens and subjects acting as carriers, importers, wholesalers, and retailers. Since they enjoyed full tax exemption, the Byzantine authorities strongly opposed the sale of wine in the taverns they established outside the Venetian quarter in the first half of the fourteenth century. Their competitive prices undercut the activity of taverns in the imperial section of the city, and the large volume of wine they sold inflicted heavy losses to the imperial treasury. The conflict that erupted between Venice and the Empire in 1344 was followed by compromises between the two parties regarding the number of Venetian taverns, temporary imperial taxation of wine sold by Venetians, and short-lived imperial embargos on Venetian wine imports.¹⁶² Incidentally, Venetian taverns appear to have also sold local wines, as implied by a purchase of Trigleia wine made around 1350.¹⁶³

Byzantine merchants and ships sailed from Constantinople to Crete in the late fourteenth and the first half of the fifteenth century.¹⁶⁴ So far attention has been focused on their contribution to the supply of grain to the Byzantine capital during the long Ottoman siege, which lasted from 1394 to 1402. However, since their journeys continued after the lifting of the siege, it is likely that they were partly related to the export of Cretan wine to Constantinople. Their competition in that field appears to have been the main factor, if not the only one, inducing the Venetian authorities in Crete to tax them, in violation of the clause of reciprocity in Byzantine–Venetian treaties calling for tax exemption. Byzantium repeatedly protested against that measure. It is noteworthy that in 1405 emperor Manuel II entrusted Nikolaos Mamalis, who had earlier traded in Crete, to deal with the authorities of the island about that issue.¹⁶⁵ The continuation of Byzantine exports of wine from Crete is suggested by the purchase of 100 mistati or 1287.3 liters wine for 54 Cretan hyp. in Candia in 1449, carried out by a Greek of Constantinople on behalf of Theodoros Vatatzes, kommerkiarios of fish in Constantinople.¹⁶⁶

no. 119; Ch. GASPARES (ed.), *Catastici feudorum Crete. Catasticum sexterii Dorsoduri, 1227–1418 (National Hellenic Research Foundation, Institute for Byzantine Research, Sources 6)*. Athens 2004, II 573–574, no. 1095 (in 1353); IDEM, *Η γη και οι αγρότες στη μεσαιωνική Κρήτη, 13ος–14ος αι. (National Hellenic Research Foundation, Institute for Byzantine Research, Monographs 4)*. Athens 1997, 333, no. 9.2, in 1356. On the athiri variety, see also above, n. 118.

¹⁵⁸ This view has recently been stated anew by KISLINGER, *Dall’ubriacone al krasopateras* 163, and IDEM, *Graecorum vinum* 664, whose claim that there was a “falsificazione di etichetta” is unjustified. Besides, not all Cretan wines were sold as malvasia, as noted below.

¹⁵⁹ GALLINA, *Una società coloniale* 135–138.

¹⁶⁰ ZUG TUCCI, *Un aspetto trascurato* 319–323, 328–333; U. TUCCI, *Le commerce vénitien du vin de Crète*, in: K. FRIEDLAND, *Maritime Food Transport. Köln–Weimar–Wien 1994*, 199–202; U. TUCCI, *Il commercio del vino nell’economia cretese*, in: G. ORTALLI (ed.), *Venezia e Creta (Atti del Convegno internazionale di studi, Iraklion–Chanià 1997)*. Venezia 1998, 183–187, 193–194, 202–203.

¹⁶¹ As stated in 1372, the malvasia of the region of Canea was of inferior quality: THEOTOKES, *Θεσπισματα* II 160. It would seem that this type of wine was nevertheless imported to Constantinople, like the low-grade variety handled by Genoese merchants in 1339: see above, 138.

¹⁶² See J. CHRYSOSTOMIDES, *Venetian Commercial Privileges under the Palaeologi. Studi Veneziani* 12 (1970) 298–311. However, this author has not noted that the friction between the Empire and Venice regarded taverns located *outside* the Venetian quarter. This is confirmed by the refusal of John V to rent out vacant taverns to Venetians and to the Venetian attempt to transfer some taverns to districts with a larger market potential, problems raised in 1375: see *ibid.*, 305–306. On Venetian wine sales and taverns in Constantinople, see also MALTEZOU, *Ὁ θεσμός τοῦ ἐν Κωνσταντινουπόλει βενετοῦ βαΐλου* 144–148, pars 7–8, 10–11, 157 par. 17, 159 par. 24, 175 par. 11. On the whole issue, see also JACOBY, *Les Vénitiens naturalisés* 224–226.

¹⁶³ See above, 135–136.

¹⁶⁴ Th. GANCHOU, *Giacomo Badoer et Kyr Théodoros Batatzès’, comercier di pesi à Constantinople (flor. 1401–1449)*. *REB* 61 (2003) 64–66.

¹⁶⁵ *Ibidem* 65–66. However, the issue was not impediments to trade, as stated by this author, but taxation: see JACOBY, *Les Vénitiens naturalisés* 229–230, esp. n. 106.

¹⁶⁶ GANCHOU, *Giacomo Badoer* 69 and n. 72 for the sale contract. For the identity of the kommerkiarios, see *ibidem* 49–70, 79–95. The botte of Candia used for wine shipments, including to Constantinople, contained 540.70 liters equivalent to 42 mistati: see U. TUCCI, *La botte veneziana. Studi Veneziani* 9 (1967) 213–217, esp. 215–216. It follows that the mistato was equivalent to 12.873 liters. SCHILBACH, *Byzantinische Metrologie* 141–143, examines the data found in trade manuals and in one calculation arrives at a similar result.

Not surprisingly, Byzantine Greeks too sold Cretan wine in Constantinople. In the 1430s a certain Goudeles owned a tavern on the Plateia, the strip of land between the urban wall and the Golden Horn, which was known to sell “the finest Cretan wine”, presumably malvasia.¹⁶⁷ This tavern has been tentatively, yet mistakenly identified with one supposedly owned by another Goudeles in 1390.¹⁶⁸ Shortly before the Ottoman conquest of the city on 29 May 1453 a Genoese living in Chios arrived in Pera with Cretan malvasia, some of which he sold to a Greek of Constantinople.¹⁶⁹ Malvasia was also sold in Genoese Pera, as attested in 1390 and 1399. In 1403 the Genoese of Pera offered several consignments of malvasia to Emperor John VII, who served as regent of Constantinople during the absence of Manuel II, as well as to Ottoman dignitaries.¹⁷⁰ Despite the growing share of Cretan malvasia among imports, wines continued to arrive also from numerous other distant regions. From 1436 to 1439 the Venetian Badoer handled, in addition to malvasia as well as other Cretan varieties, Sicilian white and vermilion wine, white and red from Apulia, wines from Chios, Romania (which presumably stands for the Peloponnesus), Vicenza in the Veneto, and local Greek wine sold in jars.¹⁷¹ Interestingly, in 1437 Zanachi Torzelo bought for Emperor John VIII a cask of vermilion or white wine brought from Messina by the Cretan Todoro Vatazi, rather than malvasia.¹⁷²

Cretan Jews shipped kasher or Jewish wine from Crete to Constantinople. A consignment of ten casks sent in 1370 contained 5,407 liters.¹⁷³ The wine was sold in the Venetian quarter of Constantinople, yet also to Genoese Jews, as implied by its occasional seizure in Pera. Indeed, in 1403 or 1404 the Genoese authorities in Pera confiscated 23 casks holding 12,436 liters.¹⁷⁴ The Byzantine authorities strongly opposed the sale of Cretan kasher wine in the emperor’s section of the city, like that of other Cretan wine, since Venetian citizens and subjects enjoyed full tax exemption.¹⁷⁵ It is likely that kasher Cretan wine was increasingly distributed from Constantinople to Jewish communities in neighboring territories and around the Black Sea. This may account for a substantial increase in its import to Constantinople in the first half of the fifteenth century, which induced the Byzantine authorities to impose sometime before 1450 a special tax of ½ hyp. on each imported cask. Emperor Constantine XI promised to abolish the tax, collected by a special office called *scribania vegetum Judeorum venetorum*, following Venice’s protest against this infringement of its privileges.¹⁷⁶

¹⁶⁷ J. CANIVET – N. OIKONOMIDÈS, La comédie de Katablattas, invective byzantine du XV^e s. *Diptycha* 3 (1982–83) 67–69. On taverns in that area, see above 137 and note 139.

¹⁶⁸ An entry for 24 September 1390 in the accounts of the Genoese podestà of Pera mentions the arrival of *Godeli et Cassan-Bassa Turcho, acip[iente] Jacobo de Terdona, et sunt pro vini marvaxie pintijs xij*: IORGA, Notes 73. According to S. LAMPROS, Ὁ βυζαντινὸς οἶκος Γουδέλη. NE 13 (1916) 216–217 Goudeles supplied the wine from his warehouse or tavern to the podestà. This erroneous interpretation has been repeated numerous times, recently again by KISLINGER, *Graecorum vinum* 661–662. In fact, Goudeles did not deal in wine, but accompanied the envoy of Murad I, Hasan pacha, who had witnessed the agreement of 1387 between the sultan and Genoa: see I. BELDICEANU-STEINHERR, Recherches sur les actes des règnes des sultans Osman, Orkhan et Murad I. Munich 1967, 241–243 and n. 14. Goudeles may have either been identical to Georgios Goudeles, attested from 1382 to 1401, or to his son Iohannes Goudeles who owned a ship in 1402: on these two, see BALARD, La Romanie génoise II 758 and n. 113, and A. E. LAIOU-THOMADAKIS, The Byzantine Economy in the Mediterranean Trade System: Thirteenth–Fifteenth Centuries. *DOP* 34–35 (1980–1981) 199–200, 221–222 (reprint in EADEM, Gender, Society and Economic life in Byzantium. Hampshire 1992, VII). However, the payment for the wine was made to Giacomo de Terdona, who in 1390–1391 supplied several times wine and preserves to the Genoese podestà: IORGA, Notes 66–69, 71–73.

¹⁶⁹ A. ROCCATAGLIATA (ed.), Notai genovesi in Oltremare. Atti rogati a Chio (1453–1454, 1470–1471) (*Collana storica di fonti e studi* 35). Genova 1982, 22–24, 43–50, 143–144, 146–148, nos. 18, 31–33, 87, 89 respectively.

¹⁷⁰ IORGA, Notes 73, 80, 86–88; G. PISTARINO – G. OLGATI, Tra Creta veneziana e Chio genovese nei secoli XIV e XV. *Cretan Studies* 2 (1990) 200, 204, for 1399. On John VII as regent at that time, see J.W. BARKER, Manuel II Palaeologus (1391–1425): A Study in Late Byzantine Statesmanship. New Brunswick, N. J. 1969, 238.

¹⁷¹ See G. BERTELÈ, Il Libro dei conti di Giacomo Badoer (Costantinopoli 1436–1440). Complemento e indici. Padova 2002, 160, s.v. Vin. The rich documentation bearing on Crete and Badoer’s Venetian connections create a somewhat distorted picture of wine imports.

¹⁷² Badoer, Libro 199.40–42, and for the origin of the wine and the Cretan carrier, *ibidem* 198, 1–5. On the latter, see GANCHOV, Giacomo Badoer 56–58, 66–68.

¹⁷³ BORSARI, Ricchi e poveri 216–217.

¹⁷⁴ H. NOIRET, Documents inédits pour servir à l’histoire de la domination vénitienne en Crète de 1380 à 1485. Paris 1892, 179–180. The case, discussed in 1406, occurred while Tommaso Mocenigo was duke of Crete, an office to which he had been elected in 1403: *ibidem* 147 and n. 1.

¹⁷⁵ JACOBY, Les Vénitiens naturalisés 225–226.

¹⁷⁶ THOMAS, Diplomatarium II 379–380. For more evidence on the import of Cretan kasher wine to Constantinople, see D. JACOBY, The Jews in Byzantium and the Eastern Mediterranean: Economic Activities from the Thirteenth to the Mid-Fifteenth Century, in: M.

Not surprisingly, Cretan ships appear to have largely ensured the transportation of Cretan wines to Constantinople in the second half of the fourteenth and especially in the fifteenth century. Yet, in addition, these ships occasionally conveyed wines from other regions such as Sicily.¹⁷⁷ In November 1452 eight Cretan ships carrying malvasia arrived in Constantinople. Six vessels succeeded in escaping from the Ottoman siege in February 1453, followed by three others before the fall of the city to Sultan Mehmed II on 29 May of that year.¹⁷⁸ The owners of these three vessels or their relatives had engaged for many years in trade and transportation between Candia and Constantinople. Antonio Jalina is attested from 1430 and Sgouros, whose first name is unknown, may have been identical either with Lio or Micali, both of whom lived in Candia and owned ships in the late 1430s.¹⁷⁹ The brother of Antonio Filomati, Marco, traded in 1437–1439 in malvasia and unspecified Cretan wines bought by Badoer.¹⁸⁰

By the fourteenth century wooden casks had become a vital component of wine production and transportation in the Mediterranean region. In order to overcome shortages and reduce costs they were re-used and defective casks were repaired. Occasionally, though, the casks leaked and wine deteriorated during the voyage to Constantinople.¹⁸¹ By the second half of the fourteenth century Crete was in short supply of wooden barrels, indispensable for its growing wine production and export. Venice prevented on the whole the export of raw materials from the Adriatic for their manufacture in the island.¹⁸² Cretan winemakers were compelled, therefore, to import casks from Venice or find the materials to manufacture them elsewhere. From the 1420s at the latest Cretan ships returning from Constantinople to Crete carried large amounts of barrel staves and barrel hoops for the manufacture of casks by the island's coopers.¹⁸³ In September 1437 Badoer handled 11,000 barrel staves and an unspecified number of barrel hoops, in January 1438 he sent 5,950 barrel staves and 3,000 hoops on a single ship and 2,000 more hoops on another, while in August 1439 he was party to a deal involving 15,000 barrel staves.¹⁸⁴ Greek and Latin residents of Constantinople supplied these semi-finished products.¹⁸⁵ Barrel staves were among the commodities, alongside caviar, brought by Genoese merchants from Constantinople to Crete to finance their purchases of Cretan wine, as noted in June 1453. In 1455 the Cretans mentioned the large amount of barrel staves (*maxima copia lignaminis dogarum*) they had obtained in the past from Constantinople, the flow of which had stopped after the city's conquest by the Ottomans.¹⁸⁶ The shipping of these materials on vessels returning to Crete after carrying the island's wine to Constantinople illustrates an interesting aspect of the interdependence between centers of wine production and wine consumption.

It is impossible to gauge the volume of long-distance shipments of wine reaching Constantinople at any time. To gain some insight into the scope of these imports, it may nevertheless be helpful to engage in some

TOCH – E. MÜLLER-LUCKNER (eds.), *Wirtschaftsgeschichte der mittelalterlichen Juden: Fragen und Einschätzungen*. München 2008, 30–32, 47.

¹⁷⁷ See above, 141.

¹⁷⁸ M. MANOUSSAKAS, *Les derniers défenseurs crétois de Constantinople d'après les documents vénitiens*, in: *Akten des XI. Internationalen Byzantinistenkongresses*, München 1958. München 1960, 334–338.

¹⁷⁹ BERTELE, *Il Libro dei conti* 186, 199, s.v. Jalina, Sgouros.

¹⁸⁰ Badoer, *Libro* 260.30–31, 486.2–3, 604.5–6, 698.7–8, 706.2–3. On the Filomati brothers, see D. JACOBY, *I Greci ed altre comunità tra Venezia e oltremare*, in: M. F. TIEPOLO – E. TONETTI (eds.), *I Greci a Venezia (Atti del Convegno Internazionale di Studio, Venezia 1998, Istituto Veneto di Scienze, Lettere ed Arti)*. Venezia 2002, 57–59.

¹⁸¹ Spoiled wine from Messina: Badoer, *Libro* 267.7–12; leaking casks of Cretan wine: *ibidem* 486, 2–3. On defective casks, see also ZUG TUCCI, *Un aspetto trascurato* 329, 331–332.

¹⁸² On the construction of casks in Venice and the problems encountered by Crete in their supply, see ZUG TUCCI, *Un aspetto trascurato* 329–331, 336–340, 342–343; TUCCI, *Le commerce vénitien*, 405; also IDEM, *Il commercio del vino*, 186, n. 10, on the amount of wood required for the construction of a cask.

¹⁸³ On the import of casks, see above, previous note, and below, n. 187. Evidence on *doge* (= staves) *de Constantinopoli* and, to a lesser extent, on *doge de Salonichi* appears in Venetian notarial documents to be published in the near future by Thierry Ganchou (I wish to thank him hereby for this information). The wood used in Constantinople came from Thrace, while Thessalonica drew its supply from its hinterland in Macedonia: see ZUG TUCCI, *Un aspetto trascurato* 339.

¹⁸⁴ Badoer, *Libro* 209.37, 610.8–19, 371.12–13, respectively.

¹⁸⁵ MATSCHKE, *Cretan Malmsey* 123–126.

¹⁸⁶ NOIRET, *Documents* 441, for 1453: the origin of the staves is revealed by the reference to caviar, imported from the Black Sea via Constantinople; *ibidem* 444–445, for 1455. The Cretans mentioned staves, and not the wood for their manufacture as stated by MATSCHKE, *Cretan Malmsey* 123–124. The supply of staves and hoops from Constantinople to Crete was resumed later in the fifteenth century: see TUCCI, *Il commercio del vino* 187.

speculation. In 1378 the ships sent from Venice to pick up Cretan wine had a carrying capacity varying from 200 to 400 casks of 540 liters each.¹⁸⁷ In 1432 the smallest ships sent from Venice to Candia to bring back malvasia had 480 casks on board.¹⁸⁸ However, it is likely that the long-distance shipping of wine to Constantinople was mostly carried out by medium-sized vessels, like the one from Ragusa hired in Candia in October 1369 to load 150 casks of wine differing in size, and a Cretan ship built at Canea that loaded 120 casks, as attested in 1378.¹⁸⁹ If we assume, for the sake of calculation, that the eleven Cretan ships escaping from Constantinople in the early months of 1453 had brought an average of 150 casks per ship, each cask containing 540 liters Cretan malvasia, we arrive at a total of 891,000 liters, most of which must have either been of medium or high quality.¹⁹⁰ These were clearly not the only vessels carrying wine from Crete to the Byzantine capital within a single year, not to mention ships from other regions. In any event, the amount of wine imported to Constantinople must have been substantial and provided large profits, both commercial and fiscal, judging by the frequent disputes between the Empire and Venice regarding Venetian taverns and the taxation of Venetian wine imports.¹⁹¹ Some Cretans suffered heavy losses of capital invested in wine following the fall of Constantinople in 1453.¹⁹²

The absorption by Constantinople of large volumes and multiple varieties of Mediterranean wine carried over long distances could not have been achieved without competitive prices. In order to be meaningful, any comparison of wine prices must take into account several considerations: the provenance and nature of the wine, whether it was young or aged, naturally fermented or cooked,¹⁹³ the type of storage, the location of sales, whether by a producer or a merchant, close to the production center or after transportation involving freight, taxes and handling,¹⁹⁴ special contractual arrangements between producer and buyer, as in the case of anticipated sales involving credit to the former,¹⁹⁵ varying ratios between currencies, depreciations of coinage over time, fluctuating levels of demand and supply, as for instance before or after the arrival of seasonal convoys carrying wine, as well as the difference between wholesale and retail prices. In view of these multiple variables and the wide range of qualities, far more numerous than for grain or cheese, it is impossible to establish a medium price for wine in Constantinople at any given moment, nor are prices indicative of quality.¹⁹⁶

This is well illustrated by the account book of Giacomo Badoer, which has the advantage of offering contemporary data for Constantinople in the years 1436–1439 under more or less similar conditions.

¹⁸⁷ They were sent with empty casks to Candia. Exceptionally a smaller Cretan ship was also authorized to transport them: THEOTOKES, *Θεσπίσματα* II 210–211, no. 7. For the volume of wine in the casks, see above, n. 166.

¹⁸⁸ See ZUG TUCCI, *Un aspetto trascurato* 322–323, for the capacity of wine-carrying ships.

¹⁸⁹ BORSARI, *I movimenti* 325, n. 1, and 331; THEOTOKES, *Θεσπίσματα* II 211–212, no. 8.

¹⁹⁰ For the volume of wine in the Cretan botte or cask, see above, n. 166.

¹⁹¹ See above, 140.

¹⁹² MANOUSSAKAS, *Les derniers défenseurs crétois* 339.

¹⁹³ R. MOROZZO DELLA ROCCA (ed.), *Lettere di mercanti a Pignol Zucchello (1336–1350)* (*Fonti per la storia di Venezia, Sez. IV, Archivi privati*). Venezia 1957, 38, 91, on young and aged Cretan malvasia in 1347. See also ZUG TUCCI, *Un aspetto trascurato* 327–328.

¹⁹⁴ Expenses for the handling of Cretan wine arriving in Constantinople: Badoer, *Libro* 256.2–11, 706.2–11. For a general view, see J. Lefort, *Le coût des transports à Constantinople, portefaix et bateliers au XV^e siècle*, in: *Eupsychia* II 413–425.

¹⁹⁵ JACOBY, *Changing Economic Patterns* 218–219.

¹⁹⁶ MORRISSON – CHEYNET, *Prices and Wages* 834–836, have overlooked these considerations, especially important for Crete where the use of sale credit was fairly common: see previous note. J.-C. CHEYNET, *La valeur marchande des produits alimentaires dans l'Empire byzantin*, in: D. PAPANIKOLA-BAKIRTZI (ed.), *Byzantinon diatrophe kai mageireiai. Praktika emeridas peri tes diatrophes sto Byzantio* (= *Food and Cooking in Byzantium. Proceedings of the Symposium «On Food in Byzantium»*). Athens 2005, 41, asserts anew that Cretan wine tripled in price in the course of one century and suggests that the rise in wine prices, higher than those of grain, may have been generated by the shortage in manpower in labor-intensive viticulture caused by wars and plagues. These conclusions are unwarranted. GALLINA, *Una società coloniale* 135, mentions a threefold increase in the price of malvasia in Crete from 1346 to 1371, yet has also disregarded the differing factors determining wine prices.

Wholesale prices in hyp. per metron:

(* Price registered in the account book for wine taken for Badoer's household)

Malvasia, barter deal	0.40 (Badoer, Libro, 604, 3–4)
Malvasia	0.43 (604, 5–6; same consignment and same day)
Malvasia	0.48 (260, 30–31)
Malvasia	0.63 (280, 19)
Cretan, unspecified	0.45 (238, 4–5)
Cretan, unspecified	0.47–0.48 (487, 2–8; for the origin, 486, 2)
Cretan, unspecified	0.43 (487, 9–10)*
Chios	0.44 (47, 21)
Messina, white	0.45 (199, 2; for the origin: 198, 1–5)
Messina, unspecified	0.40 (238, 2–3)
Messina, unspecified	0.40 (267, 9)*
Greek local	0.50 (82, 38–39) ¹⁹⁷
Greek local	0.45 (604, l. 27–28)

A comparison of wine prices provides at least a partial explanation for the successful marketing of foreign wines in Constantinople.¹⁹⁸ To be sure, wine like bread and cheese was a staple of the daily diet at all levels of the city's society, yet its market was far more elastic. This was especially the case of medium and high-grade wines, the consumption of which grew beyond that of beverage as meal constituent, was linked to elevated social and economic status, and carried with it prestige. Sampling the many foreign wines was both a luxury and a status symbol. As a result these Mediterranean wines, brought from distant ports, were also eminently suited for re-export in response to the high demand around and beyond Constantinople.

Differences in type and quality, as well as the ratio between supply and demand were the main factors accounting for differences in the wholesale prices of foreign wines of similar provenance. As illustrated by wine purchased from a wholesaler in Candia in 1449, the price paid in the region of origin was substantially lower than the wholesale prices of local Greek wines imported to Constantinople.¹⁹⁹ This appears to have remained the case even after the addition of expenses involved in the long-distance transfer of the wine from Candia to the Constantinopolitan warehouse. As a result, the importers could afford to adjust their sale prices in the Empire's capital to those of local wines, while still ensuring themselves of sizeable margins of profit. At prices varying in approximately the same range as those of local wines they offered on the whole superior quality and were thus highly competitive. Once they had gained a share of the market, they strove to enlarge the diffusion of the foreign wines they imported. The long-distance trade in wine thus appears to have been highly lucrative.

This short review of long-distance supplies in Mediterranean foodstuffs and wine to Constantinople over some four and a half centuries is far from exhaustive. It is mainly based on western sources, which reflect these supplies more adequately than the sparse Byzantine data illustrating them. As a result, the Byzantine involvement in that long-distance trade is clearly underrepresented. Despite its fragmentary nature, the evidence provides an insight into the conjunction of factors and interests stimulating that trade, which was inserted within broader trends of commercial operations directed both toward Constantinople and to destinations around and beyond the city. Initially Italian merchants took advantage of growing *Byzantine* demand in Constantinople from the early eleventh-century onward to offer cheese, oil and wine shipped over long distances, which enabled them to finance their acquisition of costly goods such as silk textiles in the city. However, from the 1260s onward it was the growing *Western* demand for grain, industrial raw materials and finished products that generated an intensification of Italian trade in Constantinople and the Black Sea. The western purchase of massive volumes of grain, as well as hides and costly items such as silk, silk textiles, furs and gems, not to speak of other goods, required a substantial increase in the volume of exchange commodities shipped to these destinations. Specific Mediterranean foodstuffs and wines brought from distant regions were prominent among them.

¹⁹⁷ Greek wine in 2 jars holding 12 metra at 6 hyp: see above, n. 109.

¹⁹⁸ As noted above, 136, the wholesale price paid for Trigleia wine around 1350 was 0.68 per metron. However, this figure does not permit any conclusion in view of the chronological gap between ca. 1350 and the 1430s.

¹⁹⁹ See below, Appendix B, and the figures cited above.

In order to acquire a growing segment of the market, the merchants engaging in the long-distance supply of Constantinople diversified their imports by enlarging the range of brands and qualities they offered, including low-grade oil and wine. They generated and stimulated thereby new demand and shifts in taste. This strategy proved to be successful thanks to competitive prices, partly achieved by flexibility and efficiency in the collection, transportation and distribution of the goods.

The flow of Mediterranean foodstuffs and wine shipped over long distances to Constantinople appears to have been continuous in the period covered here. However, the fragmentary evidence and the absence of continuous series of quantitative data prevent any assessment of the volume of goods imported to the city, nor is it possible to determine the contribution of specific sources of supply in that framework. On the other hand, we may safely assume that the distribution pattern of the goods arriving in Constantinople evolved from the thirteenth to the mid-fifteenth century. The city's dwindling population and the substantial increase in demand from Mongol and Ottoman courts and elites established in its commercial hinterland resulted in a decline in local consumption and growing exports of prestige-linked Mediterranean commodities.

APPENDIX A: THE GREEK ACCOUNT BOOK OF CA. 1360 (VATICANUS GR. 1325, FOL. 316–324)

Peter Schreiner published in 1991 a Greek account book, the compilation of which he dated on convincing grounds to ca. 1360 and tentatively located in Herakleia of the Pontos.²⁰⁰ However, this siting is highly questionable for various reasons and, therefore, warrants a renewed examination of the text.

The account mentions Venetian and Cretan cheeses (τυρί(ν) βενέτ(ικόν), lines 100, 102, 140, and τυρίν κριτικ(όν) or κρητικ(όν), lines 109, 130, 131, 133). Since the editor assumes that these commodities were traded in the Black Sea, he excludes *a priori* that 'Venetian' or 'Cretan' cheeses could have reached that region. He suggests, therefore, that the names refer to Venetian and Cretan types of cheese manufactured in the Black Sea, primarily in the Crimea, rather to the origin of the cheeses (Texte 63 [for line 133] and 371–372). Incidentally, the distance from the Black Sea to Crete is not a valid argument against the provenance of 'Cretan' cheese from that island, since Italian, Peloponnesian and Cretan wines reached Tana.²⁰¹ More specifically, Venice never produced cheese and imported it from various regions, among them Crete. By 1360 the island was ruled by Venice and Cretan cheese could well have been considered as being Venetian, all the more so since it was mainly handled by Venetian citizens and subjects and traded in the Venetian quarter of Constantinople from the twelfth century onward, if not earlier. Such was still the case around 1360.²⁰² This last factor raises the possibility that the account was compiled in Constantinople.

This assumption appears at first glance to be contradicted by the purchase of Cretan cheese ἀπὸ τ(ῆς) Περαιτί(ας), translated "aus der Peratia" (line 133; similar references appear on lines 95, 103, 120, 122, 123, 133, 178). Schreiner considers this a place name, which he somewhat hesitantly identifies with the Crimea (Texte 34), based on arguments that remain unconvincing. A more plausible reading may be suggested, namely, ἀπὸ τ(οῦ) Περαιτικ(οῦ), "from the one living in Pera", the site of the Genoese quarter in the fourteenth century. The appellation Περαιτικός is indeed attested by another Greek account (Schreiner, Texte 243, no. 48, line 31). This reading would conform with that of ἀπὸ Μουλσουμάν(ου), "from the Muslim" (lines 2; 38, line 40; and 134), ἀπὸ Ἀμαστρινοῦ (l. 28), and ἀπὸ Βενετ(ικοῦ), "from the Venetian", which is to be preferred to ἀπὸ Βενετ(ίας), "from Venice" (lines 106, 110 and 117). Schreiner's reading ἀπὸ Βενετίας on line 117 would imply the import of caviar from Venice, which is of course excluded, and he therefore attempts to circumvent that difficulty by freely translating "aus venezianischem Gebiet (z.B la Tana)" (Texte 62), an unconvincing paraphrase. On the other hand, ἀπὸ Βενετ(ικοῦ) would refer to a Venetian handling caviar, which is quite plausible. The reference to that commodity in line 117 is a decisive argument in favor of the emendations ἀπὸ τ(οῦ) Περαιτικ(οῦ) and ἀπὸ Βενετ(ικοῦ) proposed above. The record of Cretan cheese in connection with ἀπὸ τοῦ Περαιτικ(οῦ) (line 133) does not contradict it, since a resident of Pera, like any other individual, could trade

²⁰⁰ SCHREINER, Texte, 37–46, no. 1 (edition); dating and localization *ibidem* 33–36; commentary, *ibidem* 74–79. I use below lines when referring to the text of the account and 'Texte' when dealing with the editor's interpretations.

²⁰¹ See above, 138.

²⁰² See above, 128.

in that cheese and other goods regardless of their origin. In short, the appellation Peratikos was particularly appropriate in a Constantinopolitan context.

The assumption that the account was compiled in the Byzantine capital may be supported by the mention of the Παλαιὸς Φόρος (line 99). An ‘Old Market’ is attested in the city by a verdict of the patriarchal court of Constantinople issued in 1351, thus precisely around the time at which the account was apparently compiled, and again in 1439.²⁰³ A retail shopkeeper is located in the district of St. Anastasia (line 70). A church bearing that name was situated in a commercial area close to the Mese.²⁰⁴ The Byzantine administrative functions of kynegos, archon, grammatikos and exarchos (lines 6, 12, 36, 67) and the names Angelos, Goudeles, Gabras, Gabalas and Branas (lines 14, 27, 49, 99, 174) fit well the Constantinopolitan milieu, although they do not provide a decisive argument in favor of the capital.²⁰⁵ The convergence of caviar from the Black Sea, on the one hand, and foodstuffs and wines from the Mediterranean on the other is noteworthy and may point to an emporium located at the crossroads of these two regions. This is also the case of the fourteen payments in Venetian ducats, alongside others in Byzantine currency. The appearance of Aretzianos (line 72), from Arezzo, and Frantzeskos (line 82), both Italians, is thus not surprising.²⁰⁶ If Theodoros tou Rhodeos (lines 7 and 9) is indeed identical with Theodoro Rodio de Constantinopoli, attested in Kilia in 1361,²⁰⁷ the account book would illustrate the presence of this individual in his home city.

It is excluded that the ‘Venetian scale’ (line 111) should have been a private balance owned by a Venetian.²⁰⁸ The epithet ‘Venetian’ in this case points to an official scale, which in Constantinople was operated by a state official called ponderator, whether in the latter’s office or at warehouses or shops to which he had been requested to come. Regulations concerning that office were confirmed by the Venetian baili in Constantinople in 1327 and 1361.²⁰⁹ A proclamation issued in 1368 specified that within three days upon arrival in the city all Venetian citizens and subjects residing in the Byzantine empire and in the Black Sea region had to register “ad nostrum pondus”, “at our weighing office”, obviously to ensure the weighing of their goods by the official ponderator.²¹⁰ The enforcement of the regulations supposes the presence of Venetian state officials and could best be achieved within the Venetian quarter. The use of the Venetian scale, coupled with that of the kantarion, the Venetian cantaro (Texte 345), as weight unit for various commodities in forty-four entries, reinforces the argument in favor of that quarter.²¹¹ At first glance this suggestion appears to be contradicted by the reference to “wheat from the city”, ἀπὸ τῆς πόλ(εω)ς (line 166). The transshipment of Black Sea grain in Constantinople and its re-export to Herakleia (as suggested by Schreiner, Texte 34) is not impossible, yet rather unlikely since this city was a grain outlet and could be more conveniently supplied by Amastris, another grain outlet along the Black Sea coast of Asia Minor situated closer than Constantinople.²¹² Therefore, in view of the arguments adduced above in favor of Constantinople, another interpretation of ἀπὸ τῆς πόλ(εω)ς may be offered. Both the imperial authorities and Venice clearly distinguished between the imperial section and the Venetian quarter of Constantinople, which benefited from an extraterritorial status. In 1319 the ambassadors sent by Andronicus II to Venice requested that the Jewish tanners enjoying Venetian status “should leave the emperor’s land and go to reside in the land and places of the Commune granted by the emperor to the Commune of the Venetians

²⁰³ Das Register des Patriarchats von Konstantinopel III 68, no. 184; Badoer, Libro 718.16. For the location in the city, see R. JANIN, Constantinople byzantine. Paris 1964, 402.

²⁰⁴ R. JANIN, La géographie ecclésiastique de l’Empire byzantin. Première partie: Le siège de Constantinople et le patriarcat oecuménique, tome III: Les églises et les monastères. Paris 1969, 22–25.

²⁰⁵ Schreiner’s location of the account in Herakleia leads him to cast doubts upon the Constantinopolitan connection of these elements. It thus functions as a circular argument strengthening that location.

²⁰⁶ The same consideration as in the previous note induces SCHREINER, Texte 72, to reject the Italian origin of Aretzanos and to suggest an unconvincing derivation of the name from a Greek toponym.

²⁰⁷ As suggested by K.-P. MATSCHKE in his review of Schreiner, Texte, published in *Südost-Forschungen* 52 (1993) 466.

²⁰⁸ As suggested by SCHREINER: see below, n. 211.

²⁰⁹ Edition by MALTEZOU, Ὁ θεσμός τοῦ ἐν Κωνσταντινουπόλει βενετοῦ βαΐλου 140–142 and 137–140 respectively.

²¹⁰ *Ibidem* 142–143, no. 3.

²¹¹ SCHREINER, Texte 62 uses here again a paraphrase: “die Stelle, an der von den Venezianern die Waren gewogen wurden”.

²¹² S. VRYONIS jr., The Decline of Medieval Hellenism in Asia Minor and the Process of Islamization from the Eleventh through the Fifteenth Century. Berkeley 1971, 14–17; J.-Cl. CHEYNET, Un aspect du ravitaillement de Constantinople aux X^e/XI^e siècles d’après quelques sceaux d’hôrreiaroi. *Studies in Byzantine Sigillography* 6 (1999) 1–13.

in Constantinople”.²¹³ In view of that approach, ‘the city’ mentioned in connection with grain in the Greek account refers to the imperial section of the city, from which the grain came, and illustrates a Venetian perspective of the latter’s political and territorial division.

In sum, the conjunction of material, toponymic, topographic, prosopographical and implied political-territorial elements in the account book points to the latter’s compilation in Constantinople and, more precisely, in the city’s Venetian quarter by a Greek enjoying Venetian status and residing in that quarter. It is thus highly relevant for the study of long-distance supplies to the Empire’s capital.

APPENDIX B: AN ASSESSMENT OF PROFIT MARGIN IN THE WINE TRADE

Most notarial deeds recording wine transactions in Venetian Crete reflect business deals between producers and customers or merchants.²¹⁴ On the other hand, the document recording the purchase of 100 mistati wine carried out in Candia in 1449 by a Greek of Constantinople on behalf of Theodoros Vatatzes, *kommerkiarios* of fish in Constantinople, mentions the wholesale price paid to a local merchant before the wine’s shipping to Constantinople. Therefore it offers an opportunity to assess the profit made by wine exporters.

The cask of Candia used for wine shipments to Constantinople contained 42 mistati corresponding to 540.70 liters, and the mistato 12.873 liters.²¹⁵ The wine metron of Constantinople contained 10.250 liters.²¹⁶ It follows that 100 mistati of Candia were equivalent to 125.59 metra of Constantinople. Since 54 Cretan hyp. were paid for the wine in Candia, we arrive at a price of 0.43 Cretan hyp. per metron of Constantinople (54: 125.59). According to Badoer’s account book, the ratio between the Cretan and the Constantinopolitan hyperpyron in the 1430s appears to have been 1½ to one.²¹⁷ If we assume that the same ratio existed in 1449, the price of the wine purchased in Candia was 0.28 hyp. in Constantinopolitan currency (0.43: 1,5). Even if we take into account freight, taxes, and handling from Candia to the warehouse in Constantinople,²¹⁸ the margin of profit was substantial if the wine was sold there at a minimum price of 0.40 hyp.²¹⁹

One cannot generalize from this single case. Still, it would seem to reflect the norm, which explains why wine imports from distant regions appear to have been so lucrative.

ADDENDUM

Regarding wine the following volume should also be consulted, although it does not change my argumentation:

ILIAS ANAGNOSTAKIS (ed.), *Monemvasian wine – Monovas(i)a – Malvasia*. Acts of the Symposium Athens, May 19–20, 2006. National Hellenic Research Foundation, Institute for Byzantine Research. International Symposium 17. Athens 2008.

This volume reached me late in 2008 after my paper had already been printed with final pagination. It was impossible, therefore, to refer to it in the text and in the notes.

²¹³ THOMAS, *Diplomatarium* I 125.

²¹⁴ MORRISSON – CHEYNET, *Prices and Wages* 834–835, cite some of them.

²¹⁵ See above, n. 166.

²¹⁶ See above, n. 86.

²¹⁷ C. MORRISSON, *Coin Usage and Exchange Rates in Badoer’s Libro dei Conti*. *DOP* 55 (2001) 221, n. 14.

²¹⁸ See above, n. 194.

²¹⁹ On prices, see above, 144.

