



**HAL**  
open science

# **Distribution Atlas of Byzantine Ceramics. A New Approach for Pottery Trade in Byzantium**

Véronique François

► **To cite this version:**

Véronique François. Distribution Atlas of Byzantine Ceramics. A New Approach for Pottery Trade in Byzantium. Paul Magdalino, Nevra Necipoglu. Trade in Byzantium. Papers from the Third International Sevgi Gönül Byzantine Studies Symposium, Anamed, pp.143-155, 2016, 978-605-9388-05-4. ⟨halshs-01342002⟩

**HAL Id: halshs-01342002**

**<https://shs.hal.science/halshs-01342002v1>**

Submitted on 4 Jan 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



HAL Authorization

**! Version auteur disponible en ligne en attendant un dépôt de l'article autorisé par l'éditeur**

**! Author's version available online while waiting for a deposit of the article authorized by the editor**

## A Distribution Atlas of Byzantine Ceramics: a New Approach to the Pottery Trade in Byzantium

Véronique FRANÇOIS, Aix Marseille Univ, CNRS, LA3M, Aix-en-Provence, France

From archaeological discoveries, we know that ceramics traveled in the Mediterranean during the Middle Ages - sometimes very far from their areas of manufacture. What we often do not know are the terms of this circulation. Written sources such as *nolisement* acts, toll accounts, taxation records, chronicles and travel accounts or lists of diplomatic gifts provide some information about the trade and the circulation of pottery.<sup>1</sup> However, some areas are better documented than others are. As far as the Byzantine Empire is concerned, the contribution of written sources on the issue of tableware trade is very limited and we must therefore look elsewhere for information on trade mechanisms.

Studying the cargoes of shipwrecks is one way to do this. A handful of important cargoes of glazed ceramics have been located in the Aegean and Eastern Mediterranean seas. They have been discovered either by rescue excavations or through looted material. The Pelagonnisos shipwreck, discovered in the Northern Sporades, contained in its hold more than 768 pieces of Byzantine pottery dating from the late twelfth century to the early thirteenth century; eleven jars, sixty-one amphorae, lamps, a copper cauldron and six grindstones.<sup>2</sup> The tableware transported by this ship is of the same type as that found in four other sunken ships: one at Skopelos, in the Sporades;<sup>3</sup>

---

<sup>1</sup> V. François, "Réalités des échanges en Méditerranée orientale du XIIe au XVIIIe siècle: l'apport de la céramique," *DOP* 58 (2004): 241–49.

<sup>2</sup> C. Kritzas, "Τό Βυζαντινόν ναυάγιον Πελαγονήσου-Αλοννήσου," *Αρχαιολογικά Ανάλεκτα ἐξ Ἀθηνῶν* 4 (1971): 176–82; E. Ioannidaki-Dostoglou, "Les vases de l'épave byzantine de Pélagonnèse-Halonnèse," in *Recherches sur la céramique byzantine*, ed. V. Déroche and J. -M. Spieser, *BCH Supplément* 18 (Athens-Paris, 1989), 157; V. François, "De la cale à l'atelier. La vaisselle byzantine de la donation Janet Zakos au Musée d'art et d'histoire de Genève", in *Donation Janet Zakos. De Rome à Byzance*, ed. M. Martiani-Weber, Collections Byzantines du MAH (Genève, 2015), 201-272.

<sup>3</sup> P. Armstrong, "A Group of Byzantine Bowls from Skopelos," *OJA* 10.3 (1991): 335–47.

the second near the island of Kavaliani south of Evia;<sup>4</sup> the third off the island of Kastellorizo, on the south coast of Lycia;<sup>5</sup> and the last one in the bay of Adrasan south of Antalya.<sup>6</sup> Unfortunately, these finds do not provide any information about the departure port, the place the goods were loaded, the route or the final destination of the ship.

Another shipwreck provides more interesting data about maritime trade in glazed ceramics. This is the Novy Svet shipwreck found in the Black Sea near Soldaia, and excavated since 1999 by a team from the Taras Shevchenko University in Kiev.<sup>7</sup> Based on historical sources, the team has established it to be a Pisan vessel which was burned and sunk in 1277 after being chased from Constantinople through the Black Sea by a Genoese galley in retaliation for brawls that had opposed Pisan and Genoese sailors in Constantinople. The underwater excavations produced *pithoi*, many type 3 and 4 Günsenin Byzantine amphorae (frequently found in the Black Sea and the Mediterranean) and glass objects probably made in Italy in the second half of the thirteenth century. However, the shipwreck mostly contained an exceptional quantity of glazed tableware of different origins. These included western products such as *Graffita arcaica tirrenica* from Savona workshops and a few bowls of Venetian Roulette Wares; eastern products such as “so-called Al Mina Wares” from the region of Antioch and Cilicia; cooking pots and frying pans from Beirut workshops, cups from Paphos workshops and a few Seljuk ceramics from Rum. Byzantine tableware was mainly represented by “Novy Svet” ceramics - the name given to a type of bowls decorated with *sgraffito* in a simple pattern and covered with an orange glaze - by numerous examples of Glazed White Wares IV of Constantinople origin and by fewer Zeuxippus and Aegean Wares. The cargo, composed of pottery coming from Northern Italy, the Levantine coast, Constantinople, Cyprus and other locations in the Byzantine and Seljuk territories, may reflect a coasting trade, which used these goods to complete, depending on the resources and deficiencies of each region, the general cycle of trading operations. It is also possible that the ship was loaded in a great port such as Constantinople that centralized all kinds of goods. As confirmed by the underwater excavations of the Novy Svet shipwreck, cooking pots, jugs, dishes and bowls reached consumers via different routes and not necessarily via the most direct ones between the place of production and the place of consumption. In addition, the cargo shows that Byzantine products could be transported by Italian vessels.

---

<sup>4</sup> G. Koutsouflakis, X. Argiris, Ch. Papadopoulou et al., “Underwater Survey in the South Euboean Gulf (2006–2008),” *ΕΝΑΛΙΑ, Journal of the Hellenic Institute of Marine Archaeology* 11 (2012): 69, fig. 24.

<sup>5</sup> G. Philotheou and M. Michailidou, “Βυζαντινά πινάκια από το φορτίο ναυάγισμένου πλοίου κοντά στο Καστελλόριζο,” *Άρχ.Δελτ.* 41 (1986): 271–330.

<sup>6</sup> See the article by L. Doğer and A. H. Özdaş in this volume.

<sup>7</sup> S. M. Zelenko, “The Results of Underwater Archaeological Research in the Black Sea by the Taras Shevchenko Kiev University 1997–99,” *Vita Antiqua* 2 (1999): 223–34; S. Y. Waksman and I. Teslenko, “‘Novy Svet Ware’, an Exceptional Cargo of Glazed Wares from a 13th-Century Shipwreck Near Sudak (Crimea, Ukraine) - Morphological Typology and Laboratory Investigations,” *IJNA* (2009): 1–21; S. Y. Waksman, I. Teslenko, S. M. Zelenko, “Glazed Wares as Main Cargoes and Personal Belongings in the Novy Svet Shipwreck (13th c. AD, Crimea): A Diversity of Origins Investigated by Chemical Analysis,” in *Actas del VIII Congreso Internacional de Cerámica Medieval en el Mediterráneo, Ciudad Real-Almagro del 27 de febrero al 3 de marzo de 2006*, ed. J. Zozaya, M. Retuerce, M. A. Hervás et al., vol. 2 (Ciudad Real, 2009), 851–56.

The contribution of texts and excavations is however limited; the use of other methods to try to understand how the pottery was traded in Byzantium is thus needed. Mapping is one of these.

Based on a thorough analysis of the bibliography, mapping discoveries allows us to draw a picture of the distribution of the main types of tableware traded between the seventh and the fifteenth centuries in the empire and beyond.<sup>8</sup> This in turn enables us to describe the traffic of Byzantine ceramics. In order to identify patterns of distribution and consumption, archaeological data are set against geographical, political and economic data.<sup>9</sup> The inventory of ceramics found in consumption sites and materialized in the form of cartographic representations reflects the distribution of production over long distances, across the Mediterranean for instance, but also, as we shall see for Pergamon and Nicaea, on regional and macro-regional scales. It allows us to rank the supplies. These distribution maps however have their limits. They only map the sources from which they have been drawn and therefore only represent the state of research. Differences in the type and number of sources, from one region to another, obviously limit their scope. The presence of Byzantine ceramics is well documented on sites excavated in the Danubian regions, in Thrace and Macedonia, in the Peloponnese, on the coast of Asia Minor and the Levant, in Cyprus, on the Crimean shores and in the Italian peninsula. These densely populated areas have been the subject of intense archaeological exploration. The sample obtained from these excavations is therefore rather satisfactory. Moreover, distribution maps indicate the presence or the absence of a certain type of items on a given site. An isolated bowl is only the testimony of a marginal or random distribution and cannot be representative of a trade, while larger quantities of ceramics are indicative of an organized diffusion. To take into account these differences in the amount of objects found, the maps should include quantitative data, but considering the level of research on Byzantine ceramics, that it is impossible.<sup>10</sup> The lack of quantitative data in most publications does not allow for comparing the amounts of ceramics by category. The frequency of occurrence of a single production in a small geographical area can partially address this deficiency. Small numbers may be offset by the regular presence of a single production in a relatively small area and for a certain period of time. This repetition will be interpreted as an indication of the trade of tableware.

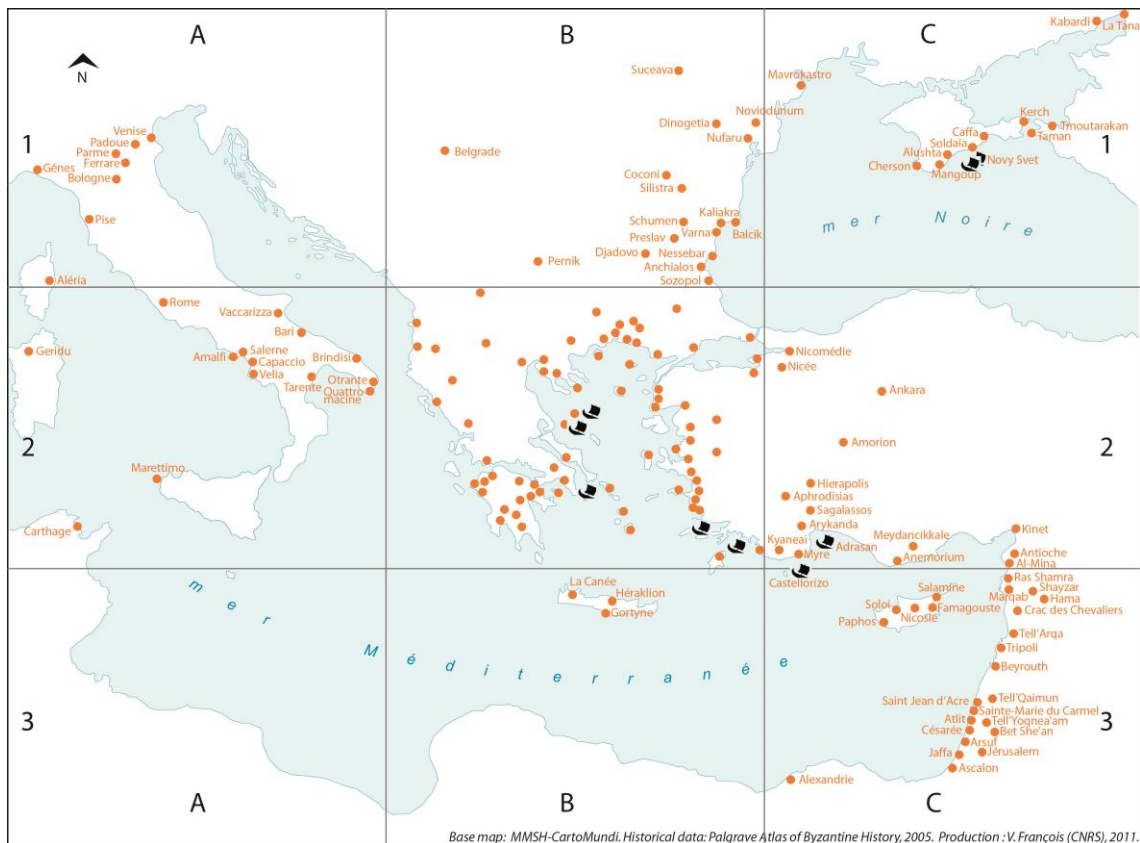
In this context, and within these limits, the mapping of the discoveries of ceramics in 190 sites seems representative of the circulation of Byzantine tableware from the Macedonian to the Palaiologan period (**Map 1**).

---

<sup>8</sup> In order not to multiply the footnotes, I will not refer systematically to publications reporting the findings. For references, see particularly V. François, *Bibliographie analytique sur la céramique byzantine à glaçure*, *Varia Anatolica* 9 (1997).

<sup>9</sup> For the historical data, see J. Haldon, *The Palgrave Atlas of Byzantine History* (Basingstroke, 2005).

<sup>10</sup> Counting fragments is not to calculate the exact number of sherds but to achieve relative orders of magnitude of the different types in order to compare data from one site to another.



Map 1

The first map<sup>11</sup> one is the distribution map of Glazed White Ware II, a white fabric pottery with impressed decoration made in Constantinople from the tenth to the early twelfth centuries (**Map 2**).<sup>12</sup> It was well distributed throughout the empire yet remained within its borders. The exceptions are the cities of the Taman peninsula that had fallen under the control of Kiev Rus' but which obviously had kept links with Byzantium and Sigtuna in Sweden.<sup>13</sup> The coastal distribution of GWW II is widespread but this glazed ware was also sometimes sold inland: in the cities of Hierapolis and Amorion along the main roads of Anatolia; in Silistra, Dinogetia and Belgrade going up the Danube; in Adrianople and Pernik along the Maritza River. In the Peloponnese, the use of this Constantinopolitan tableware could be a material expression of a renewed Hellenic influence after the Slav invasions.<sup>14</sup> Similarly, the GWW II found in tenth-century

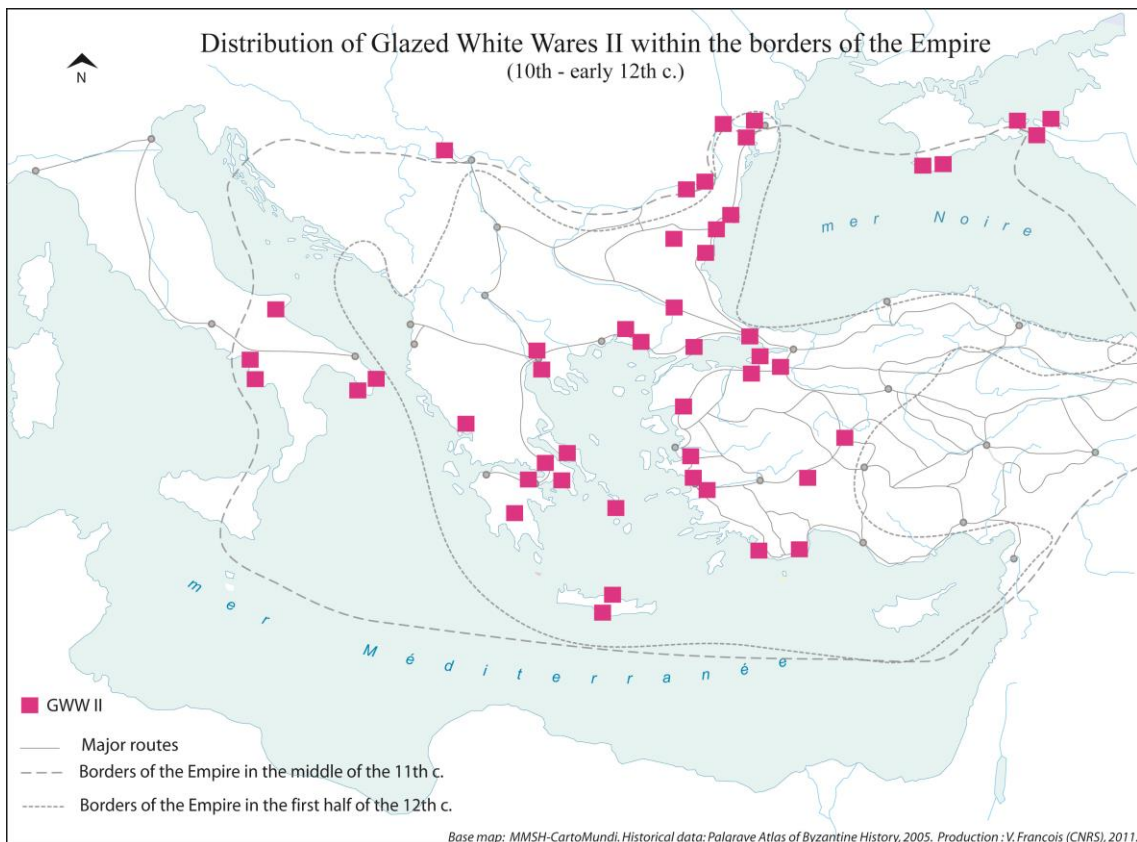
<sup>11</sup> For other distribution maps, see V. François, *La vaisselle de terre à Byzance* (Paris, 2016, in print).

<sup>12</sup> J. W. Hayes, *Excavations at Saraçhane in Istanbul, vol. 2: The Pottery* (Princeton, 1992), 18–28.

<sup>13</sup> M. Roslund, “Crumb from the Rich Man’s Table. Byzantine Finds in Lund and Sigtuna, C. 980–1250,” in *Visions of the Past. Trends and Traditions in Swedish Medieval Archaeology*, ed. H. Anderson, P. Carelli, L. Ersgård (Lund, 1997), 239–95.

<sup>14</sup> P. Armstrong, “From Constantinople to Lakedaimon: Impressed White Ware,” in *A Mosaic of Byzantine and Cypriot Studies in Honour of A. H. S. Megaw*, ed. J. Herrin, M. E. Mullett, C. Otten-Froux (London, 2001), 57–68.

fortified sites in southern Italy - Puglia, Calabria and Basilicata - suggest the strengthening of the Byzantine presence in this region.<sup>15</sup>

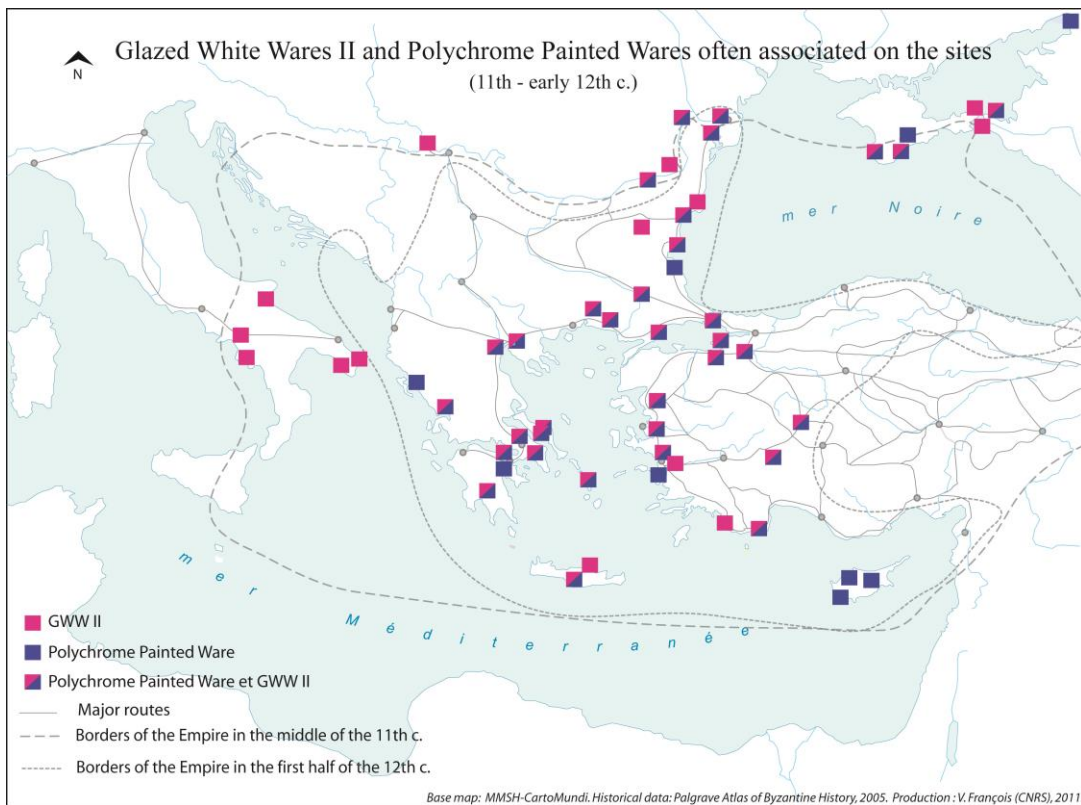


Map 2

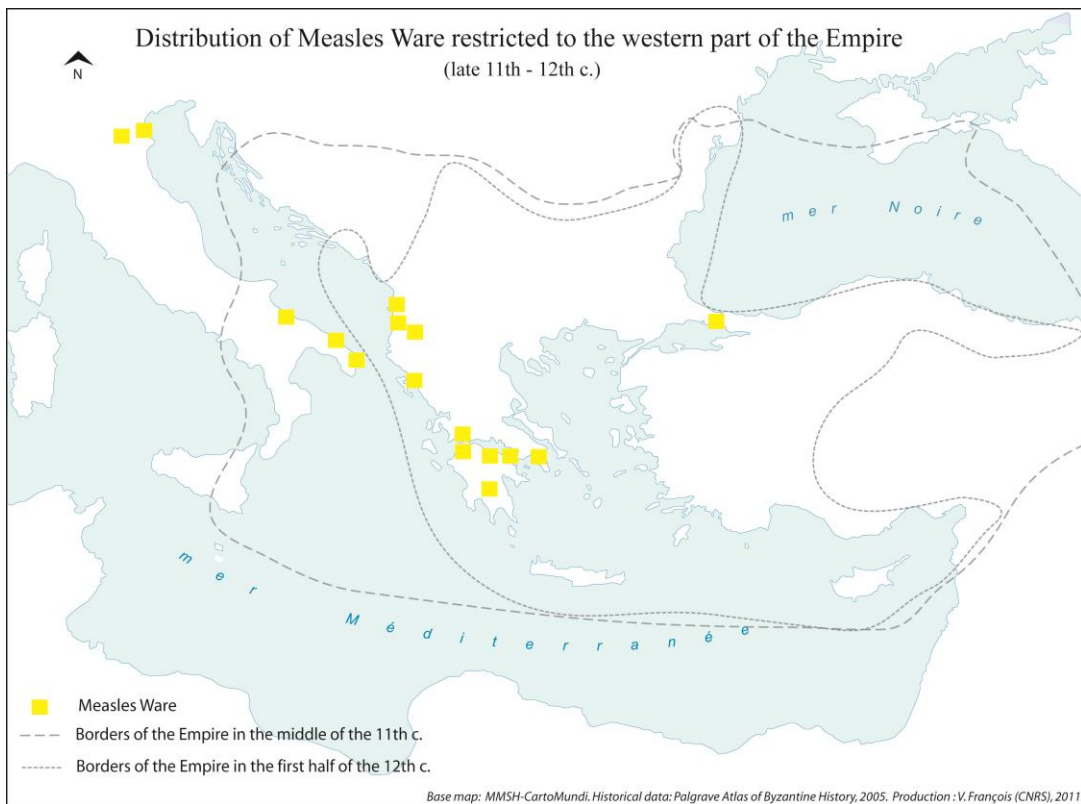
The Painted Polychrome Ware, another white fabric production of Constantinopolitan origin,<sup>16</sup> seems to have been marketed during the eleventh century within the same geographical and political area as the GWW II (**Map 3**). Outside the empire's borders, Polychrome Painted Ware was employed at La Tana and in southern Russia, in Kiev, Novgorod and Sarkel, regions that all still retained some kind of Byzantine influence. In contrast, there is no trace of it in southern Italy, an area lost by the empire at the end of the eleventh century. These two types of tableware are frequently associated in Byzantine provincial sites with the exception of Cyprus and southern Italy. Their frequent association is all the more remarkable that the GWW II appears to have been produced in mass while the Polychrome Painted Ware is often presented as a more luxurious type of ceramics which differed in the techniques used for its manufacture and decoration.

<sup>15</sup> E. d'Amico, "Glazed White Ware in the Italian Peninsula: Proposals for a Study," in *Late Antique and Medieval Pottery and Tiles in Mediterranean Archaeological Contexts*, ed. B. Böhlendorf-Arslan, A. O. Uysal, J. Witte-Orr, Byzas 7 (Istanbul, 2007), 215–38.

<sup>16</sup> Hayes, *Excavations at Saraçhane*, 35–37.



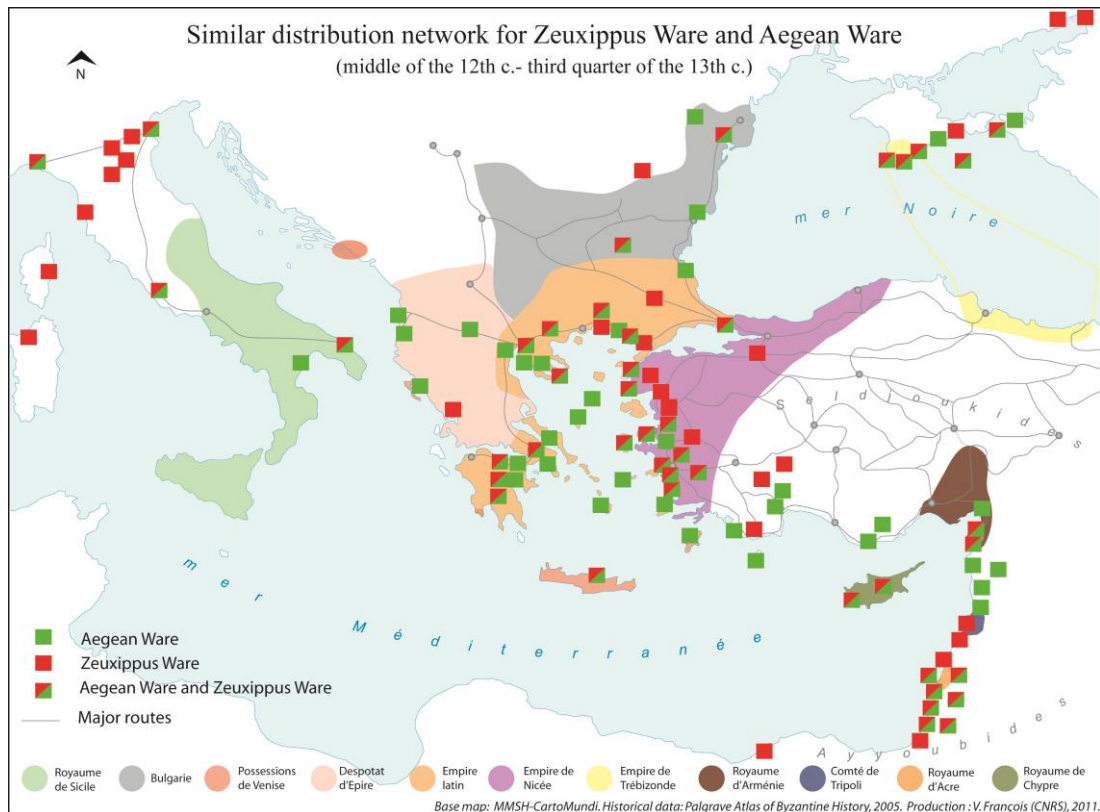
Map 3



Map 4

Mapping can reveal the distribution of manufactures in areas of various sizes, which provides information on the size of the workshops and on the commercial networks supplied by these workshops. The *Measles Ware* for example, a glazed painted ware, made during the late eleventh to twelfth centuries in at least two workshops in the Peloponnese - Corinth and Sparta - seems to have been sold only in the western part of the Byzantine Empire (**Map 4**).

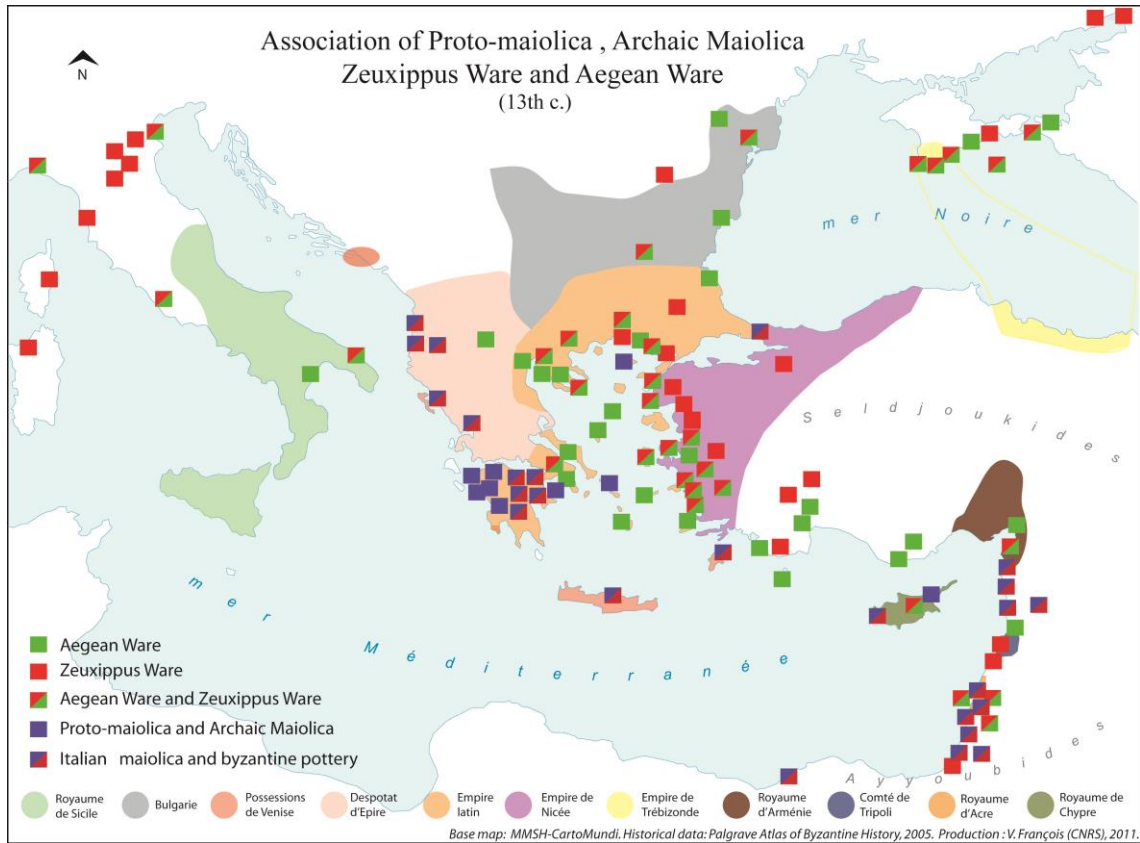
On the contrary, Zeuxippus Ware and Aegean Ware, manufactured from the late twelfth to the third quarter of thirteenth century in workshops that have not yet been located, were sold across the whole Mediterranean (**Map 5**)



Map 5

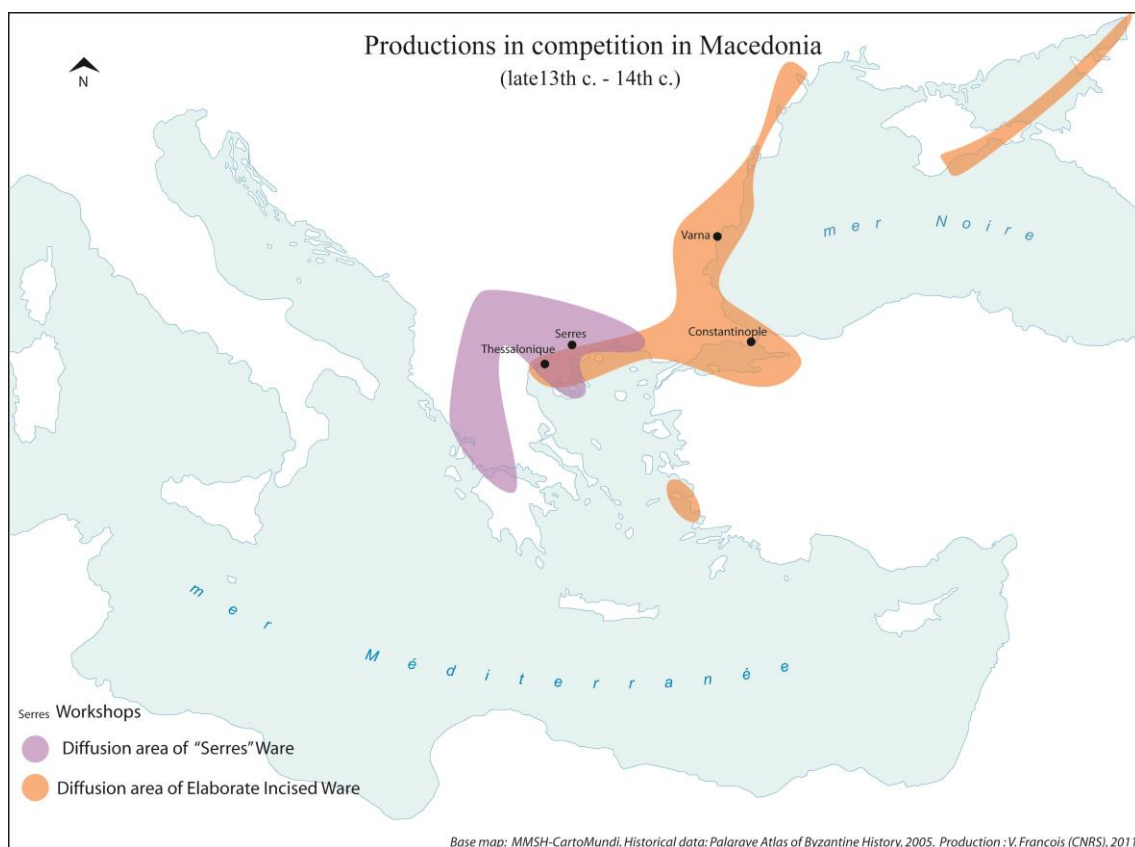
These repeated associations on the consumption sites of these types of tableware are a sign of a common distribution network - perhaps a coasting trade supplied by large centers that served as relays in the distribution of the pottery. Furthermore, the representation of this distribution shows that even when the empire was divided the circulation of Byzantine pottery was done independently of the new political boundaries. We can also superimpose the distribution of Italian majolica on the distribution map (**Map 6**). Proto-majolica is the name given to a kind of tin-glazed polychrome painted pottery produced in southern Italy and Sicily from the late twelfth to the early fifteenth centuries; the archaic majolica represents the central and north Italian equivalent to the proto-majolica produced in the south. Absent from sites in the Nicaean and Trebizond Empires or in Bulgaria, Italian manufactures were abundant in the Despotate of Epiros, in the Peloponnese (which was under Latin control), in Venice's

territories - Crete and Andros - and in coastal sites in the Levant in the thirteenth century. Proto-majolica was traded extensively in the eastern Mediterranean and is found particularly in Frankish sites.



Map 6

Mapping also reveals some occurrences of competition. “Serres” ceramics, manufactured in Serres but also probably in Thessaloniki were distributed mainly in northern Greece and in southern Serbia. It contrasts with the distribution of the Elaborate Incised Ware made in, at least, three workshops - Constantinople, Varna and in Crimea - in the late thirteenth to fourteenth centuries. The latter appears only in Greece in a few Macedonian sites and is hardly found in Asia Minor. It is however widespread in Constantinople and on the western and northern coasts of the Black Sea as well as around the Azov Sea. Mapping thus reveals distinct diffusion areas but a common consumption region, Macedonia, where these glazed wares were probably in competition (**Map 7**).



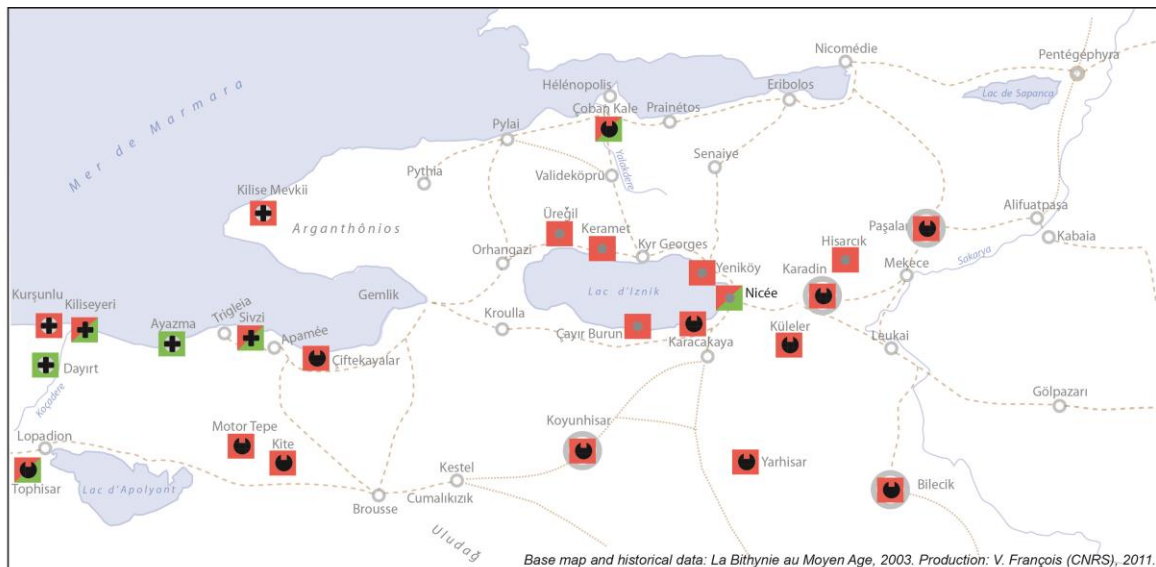
Map 7

This first map series allows us to examine Byzantine tableware distribution across the empire and the Mediterranean. We can also create distribution maps at a smaller scale comparing the distribution area of products manufactured in Nicaea and Pergamon during the thirteenth century. Archaeological and historical sources allow us to examine the nature of these workshops and to study the socio-economic environment in which the ceramics were made in these sites. Mapping discoveries allows us to establish their distribution at local, regional and interregional levels.

Byzantine pottery activity in Nicaea was established from the discovery of wasters and oven fired pots found in the city's excavations and associated with a significant amount of incised, slip painted and champlévé glazed wares.<sup>17</sup> This workshop functioned during the thirteenth century in Nicaea when the city was the capital of the eponymous empire, the religious heart of the new state, the refuge of the patriarchate in exile, the place of imperial coronations and an important center of learning. With the

<sup>17</sup> V. François, "Les ateliers de céramique byzantine de Nicée/Iznik et leur production (Xe-début XIVe siècle)," *BCH* 121 (1997): 411-42; N. Ö. Findik, "Slip Painted Iznik Ceramics," in *Late Antique and Medieval Pottery and Tiles*, ed. Böhlendorf-Arslan, Uysal, Witte-Orr, Byzas 7 (Istanbul, 2007), 531-544; O. Aslanapa, Ş. Yetkin and A. Altun, *The Iznik Tile Kiln Excavations (The Second Round: 1981-1988)* (Istanbul, 1989); B. Yalman, "Iznik Theatre, 1982," *AnatSt* 33 (1983): 250-52; idem, "Iznik Theatre, 1983," *AnatSt* 34 (1984): 222-23.

help of various studies conducted in recent years in Bithynia -surveys, excavations, study of museum collections - the regional distribution of Nicaea manufactures as well as ceramics from other origins can be mapped. This mapping enables us to draw a picture of the tableware market in this prosperous province. Between 1989 and 1994, under the leadership of J. Lefort and B. Geyer, historians, geographers and archaeologists including myself traveled all over Bithynia in order to retrace the history of the province between the fourth and the sixteenth centuries.<sup>18</sup> This region extends from the south shore of the Marmara Sea to Mount Olympos / Uludağ and from Lake Apollonias / Apolyont to the Sangarios / Sakarya, thus creating an 80 km long and 180 km wide area. New surveys, initiated by M.-F. Auzépy in 2004, have been devoted to Byzantine monasteries located between the south coast of the Marmara Sea and the foothills of Mount Olympos.<sup>19</sup> We were led to these sites by historical sources, toponyms, villagers' accounts and very visible remains. More than 250 sites were examined in total. Fragments of Byzantine ceramics were identified in about forty of them.<sup>20</sup> The twenty-five sites mapped here show the notable discoveries (**Map 8**).



- Productions of Nicaea in a city or a village
- Productions of Nicaea in fortress
- + Productions of Nicaea in monastery
- Productions of Nicaea and imports in a city or a village
- Productions of Nicaea and imports in fortress
- + Imports in monastery
- ..... Possible routes in Middle Ages
- Productions of Nicaea and imports in fortress and road junction
- + Productions of Nicaea and imports in monastery
- City or road junction
- Routes attested in the Middle Ages

Map 8

<sup>18</sup> B. Geyer and J. Lefort, ed., *La Bithynie au Moyen Âge* (Paris, 2003).

<sup>19</sup> M.-F. Auzépy, "Campagne de prospection 2005 de la mission Monastères byzantins de la côte sud de la Marmara," *Anat.Ant.* 14 (2006): 380–86; M.-F. Auzépy, H. Çetinkaya, O. Delouis et al., "Campagne de prospection 2006 de la mission Marmara," *Anat.Ant.* 15 (2007): 335–69; idem, "Campagne de prospection 2007 de la mission Marmara," *Anat.Ant.* 16 (2008): 413–42; idem, "Campagne de prospection 2008 de la mission Marmara," *Anat.Ant.* 17 (2009): 427–56.

<sup>20</sup> V. François, "La céramique byzantine et ottomane," in *La Bithynie au Moyen Âge*, ed. Geyer and Lefort, 287–310.

The picture that emerges shows that Nicaea glazed pottery was widely distributed throughout the province. Local tableware was identified on twenty-two sites. It was used in cities - in Nicaea and Bilecik - in some villages on the lake shore as well as in the many fortresses in the region. It was also present in many monasteries. In Bithynia, pottery manufactured in Nicaea was in competition with imported ceramics. The presence of Glazed White Ware IV seems limited to western monasteries located on the shore of Rhyndakos / Kocadere (in Kiliseyeri and Dayirt) and on the sea shore (in Ayzama and Sivzi). Aegean Ware was present in Ayazma monastery and in Çoban Kale fortress, two sites that are near the coast. For its part, the Zeuxippus Ware, imitated in Nicaea workshops, was not distributed outside the city walls.<sup>21</sup> “Novy Svet” wares were present in Nicaea, Tophisar and Çoban Kale fortresses and in Ayazma monastery. Given the fact that these searches were carried out in relatively random conditions, it is difficult to talk about “volume of discovery.” They do not pretend to be exhaustive. However, ceramics of regional origin, as well as being frequently attested, also appear in larger quantities in many sites. The inventory shows that, during the Laskarid period, Nicaean workshops supplied almost exclusively the pottery market in Bithynia. The findings show that, outside cities, the rural elite, the military and the monks who formed an important part of the regional population, probably used this tableware.

Excavations conducted by the German Archaeological Institute revealed the existence of a pottery production in Pergamon during the thirteenth century. Coarse wares, which represent the largest part of the material found has not been studied in detail so far, but the fine tableware has been the subject of a monograph written by J.-M. Spieser.<sup>22</sup> Pergamon was a Byzantine provincial town, a metropolis without any real urban traits. Around the middle of the thirteenth century, the settlement occupied almost the entire southern slope of the hill and it is estimated that around 2,400 people lived there.<sup>23</sup> During the reign of emperor Michael VIII Palaiologos, the hillside was more urbanized and peasants came to settle in the lower town. The population rose to more than 3,000 inhabitants towards the end of the thirteenth century. Finds from excavations show that a number of smithies existed there. Glass items were also produced. Remnants of a pottery workshop were found at the margins of living quarters in the lower town, near the battlements. Local crafts were intended to provide inhabitants with the tools and basic supplies they needed in their domestic, agricultural and military occupations. According to historians, trading in the settlement catered to the needs of an agrarian economy. However, the inventory of pottery produced in Pergamon and widely distributed in the sites of Asia Minor shows that the local production supplied tableware markets far beyond the city. The rather modest socio-economic context in which this Byzantine manufacture was produced would not lead us to believe the commercial success that it enjoyed in the coastal regions of Asia Minor.

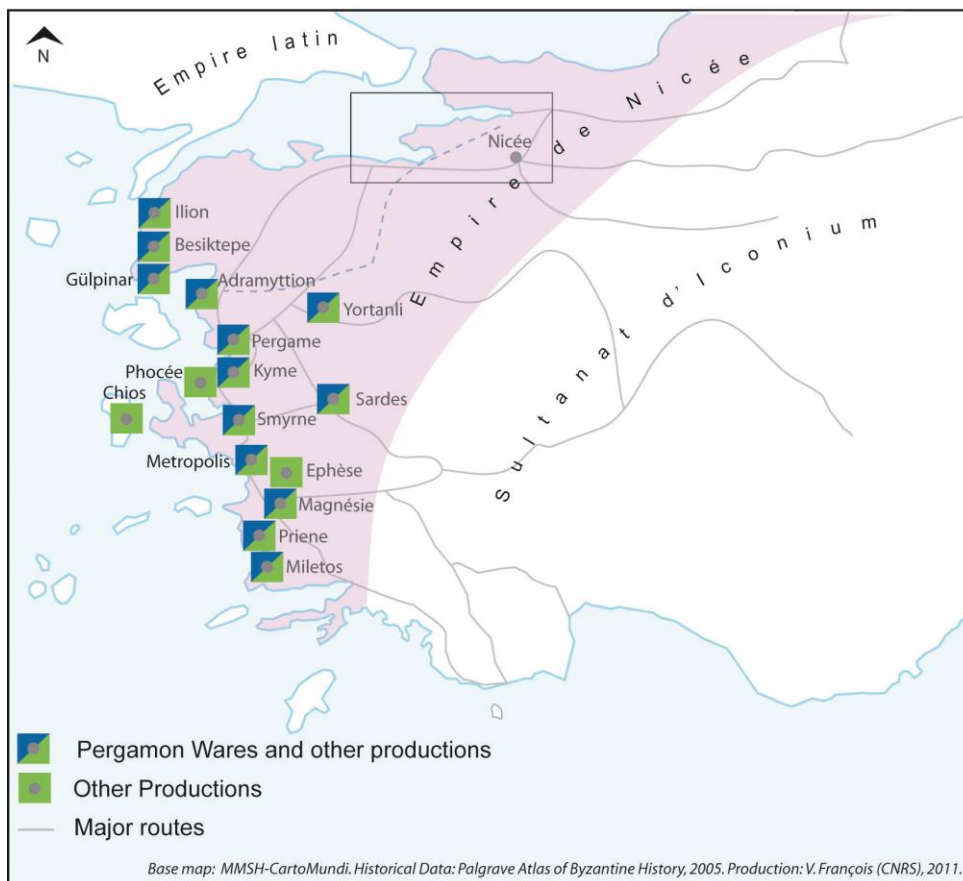
---

<sup>21</sup> S. Y. Waksman and V. François, “Vers une redéfinition typologique et analytique des céramiques byzantines du type *Zeuxippus Ware*,” *BCH* 128/129, 2.1 (2004–2005): 629–724.

<sup>22</sup> J.-M. Spieser, *Die Byzantinische Keramik aus der Stadtgrabung von Pergamon*, Pergamenische Forschungen 9 (Berlin, 1996).

<sup>23</sup> K. Rheidt, “In the Shadow of Antiquity: Pergamon and the Byzantine Millennium,” in *Pergamon, Citadel of the Gods: Archaeological Record, Literary Description, and Religious Development*, ed. H. Koester, HTS 46 (Harrisburg, Pa., 1998), 395–424; idem, “The Urban Economy of Pergamon,” in *EHB* 2:623–30.

The distribution of Pergamon ware is established from excavation reports, from studies devoted exclusively to ceramic finds but also from brief and not very informative preliminary reports. The degree of accuracy of these sources is therefore variable. Pergamon tableware appears on a 350 km long coastline. With the exception of the northern sites, which had temporarily fallen under the control of the Latin Empire of Constantinople (until 1225), all the other sites were part of the Nicaean Empire. When the nature of the sites can be defined from archaeology or from texts, it appears that the Pergamon glazed ware was used: in large commercial cities like Smyrna or Magnesia on the Maeander; in castles like Kyme; in villages combining fortresses and scattered settlements like Sardis, Priene and Miletos; in smaller settlements whose exact nature is difficult to understand on the basis of the archaeological publications that relate to them (Troia, Beşiktepe, Gulpinar, Yortanlı, Adramittyon, Metropolis). In most of these places, tableware was not exclusively provided by Pergamon manufactures (**Map 9**).

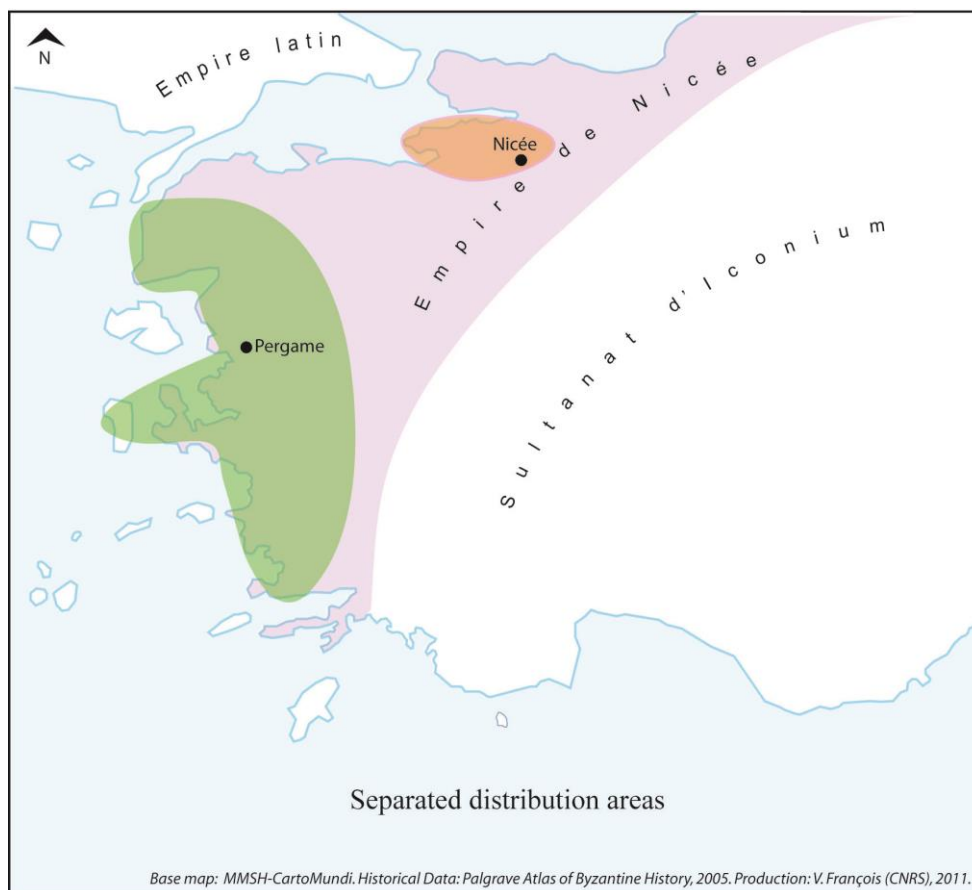


Map 9

In the thirteenth century, these were often coupled with Aegean Ware as well as various imitations of Zeuxippus Ware. They were more rarely coupled with Green and Brown Painted Wares (Pergamon, Sardis, Priene and Magnesia), which were actually often used in other places in Asia Minor (Phokaia, Ephesos and Xanthos). In most places

Pergamon tableware was thus in competition with widely traded good quality glazed manufactures.

The materialization on maps of the ceramics' distribution area enables us to understand the mechanisms of diffusion. At the same time, it gives us an idea of the customers for whom these products were intended. Tableware produced at Nicaea in the thirteenth century was almost exclusively used in Bithynia, where it often appears in cities, villages, monasteries and fortresses. It was not sold in the rest of the fragmented empire (with the exception of Constantinople and Cherson). We do not find it on coastal sites in Asia Minor where Pergamon manufactures were also widely found. Pergamon glazed wares, present in large commercial cities, castles and fortified villages did not reach Bithynia. The respective distribution areas of these two workshops therefore seem rather separate (**Map 10**).



Map 10

It seems that in Nicaea, Pergamon and surrounding areas, customers had both locally produced ceramics and other manufactures including widely traded objects like Aegean Ware and Zeuxippus Ware at their disposal. Local and regional products therefore supplied the market as well as pottery marketed on a larger scale. These two types of products were not distributed in the same way. The distribution of the first one

was geographically limited and barely exceeded the area of influence of the cities in which the workshops were established whilst the second one was probably manufactured on a scale that exceeded local or regional demand, and therefore fueled international long-distance trade.

Mapping, this new approach to the pottery trade in Byzantium, highlights the distribution areas of contemporary production in terms of both complementarity and competition and generates new questions relating to the traffic flow of these products on different scales: macro-regional, regional or at long distance.