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A physicochemical study of Medieval and Post-Medieval ceramics from the Aegean

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CHAPTER 5 TYPOLOGY OF THE SAMPLED PIECES

5. INTRODUCTION

In this chapter it is my intention to present short introductions of the 245 wares that are included in the samples taken from the three studied areas. My desire to investigate the typology of the ceramics produced locally in Chalcis in Euboea, in the Athenian Agora in Attica, in Mytilene in Lesbos came out of the need for more scientific study of ceramics from excavations in these sites (Appendix VI). All three sites are, after all, important archaeological research areas, where archaeologists come across major finds and evolution dating from antiquity to the modern period. Hence, the fragments of Byzantine, Frankish, Venetian and Ottoman pottery attract, for them, little attention. Professor Joanita Vroom was one of the first ones to notice this fact and turn her attention to these disregarded but extremely interesting specimens. Once she established a typology of the various kinds of pottery sherds, I studied it deeply in order to carry out a comprehensive physicochemical study in the next chapters, with the intention of determining whether such production was sufficiently identified in order to be defined "local or imported production". At the same time, particular attention was paid to anomalies and morphological differences in order to ascertain the existence of local characteristics to be found only in the specific regions. On the basis of the archaeological study in this chapter in combination with the archaeometric study in the following chapters, the ceramic material produced in the studied areas will represent a reference point for the time span of several centuries cultural indicator that will allow us to understand the level of technical and technological knowledge acquired by local craftsmen as well as the rules related to these pottery objects in this specific area and period.

The sampled ceramics from Chalcis in Euboea, the Athenian Agora in Attica, Mytilene in Lesbos needed to be classified on archaeological level in this chapter as well as in an archaeometric level to the following chapters and to be compared between them. This typological classification cannot boast, of course, of being an exhaustive and definitive work, but rather of being an important first step towards this kind of material study. This typological study, albeit being a useful tool for archaeological work and analysis, needs to be unceasingly "tested" to prove the validity of the reference system. It is therefore essential for this kind of study to be updated continuously, taking into account both new publications as well as new archaeological discoveries.

As a result of this typological study extended to Chalcis in Euboea, the Athenian Agora in Attica and Mytilene in Lesbos, it has been demonstrated that the ceramic pottery produced locally should be considered as a massive and large production standardized throughout the territory during the Byzantine and Post-Medieval periods because over a century of archaeological excavations in these areas resulted in the accumulation of an unparalleled collection of pottery. Pottery in the Aegean after the classical period is not yet fully examined. The classification for the Medieval and Post-Medieval ceramics in the Aegean region does not yet abide to a fixed system. Although there is of local and consensus regarding identification and description of the wares, many details are still open for discussion (Hayes 1981; Vroom 2014). This collection of imported glazed wares dated within the time span of the 11th to the 19th centuries lends itself for the current study which investigates the development of production technologies of glazed pottery at Chalcis, Athens and Mytilene. In order, however, to produce a successful study for such a large span of time, one has

to be confident in the date ranges as far as the production and use of the glazed wares is concerned, in order to be able to extract some conclusions regarding the technological aspects of the production of the different styles produced in the same place as well as the differences between them and imported wares. Alison Frantz's articles published in 1938 and 1942 were the first major study on the typology and chronology of Byzantine and later glazed pottery from the Athenian Agora in Attica; Joanita Vroom published her major contribution on Byzantine to Modern Pottery in the Aegean (7th-20th) centuries in 2014; also, Stefania Skarzi's article on Middle Byzantine Chalcis was published in 2017; and finally, Hector Williams published his study on Medieval and Ottoman Mytilene in 2009, all the above have remained for some the standard reference for pottery of these periods. Each of the glazed ware decorative types selected for this research are described in this chapter and a summary of the currently accepted chronological ranges for the wares is presented (Tables 6,7,8). Finally, the book 'Byzantine Pottery in the Benaki Museum' by Dimitra Papanikola-Bakirtzi has inspired me to divide this chapter into two sections headed 'White Ware' and 'Red Ware' which are the two primary categories in the classification of Byzantine ceramics.

Local production of pottery at the rescue excavation at 10 Orionos Street in Chalcis in Euboea could be dated mainly in the Middle Byzantine and Late Byzantine/Frankish periods (Vaxevanis 2007, pp. 601-603, Fig. 26-29). Within the present PhD study, local and imported wares in Chalcis were included White Wares and Red Ware (Figures 56-63; Tables 7,9). Furthermore, a variety of types and decoration can be distinguished in Byzantine period finds from the Athenian Agora in Attica from the 10th or early 11th century to the 13th century (Frantz 1938, p. 429) as well as a variety of ceramics can be noticed in the Ottoman period (Frantz 1988; 1942; Vroom 2005; 2019). Local and imported White and Red Wares from the Athenian Agora were also included in the present study (Figures 64-75; Tables 6,9). Finally, the Byzantine period of Lesbos lasted for over 1000 years. Among the Medieval pottery finds there were no evident Eastern imports; the fine wares consisted of fragments of Sgraffito Ware with Byzantine influences (Williams 2009). The Ottoman period yielded a rich collection of different ceramic wares from the 16th to the 19th century. Finds of the 16th century include small quantities of Italian Montelupo Ware, while in the 18th century the imports of Chinese blue-on-white ceramics started (as well as their Turkish copies). On the late 18th to early 19th century, a big variety of imports were also observed such as Monochrome Green Glazed Ware from Chios, Didymoteichon Ware from Northern Greece with its characteristic variegated marbled surface, and a small quantity of Çanakkale Ware from the Dardanelles (Vroom 2003; 2005; Williams 2009; Korre-Zografou 1995a; 2007). Finally, within the present PhD study local and imported White and Red Wares from Mytilene in Lesbos were included (Figures 76-81; Tables 8,9).

5.1 A) WHITE WARES

The Byzantine White Ware forms the major component of glazed ceramic assemblages from Byzantine sites from the 9th to the early 12th century (for example Sanders 2003, p. 390). White wares stand out for their white, pale pink or buff, gritty and coarse or very fine pure white fabrics. The coarse fabric tended to be used for house utensils, such as oil lamps, chafing dishes, bowls and jugs, while the finer fabrics were reserved for architectural decoration items such as revetment plaques and tiles, and fine tablewares including thin-walled bowls and cups (Armstrong et al. 1997, p. 225). The tablewares bear with plain green or yellow lead glazes. Yellow glaze was commonly applied only to the interior of open forms whereas green glazed vessels tended to be glazed on both interior and exterior surfaces (Sanders 1995, p. 70; Armstrong 2001, pp. 57-67; Papanikola-Bakirtzi 2012, pp. 193-216).

5.1.1 A.I) GLAZED WHITE WARE II/IV

Glazed White Ware IV was found in Mytilene in Lesbos and can be dated to the Late Byzantine/Frankish period (Tables 8,9; Appendix VI). The fabric is soft, medium fine, and has a whitish or dull orange colour. There is no slip. The fabric is directly covered by olive-green or yellow glazes on the in- and outside. The whiteness of the fabric is due to the high calcium content of the raw clay. There are two main types of white ware: Polychrome, and Glazed or Unglazed white ware. The open vessels of Glazed White Ware II are generally incised or stamped on the inside with geometric designs, as well as with representations of (fantasy) animals, birds, crosses, zigzag motifs or human figures in a Classical style. Incised potter's or owners' marks occur on the exterior underside (Armstrong 2001; 2008, p. 57-67; Papanikola-Bakirtzi 2012, pp. 193-216). Glazed White Ware IV has painted designs in brown/black and green. Forms include mainly open vessels, such as chafing dishes with domed lids, broad dishes on low and tall pedestal bases (the so-called 'fruit stands'), as well as one- and two-handled cups and goblets. Glazed White Ware II-V were widely distributed: they have been found in large amounts at Constantinople (Istanbul), as well as in the Aegean (e.g., Crete, Melos, Siphnos, Aegina, Sparta, Argos, Corinth, Athens, Thebes, Chalcis in Euboea, Kalapodi, Thessaloniki). They were also recovered in Italy (e.g., Otranto, Salento, Salerno, Genua, Venice), in Albania (e.g., Butrint), in Cyprus (e.g., Paphos, Kourion), in North-West Turkey (e.g., Ganow, Iznik, Nikomedia, Ephesus, Hierapolis, Lycia), in Bulgaria (e.g., Apollonia, Anchialos, Mesembria, Varna, Preslav), in Rumania, in the Ukraine (e.g., Kiev), in the Black Sea Region (e.g., Cherson), in Russia (e.g., Novgorod) and even in Sweden (e.g., Sigtuna, Trondheim). The main production centre of this ware should be sought in the wider environs of Constantinople (Istanbul) (Vroom 2014, pp. 74-77).

5.1.2 A.II) POLYCHROME WHITE WARE

Polychrome White Ware was found in Chalcis in Euboea and can be dated to the Middle Byzantine period (Tables 7,9; Appendix VI). The fabric is soft, fine, sandy white with a greyish or pinkish tone. The core and surfaces can be pinkish or orange-ish. The surface is fine and smooth, and has no slip. Some examples have a thin transparent glaze; others an exterior yellow or green glaze. There is a polychrome painted decoration of three or more colours on the white fabric. Designs include geometric, floral, religious, human, animal and bird motifs, sometimes in a very naturalistic style. Pseudo-Kufic patterns recall an Islamic 'influence'. Sometimes painted Greek inscriptions occur. Most common designs are stripes and dots, or distinctive cross motifs with dots

in each corner. Shapes include broad, shallow dishes and bowls, one-handed small cups on low ring foots, as well as goblets on high ring foots. The distribution includes the Aegean (e.g., Corinth, Chalcis in Euboea), Turkey, the Balkans (e.g., Bulgaria, Rumania), Ukraine (e.g., Kiev), Black Sea Region (e.g., Cherson) and Israel. Places of origin include Constantinople (Istanbul) (and elsewhere in Turkey: probably Nikomedeia). A second production centre may be claimed for tile fragments of Polychrome Ware in Bulgaria (e.g., Patleina, Preslav, Tuzlalāka) (Armstrong 2001; Vroom 2014, pp. 78-79).

5.1.3 A.III, A.IV) GLAZED FRIT WARE AND FRIT WARE

They were first produced in Egypt during the 11th century AD (Mason and Tite, 1994), and were subsequently extensively produced throughout the Islamic Near East, particularly for the production of finewares (Kleinmann, 1987; Henderson, 1989; Agosti and Schweizer, 2002; Freestone et al., 2009). Abū'l Qāsim's classic recipe prescribed 10 parts of silica, one part of glass frit and one part fine white clay (Allan, 1973). The silica he describes came in the form of quartz pebbles, whereas Ali Mohammed recommended flint (Atasoy and Raby 1989). The usual place for collecting raw materials was by drained rivers with dry silt. An alternative, or additional, source of silica was sand. Abū'l Qāsim's classic recipe called for one-part white clay, apparently free of impurities, in order for pure white colour body paste to be produced. The third component for the frit-ware body was a glass frit. Almost equal parts of pounded quartz stone and calcined soda plant or glasswort were cooked for six to eight hours in a special fritting furnace until it melted into a clear glass, which was ladled into a pit filled with water. As the frit was quenched, it broke into granules. Lead is well-known to be used in Ottoman frit recipes, but not for the production of Iranian or Mamluk fritwares. Furthermore, for Iznik lead-frit and for Iranian soda-alkali frit were used different types of alkalis. The Iznik potters did not use desert plant ashes such as Salicornia or Salsola, but, a preparation of soda from Afyon Karahisar, known as bora (Atasoy and Raby 1989; Mason and Tite 1994, pp. 77–91).

5.1.4 A.V) LUSTRE WARE

Lustre Ware was found in Chalcis in Euboea and can be dated to the Islamic period (Tables 6,9; Appendix VI). The word 'lustre' describes a metallic sheen giving off multi-coloured reflections. The technique, first used in Egypt in the 18th century to decorate glass, was probably adopted in Basra in Iraq and was there transferred to pottery. The production of lustre is both a mysterious and complicated process. It is achieved by applying a mixture of silver and copper oxides to the cold surface of a glazed vessel or tile. This is then fired again in a reduction kiln, which extracts oxygen from the oxides and reduces them to a pure metallic state in which they become fixed to the surface. Once out of the kiln, the objects are lightly rubbed to remove any earthy deposit and, as evocatively described by Abū'l Qāsim, 'that which has been evently fired reflects like red gold and shines like the light of the sun'. The construction of the kiln was a crucial factor, as were the positions of the objects inside the kiln and the type and amount of fuel used. The Italian author Cipriano di Michele Piccolpasso, originating from a family of potters specialised in Maiolica and writting in 1558 his "*Li tre libri dell'arte del vasaio*", says: "It is certain, therefore, that lustre was not a technique that could be learned simply from seeing the objects; craftsmen were needed to teach it". In addition, the continuity of designs on lustre pottery between the ninth an 14th centuries indicates that the lustre potters travelled between centres of patronage, taking the tchnique with them (Porter 1995; Mason 1997, pp.103-135).

5.1.5 A.VI) MAIOLICA

Maiolica from Italy was found in Athens in Attica, Chalcis in Euboea and Mytilene in Lesvos and can be dated to the Turkish/Venetian period (Tables 6,7,8,9; Appendix VI) (Figures 56,64). The fabric is soft and the colour of the fabric is generally whitish or pale yellow. The surface of the vessels is covered with an opaque white tin glaze providing the foundation for painted designs in blue. Closed vessels are often only lead-glazed on the inside, which gives a yellowish colour to the white fabric. Forms appear to be confined to dishes and plates with an everted flattened rim, hemispherical bowls and one-handled jugs with trefoil mouth rims. The majority of the Maiolica finds in the Aegean consists of fragments with a 'ladder medallion design' painted in blue. This type of painted decoration is common on Italian maiolica-jugs of the so-called *stile severo* from Northern Italy (especially from Faenza), but a more simplified version can also be seen on some locally made 16th-century vessels found during the Agora-excavations at Athens in Attica. The distribution of these wares was at North-west Europe, Italy, the Dalmatian coast (e.g., Butrint), Aegean (e.g., Epirus, Boetia, Peloponnese, Cret, Cyclades), Cyprus and Egypt. The origin of Maiolica was Northern Italy, especially from Emilia Romagna (e.g., Faenza) (Hess 1999; Skartsis 2009, pp.179-200; Vroom 2014, pp. 146-147). Exceptions are the samples MYT227, MYT236 which have red fabric and they came from South Italy.

5.1.6 A.VII) PORCELAIN

Porcelain was found in Mytilene in Lesvos and can be dated to the Turkish/Venetian period (Tables 8,9; Appendix VI) (Figure 78). The fabric is very hard, fine, very smooth, and translucent white. It is fired at a high temperature up to 1100 °C, and made of a mixture of white China clay (kaolin) and a feldspathic stone (called *petuntse*). Many shapes have been developed specifically for the West, among them dishes, jars, flasks, double-gourd vases, pen-boxes, ink wells, rosewater sprinklers, sauce boats, candle-sticks and flower pots. The most common shape found in the Aegean is a small hemispherical coffee cup with a thin ring foot, curved sides and a straight rim. The massive export of Chinese Blue-and-White Porcelain to Europe began in the 16th century. From the 18th century onwards Porcelain coffee cups from European factories in Meissen and in Vienna began to replace Chinese Porcelain in the Mediterranean (e.g. Turkey, the Aegean, Syria, Israel). The origin of Porcelain was first made in the north of China, in the Jingdezhen region, during the Tang dynasty (probably not before the 9th century). In the following centuries Porcelain production spread into Korea, Vietnam and Japan (Carswell 1985; Crowe 1978; Vroom 2014, pp. 162-163; Marchand 2020).

5.1.7 A.VIII) IZNIK WARE

Iznik Ware was found in Mytilene in Lesvos and can be dated to the Turkish/Venetian period (Tables 8,9; Appendix VI) (Figures 76,77). The fabric is hard, fine, has an opaque consistency that is composed of silica (from sand or quartz), white clay and lead-rich glass frit. The vessels are covered on the inside and outside with a fine, white slip of a quartz-frit type which is used as a ground for the painted decoration. The lead-soda glaze, with small additions of tin and alkaline, is colourless. The compact white body sometimes gives the impression of Porcelain. A classification of three phases has been suggested for Iznik Ware, largely on the basis of colour schemes in the decoration: 1) 'Abraham of Kütahya Ware', 'Iznik Blue-and-White Ware' and; Golden Horn

Ware' with blue-and-white patterns only (ca. 1480/90-1525/30); 2) 'Damascus Ware' or Iznik 'Blue-and Turquoise Ware' with a variety of colours, excluding red (ca. 1525-1560); 3) 'Rhodian Ware' or 'Iznik Polychrome Ware' in red, turquoise-green and blue decoration with black outlines (ca. 1555-1700). The most common shapes of Iznik Ware include large dishes and plates with a ring foot and everted flattened rim. Furthermore, there are small footed bowls, hanging-lamps, jugs, tankards, flasks, candlesticks, hanging ornaments and even ink pots. Before the mid-17th century Iznik vessels and tiles circulated widely throughout Turkey and beyond: in the Aegean, for instance, in Corinth, Boeotia, Thebes, Chalcis in Euboea, Skyros, Athens in Attica, Thessaloniki and the Cyclades as well as in the Black Sea Region, the Near East (e.g., Jerusalem, Damascus), Southern Italy (e.g., Muro Leccese), Hungary and Croatia (e.g., Dubrovnik). Origin Investigations at Iznik (ancient Nicaea, in North-Western Turkey) have produced evidence for the production of the ware, but Kütahya has also been mentioned as a manufacturing centre for this ware (Lane 1957a; Aslanapa 1971; Crowe 1978; Atasoy and Raby 1989a,b; Henderson 1989; Wenzel 1989; Carswell 1998; Tulun et al 2002; Bilg 2009; Vroom 2014, pp. 158-161).

5.1.8 A.IX) KÜTAHYA WARE

Kütahya Ware was found in Mytilene in Lesbos and can be dated to the Turkish/Venetian period (Tables 8,9; Appendix VI). The fabric is moderately soft, fine of a granular texture and has a buff colour. The vessels are covered with an irregular glaze. Usually polychrome, the colours (including blue, green, red, purple and yellow) are painted on white slip beneath the transparent glaze on the inside and outside of the vessel. Kütahya Ware is strongly influenced by Chinese Porcelain, and it is therefore sometimes considered as a cheap substitute of real Porcelain and described as 'peasant-porcelain'. The painted designs are usually geometrical, floral or figural (often inspired by Chinese and Japanese Porcelain). Characteristic are also Christian subjects (figures of saints) or the depiction of men and women wearing contemporary 18th-century Turkish costume. It has been suggested that most of the potters in Kütahya were in fact Armenians or Greeks, because the vessels often bear inscriptions in these languages. The most common products are small, thinly-potted utensils, including coffee cups (often with matching saucers), bowls, plates and coffee pots. The shapes of the small cups (the so-called *fincan*) are probably derived from those of Porcelain coffee cups made at Vienna and Meissen (Germany) about 1730-40. Furthermore, there are jugs, pilgrim flasks, bottles, jars, tankards, mugs, pitchers, decanters, boxes, incense burners, hanging ornaments and lamps, rose water sprinklers, writing sets, trays, figurines, and even lemon squeezers and bases of water pipes. Widely distributed in the Mediterranean: from the Near East (e.g., Jerusalem, Damascus, Sharon Plain) and Egypt (e.g., Cairo) in the East to Southern France (e.g., Marseilles) in the West, and to South Russia (e.g., Black Sea Region, Azov) in the North. A few pieces even reached North America (cf. Hayes 1992, 266, notes 3-5, with extensive literature), Kütahya Ware has also been found in Cyprus (e.g., Kouklia), in Montenegro (e.g., Stari Bar) and in the Aegean (e.g., Athens, Boeotia, Thebes, Eastern Phokis, Corinth, Monemvasia, Thessaloniki, Mytilini and Khania on Crete). The origin was from Kütahya in north-western Turkey (Figures 80, 81) (Lane 1957b; Carswell, 1982; Allan 1991; Porter 1995; Colomban 2005a,b, pp. 857-863; Vroom 2014, pp. 168-171).

5.2 B) RED WARES

Red Wares are the greater part of Byzantine ceramics. Vroom's book *Byzantine to Modern Pottery in the Aegean, 7th-20th centuries*, in 2014 was deeply useful for the classification of my pottery fragments in this PhD study. Furthermore, Rice's classification in 1930 about the main groups of Glazed Red Wares of the Middle Byzantine period from the excavations in the Great Palace at Constantinople period was also very helpful. Finally, the description of the glazed pottery from the Corinth excavations published by Morgan in 1942 was very important as Red Wares were also the overwhelming majority of the studied material. Great differences in fabrics are observed in the large class of Glazed Red Wares, since there are dependent on the clay as well as the technology of preparing it and the method of firing used in the various workshops. The Red Wares within the present PhD thesis were classed in the following groups:

5.2.1 B.I) PLAIN GLAZED WARE IN A RED AND GREY FABRIC

Plain Glazed Ware in a Red and Grey Fabric was found in Athens in Attica and can be dated to the Middle Byzantine period and in Chalcis in Euboea during Early Byzantine to Early Modern periods (Tables 6,7,9; Appendix VI). The fabric is gritty, and can be both of a red or a grey colour (due to firing circumstances). The red variant is soft, coarse and reddish brown in colour and the grey variant is soft, medium fine and light brownish grey to reddish grey in colour. The colourless glaze is applied as a sealant directly to the coarse fabric, resulting in a dark olive-brown or olive-green tone on the clay. The decoration on the outside may be limited to incised motifs, such as simple (wavy) lines, zigzags, spirals or chevrons. Plastic decoration also occurs, e.g., applied pellets of clay (petals), fantastic animals or human figures in relief. Forms include one- and two-handled cups, shallow dishes, one-handled jugs, but mainly thick-walled chafing dishes with a glaze bowl set on a hollow, ventilated stand. The distribution was at Aegean, West and Central Turkey, Italy and Adriatic coast. Various production centres can be studied, such as Central Greece (e.g., Corinth, Athens), Turkey (e.g., Amorium), Italy (e.g., Rome), Albania (e.g., Butrint) and Adriatic coast (Vroom 2014, pp. 72-73).

5.2.2 B.II) UNGLAZED PLAIN WARE (LU)

Unglazed Plain Ware was found in Chalcis in Euboea and can be dated during Middle Byzantine to Late Byzantine times (Tables 6,9; Appendix VI). The fabric of these unglazed jugs is soft, medium fine and the colour of the fabric is dull orange. There is no slip, no glaze and no decoration. Forms include small squat or globular jugs. The jugs have generally a flat base with a rounded transition, or a high ring foot. The body is globular and has a long narrow neck. The rim is straight, with a slightly flaring opening. Most vessels have one vertical handle. In shape and size this globular jug looks similar to Late Roman-Early Byzantine *lekythoi* found in graves at Corinth and Athens. Aegean (e.g, Corinth, Argos, Athens, Thebes, Emporio), Albania, Central and South Italy. The origin of these wares was probably from Central Greece or Italy (Korre 1995a,b; Vroom 2014, pp. 44-45).

5.2.3 B.III) AMPHORAE

A common type of amphora is **A8A amphora** and can be dated to the Middle Byzantine period (Table 7). **A8A amphora** appears to have been manufactured in Chalcis in Euboea, based (i) on the fact that overfired vitrified fragments of the type were found, (ii) on the similarity of the fabric with Günsenin 3 amphora type. Its overall shape is yet unknown, since the body is always found in a few small pieces. A8A type has an everted rim, conical neck and handles with an oval section. Its fabric is pinkish orange, sometimes strong orange. All fragments present a rather hard and clean fabric (Vroom, et al., forthcoming).

Günsenin 2 amphora can be dated to the Middle Byzantine period (Table 7). This type of amphora has a wide-splayed rim, a conical neck, a pear-shaped body and rounded base. The handles are straight and reach rim level. The shape is rather similar to Günsenin 3, therefore Günsenin 2 is sometimes thought as the predecessor of Günsenin 3. The fabric is hard fired, normally beige in colour, relatively clean. The firing is purplish brown, rather typical for amphoras (Vroom 2014, pp. 96-97).

Günsenin 3 amphora and can be dated to the Middle Byzantine period (Table 7). It is the most common amphora in the Aegean during this period. It has a short everted rim, a long tubular conical neck, and a relatively thin conical body with rounded base. The handles are straight, long, and reach over rim level. It is also found in mainland sites of Greece and in the Black Sea. In addition, the clay is purplish-brown and hard. Finally, some traces of organic inclusions (grass) on surfaces and at core are observed in the fabric (Poulou-Papademetriou 2013, pp. 125-126; Vroom 2014, pp. 97-99). A8A amphora, Günsenin 2 amphora and Günsenin 3 amphora were found in Chalcis in Euboea (Table 9; Appendix VI).

5.2.4 B.IV) SLIP-PAINTED WARE

Slip-Painted Ware was found in Athens in Attica and can be dated to the Late Byzantine/Frankish period and in Chalcis in Euboea during Middle Byzantine to Late Byzantine/Frankish times (Tables 6,7,9; Appendix VI) (Figure 57). The fabric is soft, medium fine, and has an orange colour. The interior is not completely covered with a white slip, but only decorated with it (as a kind of paint). The designs were painted directly onto the clay surface with the white slip and coated with a glaze. The decorative effect is based on the contrasts between the brown clay and the pale slip-painted designs. The glaze on top enhances this contrasting effect. The tone of the glaze varies from pale yellow where it covers the unslipped clay. The slip-painting technique occurs on both open and closed vessels. They widely distributed at Aegean (e.g., Sparta, Sikyon, Athens, Thebes, Chalcis, Crete, Thessaloniki, rural sites in Eastern Phokis and Boeotia), Bulgaria, Italy (e.g., Venice, Mantona, Otranto), Western Turkey (e.g., Constantinople/Istanbul, Ephesus), Cyprus (e.g., Paphos, Kouklia, Nicosia), Israel (e.g., Acre). They origin is from Chalcis, Corinth, Athens (Korres 1995a,b; Papanikola-Bakirtzi 1999, pp. 53-57; Vroom 2014, pp. 80-81).

5.2.5 B.V) GREEN AND BROWN PAINTED WARE

Green and Brown Painted Ware was found in Athens in Attica and can be dated to the Middle Byzantine period and in Chalcis in Euboea during Middle Byzantine to Early Modern times (Tables 6,7,9; Appendix VI) (Figure 65). The fabric is covered on the inside with a thick, white slip followed by a thin, transparent or light grey glaze. A decoration is painted on top of the white slip but under the glaze in green and different hues of brown. The forms include cups and shallow dishes with a flat everted rim and kings-foot. There exist also closed shapes, usually small jugs. Green and Brown Painted Ware is found mostly in Central Greece and the Peloponnese. In addition, the ware has been found in other parts of the Aegean (e.g., Keos, Kastellorizo, Crete), Cyprus, Israel (e.g., Acre), Black Sea Region (Cherson), Western and Southern Turkey (e.g., Constantinople/Istanbul), the Balkans, Italy (e.g., Venice, Otranto and as *bacini* in Italian churches). Chalcis in Euboea, Corinth, Athens (Korre 1995a,b; Vroom 2014, pp. 82-83).

5.2.6 B.VI) FINE SGRAFFITO WARE

Fine Sgraffito Ware was found in Athens in Attica and can be dated during Middle Byzantine to Late Byzantine/Frankish times and in Chalcis in Euboea to the Middle Byzantine period (Tables 6,7,9; Appendix VI) (Figures 58,66). The fabric is soft, medium coarse, and has a deep orange-red colour. A thickly applied, white slip and transparent glaze cover the interior and exterior upper part of this ware. The colour of the glaze, which ends some distance below the rim on the outside, is often slightly pale yellow-green, because of impurities in the glaze. The vessels are decorated on the interior with delicate scrollwork and lace designs which were engraved through the white slip with a fine and sharp tool before firing. The delicate incised designs are either in horizontal bands between two compass-drawn lines, or in a tondo in the centre of the vessel. Forms include mainly shallow dishes with a plain or slightly everted rim and a low ring foot, as well as cups. It is widespread in the Aegean and beyond: e.g., Italy, Albania, Rumania, Serbia, Bulgaria, Russia, Turkey, Cyprus, Lebanon, Syria, Israel and Sweden. Origin Chalcis, Corinth, Athens (Vroom 2014, pp. 84-85).

5.2.7 B.VII) PAINTED FINE SGRAFFITO WARE

Charles Morgan (1942) dated Painted Fine Sgraffito Ware in the first half of the 12th century, but nowadays it is generally dated to the middle and the second half of the 12th century. Painted Fine Sgraffito Ware was found in Chalcis in Euboea and can be dated to the Middle Byzantine period (Tables 7,9; Appendix VI) (Figure 59). The fabric is soft, medium coarse, and has a deep orange-red colour. It has many lime inclusions. A thickly applied, white slip covers the interior and exterior upper part of the vessels. The colour of the transparent glaze, which ends some distance below the rim on the outside, is often pale yellow-green, because of impurities in the glaze. The incised designs are executed on the interior through the white slip. Around the central medallion are zones of scrolls, spirals or tendrils. Furthermore, the incised decoration has painted spirals or linear motifs in green and/or in brown. Forms include shallow dishes with a long ring foot and a straight or an everted rim, as well as smaller hemispherical bowls. Painted Sgraffito Ware has been found in Constantinople (Istanbul), Corinth, as well as in the Peloponnese and in Central Greece (e.g., Sparta, Argos, Athens, Thebes, Chalcis, Euboea, Eastern Phokis). The ware is also found in Northern Greece (e.g., Thasos, Thessaloniki), Western Crete, Bulgaria, Serbia, Montenegro (e.g.,

Stari Bar), Cyprus (e.g., Nicosia) and in Western and Southern Turkey (e.g., Kinet Höyük, Ephesus). As far as Greek production centres are concerned, one workshop was in Chalcis in Euboea, perhaps another in Athens in Attica (Morgan 1942; Korre 1995a,b; Papanikola-Bakirtzi 1999, pp. 81-84; Vroom 2014, pp. 86-87).

5.2.8 B.VIII) INCISED SGRAFFITO WARE

Incised Sgraffito Ware was found in Athens in Attica and Chalcis in Euboea and can be dated during Middle Byzantine to Late Byzantine/Frankish times (Tables 6,7,9; Appendix VI) (Figures 60,67). The fabric is soft, and has an orange-red colour. A (pale) yellowish glaze covers a thick, whitish slip on the interior of the vessel with a mere overlap on the exterior rim. The outside, including the base, is often covered with a thin slip-wash. The decoration is thickly gouged through the white slip with a blunt or broad-bladed tool, rather than neatly incised with a fine sharp tool as in Fine Sgraffito Ware. The decorative engraved subjects fall into two categories: 1) human and animal figures; 2) vegetal motifs. Also possible is a decoration of only green splashes or dabs over the whitish slip and under the (pale) yellowish glaze. Forms include mainly thick-walled shallow dishes with a plain rim and a low ring foot, as well as dishes with a slightly incurved rim. Incised Sgraffito Ware has been identified on many sites in Italy, South France, the Dalmatian Coast, Albania, Montenegro, Rumania, Bulgaria, Greece, Turkey, Black Sea Region, Cyprus, Lebanon, Syria and Israel. Origin: Chalcis, Corinth, Athens (Korre 1995a,b; Papanikola-Bakirtzi 1999, pp. 86-99; Vroom 2015, pp. 90-91).

5.2.9 B.IX) CHAMPLEVÉ WARE

Champlevé Ware was found in Chalcis in Euboea and can be dated during Middle Byzantine to Late Byzantine/Frankish times (Tables 7,9; Appendix VI) (Figures 61,62). The fabric is soft, medium fine, and has an orange-red colour. A greenish or yellowish glaze covers a thick, whitish slip on the interior of the vessel with a mere overlap on the exterior rim. The outside of the vessel, including the base, is often covered with a thin slip-wash or transparent lead glaze. The whitish slip is cut away by a broad blunt tool so that the decorative subjects appear in very low relief, while details are usually in fine incisions. The decorative engraved subjects fall into two categories: 1.) Human and animal figures (hare, lion, deer) in a central medallion on the interior bottom; 2.) Vegetal and geometric motifs, among which gouged bands with squares in reserve, can be seen around the central medallion. Forms include mainly thick-walled shallow dishes with a low ring foot and a plain rim, as well as hemispherical bowls on a higher pedestal base. Identified on sites in Greece, West and South Turkey and the Black Sea Region. They probably were manufactured at more than one site: Chalcis in Euboea and Athens in Attica can be named as production centres (Papanikola-Bakirtzi 1999, pp. 101-111; Vroom 2014, pp. 92-93).

5.2.10 B.X) MONOCHROME GLAZED WARE

Monochrome Glazed Ware was found in Athens in Attica and can be dated during Late Byzantine/Frankish to Turkish/Venetian times, in Chalcis in Euboea during Middle Byzantine to Late Byzantine/Frankish times and Mytilene in Lesbos to the Turkish/Venetian period (Tables 6,7,8,9; Appendix VI) (Figure 68). The fabric is soft, fine and has a buff to dull orange or dull yellow orange colour. The surface treatment is confined to a white slip on the inside as well as on

the outside, over which a vitreous lead glaze of one colour has been applied. The glaze is commonly pale green or green, although other colours are possible. Shapes mostly include large dishes with a high ring foot, a convex divergent upper wall and a broad flaring rim, often with notches of rough rouletting along the edge of the round lip. There are also small bowls with a straight rim and jugs or jars with oval strap-handles. Widely distributed in Turkey (e.g., Constantinople/Istanbul, Yassi Ada shipwreck, Ganos, Edirne), Aegean (e.g., Athens, Corinth, Thebes, Boeotia, Eastern Phokis, Lakonia) and Cyprus (e.g., Kouklia) (Korre 1995a,b; Vroom 2014, pp. 150-151).

5.2.11 B.XI) SPLASHED WARE

Splashed Ware was part of the pottery production of the Late Byzantine/Frankish period in Chalcis in Euboea (Tables 7,9; Appendix VI). They have a quite coarse texture for table wares. The fabric is medium hard and its colour is (light) red. Shallow dishes are the most common form. The interiors have a slip coat and are covered with a lead glaze. To enliven the surface a coloured glaze is added. The duo-chrome decoration exists of glaze dabs, from olive to bright deep green on the central part of the interior. Alternatively, dark brown splashes do occur, although less frequent. The interiors are covered with monochrome ochre or pale yellow glaze which can be very transparent; however, in some cases, such over-glaze is absent (Vroom and IJzendoorn 2015). Splashed Ware should be dated probably from the late 12th to the first half of the 13th century or perhaps even slightly later. Its distribution seems to have been limited to the western Aegean, namely in Central Greece and on the island of Crete. Splashed Ware has been found at Almyros, Chalcis, Eleutherna and Thebes (Vroom and IJzendoorn 2015; Armstrong 1993, pp. 304-305; Poulou-Papadimitriou 2006, pp. 77-81; Waksman et al. 2014, pp. 398-390).

5.2.12 B.XII) ZEUXIPPUS WARE

Zeuxippus Ware was found in Chalcis in Euboea and can be dated to the Late Byzantine/Frankish period (Tables 7,9; Appendix VI) (Figure 63). The fabric is very hard, fine and of an orange-brown to red colour. The high firing temperature makes it sometimes purple or black, especially on the rims. A thickly applied white or cream slip and vitreous glaze covers the interior and exterior upper part, sometimes in a pattern of vertical tongues or loops. There are 4 different glazes: Group IA: colourless or pale greenish/yellowish; Group IB: orange-brown or yellow-brown; Group IC: dark green and Group II: colourless or pale with added yellow-brown colour to the interior decoration. In Group I the designs consist of concentric circles around the interior base, rouletted patterns and removal of the slip in broader bands with a gouge. There are S-shaped motifs at the centre or on the walls, as well as thin lines (single or in series) or mushroom-like trees. In Group II small central medallions contain finely cut circles (or ovals), each filled with a palmette, trefoil, floret, phi, or a simple spiral. Little oval or triangular motifs on the rims also occur. There are geometric, floral and figuratif motifs. Shapes include very thinly-potted dishes and bowls with simple rims and a flaring ring feet. Widely distributed from Constantinople (Istanbul) to North Italy. More than one production centre, probably in West Turkey (Armstrong 1992; Papanikola-Bakirtzi 2012, pp. 113-123; Vroom 2014, pp. 108-109).

5.2.13 B.XIII) ZEUXIPPUS WARE SUBTYPES

The Zeuxippus Ware Subtypes were found in Athens in Attica and Mytilene in Lesvos and can be dated to the Late Byzantine/Frankish period (Tables 6,9; Appendix VI) (Figure 69). Imitations were even produced in the Balkans into Otoman times. The fabric is fairly hard, fine and of a dull orange or reddish colour. The interior mainly surface is entirely covered with a white slip and a glaze. This glaze can be either matt ochre-yello, sometimes green, or pale yellow in colour. There are two types: 1) Monochrome Sgraffito Ware with a monochrome glaze and 2) One colour Sgreffito Ware with painted splashes under the glaze. The decoration is not so precise as in real Zeuxippus Ware. It often consists of a central incised spiral, engraved or gouged with a tool through the white slip on a potter's wheel, which gives the impression of concentric circles. The incised circles on One Colour Sgraffito Ware can be coloured with a green colour. Forms include deep bowls with a ring foot and a central nipple. The vessels have steep walls, a straight rim and a rounded lip. Various production centres of Zeuxippus Ware are known: Western Turkey (e.g., Constantinople/Istanbul, Troad region) or Greece (e.g. Sparta, Thebes), but also Northern Italy (e.g., Venice, Padua) and Western Cyprus (e.g., Lemba, Paphos) (Vroom 2014, pp. 110-111).

5.2.14 B.XIV) MONOCHROME AND ONE COLOUR SGRAFFITO WARE

Monochrome and One Colour Sgraffito Ware was found in Mytilene in Lesvos and can be dated to the Late Byzantine/Frankish period (Tables 8,9; Appendix VI). The fabric is fairly hard, fine, smooth, and has a dull orange to orange-red colour. The vessel is covered with a white slip and yellowish or ochre-yellow glaze on the inside and on the upper part of the outside and the rest of the exterior surface is covered with glaze. The interior has abstract motifs incised through the white slip in fine and wide lines, as well as in cut-slip (*champlevé*) technique. The most common shape is a hemispherical bowl with flaring ring foot and flat resting surface. Furthermore, there are dishes with flaring walls and narrow horizontal rims, and occasionally small jugs. The distribution was more complex as vessels with the representation of a bird were found in North Greece, as well as in Turkey (e.g., Constantinople/Istanbul, Pergamon, Iznik), Black Sea region (e.g., Cherson), Bulgaria (e.g., Varna) and even in Italy (e.g., Venice). Vessels with incised 'Solomon's knots' were found at Constantinople (Istanbul) and in the Aegean (e.g., Thessaloniki, Chalcis and Corinth). The origin of these wares was from Thessaloniki and Constantinople (Istanbul) (Sirkeci district) (Vroom 2014, pp. 114-115).

5.2.15 B.XV) ELABORATE INCISED WARE

Elaborate Incised Ware was found in Mytilene in Lesvos and can be dated to the Late Byzantine/Frankish period (Tables 8,9; Appendix VI) (Figure 79). The fabric is hard, fine and grey-buff or orange-red in colour. There is a white slip and colourless glaze applied all over the surface. The glaze turns greenish or yellowish after firing due to impurities in the glaze. Scars of tripod stilts can often be noticed on the interior base. The incisions were covered with a green, yellow or dark brown glaze before firing. The decoration is often at the interior base, and includes geometric (circles, wavy lines), animal (fish, birds) and occasionally human designs. Religious subjects (crosses and monograms) and very elaborate scenes (such as five-pointed stars) are also possible. Shapes include mainly hemispherical bowls with a ring foot, sloping walls and plain rim. The distribution was at Constantinople (Istanbul), Aegean (e.g., Thessaloniki, Athens, Thasos, Olynthus, Mytilene, Euboea, Crete), South Russia (e.g., Black Sea Region), Rumania, Bulgaria

(e.g., Varna), Serbia, Albania (e.g., Butrint) and West Turkey (e.g., Ephesus, Priene, Iznik, Pergamon, Miletus, Metropolis). The origin was from Constantinople (Istanbul) (Sirkeci district) (Rice 1930; Vroom 2014, pp. 122-123).

5.2.16 B.XVI) ROULETTE/VENETO WARE

Roulette Ware was found in Chalcis in Euboea and Mytilene in Lesvos and can be dated to the Late Byzantine/Frankish period (Tables 7,8,9; Appendix VI). The fabric is fairly hard, medium fine and of an orange-brown to orange-red colour. There can be a white slip on the interior and on the upper part of the exterior. A vitreous yellow-brown, green or transparent glaze is applied thickly on the interior and on the exterior down to the ring foot. The base is not covered with glaze. Traces of tripod stilts in the interior are characteristic for this ware. The impressed decoration (or rouletting) on the exterior of the bowls (mostly on the exterior upper part) is made with a rotating instrument (a roulette), which produces a series of well-arranged indentations in parallel lines. Sometimes there are horizontally incised lines on the interior, at the base of the rim or near the lip, as well as an incised spiral or concentric circle in the centre. The main shape of the ware is a carinated bowl with a small flaring low ring foot and central nipple on the underside. The distribution was in the Aegean region (e.g., Corinth, Argos, Epirus, Arta, Chalcis, Crete), Albania (e.g., Butrint, Durrës), Italy (e.g., Venice, Faenza, Trieste, Otranto, Rimini, Finale Emilia, Aquileia), Western Turkey (e.g., Ephesus), Near East and the Adriatic coastline (e.g., Split, Stari Bar in Montenegro). The origin was from North-Eastern Italy, probably Veneto region and/or Emilia Romagna (MacKay, 1967, pp. 249-320; Vroom 2014, pp. 132-133).

5.2.17 B.XVII) MONOCHROME SGRAFFITO WARE

Monochrome Sgraffito Ware was found in Mytilene in Lesvos and can be dated to the Late Byzantine/Frankish period (Tables 8,9; Appendix VI). The fabric is moderately soft to fairly hard, fine, and has a dull orange to orange colour. The vessels are covered with a white slip and glaze on the inside and just under the rim on the outside. There is a dull orange-buff wash on the rest of the exterior. There are two variants in the colour of the glaze: 1) 'Monochrome Green Sgraffito Ware' covered with an olive green to green glaze and 2) Monochrome Yellow Sgraffito Ware', covered with a bright yellowish brown to dark yellow glaze. The decoration of both types is incised through the white slip in the interior of the vessels. It consists of horizontal lines just under the rim and above the base and stylized motifs of a vegetal and geometric character in between. The most common shapes are hemispherical bowls, dishes or basins. These have a straight rim with round lip, convex divergent upper wall and the base is flat. The distribution was in Italy, the Aegean area (e.g., Central Greece, Athens, Corinth, Rhodes), Cyprus (e.g., Paphos), the Near East (e.g., Giv'at Yasaf/Tell Er-Ras in Israel) and Egypt (e.g., Medieval Alexandria). But the origin was from North Italy and probably the Veneto region (Korre 1995a,b; Vroom 2014, pp. 140-141).

5.2.18 B.XVIII) POLYCHROME (BROWN AND GREEN) SGRAFFITO WARE

Polychrome (Brown and Green) Sgraffito Ware was found in Athens in Attica and can be dated during Late Byzantine/Frankish to Turkish/Venetian periods and in Mytilene in Lesvos to the Turkish/Venetian period (Tables 6,8,9; Appendix VI) (Figures 70,71,72,73). The fabric is generally fairly hard, fine, and has a dull orange to orange colour. There is a transparent thin glaze

over a white slip, through which an incised decoration is engraved that are mostly on the inside; the rest of the exterior is either polished and unglazed or covered with a green glaze. The engraved decoration on the in- and outside is enhanced by brushstrokes of yellow-brown and green. The designs consist of incised small spirals and rosette-like motifs created by winding lines. One can also discern straight lines alternating with pairs of zigzag lines or winding lines, chequerboard patterns with spirals in the square panels or occasionally birds, fish and human figures. Forms mainly include small hemispherical bowls and sups with a low ring foot and straight rim. Common are also large shallow dishes with a ring foot and broad horizontal rim, forming a ridge at the point of junction with the body. Closed vessels do also occur, especially trefoil-mouth jugs with a flask-shaped or spherical body and one- or two strap-handles. They appeared in Northern Greece (e.g., Thessaloniki, Epirus, Arta), Central Greece (e.g., Thessaly, Boeotia, Phokis, Athens, Zakynthos) and the Aegean (e.g., Crete, Cyclades). The origin was from Northern Greece (e.g., Thessaloniki, Veria), Central Greece (e.g., Trikala, Arta, Athens) and Crete (e.g., Khania) (Skartsis 2009, pp. 122-129; Papanikola-Bakirtzi 2012, pp. 151-160; Vroom 2014, pp. 144-145).

5.2.19 B.XIX) MILETUS WARE

Miletus Ware was found in Mytilene in Lesvos and can be dated to the Turkish/Venetian period (Tables 8,9; Appendix VI). The fabric is soft, fine and has an orange-reddish colour with some medium lime and some to many fine micaceous particles. There is a white slip and a clear alkaline-lead glaze on the interior, and in some instances on the outside as well. This alkaline-lead glaze has a tendency to flake, and does not always cover the white slip coating the outside. The colour of the glaze can be pale or turquoise-blue. The predominant colours of the under glaze painted decoration are dark blue and black on white, or black on turquoise-blue. The decoration mainly consists of floral and geometric designs, often imitating blue-and white Porcelain from China. Shapes mostly include large dishes and bowls with a low ring foot, convex divergent walls and an everted, flanged rim. Widely distributed throughout Turkey (e.g., Constantinople/Istanbul, Sardis, Ephesus, Miletus region, Arsameia Nymphaios, Bozmus Köy and Eski Malatya) as well as occasionally in the Aegean (e.g., Cyclades, Mytilene) and Black Sea Region. As far as their origin is concerned, there are several production centres in western Turkey (e.g., Miletus, Pergamon, Iznik, Kütahya, Aphrodisias and Akçaalan, near Ezine, in the Troad), but probably also in Eastern Turkey (Lane 1957b; Carswell, 1982; Allan 1991; Porter 1995; Vroom 2014, pp. 156-157; Henderson 2020).

5.2.20 B.XX) PAINTED WARE

Painted Ware can be dated from the middle 16th to the 17th centuries (Tables 6,7,8). Painted Ware was found in Athens in Attica, Chalcis in Euboea and Mytilene in Lesvos (Table 9; Appendix VI). The fabric is soft, fine, and has a dull orange colour. The inside and the upper part of the outside (just under the rim) are covered with a white slip and transparent lead glaze, sometimes pale yellow in tone. The interior is nonchalantly painted with brushstrokes in brown and in (mustard) yellow to yellow orange and in olive green to olive yellow paint. On the rim and on the upper part of the exterior are often also splashes in olive-brown, ochre/yellowish brown or green paint. Forms include bowls with a (heavy) ring foot and flat resting surface. The upper part has an everted, flanged rim with straight divergent upper wall. Central Greece (e.g., Boeotia, Thebes, Athens, Corinth) (Korre 1995b; Skartsis 2009, pp. 137-159; Vroom 2014, pp. 154-155). Monochrome

Painted Ware has the same characteristic as the Painted Ware B.XX but they present only one colour in their surface (Vroom 2014, pp. 154-155). They were found in Mytilene in Lesvos (Table 9; Appendix VI).

5.2.21 B.XXI) POLYCHROME PAINTED MAIOLICA WARE

Polychrome Painted Maiolica Ware was found in Athens in Attica and can be dated to the Turkish/Venetian period (Tables 6,9; Appendix VI) (Figures 74,75). The fabric is soft, fine and has a light yellow orange or light grey colour. The vessel is covered with a white slip and tin glaze in and out. The glazing technique is like the one for Italian blue-and-white Maiolica. The most popular painted colours are yellowish orange, yellowish brown, dark brown and blue. There are two main categories in painted decoration: 1) –a two-headed eagle with hooked nails and open wings; this design was popular in the Western coast of the Adriatic and Dalmatia, as well as in German-speaking countries. 2) –‘verses’ of a Bacchic (or anti-Bacchic character), and a kind of popular poetry; the verses are written in black on a white background in the centre of the pot, and an 18th-century script is used (also in the 19th century). Finally, more free-style designs were also possible. In all Polychrome Painted Maiolica the circular frame is formed with double or triple lines and spirals of a baroque or rococo type. Sometimes, lines in light blue may decorate the base. The most common shape is one-handled trefoil-mouth jug with a broad stable foot. The handle forms a curve, from the rim to the body of the pot. Other shapes include large plates with everted, flanged rims. Widely distributed in the Aegean (e.g., Samos, Skyros, Athens, Corinth, Boeotia) and in Albania (e.g., Butrint). (Many jugs can still be seen in traditional houses on the islands of Samos and Skyros.) The origin was from Central Italy (e.g., Pesaro). Finally, the *mastrapades* were produced at the Italian workshops to the orders of Greek traders. After that workshops in Epirus, Greece, produced similar jugs at the middle of 19th century (Skartsis 2009, pp. 160-164; Vroom 2014, pp. 166-167).

5.2.22 B.XXII) POLYCHROME MARBLED WARE

Polychrome Marbled Ware was found in Chalcis in Euboea and Mytilene in Lesvos and can be dated to the Turkish/Venetian period (Tables 7,8,9; Appendix VI). Polychrome Marbled Ware is dated from the late 16th to the 17th centuries for Italian products of a finer quality and from the 17th to the 19th for Ottoman imitations. The fabric is fine, hard and has an orange-red colour. There is a white slip on the inside and upper part exterior. The rest of the outside is plain with a glossy brown glaze. The polychrome marbling effect on the surface is made by running or shaking different-coloured slips or glazes (often brown, yellow and green) so that the colours moved among one another. With narrow streaks the ware is known as ‘fine marbling’, with wide streaks as ‘open marbling’. The most common shapes include dishes with broad rims, as well as hemispherical bowls and dishes with everted and overhanging rims. The footed bases are concave underneath, and have often wheel turning and trimming marks. Closed vessels such as one-handled trefoil-mouth jugs and flasks also exist in this type of pottery. Widely distributed throughout the Mediterranean, but also to the Americas and North-Western Europe. Marbled Ware and its imitations can be found in the Aegean (e.g., Athens, Thebes, Larissa, Corinth, Argos, Chlemoutsi Castle, Chalcis, Thessaloniki, Veria, Didymoteicho, Andros, Kos, Rhodes, South Peloponnese, Herakleion, Chania), in Turkey (e.g., Constantinople/Istanbul, Lycian coast, Mersin, Ganos) and in Cyprus (e.g., Nicosia, Kouklia). This ware was made at various production centres in Northern Italy (e.g., Pisa, Montelupo, Savona, Lombardy) and was imitated in South France (e.g., the

Provence), Spain, the Balkans, Greece and Turkey (e.g., Eyüp in Istanbul) (Skartsis 2009, pp. 205-206; Vroom 2014, pp. 164-165).

5.2.23 B.XXIII) SPANISH LUSTRE WARE

Spanish Lustre Ware was found in Athens in Attica and can be dated to the Turkish/Venetian period (Tables 6,9; Appendix VI). The fabric is soft, medium fine and whitish or pale buff in colour. Interior and exterior are covered with a white slip and a pitted irregular tin glaze, which is very glossy and pale in colour. The ware has an 'Islamic' geometric decoration (including radiating zones, pseudo-*Kufic* script, rough interlace, trees of life and foliage spirals) or a 'Christian' decoration (including heraldic shields, Gothic letters, animals, human figures) in a cobalt blue paint under tin glaze. Usually, both types of decoration are combined with brownish-yellow lustre painted designs on the surface of the tin glaze. Lustre consisted of a compound of sulphur, silver and copper oxides painted on the already fired tin glaze in a second firing in a reduction kiln. The shapes are mainly open, such as bowls with a straight rim and large dishes with a flanged rim. Furthermore, vases with two loop handles and *albarelli* (slightly waisted cylindrical jars, without handles, used for drugs) were also made. They widely were traded in Egypt, Near East (e.g., Hama, Jerusalem), West Turkey (e.g., Ephesus, Miletus, Pergamon, Aphrodisias), Aegean (e.g., Cyclades, Athens, Chalcis, Peloponnese, Northern Greece, Rhodes, Crete, Levkas, Corfu), the Black Sea Region, Albania (e.g., Butrint), Dalmatian Coast, Italy (e.g., Liguria, Udine, Venice, Padua, Sicily), France (e.g., Avignon), and even North-Western Europe. The origin was from Spain (e.g., Valencia, Malaga, Manises) (Skartsis 2009, pp. 114-116; Vroom 2014, pp. 134-135; Barceló and Heidenreich 2014).

5.2.24 B.XXIV) DIDYMOTEICHO WARE

Didymoteicho Ware was found in Chalcis in Euboea and can be dated from the 19th to the middle 20th centuries (Table 7,9; Appendix VI). The fabric is moderately soft, fine and has a dull orange to orange colour. There are two variants of this ware. One has a vitreous greenish glaze, becoming dark green on the fabric and pale green on the white slip. The other shows an ochre-yellowish glaze, becoming brown on the fabric and yellow on the white slip. Both are wet-smoothed on the outside. There are broad white slip stripes on the inside, under the glaze. The white slip is simply put on the rim by hand, dribbling star like towards the interior of the vessel. The shape is often open: usually dishes with an everted, hooked rim and straight divergent walls. The interior bases of these dishes are sometimes decorated with two impressed concentric circles. They widely distributed throughout the Eastern Mediterranean: Turkey (e.g., Constantinople/Istanbul, Aphrodisias, Al-Mina, Miletus, Ephesus, Izmir), Egypt, Near East (e.g., Acre, Damascus), Cyprus (e.g., Kouklia, Potamia, Nicosia, Troodos Mountains) and the Aegean (e.g., Athens, Thasos, Kythera, Crete). This ware was produced in Didymoteicho in Thrace (Bakirtzis 1980; Vroom 2014, pp. 186-187).

I studied well the typology of the various kinds of pottery sherds in order to carry out a comprehensive physicochemical study in the next chapters, with the intention of determining whether such production was sufficiently identified in order to be defined as "local or imported production". Meanwhile, I also paid particular attention to anomalies and morphological differences in order to ascertain the existence of local characteristics, exclusive to certain territories. On the basis of the archaeological study in this chapter in combination with the archaeometric/ material science study in the following chapters, the pottery specimens produced in the areas under study will represent a highly informative reference point covering a few centuries and thus becoming a true cultural indicator that will allow us to understand the level of technical and technological knowledge acquired by local craftsmen as well as the rules related to these pottery objects in this specific area and period.

Concluding, in this chapter it is my intention to present short introductions of the 245 wares that are included in the samples taken from the 3 studied areas. My aim for more scientific study of ceramics from excavations in these sites created the need for investigation the typology of the ceramics produced locally in Chalcis in Euboea, in the Athenian Agora in Attica, in Mytilene in Lesbos. The ceramics belonging to Chalcis in Euboea, the Athenian Agora in Attica, Mytilene in Lesbos were classified on archaeological level in this chapter. All three sites are important archaeological research areas, where archaeologists come across major finds and evolution dating from antiquity to the modern period. I studied the typology of the various kinds of pottery sherds deeply in order to carry out a comprehensive physicochemical study in the next chapters, with the intention of determining whether such production was sufficiently identified in order to be defined "local or imported production". At the same time, particular attention was paid to anomalies and morphological differences in order to ascertain the existence of local characteristics, exclusive to certain territories. On the basis of the archaeological study in this chapter in combination with the archaeometric study in the following chapters, the ceramic material produced in the studied areas will represent a highly informative reference point covering a few centuries and thus becoming a true cultural indicator that will allow us to understand the level of technical and technological knowledge acquired by local craftsmen as well as the rules related to these pottery objects in this specific area and period.

ATHENS IN ATTICA	CHRONOLOGICAL PERIODS
WHITE WARES	
Maiolica	TURKISH/VENETIAN PERIOD
RED WARES	
Plain Glazed Ware	MIDDLE BYZANTINE PERIOD
Green and Brown Painted Ware	MIDDLE BYZANTINE PERIOD
Fine Sgraffito Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Incised Sgraffito Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Pottery waster	MIDDLE BYZANTINE - TURKISH/VENETIAN TIMES
Slip-Painted Ware	LATE BYZANTINE/FRANKISH PERIOD
Late Sgraffito Ware	LATE BYZANTINE/FRANKISH PERIOD
Monochrome Glazed Ware	LATE BYZANTINE/FRANKISH - TURKISH/VENETIAN TIMES
Zeuxippus Ware Subtype	LATE BYZANTINE/FRANKISH PERIOD
Polychrome Sgraffito Ware	LATE BYZANTINE/FRANKISH - TURKISH/VENETIAN TIMES
Painted Ware	LATE BYZANTINE/FRANKISH PERIOD
Polychrome Painted Ware/Maiolica	TURKISH/VENETIAN PERIOD
Spanish Lustre Ware	TURKISH/VENETIAN PERIOD

Table 6 The chronological division of the studied glazed pottery at Athens in Attica (the dateline is provided by J.Vroom).

CHALCIS IN EUBOEIA	CHRONOLOGICAL PERIODS
WHITE WARES	
Glazed White Ware II	MIDDLE BYZANTINE PERIOD
Polychrome White Ware	MIDDLE BYZANTINE PERIOD
Glazed Frit Ware	ISLAMIC PERIOD
Frit Ware	ISLAMIC PERIOD
Lustre Ware	ISLAMIC PERIOD
Maiolica	TURKISH/VENETIAN PERIOD
RED WARES	
Plain Glazed Ware	EARLY BYZANTINE - EARLY MODERN TIMES
Unglazed Plain Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Amphorae	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Slip-Painted Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Green and Brown Painted Ware	MIDDLE BYZANTINE - EARLY MODERN TIMES
Fine Sgraffito Ware	MIDDLE BYZANTINE PERIOD
Painted Fine Sgraffito Ware	MIDDLE BYZANTINE PERIOD
Incised Sgraffito Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Champlevé Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Monochrome Glazed Ware	MIDDLE BYZANTINE - LATE BYZANTINE/FRANKISH TIMES
Splashed Ware	LATE BYZANTINE/FRANKISH PERIOD
Zeuxippus Ware	LATE BYZANTINE/FRANKISH PERIOD
Roulette/Veneto Ware	LATE BYZANTINE/FRANKISH PERIOD
Painted Ware	TURKISH/VENETIAN PERIOD
Polychrome Marbled Ware	TURKISH/VENETIAN PERIOD
Didymoteicho Ware	EARLY MODERN PERIOD

Table 7 The chronological division of the studied glazed pottery at Chalcis in Euboea (the dateline is provided by J.Vroom).

MYTILENE IN LESVOS	CHRONOLOGICAL PERIODS
WHITE WARES	
Glazed White Ware IV	LATE BYZANTINE/FRANKISH PERIOD
Glazed Frit Ware	TURKISH/VENETIAN PERIOD
Maiolica	TURKISH/VENETIAN PERIOD
Porcelain	TURKISH/VENETIAN PERIOD
Iznik Ware	TURKISH/VENETIAN PERIOD
Kütahya Ware	TURKISH/VENETIAN PERIOD
Overfired Stoneware	TURKISH/VENETIAN PERIOD
RED WARES	
Zeuxippus Ware Subtype	LATE BYZANTINE/FRANKISH PERIOD
Monochrome and One Colour Sgraffito Ware	LATE BYZANTINE/FRANKISH PERIOD
Elaborate Incised Ware	LATE BYZANTINE/FRANKISH PERIOD
Roulette/Veneto Ware	LATE BYZANTINE/FRANKISH PERIOD
Monochrome Sgraffito Ware	LATE BYZANTINE/FRANKISH PERIOD
Miletus Ware	TURKISH/VENETIAN PERIOD
Painted Ware	TURKISH/VENETIAN - EARLY MODERN TIMES
Unglazed Painted Ware	TURKISH/VENETIAN PERIOD
Polychrome Painted Ware	TURKISH/VENETIAN PERIOD
Monochrome Glazed Ware	TURKISH/VENETIAN PERIOD
Polychrome Sgraffito Ware	TURKISH/VENETIAN PERIOD
Unglazed Incised Grey Ware	TURKISH/VENETIAN PERIOD
Polychrome Marbled Ware	TURKISH/VENETIAN PERIOD
Pottery waster	TURKISH/VENETIAN PERIOD
Tripod stilt	TURKISH/VENETIAN PERIOD

Table 8 The chronological division of the studied glazed pottery at Mytilene in Lesvos (the dateline is provided by J.Vroom).

		ATHENS IN ATTICA	CHALCIS IN EUBOEA	MYTILENE IN LESVOS
A. WHITE WARES				
A.I	Glazed White Ware II/IV	—	—	√
A.II	Polychrome White Ware	—	√	—
A.III	Glazed Frit Ware	—	√	√
A.IV	Frit Ware	—	√	—
A.V	Lustre Ware	—	√	—
A.VI	Maiolica	√	√	√
A.VII	Porcelain	—	—	√
A.VIII	Iznik Ware	—	—	√
A.IX	Kütahya Ware	—	—	√
B. RED WARES				
B.I	Plain Glazed Ware in a Red and Grey Fabric	√	√	—
B.II	Unglazed Plain Ware	—	√	—
B.III	Amphorae	—	√	—
B.IV	Slip-Painted Ware	√	√	—
B.V	Green and Brown Painted Ware	√	√	—
B.VI	Fine Sgraffito Ware	√	√	—
B.VII	Painted Fine Sgraffito Ware	—	√	—
B.VIII	Incised Sgraffito Ware	√	√	—
B.IX	Champlevé Ware	—	√	—
B.X	Monochrome Glazed Ware	√	√	√
B.XI	Splashed Ware	—	√	—
B.XII	Zeuxippus Ware	—	√	√
B.XIII	Zeuxippus Ware Subtypes	√	—	—
B.XIV	Monochrome and One Colour Sgraffito Ware	—	—	√
B.XV	Elaborate Incised Ware	—	—	√
B.XVI	Roulette/Veneto Ware	—	√	√
B.XVII	Monochrome Sgraffito Ware	—	—	√
B.XVIII	Polychrome Sgraffito Ware	√	—	√
	Late Sgraffito Ware	√	—	—
B.XIX	Miletus Ware	—	—	√
B.XX	Painted Ware	√	√	√
B.XXI	Polychrome Painted Ware/Maiolica	√	—	—
B.XXII	Polychrome Marbled Ware	—	√	√
B.XXIII	Spanish Lustre Ware	√	—	—
B.XXIV	Didymoteicho Ware	—	√	—
B.XXV	Unglazed Incised Grey Ware	—	—	√
B.XXVI	Unglazed Painted Ware	—	—	√
B.XXVII	Tripod stilt	—	—	√
B.XXVIII	Pottery waster	√	—	√
B.XXIX	Overfired Stoneware	—	—	√

Table 9 The typology of the studied pottery at Chalcis in Euboea, Athens in Attica and Mytilene in Lesvos (in chronological order).

CHALCIS IN EUBOEIA



Figure 56 Maiolica. Turkish/Venetian period. Italy.



Figure 57 Slip-Painted Ware. Middle Byzantine to Late Byzantine/Frankish period. Chalcis local (Vroom 2014, p. 80).



Figure 58 Fine Sgraffito Ware. Middle Byzantine period. Chalcis local.

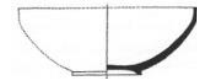


Figure 59 Painted Fine Sgraffito Ware. Late Byzantine/Frankish period. Chalcis local (Vroom 2014, p. 86).

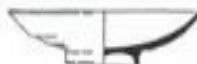


Figure 60 Incised Sgraffito Ware. Middle Byzantine to Late Byzantine/Frankish period. Chalcis local (Vroom 2014, p. 90).

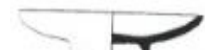


Figure 61 Champlevé Ware.. Middle Byzantine to Late Byzantine/Frankish period. Chalcis local (Vroom 2014, p. 92).



Figure 62 Champlevé Ware. Middle Byzantine to Late Byzantine/Frankish period. Chalcis local.



Figure 63 Zeuxippus Ware. Late Byzantine/Frankish period. W.Turkey.

ATHENIAN AGORA IN ATTICA



Figure 64 Maiolica. Turkish/Venetian period. Italy (Vroom 2014, p. 146).



Figure 65 Green and Brown Painted Ware-variant. Middle Byzantine period. Probably from Athens (Vroom 2014, p. 82).



Figure 66 Fine Sgraffito Ware. Late Byzantine/Frankish period. Probably from Chalcis or Athens (Vroom 2014, p. 84).



Figure 67 Incised Sgraffito Ware. Middle Byzantine period. Probably from Chalcis or Athens.



Figure 68 Monochrome Glazed Ware. Turkish/Venetian period. Athens local.



Figure 69 Zeuxippus Ware Subtypes. Late Byzantine/Frankish period. Probably from Athens.



Figure 70 Polychrome Sgraffito Ware. Turkish/Venetian period. Athens local (Vroom 2014, p. 144).



Figure 71 Polychrome Sgraffito Ware. Turkish/Venetian period. Athens local.



Figure 72 Polychrome Sgraffito Ware. Turkish/Venetian period. Athens local.

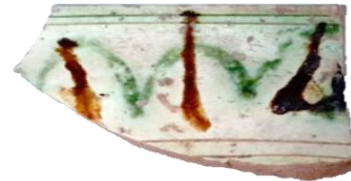


Figure 73 Polychrome Sgraffito Ware. Turkish/Venetian period. Athens local.

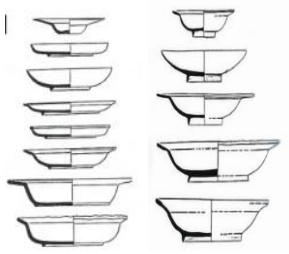


Figure 74 Polychrome Painted Ware/Maiolica. Turkish/Venetian period. Athens local (Vroom 2014, p. 168).



Figure 75 Polychrome Painted Ware/Maiolica. Turkish/Venetian period. Athens local.

MYTILENE IN LESVOS



(Vroom 2014, p. 158)



Figure 76 Iznik Ware. Turkish/Venetian period.
W-Turkey.



Figure 77 Iznik Ware. Turkish/Venetian period. W-Turkey.



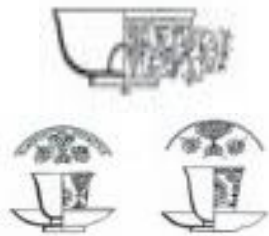
(Vroom 2014, pp. 168,122)



Figure 78 Porcelain. Turkish/Venetian period.
Probably from China.



Figure 79 Elaborate Incised Ware. Late
Byzantine/Frankish period. Constantinople.



(Vroom 2014, p. 168)



Figure 80 Kütahya Ware. Turkish/Venetian
period. Probably from W-Turkey.



Figure 81 Kütahya Ware. Turkish/Venetian period.
Probably from W-Turkey.