10 – THE ECONOMICS OF CERAMICS IN BOEOTIA AND BEYOND

‘Without exchange, there is no society.’
Fernand Braudel (1977, 15)

10.1 Introduction
The purpose of this chapter is to look at ceramics found in Boeotia in their wider socio-economic perspective. In this chapter I will try to move, as the ceramicist Carla Sinopoli once put it, ‘one step back from the sherds themselves to examine how they are linked to their broader context’ (Sinopoli 1991, 69). In contrast to the previous chapter, in which the Medieval and Post-Medieval ceramics from the Boeotia Project were discussed from the perspective of the development of local production and local distribution, I will try to sketch in this present chapter wider patterns of long-distance distribution and discuss production centres in the Mediterranean outside the research area.

This is of course a subject which is complicated enough for a book in its own right, so I will limit myself here to a mere survey of relevant problems and theories, in an attempt to shed some light on the material found in Boeotia from a wider perspective, and to explore possibilities for future research.

In order to address the problem of the economics of pottery in Boeotia in a wider context, I will first discuss two views on long-term changes in the technology of Medieval and Post-Medieval ceramics in general (e.g. changes of shape, glaze, decoration) which have been forwarded by archaeologists during the late 1970s and mid 1980s. One view is based on the role of pottery as an indicator of changing demand (and thus of economic change) and consumption in a certain region (Blake 1978; 1980). The other view is based on technological innovations in pottery in relation to economic trends (Orton 1985). Both views, which were developed separately but partly overlap, will be tested on the finds from Boeotia.

Secondly, I will sketch the outlines of the socio-economic background for changes in the imports of pottery in Boeotia. In particular, I will focus on the processes of import and distribution of the tin-glazed wares in Boeotia from the 16th to the 18th century (e.g. Maiolica from Italy, Iznik and Kütahya wares from Turkey). I will discuss the large-scale organisation of pottery production in the main production centres, the costs of manufacture, as well as the pottery prices and long-distance market patterns of these Post-Medieval wares in an emerging ‘world-economy’ (or modern ‘world-system’ in the words of the sociologist Immanuel Wallerstein).

10.2 Pottery and socio-economic history

When addressing the problem of explaining the occurrence of changes in technology, form and decoration in Post-Roman pottery over time, we cannot but establish that there are no elaborated, tested and generally accepted theories or models to help us. However, two tentative views have been formulated to explain change and innovation in Medieval and Post-Medieval ceramics.

In two successive small papers the British archaeologist Hugo Blake proposed (in the late 1970s) a theory regarding the value of ceramic finds as indicators of economic change. He based his approach on the material from a regional surface survey by L. Mannoni and T. Mannoni in Liguria, Northern Italy (Blake 1978; 1980). In his view entire assemblages or ‘genuine’ samples of pottery of all periods can be used as a measure of the changing consumption habits of past communities. The implication is, of course, that ultimately changes in demand by consumers generate changes in the production and technology of pottery.

Five years after Blake, the British archaeologist Clive Orton published a small paper in which he formulated an approach with a somewhat different emphasis. In his view technological innovations in Medieval and Post-Medieval pottery are directly linked to long-term economic cycles (Orton 1985). In formulating this model, he was inspired by the longue durée perspective of the French Annales-historian Fernand Braudel (formulated, for instance, in his famous La Méditerranée of 1949; see also 1984).

Here, I will review both of these approaches (which seem complementary rather than alternatives, as
consumption patterns and economic cycles are inter-related), and will try to test them with the ceramics found in Boeotia.

10.2.1 Blake’s theory
Hugo Blake presented his views on the underlying factors influencing changes in Medieval pottery technology in two papers of limited size (Blake 1978; 1980). The more notable of the two is his 1980-article ‘Technology, supply or demand?’ in Medieval Ceramics. The conclusion of both papers was that it is foremost the mechanism of demand (and thus of economic change) and consumption in a certain region, which induced change, and not so much ‘supply’ of technological innovations.

In general, Blake questioned the value of the traditional approaches to Medieval and Post-Medieval pottery. He raised doubts, in particular, on its traditional role as a ‘dater’, as a ‘characteriser of cultural groups’ and as an ‘index of technical progress’. Instead, he suggested that probably only our understanding of the role of pottery as a functional object makes any significant contribution to our understanding of the past (Blake 1980, 4). In the end, his main line of argument was clear: pottery is to be used as an indicator of supply and especially of demand in any community: ‘The assumption behind all distribution studies is that the consumers wanted and were able to buy the products’ (Blake 1980, 5).

The method suggested by him to test this theory of pottery as an indicator of supply and demand is to erect for a region under research a hierarchy of sites as well as an hierarchy of different types of pottery over time. Consequently, both hierarchies have to be plotted against the known socio-economic history of the sites (see Blake 1978, fig. 28.2; 1980, fig. 1). The next step is to infer from the ceramic finds the relative wealth and status of different groups of people in a certain region. These differences can be seen in the distribution of pottery types and their relative presence in various periods and types of settlement.

The example used by Blake in his 1980-article is based on the quantified results of work by L. Mannoni and T. Mannoni on ceramic types found on different sites in a regional surface survey in Liguria, Northern Italy (Mannoni & Mannoni 1975, fig. 3; here table 10.1). The dates of these finds range from the period pre-1050 AD to 1900 AD. The study of Mannoni and Mannoni shows the ceramic developments in a relatively poor

<table>
<thead>
<tr>
<th>SETTLEMENT TYPES</th>
<th>NO. OF SITES</th>
<th>INDUSTRIAL</th>
<th>MILITARY</th>
<th>FEUDAL</th>
<th>RELIGIOUS</th>
<th>MIXED ECONOMY</th>
<th>RURAL</th>
<th>CLASSES OF POTTERY</th>
</tr>
</thead>
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<tr>
<td>PRE 1050</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRE-ROMAN COARSE</td>
</tr>
<tr>
<td>1050–1350</td>
<td>13</td>
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<td></td>
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<td></td>
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<td></td>
<td>INDUSTRIAL GLAZED</td>
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<tr>
<td>1350–1500</td>
<td>14</td>
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<td></td>
<td>GLAZED BIJILLATA</td>
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<td>1500–1750</td>
<td>20</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>FINE GLAZED MED.</td>
</tr>
<tr>
<td>1750–1900</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>INCISED ISLAMIC</td>
</tr>
</tbody>
</table>

Table 10.1 Proportion of ceramic types found in each class of settlement in Liguria (after Mannoni & Mannoni 1975, fig. 3).
peasant society in Liguria during the late 11th to late 14th centuries, followed by wealthier rural sites in the Renaissance era with access to tin-glazed wares (such as Maiolica). During the 16th to early 18th centuries, however, these tin-glazed wares were replaced on the rural sites by cheaper slip-coated wares, indicating, according to Blake, the impoverishment of the Ligurian countryside in that period. Finally, in the later 18th and 19th centuries one can detect rural improvement in Liguria again with a renewed appearance of exotic glazed wares.

To sum up, Blake detected these main trends in the Ligurian material; in his view all were generated by changing demand by consumers:

<table>
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<tr>
<th>Time Period</th>
<th>Ceramics Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050-1350 AD</td>
<td>exotica and tin-glazed types absent</td>
</tr>
<tr>
<td>1350-1500 AD</td>
<td>tin-glazed type present</td>
</tr>
<tr>
<td>1500-1750 AD</td>
<td>slip-coated types replaced tin-glazed ware</td>
</tr>
<tr>
<td>1750-1900 AD</td>
<td>peak in glazed ware</td>
</tr>
</tbody>
</table>

Table 10.2 Blake’s interpretation of the Ligurian material.

In the end Blake concludes from the study of Mannoni and Mannoni that entire assemblages, which include pottery from a substantial time span, can make an important contribution to our understanding of demand for ceramics (rather than of their supply). Most members of Medieval and Post-Medieval societies used pots, creating a huge and constant demand, whereas few were engaged in its production and distribution (and were bound to rely in their trade on consumer demand). In this way pots are, according to him, a ‘unique measure of the consumption habits of past communities’. In short, Blake concluded that ceramics provide in certain circumstances, ‘the most reliable measure of economic change’ (Blake 1980, 8).

10.2.2 Blake’s theory and the fragility of pots

Blake’s theory and his plea to ask more complex questions of Medieval and Post-Medieval ceramics rather than dating and diagnosing alone, induced in the early 1980s a positive reaction from the Medieval archaeologists Peter Davey and Richard Hodges (Davey & Hodges 1983, 13-4). They underlined the two practical implications of Blake’s approach. Firstly, the recovery of ceramic evidence should be one of the central aims in any excavation or survey strategy. Secondly, entire assemblages should be collected, which is to say that sampling should include both the easily recognizable wares and the harder to date wares on any given site. Both points had also been stressed by Blake himself.
Apart from those – nowadays perhaps not so revolutionary – observations, it seems that Blake’s model also leads to some further considerations. His theory is based on the exact counting of sherds, but this may be a bit more problematic than it seems. The main problem is that sherds are not pots (cf. Orton 2000). This is also not a very revolutionary observation, but it seems that especially in modern quantitative pottery research this very basic fact is perhaps somewhat underestimated at times. The fact that sherds are not pots has, however, serious consequences for any theory which relies on sherd-counts. One of these consequences is that careful attention should be paid to the breakage-frequency of pottery, to the type of pottery and to the period of use of the pottery, which is found in the form of sherds.

Pottery is fragile, it has in general a short life and is most of the time quite quickly replaced. It is obvious that the most frequently used pots will have a higher chance of being broken than vessels which are never moved in the household, such as large pithoi. This implies that the replacement rate is the highest for the cheapest, most often used (and most often broken) vessels (Sinopoli 1991, 87; Abbink 1999, 48).

As a general principle, the larger the pot the longer it lasts, and use life is directly related to frequency of use. It has been established, for instance, that (among the Kalinga in the Philippines) rice cooking vessels tend to last slightly longer than vegetable cooking pots, but that they both average about two years of use. Water jars tend to last three times as long and wine jars perhaps ten times as long. The larger rice and vegetable cooking pots last, on average, nine to ten years; large containers last even longer than a generation (Longacre 1981, 63-4).

Exposure to thermal stress also leads to increased breakage rates. Cooking and serving vessels can be expected to break at a higher rate than large, non-movable pithoi. It is no surprise that in ethnographic studies, the cooking pot is often the type of vessel with the shortest use-life and with the highest replacement rate (Abbink 1999, appendix 2, table 2a-c).

On the other hand, valuable (imported) pots can be more carefully preserved or kept longer than less valuable ones, and therefore of considerable age when discarded. Damaged vessels may or may not be removed from active use, depending on their value (Rice 1987, 303-4). Cracked vessels which are expensive, rare or have some sort of added value may be repaired and continue in their primary uses. It has been suggested that objects could have been repaired in the past to indicate aspects of status, the desire for the retention of the ‘antique’ or simply for reasons of personal affection (Willmott 2001, 103).
As far as Greek Medieval pottery is concerned, pots are indeed found that have been repaired. Several 12th
and 13th century plates and bowls from Athens and
Thrace, for instance, show small circular holes pierced
through the body at a later date to repair the crack in the
plate with aid of metal clamps or rivets to hold the join
together (Papanikola-Bakirtzis 1999, cat. nos. 14, 17, 75).
Also in the surface ceramics from Boeotia one can occa-
sionally notice sherds with small repair holes in the walls
(see figs. 10.1a-c).

Interesting in this respect is the remark of the
Ottoman traveller Evliya Çelebi about the twenty
‘menders of broken cups’ (Finjian Kindejian) among the
tradesmen’s guilds of Istanbul, who paraded before the
Sultan while mending broken cups. He also listed
twenty-five craftsmen working in ten workshops earning
their money by clamping and pinning broken vessels, as
can be seen on a repaired (blue-white painted) mosque
lamp from ca. 1495-1505 AD (Atasoy & Raby 1989, 37,
note 4 and fig. 283). This suggests there was even an
industry of recycling broken pottery (from Iznik and
Kütahya?) in 17th century Istanbul. Nowadays, repairs of
broken pottery are still made by traditional potters on
Modern Cyprus (London 1989a, 69).

Finally, the reuse or recycling of broken pottery into a
variety of secondary uses must also be taken in account
in the life-time of a pot. In North-Western Europe, for
instance, sherds were often used in the construction of
hearth, floors and ditches (Therkorn 1987; Abbink
1991, fig. 2.6). Damaged amphorae, found at several
shipwrecks in the Eastern Mediterranean, revealed the
recycling of these transport jars in Byzantine times and
showed that these vessels must have been used (for a
secondary purpose) for a much longer period than
previously assumed (Van Doorninck 1989; 2002, 141-42
and note 24; Parker 1992, 372-73; Kingsley 1994-95, 42-
44). This recycling of amphorae has been explained as a
reaction to the decreasing significance of amphorae as
transport containers in preference to skins (Van
Doorninck 1989, 256). Other suggestions are that
recycling indicates the attempt of entrepreneurs to
minimize transportation costs by reusing vessels, or the
preference for the storage of liquids in old vessels. Since
a freshly thrown one could absorb as much as one-fifth of
the liquid inside it (Kingsley 1994-95, 43-44).

In Early Modern Greece and Cyprus, the walls and
side entrances of kilns were strengthened or closed

<table>
<thead>
<tr>
<th>Century</th>
<th>NORTH</th>
<th>SOUTH</th>
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<tbody>
<tr>
<td>pre-1200</td>
<td>▲ upswing ▲</td>
<td>▲ upswing ▲</td>
</tr>
<tr>
<td>1200/1250</td>
<td>▼ downswing ▼</td>
<td>▼ downswing ▼</td>
</tr>
<tr>
<td>1350</td>
<td>▲ upswing ▲</td>
<td>▲ upswing ▲</td>
</tr>
<tr>
<td>1510</td>
<td>▼ downswing ▼</td>
<td>▼ downswing ▼</td>
</tr>
<tr>
<td>1650</td>
<td>▲ upswing ▲</td>
<td>▲ upswing ▲</td>
</tr>
<tr>
<td>1730/40</td>
<td>▼ downswing ▼</td>
<td>▼ downswing ▼</td>
</tr>
<tr>
<td>1817</td>
<td>▲ upswing ▲</td>
<td>▲ upswing ▲</td>
</tr>
<tr>
<td>1896</td>
<td>▼ downswing ▼</td>
<td>▼ downswing ▼</td>
</tr>
</tbody>
</table>

Table 10.3 Long-term economic cycles in Europe (after Braudel 1984 and Orton 1985).

<table>
<thead>
<tr>
<th>Century</th>
<th>NORTH</th>
<th>SOUTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>13th-15th</td>
<td>Bruges</td>
<td>Venice, Genoa</td>
</tr>
<tr>
<td>late 14th-1500</td>
<td>Antwerp</td>
<td>Venice</td>
</tr>
<tr>
<td>c. 1500-1570</td>
<td>Amsterdam</td>
<td>Genoa</td>
</tr>
<tr>
<td>c. 1560-1630</td>
<td>London</td>
<td>New York</td>
</tr>
<tr>
<td>c. 1630-1750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 1750-1920</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 1920+</td>
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<td></td>
</tr>
</tbody>
</table>

Table 10.4 Economic ‘core’ zones and leading cities in the North-South poles (after Braudel 1984 and Orton 1985).

through the addition of sherds or even broken jars filled
with earth and clay (London 1989b, 221; 1990, 62, figs. 74
and 77; Blitzer 1990, 695; see also fig. 9.9). Broken
pots and sherds were also used as kiln separators during
firing (London 1989b, 221; Blitzer 1990, 696). The reuse
of often complete vessels was common in Early Modern
Greece as well. Pots reused as chimney tops stand often on the roof of houses (fig. 10.2). Large jars (pithoi) were reused in a variety of imaginative ways, as flower pots, burial containers, settling basins, wellheads, trash bins, kneading troughs, hearths, pavement elements, and even dwellings (e.g. London 1989b, 221; Cullen & Keller 1990, 184; see also fig. 10.3). Another example is the acoustic pot, frequently used in Greek churches because it was thought that it aided resonance during singing. After their second life, all these vessels may end up as archaeological data.

It is evident that whatever view we have when counting surface sherds found by survey, we should bear in mind the problem of breakage-frequency and reuse of pottery, which vary widely per type (not to mention the problems of visibility and durability).

10.2.3 Orton’s theory
Five years after Blake, the British archaeologist Clive Orton formulated a proposal to explain technological innovations in Medieval and Post-Medieval pottery in Europe which had a somewhat different emphasis (Orton 1985; see also Vroom 2000a). Central to Orton’s approach are two questions: the first is why pottery technologies, styles and forms changed as they did, and the second question is when they did. For his model Orton combined knowledge of the hierarchy of pottery technologies (formulated by Hugo Blake in the 1980-article) with the long-term economic perspectives of the historian Fernand Braudel (Braudel 1949; 1984).

Orton basically presented his model in two tables. In the first table he summarized Braudel’s long-term cycles of economic activity in Medieval and Post-Medieval Europe (table 10.3). In the second table he presented a regional division of economic development in pre-modern Europe divided into a ‘North pole’ and a ‘South pole’ (table 10.4). As far as the economic cycles are concerned, Orton emphasized that the upward trends favour all economies involved, while downward trends favour only the ‘core economies’. These core economies (or core zones) ‘set the pace’ for economic development and are least affected by economic downturns. At different times different regions take the role as frontrunner. Surrounding the core economy are concentric zones of progressively less leading regions, surrounded by a periphery which is relatively backward, marginalised and exploited. This approach might be linked to Andre Gunder Frank’s ‘A and B cycles’ (Frank 1993; Frank & Gills 1993) and to Wallerstein’s core-periphery world system, which will be discussed later in this chapter.

The heart of Orton’s model is that he tried to link the ‘Braudelian cycles’ with the idea that new pottery techniques were adopted more rapidly in a core zone during the upswing of economic cycles, for example through a greater willingness to create new productive capacity. He assumed that in a downswing core areas retained their level of technology while the other areas lost this technology or fell back on technologies of a lower level.

In the end, Orton’s conclusion was that general economic conditions, and particularly the availability of capital for investment, played an important role in innovation within ceramic production.

10.3 Testing Blake’s and Orton’s theories in Boeotia

When putting Blake’s and Orton’s theories to the test, it is inevitable to take two different approaches to the ceramics found in Boeotia. In the case of testing Blake’s theory, the main emphasis is to be put on the number of sherds, their provenance and relative value (to see whether they can be used as indicators of economic developments). In the case of Orton’s theory, however, the main emphasis is to be put on the general economic background of the periods in which the chronology of the sherds is to placed (in order to see whether a clear relation can be seen between the economic cycles and changing pottery techniques).

10.3.1 Blake’s theory and the ceramics found in Boeotia

Fundamental for Blake’s model is an overview of the number of sherds per period per site or site-type. To test his model for the ceramics from Boeotia, I use a presentation of the Medieval and Post-Medieval ceramics found by site-type (urban, rural, tower) and per period (table 10.5 and table 10.6a-b). The tables includes all 30 Boeotian sites at which substantial amounts of Post-Roman pottery was sampled (see Chapter 5), and all 48 diagnostic Medieval and Post-Medieval wares discussed in this book (see Chapter 6).

Early Byzantine period – Tables 10.5 and 10.6a-b indicate that the surface ceramics from all Boeotian sites show an
absence of decorated and/or glazed wares in the 7th to 9th centuries (Wares 1-4 are unglazed). Especially the lack of early Glazed White Ware in Boeotia is noteworthy, compared to other assemblages in the Aegean area (e.g. on sites in Crete, Cyprus etc.) where this type of ware from Constantinople has been found more frequently. Apparently, this Central Greek inland region had not much contact with the Capital during this period and its inhabitants were using rather locally or regionally produced wares such as Askra Ware (Ware 1), LR 2 amphorae (Ware 3) and beehives (Ware 4).

Moreover, the small numbers of especially table wares (Wares 1, Askra Ware, and Ware 2, Unglazed Ware) on the rural sites and tower sites seem to suggest that we are dealing in the Early Byzantine period either with a society poor in ceramics (in Blake’s terms: with a small population demanding few consumption goods) or that people were using other types of material (such as metal or wooden vessels) in daily life. There is also a decline in variety in the pottery types and shapes, as compared to Late Roman times. Apparently, pottery in Central Greece was produced on a smaller scale in Early Byzantine times.

On the other hand, there appears to be continuity in pottery technology from the Roman period. In shape and fabric, the wares seem to be relics of the Late Roman period. A common type of amphora on the Boeotian sites is, for instance, the Late Roman 2 amphora. This is a typical Aegean product, which is mostly dated from the 5th to the 7th centuries, but which was perhaps used (or reused) in a derivative form for a longer period of time in the Greek countryside.

Noteworthy are also the large quantities of Late Roman amphorae and beehives in the urban sites, which could indicate some sort of agricultural activity there.

**Middle Byzantine period** – During the 10th to early 13th centuries, one can discern a sudden increase in the numbers of diagnostic ceramics on the Boeotian rural sites and tower sites as opposed to the numbers found on urban sites, especially a boom in the different types of decorated wares (Ware 9-11, 15). New pottery techniques
were introduced during this period, whereby the potters experimented with a white slip, incised motifs and a lead glaze. Some of the new glazed tablewares of this period, which were found in Boeotia in considerable quantities, were Slip-painted Ware (Ware 9), Brown and Green Painted Ware (Ware 10), Fine Sgraffito Ware (Ware 11) and Incised Sgraffito Ware (Ware 15).

In addition, substantial numbers of the unglazed wares of this period found on the Boeotian sites included Günssenin 3/Saraçhane 61 amphorae (Ware 12), Unglazed Incised Ware (Ware 6) and Unglazed Domestic Wares (Ware 14).

The range and quantity of the glazed and unglazed wares on the Boeotian sites is the same as the Middle Byzantine finds from the excavations in Corinth and Thebes, and this perhaps indicates that pottery production of these wares took place in the region around the Corinthian Gulf. Especially the large amounts of Incised Sgraffito Ware (Ware 15) and Günssenin 3/Saraçhane 61 amphorae (Ware 12) on all Boeotian sites seems to suggest that these types of pottery could have been locally or regionally manufactured (that is: in Central Greece).

In addition, the archaeological material seems to suggest that the Middle Byzantine era was for Boeotia a period of ceramic prosperity (especially for the rural sites, but less for the urban sites). That is to say: between the 10th and early 13th centuries fine decorated tablewares reached the Boeotian rural communities which lived entirely of the land. The question remains whether this implies that the Boeotian rural communities became wealthier and better off (in Blake’s terms: whether the consumer demand increased), or whether pottery production took place on a bigger scale and pots became therefore cheaper and more accessible for the villagers.

Late Byzantine/Frankish period – During the late 13th to mid 15th centuries the highly decorated wares of the Middle Byzantine period gave way to much plainer vessels in monochrome glazes. This does not mean that for instance all Incised Sgraffito Ware and Champlevé Ware (Ware 15) or Günssenin 3/Saraçhane 61 amphorae

Table 10.6 Total of diagnostic wares per period in total, on rural sites, on ‘urban’ sites and on tower sites.
(Ware 12) immediately vanished in Boeotia in the early 13th century, but only that new wares with new stylistic and technological characteristics made their entrance. Although these Late Byzantine wares show signs of technical innovations (such as harder firing, the use of tripod stilts and new glazing techniques), they show at the same time less careful potter’s throwing methods and less imaginative designs (mostly incised abstract motifs or circles).

One can notice less sophisticated wares on the Boeotian sites, and even a decline in use in glazed wares during the 14th and early 15th centuries. Imported wares from Italy, which made their way in substantial quantities into other parts of Greece from the 13th century onwards, are sporadic in Boeotia (such as Proto-Maiolica and RMR Ware), or even non-existing (such as Metallic Ware and Roulette Ware). The absence of these wares is especially in sharp contrast with the situation in Corinth, Thebes and other parts of Mainland Greece (cf. François 1997).

In addition, one can distinguish less fragments of Unglazed Domestic Wares and amphorae on all the Boeotian sites. The normal and widespread practice of using ceramic vessels for cooking, recognizable in the Middle Byzantine period by sooting around the base and lower walls, was perhaps gradually superseded by a preference for metal pots. This new cooking trend began in some areas in Europe already before the mid 14th century.

The ceramic evidence on the Boeotian sites is not very abundant as far as the later Middle Ages are concerned (in contrast to Hugo Blake’s sites in Northern Italy during the same period of time). The decline of pottery finds in the Late Byzantine/Frankish period is perhaps the result of factors such as an impoverishment of the Greek countryside caused by depopulation, wars and the Black Death during the 14th century.

Turkish period – During the late 15th and 16th centuries things evidently changed in Boeotia. This is witnessed by finds of steadily growing numbers of imported up-market wares from Italy and Turkey. Imported Monochrome and Polychrome Sgraffito Wares (Wares 24 and 25) and Maiolica (Ware 27) from Italy, as well as Iznik Ware (Ware 32) from Turkey were found on the rural sites and on the tower sites in Boeotia. Locally produced Maiolica-imitations (from Athens?) (Ware 28) were also found on these sites. Furthermore, technological innovations (such as tin-glazed wares) and new pottery shapes (increase of trefoil mouth jugs) made their début in Boeotia. At the same time, we see the total disappearance of amphorae (probably replaced by wooden or leather containers) and unglazed cooking pots on all sites.

During the Early Turkish period, the small amounts of pottery found in the Boeotian urban sites contrasts quite sharply with the notable increase of finds in major rural and tower sites (such as VM4 and Charmena). Especially the increase in the amount of finds on the tower sites in Boeotia is striking, and perhaps suggests that the areas around the so-called ‘Frankish’ towers in this region could have been (re)used (or inhabited) well into Turkish times.

The numbers and also the increase of imported pottery (e.g. Wares 24-25, 27) seem to show that the economic conditions for the Boeotian population as a whole became more favourable during the late 15th and 16th centuries (which seems to be corroborated by the Ottoman census registers, see chapter 8). Apparently, the spending power of the population grew (in Blake’s terms: consumer demand increased), but the spending power of these potential purchasers of pottery did not increase to the extent that they were able to buy superior products substitutes such as Chinese Porcelain and Spanish or Italian lustrewares (which are known to have circulated in other parts of the Ottoman Empire).

The substantial increase in imports during the 15th-16th centuries must have made life less easy for the local potters. Competition with the low-prized and better-quality wares from abroad must have become fiercer. The local potters, however, did not innovate their pottery repertoire and they fell back on older decoration techniques (such as incising and slip-painting on red-bodied wares), which were often done in a crude manner.

From the 17th century onward, the demand for locally produced wares perhaps decreased even more, as non-ceramic (and more durable and recyclable) materials, such as metal vessels, began to be used more often. However, the shifting balance between pottery and metal wares in 17th and 18th Greece is a complex one, and may be quite different for cooking pots and serving vessels.

Early Modern period – During the 17th to early 19th centuries, we can hardly find tin-glazed wares, nor up-
market status wares like Porcelain or Kütahya Ware on the Boeotian sites. The period is generally characterized by conservatism and preservation of pottery production methods with the producers sticking to slip-coated wares of a low quality (such as Slip-painted Ware and the so-called ‘peasant porcelain’ from Çanakkale in Turkey). Does this imply that the living standards of the Boeotian villagers during this period were lower than before (in Blake’s terms: did demand decrease)? Or was there rather a regional difference in the access to wealth in Central Greece, because the Boeotian population was more selective in up-market products or used other types of materials (such as metal, leather and wood) in their household?

The ‘boom’ of an integrated capitalist, export-orientated economy, which occurred throughout the entire Mediterranean area in the final decades of the 19th century, on the other hand, can also be seen to have had an impact on Boeotia. The results of the Boeotia survey show that mass-produced cheap pottery from this period is notably abundant on the rural sites in this region. One can especially note a peak of glazed kitchen wares (later replaced by metal and plastic in the 20th century).

Only in industrial times with its advanced system of production, distribution and exchange, glazed tablewares and glazed kitchen wares seem to reach the majority of peasant households in Boeotia. Even small inland settlements in the region used glazed and domestic imports from the Mediterranean (Italy, Thrace, Crete, Siphnos, Turkey), as well as industrial manufactured wares from North-Western Europe (France and Great Britain). The cost of these modern products must have come down substantially.

For the local potters competition with these imported mass-produced wares from Western Europe, which were both cheap and usually of better quality, must have been difficult. The typical Early Modern products in the Greek folk tradition which were found in Boeotia, like the carelessly slip-painted bowls from Didymoteicho (Ware 41) and the simpler cooking wares from Crete and Siphnos (Wares 42 and 43), were not very sophisticated. Apparently, this pottery was not intended for display but rather for practical use: in food preparation, storage and consumption. These locally produced domestic wares were undoubtedly the survivors, the left overs of the pottery industry in the Early Modern period; they do not represent the former production any more. Their previous role was filled in during the 20th century by imports from the West, by plastics and by metal vessels.

According to Blake’s model, the abundance of new wares in Early Modern times must be explained by an increase in demand. There probably was a general increase in consumer purchasing power in Early Modern Boeotia. But on the other hand, the question arises here whether the increased imports of pottery may not be easier explained at least in part by the emergence of cheap new products and cheap new distribution methods (steam ships for instance).

### 10.3.2 ORTON’S THEORY AND THE CERAMICS FOUND IN BOEOTIA

It is one thing to acknowledge the importance of Braudel’s general ideas on long-term economic trends, it is another to use Orton’s theory in the specific case of the Boeotia-area. The geographical-historical perspective I have chosen here to test Orton’s model is the entire Mediterranean region in Medieval and Post-Medieval times. Instead of starting from Braudel’s model of the economic core zones in a North and South pole (which apply for ‘Western Europe’), I have divided the Mediterranean into an East and West pole with the dividing line between Italy and Greece (as shown in table 10.7) because of obvious historical and geographical reasons.

If one tries to identify the long-term economic trends in relation to the ceramics found in Boeotia (shown in tables 18.8a-b), the evidence seems to suggest an upswing in technological innovation during the 9th and 10th centuries, when a more prolific and varied ceramic production begin to appear in the Aegean area. This is

<table>
<thead>
<tr>
<th>Century</th>
<th>EAST</th>
<th>WEST</th>
</tr>
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<tbody>
<tr>
<td>7th-9th</td>
<td>Near East, (Constantinople)</td>
<td>Islamic Spain</td>
</tr>
<tr>
<td>10th-12th</td>
<td>Near East, Cairo, (Aegean)</td>
<td>Venice, Genoa, Pisa</td>
</tr>
<tr>
<td>13th-15th</td>
<td>Istanbul</td>
<td>W-Europe</td>
</tr>
<tr>
<td>15th-17th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18th-19th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20th</td>
<td></td>
<td>W-Europe</td>
</tr>
</tbody>
</table>

Table 10.7 Modified model of economic ‘core’ zones and leading cities in the East-West poles in the Mediterranean.
marked, for instance, in the ceramics from Boeotia by
the introduction of lead glazing and slip-coated tech-
niques (as seen above in Wares 9, 10 and 11) which came
from the Mediterranean core zone in the East (especially
from the Near East, with Constantinople acting as inter-
mediary). As Greece was an integral part of the Eastern
Mediterranean economic system, it is probable that the
new ‘revolutionary’ ceramic trends coming from the East
had also their effect in the Boeotia-area, which can be
seen in the pottery techniques.

This upswing is followed by a downswing in techno-
logical innovation of the ceramics found in Boeotia
around the mid 13th century with a stagnation of these
techniques and even a reversion to less carefully manu-
factured glazed wares and less sophisticated decorated
wares (Wares 16, 17 and 18). During that period, the
Mediterranean core zone seems to have shifted from the
East to the West (e.g. Northern Italy), marked by the
spread of Western tin-glazed wares (such as Proto-
Maiolica and later Maiolica) into the Eastern Mediterr-
anean economic system.

During the Early Turkish period, the core zone
changed again from the West back in the East (e.g.
Istanbul), which is shown by a upswing in pottery tech-
nology with the introduction of a high-quality frit ware
(Iznik Ware) and new pottery shapes (e.g. coffee cups) in
the Eastern Mediterranean economic system.

However, from the 18th century onwards the Eastern
Mediterranean (including Boeotia) became definitively
the periphery of the West-European core-zones (and a
consumer market for Western mass produced pottery
such as glazed tablewares and European manufactured
Porcelain). As a result of this, locally produced wares in
Greece became less sophisticated and were made in
traditional decoration techniques.

### Table 10.8a-b Model of technological innovation in European and Near Eastern ceramics, modified for the ceramics found in Boeotia (after Braudel 1984 and Orton 1985).

<table>
<thead>
<tr>
<th>EUROPE</th>
<th>ECONOMY &amp; TECHNOLOGY</th>
<th>BOEOTIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-1200</td>
<td>▲ upswing ▲</td>
<td>4th century</td>
</tr>
<tr>
<td>1200/1250</td>
<td>▼ downswing ▼</td>
<td>mid 6th century</td>
</tr>
<tr>
<td>1350</td>
<td>▲ upswing ▲</td>
<td>begin 14th century</td>
</tr>
<tr>
<td>1510</td>
<td>▼ downswing ▼</td>
<td>late 15th/begin 16th c.</td>
</tr>
<tr>
<td>1650</td>
<td>▲ upswing ▲</td>
<td>17th century</td>
</tr>
<tr>
<td>1730/40</td>
<td>▼ downswing ▼</td>
<td>18th century</td>
</tr>
<tr>
<td>1817</td>
<td>▲ upswing ▲</td>
<td>ca. AD 1814-1821</td>
</tr>
<tr>
<td>1896</td>
<td>▲ upswing ▲</td>
<td>late 19th century</td>
</tr>
</tbody>
</table>

Upswing = innovation and diffusion of many different technologies
Downswing = core areas have highest technology + other areas have
re-introduction of lower level (less complex) technologies

The result of the testing of both Blake’s and Orton’s
models through the changes in quantity and quality of pottery from the Boeotian sites, may be summarized in the form of two tables (Tables 10.9 & 10.10). They reflect the variations in general economic prosperity and socio-economic structure of this Greek region in Medieval and Post-Medieval times in relation to the ceramics.

All in all, putting Blake’s theory to the test, using the Medieval and Post-Medieval pottery from the Boeotian sites, seems to indicate that the changes in consumer access to tin-glazed wares in Central Greece are quite similar but later in time to those he presented on the basis of the Ligurian assemblages from Northern Italy.

Whether Blake’s explanation of these changes is wholly satisfactory, is another matter. His emphasis on demand as the decisive factor in triggering changes in pottery production seems in itself a valuable contribution to the debate how to understand local variation in ceramics in an historical perspective. The problem, however, seems to be that it is not always clear what triggers the changes in consumer demand itself (the causes may vary from the discovery of new cooking techniques and the import of new dining habits to falling prices and to product innovation). In addition, Blake’s model seems to be based on a very rigid assumption about the place and function of pottery in domestic material culture, which apparently remains unchanged throughout the ages. This assumption, however, does not take into account conditions in which vessels of non-ceramic materials (wood, metal) invade the domain of pottery and may diminish its visibility without a clear relation to changes in consumer demand or major shifts in the economy (cf. Vroom 1998b).

This last problem may be raised also in relation to Orton’s model; although it would seem that his approach of combining economic trends with technological innovation does make some points which can be useful for future investigations in typo-chronological developments in pottery. It seems, for instance, certain that changes in pottery styles in Medieval and Post-Medieval Greece cannot be understood fully without taking into account that the Aegean area was something of a periphery for both the Islamic/Arab and the Italian/Frankish economic systems.

On the other hand is Orton’s approach perhaps a bit too strict in the way that it looks only at economic development, and not at other factors for explaining ceramic change or continuity. The model does not take into account, for instance, of socio-demographic developments and cultural processes, such as the autonomous changes of consumer’s preferences, dining habits or fashions in past communities. Changes in the pots themselves may also be due to the increased demand or sophistication of the market. It may also be due to improvements in living standards, to the availability of alternatives in different materials and to conscious copying, not only of vessels in stone, metal, glass, wood or leather, but also of the products of other kilns. In short, large scale economic cycles alone may not hold all the answers to explain changes in pottery types and technologies on a more local scale.

Apparantly, Orton realised this himself, because he explicitly noted that one should not overlook as an archaeologist ‘the personal attributes of will’, such as ‘emotional commitment and sheer pig-headness on the part of the innovator, and greed, vanity and boredom with existing forms on part of the consumer’ (Orton 1985, 22).

If anything, both theories are not mutually exclusive and even complementary, as both focus on inter-related

<table>
<thead>
<tr>
<th>PERIOD:</th>
<th>QUANTITY:</th>
<th>QUALITY:</th>
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</thead>
<tbody>
<tr>
<td>Late Roman-Early Byzantine period</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Middle Byzantine period</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Late Byzantine/Frankish period</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Early Turkish period</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Late Turkish period</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Early Modern period</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 10.9 Blake’s theory and the ceramics found in Boeotia.

<table>
<thead>
<tr>
<th>PERIOD:</th>
<th>Economic core area:</th>
<th>Economic core area:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EAST</td>
<td>WEST</td>
</tr>
<tr>
<td>Late R.-Early Byzantine period</td>
<td>Near East, (Constantinople)</td>
<td>Near East, Cairo</td>
</tr>
<tr>
<td>Middle Byzantine period</td>
<td>Islamic Spain</td>
<td></td>
</tr>
<tr>
<td>Late Byzantine/Frankish period</td>
<td>Venice, Genoa, Pisa</td>
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<tr>
<td>Early Turkish period</td>
<td>Istanbul</td>
<td></td>
</tr>
<tr>
<td>Late Turkish period</td>
<td>W. Europe</td>
<td></td>
</tr>
<tr>
<td>Early Modern period</td>
<td>W. Europe</td>
<td></td>
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</tbody>
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Table 10.10 Orton’s theory and the ceramics found in Boeotia, based on the Braudelian cycles in the Mediterranean.
aspects (consumer demand and economic cycles). In trying to understand the changing tides of ceramics in Boeotia from the Early Byzantine period to Early Modern times, a mixture of elements brought forward by Blake and Orton may prove the most fruitful, if used in an approach which also takes the cultural complexities of pottery changes into account. In any case, even after this preliminary exploration the survey data suggest that changes in demand do not necessarily have to run exactly parallel with larger ‘economic developments’.

10.4 Boeotia in a wider economic and geographical perspective

In order to understand the full implications of Blake’s and Orton’s theories for pottery changes in the research area, it is perhaps fruitful to take another look at Boeotia in Post-Medieval times, this time in an economic wider perspective (the rise and fall of the Ottoman Empire as well as the rise of the Western capitalist system). In the previous chapter we have discussed the production and distribution of Medieval and Post-Medieval wares both on a local (Boeotian) level, as well as on a regional (Aegean) level. We have seen that the majority of the local potters in Boeotia must have been locked into the system of rural ‘isolated workshops’, where the manufacturing costs were low and the raw materials readily available. Attention should, however, also be given to other types of wares, which were produced and traded on an interregional or long-distance level (the Mediterranean area and beyond). This perspective may clarify whether and to what extent the pottery finds in Boeotia reveal the degree to which the area was part of a wider economic and trade system.

According to the archaeologist G.C. Dunning, there are three basic requirements of pottery to be used as an index of long-distance trade (Dunning 1968, 35). First, the pottery must be distinctive in style of decoration and in ware. Secondly, it must be readily distinguishable from the pottery of the country to which it is sent. And thirdly, the provenance of the pottery must be known (or definable within limits).

The imported tin-glazed wares found on the Boeotian sites, such as Maiolica from the West and Iznik and Kütahya from the East, meet all these requirements. Besides, all these wares were manufactured after 1450 AD, were imported to Boeotia from Italy and Turkey, and were made on a high-quality technological scale.

Relevant to this perspective is also the suggestion of the Ottomanist Suraiya Faroqhi: ‘Industries whose products were distributed over a wide area are more revealing about the state of the economy as a whole than those catering for a purely local market’ (Faroqhi 1995, 73). What she suggests, is that imported wares seemed to respond more quickly to increasing wealth and expanding markets, and were part of a wider, more ‘capitalistic’ distribution economy. This is certainly true for the early Post-Medieval period.

It is certain that after 1500 AD pottery-making evolved from a humble craft producing local ware for everyday use into a highly skilled ‘industrial’ activity employing power-driven machinery. The arrival of the tin-glazed wares in Boeotia indicates, in short, that the region was on the one hand becoming more and more integrated in a larger geo-political body (the Ottoman Empire) and that it subsequently became part of larger economic developments, or as the sociologist Wallerstein would say: the particular system of ‘world-economy’.

10.4.1 Wallerstein’s ‘world-system’ and Boeotia: a test case

The term ‘world-system’ was coined in the mid-1970s by Immanuel Wallerstein in his much-debated book The Modern World-System. Capitalist Agriculture and the origins of the European World-Economy in the Sixteenth Century (Wallerstein 1974; later followed by additional publications in 1980 and 1989). In this book he suggested that Western Europe transformed after about 1450 AD into a ‘capitalist, modern world-system’, overshadowing, absorbing and conquering in the process other parts of the world, such as the Eastern Mediterranean and the Ottoman Empire.

According to Wallerstein, such a ‘world-system’ represents a social system with durable structures and communities, which are typified by an all-embracing network of mutual interactions. In his The Modern World-System he devotes much attention to the rise and fall of the Ottoman Empire in relation to the world-system. It is this part of his work which could be of interest for the understanding of developments in Boeotia (and the Aegean area).

Wallerstein distinguished two forms of world-system: a ‘world-empire’ and a ‘world-economy’. With the term
‘world-empire’ he means a single social economy (or ‘division of labour’) with one overarching political structure. A ‘world-economy’, on the other hand, is a single social economy spreading throughout the world and containing multiple state-structures.

In Wallerstein’s view the world-systems in Ancient and Medieval times seem dominated until ca. 1500 AD in Wallerstein’s view by the ‘world-empire’ variety. It was only after the rise of capitalist Western Europe in the 16th century that one form of new ‘world-economy’ developed. From then on, this capitalist world-economy would expand rapidly by virtue of its own internal dynamic. As it expanded, it incorporated the world-empires and mini-systems it found at its edges (such as the Ottoman Empire, including Boeotia), until by the 20th century it had integrated the entire globe.

Thus according to Wallerstein, the Ottoman Empire found itself in Early Post-Medieval times economically outside the capitalist world-economy (Wallerstein 1979; Wallerstein et al 1987). In the 16th century the Ottoman Empire was in his view a classic case of a world-empire, and its long-distance trade was mainly trade in luxuries (or non-essentials) such as silk cloths and spices. However, thereafter the Ottoman Empire came into contact with the capitalist world-economy of Western Europe, and it was inevitably incorporated into the European world-economy. As a result, all economic production within the Ottoman Empire became more and more ‘peripheralized’, or dependent from and subjected to the economy of the central world-system.

Wallerstein’s linkage of Ottoman history with the debate on world-systems theory as an explanatory model has been questioned since its formulation by historians, anthropologists and Ottomanists alike. To start with, the world-system perspective was criticized for its ‘onesidedness’ and the ‘economism’ of its approach (see e.g. Ismanoğlu-Inan 1987; Woolf 1990 with further literature). The anthropologist Eric Wolf, in particular, criticized the ‘Eurocentric view’ of Wallerstein’s theory, in which it seems to be taken as a law of nature that an active and progressive centre (the West) subordinates and transforms a passive and backward periphery (the rest of the World) (Wolf 1982). Janet Abu-Lughod suggested that an advanced world-system already existed in the second half of the 13th century, including almost all regions (apart from the ‘New World’) that would be reintegrated in the 16th century. Especially the time between the 13th and 16th centuries marked, according to her, a ‘transition’ period, in which the ‘Fall of the (Far) East’ preceded the ‘Rise of the West’ (Abu-Lughod 1989, 361; 1993). The Ottomanists Huri Ismanoğlu and Çaglar Keyder also argued strongly against the thesis of the ‘peripheralization’ of the Ottoman Empire (Ismanoğlu & Keyder 1977). On the other hand, the historian Suraiya Faroqhi has recently pointed to the fact that Wallerstein’s global perspective did draw the study of Ottoman history into a broader historical discussion, from which it benefited greatly (Faroqhi 1999, 18; see also Baram & Carroll 1999, 14 for this view).

Indeed, it seems indisputable that as a result of the Wallerstein-discussion historical developments in the Ottoman Empire were viewed by scholars in a much wider perspective: transformations were no longer studied in isolation but as part of international patterns. More specifically, after Wallerstein more emphasis was put on the Ottoman Empire as part of the world economy, ‘as it expanded through trade and brought an ever-increasing regional specialization’ (Ismanoğlu-Inan 1987, 8). Most Ottomanist historians, who embraced or drew inspiration from the world-system theory, concentrated their research now on the development of agricultural production, of the cotton-cloth manufacture or of the silk industry in various periods of Ottoman history (see Ismanoğlu-Inan 1987 with literature). This has resulted in major steps forward in the understanding of these aspects of Ottoman socio-economic history.

However, it is beyond the scope of this book to discuss the Wallerstein-debate in detail, or to weigh the merits and flaws of his model in relation to the rise and fall of the Ottoman Empire, let alone to fully explore here the problems and possibilities of it with respect to developments in Boeotia. Yet, it would seem that the Wallersteinian perspective, and the discussion it created, could in a general sense also be useful for archaeologists. It may help, for instance, to focus on the general question of what kinds of ceramics were available in the Eastern Mediterranean at particular points in time, and in particular, to address the question of what market forces may have affected the inhabitants of rural settlements in Medieval and Post-Medieval Boeotia in buying their pots. To use the words of Ian Morris on the matter of world-system theory and Mediterranean archaeology: ‘to concentrate on one particular locality in the ancient
Mediterranean without reference to its broader context is a meaningless exercise; but equally, to focus on some abstract concept of a world-system without examining how its members actually went about constructing it through adapting or resisting large-scale forces explains little’ (Morris 1999, 70).

It seems, in short, fruitful to look with post-Wallersteinian eyes at the organization of production and at the trade patterns of wares which were imported in Boeotia after ca. 1450 AD. As a first effort I will specifically try to discuss here three types of Post-Medieval tin-glazed wares found in Boeotia in a Wallersteinian perspective: Maiolica from Italy, as well as Iznik Ware and Kütahya Ware from Turkey. I will discuss the organisation of production, the production costs, the pottery prices, and long-distance market patterns of these wares which can be associated with an expanding world-system.

10.4.2 Production and Distribution of Maiolica (ca. 15th-16th c.) (figs. 10.4-5)

Firstly, I will look here at the imported tin-glazed wares from Italy, mainly Maiolica, which came to Boeotia from the 15th century onwards. These imports came from the West, or in Wallersteinian terms: from the emerging world-system.

The best primary source on the production and distribution of Maiolica is the already mentioned and beautifully illustrated *Three Books of the Potter’s Art* (the authoritative edition is Lightbown & Caiger-Smith 1980). This is a treatise on the manufacture of this type of tin-glazed ware written by the Italian amateur potter Cipriano Piccolpasso around 1557 AD (see fig. 10.4). It contains a very detailed description of the technique of Maiolica production. An excellent discussion of this text and the role of the Maiolica industry in its socio-economic context is to be found in an article by Richard Goldthwaite, on which much of the following section on the organisation of production of Maiolica is based (Goldthwaite 1989).

**Organisation of production** – During the 15th century the number of Maiolica production centres increased in Northern and Central Italy, both regions offering good access to local clays and fuels to improve the quality of ceramic production. There was a huge variety in the nature, size and organisation of these North Italian workshops. The smallest were home-based single
potters; the largest ateliers employed specialist painters on contract as well as highly skilled kiln operators (Goldthwaite 1989, 4).

The technology of Maiolica production quickly advanced. The kiln technology improved by the introduction of moulds and saggars, which increased the volume and speed of production while reducing costs (fig. 10.4). In addition, new potter’s techniques increased the pace with which changes in form and style followed upon each other. Among these new techniques were the discovery of tin-glaze, the introduction of new colours in the painted decoration (yellow, orange, crimson and cobalt blue), and experiments with lustre-effects and Porcelain (Goldthwaite 1989, 3-4).

The heightened pace of product change went hand in hand with increasing demand. The rise of substantial consumer markets at home and abroad as well as changes in social habits created new demands for luxury pottery. Maiolica was considered fashionable and desirable as a substitute for metal vessels on the table (Goldthwaite 1989, 17-20).

At the same time, a more refined business organisation developed in Renaissance Italy. Capital was invested in the Maiolica industry by entrepreneurial family dynasties and merchants with money. In the 15th century merchants from Florence made contracts with groups of individually producing household potters in nearby Montelupo. Successful potters became, according to Goldthwaite, ‘veritable entrepreneurs’. They entered into long-term contracts, they attracted investment capital and they marketed their products in other parts of Italy and abroad (Goldthwaite 1989, 7-9).

This system of free enterprise was encouraged by the cities’ governments who offered exemption from taxes, monopoly rights and protection. At Faenza, for instance, the promotion of sales abroad took place under the patronage of the communal government. Maiolica workshops were also granted privileges of sole manufacture for a certain period, to encourage the expenditure of capital in a way which was expected to benefit trade and manufacture and to provide employment (Goldthwaite 1989, 10).

Production costs – The highest costs in the Maiolica production were the transportation of fuel and of raw materials. A 15th century potter’s account book recorded payments for transport of dried wood (required for firing the vessels) by the cartload from up to 8 km (5 miles) away (Thornton 1997, 117 and note 14).

Furthermore, not all the Maiolica production centres used local clays. Piccolpasso explains, for example, that Venetian potters used clays from Ravenna, Pesaro and Ferrara, as well as from places as far as Padua and Rimini (Lightbown & Caiger-Smith 1980, 15; cf. also Thornton 1997, 116 and n. 8).

Tin, cobalt blue and other raw materials for glazes and pigments also had to be imported from abroad and were therefore expensive (Goldthwaite 1989, 7). In fact, the main raw materials for the manufacture of Maiolica, such as white clay, tin and cobalt blue, were only found in a few places in the Mediterranean. The tin used by the Italian potters travelled considerable distances (from England, Flanders, Bavaria and Bohemia) in what must have been a profitable and highly organised trade (Lightbown & Caiger Smith 1980, 54; Wilson 1987, 24).

However, it was the cost of labour rather than the cost of raw materials that determined the price. A factor which greatly contributed to the production costs was the addition of a skilled draftsperson to the Maiolica workshop (fig. 10.5). In 15th century Italy, the cost of a painter’s touch added an extra one third to the price of a vessel. A painted Maiolica pot cost, therefore, a third more than a plain one (Lightbown & Caiger-Smith 1980, 111-21; fig. 10.5). The same difference in prizes because of painter’s costs can be seen in 16th century Holland, where monochrome blue painted Delftware was remarkably less expensive than the rest of richly decorated Delftware (Van Aken-Fehmers 1999, 28). (It may be noted that in ancient Athens in the mid fifth century BC an undecorated black-glazed vessel costed 25 to 50 percent less that a contemporary red-figured counterpart; cf. Johnston 1991a, 228; 1991b and Stüssi 2002, table XIII.1).

Pottery prices – Notwithstanding the costs of the long distance trade, Maiolica was generally moderately, even low, priced in the regions to where it was exported (Van Gelder 1973, II, 128, note 6). In fact, the prices were low enough to bring it within reach of some groups of the population of the importing region. It has been estimated, for instance, that in 14th century Holland a Maiolica jug from Spain costed three pennies, whereas a pewter jug costed 136 pennies (Baart 1993, 172).

Furthermore, recent archaeological studies have shown that in 16th century Amsterdam a substantial number of
well-to-do households possessed one or more Maiolica items (from Italy, from Spain or from the Netherlands itself) (Baart 1986a, 78; 1986b, 99).

The really upmarket segments of the pottery market, on the other hand, were formed by Porcelain and lustre products. These wares were relatively more expensive: they were costly in materials, as well as in invested labour, and in addition had a high failure rate. The technically difficult (and consequently more expensive) Porcelain and lustre-decorated earthenware were, therefore, only produced in some areas of Italy for a limited market.

Prices differed a lot among these wares. In 17th-18th century Holland, the cost of red earthenware was only one stiver, of Dutch Maiolica three stivers, but hand painted Porcelain costed at least 40 stivers (Baart 1993, 172). Daily wages of skilled labourers in the Netherlands came during the 16th-17th centuries to around 12 stivers a day (Noordegraaf 1985, tables 5a-n; Baart 1986b, 95). So, a hand painted Porcelain vessel costed in those times approximately three and a half days of work, whereas a Maiolica vessel costed only four hours of work.

*Distribution* – The commercial success of Italian Maiolica extended even to foreign markets. During the 15th and 16th centuries the pottery production town of Montelupo, for instance, seemed to have obtained a near monopoly of the Maiolica trade in the Mediterranean, ranging from Egypt in the East and Spain in the West. Then, the trade went further up the Channel to both sides of the North Sea (Hurst, Neal & van Beuningen 1986, 12).

The distribution of Maiolica from inland Montelupo to North-Western Europe ran via the port of Pisa. From there, Genoese ships transported from 1427 AD onwards the vessels around the Mediterranean to ports of trade as far away as Antwerp and Southampton (Baart 1991, 233; Mallet 1972, 251-253). From there, the Maiolica from Montelupo found its way even to the New World.

At the end of the 16th century, ships from Amsterdam began to collect the Maiolica made in Liguria themselves. During the early decades of the 17th century, Dutch ships were also responsible for the distribution of Maiolica from Faenza which they took aboard in Venice (Mallet 1972, 25; Baart 1986, 86; 1991, 233).
From the 16th century onward, the other main types of imported luxury pottery in Boeotia were Iznik and Kütahya wares. Both came from the heart of the Ottoman Empire, which was during this period in a Wallersteinian perspective doomed to ‘peripheralization’.

Here, I will treat the two main pottery production centres in Western Turkey, Iznik and Kütahya, as a single group. As other scholars have pointed out, the products of Kütahya can not easily be distinguished from those of Iznik until the beginning of the 18th century (Lane 1957, 19; Atasoy & Raby 1989, 74; Carswell 1998, 115). In fact, for most of the Ottoman wares of the 16th-17th centuries it still remains difficult to establish their provenance. Of Iznik and Kütahya, the former was the pre- eminent production centre, but not the only place in the Ottoman Empire where glazed wares were made in the 16th and 17th centuries. We now know that glazed vessels and tiles were also manufactured in Damascus and Diyarbakir, as well as at the Tekfur Sarayı kilns and Golden Horn kilns at Istanbul (Atasoy & Raby 1989, 74; Yeniçehirlioğlu 1996; 2000; Henderson 2001, 200).

Organisation of production – The vessels and tiles from Iznik and Kütahya were entire commissioned by the Ottoman court in Istanbul: for daily use in the kitchens of the Imperial household, as well as for monumental architectural decoration (fig. 10.6). The government tightly controlled the production processes, that is: it allocated the raw materials, the quantity and quality of the goods produced, and it also regulated the pottery prices.

The interference of the Ottoman authorities was, however, not always a stimulus for the pottery production. The government attempted to control the quantity of production, sometimes even at the expense of its quality, rather than to encourage technological refinement or the introduction of new designs and shapes. According to some scholars, the patronage of the court and the designs provided by it were so strictly enforced that to a certain extent the Iznik and Kütahya workshops can be considered to have been a virtual extension of the Palace ateliers (Atasoy & Raby 1994, 230).

In short, the pottery production at Iznik/Kütahya was a highly centralized industry. On the other hand, although the Ottoman state sponsored ceramic production in the 15th and 16th centuries, workshops and kilns were in principle privately owned by master artisans, and many workshops operated in a family tradition. The entire ceramic production was done by the master craftsmen and their apprentices (cf. fig. 10.6). Only some workshops knew a division of labour (Denny 1977, 190).

In Iznik, the workshops and kilns were close to each other in the city centre and fell under central control and provisioning. The 17th century traveller Evliya Çelebi remarked that some 300 potters were active in the town, although Western scholars nowadays tend to think that this figure is too high (Atasoy & Raby 1989, 63; Henderson 2001, 182-83). Recent excavations revealed, however, some 30 pottery kilns in only a small area in Iznik (Altun et al. 1991).

Creditors and the state owned part of the workshop’s capital. Official representatives of the Ottoman state not only supervised production, but also obtained and distributed supplies for potters, which would later be repaid from the proceeds of sales (Atasoy & Raby 1994, 63). A firman (imperial edict) of 1598 AD, for instance, forbade potters who were making tiles for the state from working for others, before they had completed state orders (Atasoy & Raby 1989, 63). Other edicts forbade the potters from selling their wares to private pottery merchants until state orders had been completed.

According to the Ottomanist Michael Rogers, this state interference argues for ‘a high, if periodically variable, degree of dirigisme in the Ottoman economy, both in production and consumption’ (Rogers 1986, 135).

However, state control over the pots was not total. Despite state regulation the ‘open market’ was still a significant factor (fig. 10.7). While commissioned works made up a significant portion of the production, Iznik wares were also sold through private middlemen on the free market (Aslanapa et al. 1989, 21). In 1633 AD the Ottoman traveller Evliya Çelebi described a parade of 300 merchants of pottery before Sultan Murad IV. According to his report, the merchants adorned their shops with ‘fayence of Nicaea (Iznik) and Kutahie’, obviously to promote sales to the public (Carswell 1976, 42; see also fig. 10.7 for the use of Iznik pottery in a shop).

Production costs – The Iznik/Kütahya workshops were located in Western Turkey, in a region with plentiful supply of non-resinous wood for firing. A document
from 1719 AD describes that the judge (naib) of Iznik and the governor of the province of Kocaeli were asked to provide 50,000 kilos of pine wood for the kilns at Tekfur Sarayi in Istanbul (Anhegger 1941, 176-77; Henderson 2001, 187).

Raw materials were the major production expenditure. Quartz, used for making frit ware (a siliceous clay bodied ware), was available in abundant quantities in the beds of nearby creeks and rivers. However, the other primary materials, such as clay, soda and colouring pigments, came from quite a long distance. In addition, tin (for the glaze) had to be imported from abroad and was not cheap.

The production process of Iznik/Kütahya wares in the pottery workshops was undoubtedly the last phase of a complex network of contacts between the miners obtaining the raw materials, the middlemen who supplied the materials to tradesmen who sold them, and finally, the potters (Henderson 2001, 184).

The preserved records from a frit ware workshop at Meybod, give a clear indication of the production costs for a potter. Labour formed only a low percentage of the production costs. Also here the raw materials, such as silica, frit and colouring pigments, were quite expensive and amounted to no less than 72.5 percent of the total costs. Fuel amounted to 21 percent and labour only to 6.5 percent of the production costs (see Atasoy & Raby 1989, 63).

**Pottery prices** – We have some information on the prices of the glazed pottery from Iznik and Kütahya. The earliest document mentioning Iznik ceramics in use at the Topkapi Palace can be dated to 1489-90 AD (Atasoy & Raby 1989, 30). This register lists the types, quantities and prices of items, including Iznik pottery, purchased for the Imperial kitchens. We learn from the document that the cost of 97 Iznik vessels was at that time 1916 akçe (silver coins), or about 40 akçe a piece (almost 1 Venetian ducat). Daily wages of unqualified labourers in Bursa were in 1502 AD 4 to 7 akçe a day, of master-artisans between 8 and 12 akçe a day (as a comparison: 0.960 kg. of mutton costed 1 akçe in Bursa; cf. Yerasimos 2001, 45 for these prices). Consequently, an Iznik vessel costed in those times approximately six to ten days of work for unqualified workers and three and half to five days of work for master-artisans.

In an account from 1617-8 AD, one and a half century later, the prizes of 6331 types of Iznik ceramics differed from 60.70 akçe for a large jar to only 2 akçe for a small cup (Atasoy & Raby 1989, 30). By this time, the Iznik potters apparently preferred more and more to make vessels for sale on the open market rather than ceramics on commission for the court. A royal decree sent to Iznik in 1585 AD had ordered the workshops to stop making tablewares for the open market and turn their energies toward making tiles for the Topkapi Palace in Istanbul.

Throughout its existence, the Ottoman court was trying to control inflation by setting legally enforceable fixed prices on all sorts of products. For Iznik and Kütahya wares, the prices were pegged to an artificially low level. Two of the government registers of fixed prices for the sale of various ceramics have been published so far: one is dated to the 15th September 1600 AD, the other to the 31st December 1640 AD (Atasoy & Raby 1989, 24-5; see also Carswell 1991, 52; Akalin & Bilgi 1997, 13). The pottery recorded in the 1600 AD list is arranged by type. Under the heading of ‘salad and sweetmeat dishes’, the following prices (both and ‘old price’ and a ‘new price’) of pottery from Iznik and Kütahya are given (see Table 10.11).

The list shows a puzzling (and as yet unexplained) reversal: not only are the ‘old prices’ for Kütahya and Iznik wares higher than the ‘new prices’ but the ‘new price’ for Kütahya is below that of Iznik, while the ‘old price’ was higher.

The cost of a dish remained constant at 30 akçe between 1578 and 1617-8 AD, while the price of a deep bowl was 7.75-8 akçe in 1617-8 AD and 7 akçe in the schedule of fixed prices of 1640 AD (Atasoy & Raby 1989, 32). This price stability was, according to Atasoy and Raby, in sharp contrast with the general economic situation in the late 16th and the early 17th century, when the Empire saw a continuous debasement of the coinage in rapid price inflation (Atasoy & Raby 1989, 32).

<table>
<thead>
<tr>
<th>Ware:</th>
<th>'New price':</th>
<th>'Old price':</th>
</tr>
</thead>
<tbody>
<tr>
<td>'When they are Iznik'</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>'When they are Kütahya'</td>
<td>8 or 7</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 10.11 Prices of Iznik Ware and Kütahya Ware in a 1600 AD list.
Apart from these government registers of fixed prices, probate registers also list the prices of Iznik and Kütahya wares together with Chinese Porcelain in inventories of estates. They show that Iznik pottery is always valued lower than Chinese Porcelain, although for one inventory of the possessions of one Hacı Hürem Bey, dated 1623 AD, a piece of Chinese Porcelain is valued at 150 akçe, compared to 60 akçe for an Iznik dish and 500 akçe for a Kütahya dish (Carswell 1991, 53; Akalin & Bilgi 1997, 13).

Furthermore, prices and quantities in the probate inventories of Edirne’s well-to-do residents seem to indicate that, compared to Chinese Porcelain, tin-glazed pottery was cheap and widely available (Atasoy & Raby 1989, 25-7). The potter’s skill and the taste of the decoration made them an acceptable and cheaper substitute for Porcelain, and for metal.

**Distribution** – The Ottoman government imposed strict controls over internal and external trade (Islamoglu & Keyder 1977, 40-41). This control was affected through the granting of concessions to merchants. The sale of these concessions provided the state with revenue. The extent of mercantile activity and therefore mercantile accumulation was thus controlled. Furthermore, through restrictions, sanctions and prohibitions the flow of commodities (such as pottery) inside the Ottoman Empire was regulated.

In spite of this controlled trade inside and outside the Ottoman Empire, Iznik and Kütahya wares were distributed beyond the Mediterranean. Fragments have been found in excavations ranging from Fustat (old Cairo) in Egypt to Southern Russia and Waltham Abbey in Great Britain (Azarnoush-Maillard 1977, 127, fig. 35c; Huggins 1969, 93, pl. 1). Excavations and field surveys in Greece have revealed that Iznik and Kütahya ceramics were also known in this part of the Ottoman Empire.

The 1570s provided the first interest from Europe in ceramics from Iznik/Kütahya in the form of orders (and imitations) (Atasoy & Raby 1989, 264). Italian cities, such as Venice, Genoa and Florence, were intermediaries in the trade with Western Europe. Genoese merchants, for example, docked their ships alongside the wharf at Karamürsel in Iznik, and purchased about 2000 pieces of pottery on each occasion. Sometimes the Genoese merchants even had a permanent representative in Iznik, who throughout the year visited the workshops attempting to procure or order the goods they required (Kirimli 1983, 50-52).

Furthermore, the Dalmatian city of Ragusa was a major trading partner of the Ottomans in the 16th century. Iznik and Kütahya wares were sold to the West by retailers in Istanbul, where the Venetian and Genoese merchants had headquarters in Galata, and found their way through Venice and Ragusa into Germany and the North.

To illustrate the extent of the Ottoman exports, some precious jugs from Iznik are of special interest (Sarre 1939). They were exported in the 16th century and later, and acquired silver-gilt lids in Europe. Such a jug turned up in Halle, Germany, probably through trade with Venice, as must also be the case with similar jugs found in England and Holland (Sarre 1939, 345). We learn from the Journal of Stephan Gerlach, secretary of the Austrian embassy in Istanbul between 1573 and 1578 AD, that his master, David Ungnad, had spent over 100 ducats on pottery vessels and 1000 thalers on ‘Nicaean tiles’ for shipment via Venice, which was quite a lot of money (Lane 1957, 58).

Other written sources identify the trade of Kütahya vessels still existing in the early 18th century. The French merchant Paul Lucas listed, for instance, in 1715 AD the types of Kütahya Ware he sent back from Istanbul ‘une douzaine de tasses à café avec leurs soucoupes, une tasse, deux bouteilles pour mettre de l’eau de rose, deux salières et deux escritoires, le tout de porcelaine de Cutache’, or: a dozen coffee cups with their saucers, a cup, two bottles for rose water, two salts and two escritoires, all made of porcelain from Kütahya (as cited by Lane 1957, 63). Another Frenchman, Claude Charles de Peyssonnel, French Consul in the Crimea in 1753 AD, listed among the products traded there each year, ‘environ deux cents paniers de fayence de Cutahié de tout espèce, comme pots, vases de toutes grandeurs, tasses à sorbet et à café, etc.’, or: approximately two hundred baskets of faience from Kütahya of all sorts, such as pots, vessels of all sizes, cups for sherbet and for coffee etc. (as cited by Carswell 1991, 54).

10.4.4 Wallerstein’s core-periphery theory and the Boeotian imports
One of the basic elements in the ‘world-system’ theory of Wallerstein is the relation between core areas and periphery areas (Wallerstein 1974). A summary of his discussion of the differences between core areas and
periphery areas, may be visualized in a table (Table 10.12).

This schematic outline of Wallerstein’s core-periphery model seems to fit perfectly to the 16th century tin-glazed pottery industries in Italy and Turkey respectively, the first area being the centre, and the second the periphery. The Maiolica production in Italy flourished under various mercantile city states, encouraging decentralisation of the industry in numerous centres (which produced wares with their own particular qualities). These city states defended improvement in technology which increased levels of production output (and consequently higher profits). Furthermore, the Maiolica industry was characterized by free enterprise and capital investment by entrepreneurs. The production of the wares was often in remote rural areas, presenting a further challenge to entrepreneurship. The highest production costs were for the transport of raw materials and fuel, as well as for the higher wages of the specialists who were involved in the manufacturing process.

The Ottoman court in Istanbul, on the other hand, was the seat of a highly centralized, bureaucratic government, which took centralisation of the tin-glazed pottery production at Iznik and Kütahya for granted. The Ottoman government commissioned orders, regulated fixed (low) pottery prices, supervised the quantity of production and distribution (often at the expense of its quality). The state did not encourage the introduction of new shapes or designs, or the promotion of sales. In fact, there was no real open market of demand and supply; the state owned most of the workshop’s capital and supplies. There existed no ‘free’ wage labour, but paid employment (with high supervision). Raw materials were the major expenditure, whereas labour formed the lowest percentage of the production costs.

**The Boeotian imports** – During the 16th century, ceramic influences and imports from the West seem to be much more significant in Boeotia than imports from the East (32 Maiolica sherds and 45 Maiolica-imitated sherds versus 4 sherds from Iznik and Kütahya). Apparently, the emerging city states in Italy had a bigger economic impact in Boeotia than Istanbul, the centre of the Ottoman Empire of which Boeotia was part of in the 16th to 18th centuries. Perhaps this has to do with the dynamics of distribution of pottery, in which Central Greece was since the 12th-13th centuries part of an Italian marketing area. However, the Italian merchants undoubtedly had to make more efforts to distribute their products in Greek lands than in other markets in which they operated, because this region had during the 16th century a different (precapitalist, pre-Modern) society than Italy.

From circa 1500 AD the tin-glazed wares found in Boeotia were manufactured in production centres far removed from the place of their consumption. The ceramic finds thus seem to indicate that the rise and expansion of the ‘Modern’ commercial and early-capitalist economy did not leave Central Greece untouched. On the other hand, it should be taken into account that the flourishing of the Boeotian villages during the 16th century (and thus the rise in rural purchasing power) was also the result of the regeneration of the old-fashioned market system under early Ottoman rule. In effect, the Ottoman economy may have been ‘westernizing’ through imports without changing immediately towards capitalism itself. Still, the notable influx of western ceramics into Boeotia may well mark the first step of the region into the expanding sphere of influence of what Wallerstein calls the emerging ‘world-system’.

Apart from the theory, it is clear that in Greece the access to luxury wares increased substantially. In

<table>
<thead>
<tr>
<th><strong>CORE</strong></th>
<th><strong>PERIPHERY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>expanding mercantile city states</td>
<td>‘stagnant’ bureaucratic empires</td>
</tr>
<tr>
<td>decentralised</td>
<td>centralised</td>
</tr>
<tr>
<td>wealth finance</td>
<td>staple finance (supplies of raw materials)</td>
</tr>
<tr>
<td>segmentary society</td>
<td>territorial</td>
</tr>
<tr>
<td>control developed more technological skills and production processes</td>
<td>lack of this</td>
</tr>
<tr>
<td>control forms of labour organisation (such as wage labour)</td>
<td>lack of this</td>
</tr>
<tr>
<td>strong state-ideological apparatus to defend its interests</td>
<td>lack of this</td>
</tr>
<tr>
<td>high-wage (but low-supervision)</td>
<td>low-wage (but high-supervision)</td>
</tr>
<tr>
<td>high profit</td>
<td>low profit</td>
</tr>
<tr>
<td>high-capital intensive goods</td>
<td>low-capital intensive goods</td>
</tr>
<tr>
<td>made by ‘free’ wage-renumerated labour</td>
<td>coerced labour; control over persons</td>
</tr>
</tbody>
</table>

Table 10.12 Wallerstein’s differences in core areas and periphery areas.
Medieval times only the elite could afford the products available by long-distance trade, but in Post-Medieval times an ever increasing number of people had the opportunity to buy objects manufactured in distant places around the world (for instance tin-glazed wares from Italy and Turkey and Porcelain from China). Fragments of Maiolica, of Iznik Ware and of Kütahya Ware have been found in urban centres in Greece (e.g. Athens, Corinth, Thebes and Thessaloniki), as well as on rural sites in Boeotia and Eastern Phokis. The archaeological records seem to show that from the 16th century onwards a consumer revolution occurred in Boeotia as it did in the European world, as goods that were once only available to the wealthy could be purchased increasingly also by common people (McKendrick 1982, 9-13).

10.5 Summary

In this chapter I have tried to shed light on the Medieval and Post-Medieval pottery found in Boeotia by using various models which seek to explain archaeological and historical change. My aim was to contribute to the understanding of the sherds found in Boeotia in a wider perspective, specifically in the perspective of historical developments in the entire Mediterranean area. In the first part of the chapter, I have discussed two current models of long-term regional changes in Medieval and Post-Medieval pottery. The first of those is Hugo Blake’s theory, which explores the mechanisms of demand and consumption by counting survey sherds from different types of settlements in a region. Notwithstanding the very real problems concerning breakage-frequency and reuse of pottery as well as his quite uniform approach to the role of pottery in general, his model seems to contain several useful elements which can contribute to the understanding of the stylistic and technological changes in the ceramics found in Boeotia.

The second model is Clive Orton’s theory, which combines economic trends with technological innovation. This theory has also some useful point to make in its line of approach for future investigation in typo-chronological developments in pottery. The model looks, however, purely at economic incentives and does not take into account socio-demographic developments and cultural processes such as the processes of consumer’s choices or fashions in past communities.

In short, it seems that both theories can be used as complementary models for the material found in Boeotia. Blake’s counting of survey sherds offered a very useful way of ordering the material, while at the same time Orton’s model seemed valid to explain certain trends in pottery found in Boeotia. Both models are, however, still rather rudimentary and provide no more than a first step to explain changes in pottery production and demand.

In the second part of the chapter I have tried to look at the material found in Boeotia from a meta-regional perspective. My aim was to explore whether Wallerstein’s world-system theory could contribute to the discussion of large-scale economic processes on pottery found in Boeotia.

The archaeological record seems to suggest that from the 16th century onwards the small region of Boeotia, part of the Ottoman Empire and flourishing in its own right under the Pax Ottomannica, slowly came under the shadow of the wider expanding world economy from the West. The linkage between Boeotia and the two competing systems in the Post-Medieval period is exemplified by the finds of types of wares which were produced and traded on an interregional level. These included tin-glazed wares, which were imported to Boeotia from Italy (such as Maiolica) and Turkey (such as Iznik and Kütahya wares).

In order to understand the changes in pottery types in Boeotia during this period, I have tried to look with post-Wallersteinian eyes at the organisation of production, the production costs, the pottery prices and long-distance market patterns of the imported wares. The use of Wallerstein’s model seemed to show rather clearly the fundamental differences between the capitalist structure of the Maiolica industry in Italy (a core area in the emerging ‘world-system’) and the feudalist Ottoman system of the Iznik-Kütahya workshops in Turkey (an area becoming more peripheralised during this period).

However, Wallerstein’s model seems to offer less insight into the complicated mechanisms of changing demand and supply of pottery, especially at the regional scale as the one in Boeotia. It is therefore probably inadequate to use as a key a ‘super model’ (as already stated by Bintliff 2000). It may be illuminating to use Wallerstein’s model, in order to get a wider perspective on perhaps small-time developments in a small-time region.
in the periphery of the European theatre, but other case-studies using Wallerstein’s world-system theory have also showed that the reality is often more complex than his model can explain (see in general Kardulias 1999). This also holds true for the study of the tin-glazed pottery industries in Post-Medieval times.

Nevertheless, it is safe to conclude that the perspectives of Blake, Orton and Wallerstein are helpful in underlining: 1) the close relation between technological changes in pottery in the Eastern Mediterranean in general and in Boeotia in particular; 2) the relation between technological changes and the processes of supply and demand on a regional scale; 3) the relation between regional changes and changes on a supra-regional or even global level. The benefit of these three theories is that they draw attention to these problems.

NOTES

1. This new technique was described by Cipriano Piccolpasso around 1557 AD as follows: the vessel was made on a wheel and given a first firing to a temperature of about 1000° Centigrade. The ware was then dipped in a lead glaze with added tin-oxide, which produces a white, opaque surface that is suitable for painted decoration. The main pigments used were blue from cobalt, purple and brown from manganese, green from copper and yellow from antimony. After painting, the ware was dipped in, or sprinkled with, a clear lead glaze. It was then stacked in the kiln, sometimes carefully packed in protective saggars. The second firing (about 950° Centigrade) both fused the glaze and developed the colours of the painted decoration.