

# THE STUDY OF ANCIENT TERRITORIES



## CHERSONESOS & METAPONTO

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## CHERSONESOS

### EXCAVATION IN THE ANCIENT CITY

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In 1997 Mats Roslund published a number of Byzantine objects from Lund and Sigtuna in central Sweden, dating from the 11<sup>th</sup> to 13<sup>th</sup> centuries. The artifacts had traveled across the Black Sea, up the Dniepr River, through northern Russia, perhaps down the river Lovat, and across the Baltic, for some 2000 kilometers. There is little doubt that, like the famous Helgo Buddha, by the time they reached Scandinavia they were to be considered items of substantial prestige. Whatever the nature of the trade mechanisms

that permitted their arrival so far to the north, they reflect a lucrative two-way movement of goods. This exchange was based on a series of strategic entrepôts that included both Novgorod and Kyiv and helped lay the foundations of the latter's development into one of the earliest and major cities of Russia. Before leaving the Byzantine Empire, the goods passed through outposts on the northern Black Sea coast, one of the most famous of which was Chersonesos, located in southwestern Crimea. Why was this so?



Figure 2.1. Location the 2001 excavation site in the National Preserve of Tauric Chersonesos. [J. LANE]

With the collapse of the Roman provinces of Western Europe during the course of the 5<sup>th</sup> century AD the center of gravity shifted from Rome to Constantinople. The eastern Mediterranean and the Black Sea, which under the early empire had seemed almost marginal to the capital, now became of outstanding importance to the survival of Byzantium. New markets and new centers of supply had to be found if Constantinople was to survive the onslaught of migrating peoples attracted from the northern fringes of the ancient world to the shores of the Mediterranean Sea. As the West and North Africa were lost to the empire, increasing resources were thrown into securing Asia Minor, the Aegean islands and the *Pontus Euxinus* or Black Sea. This large inland sea, linked directly to Constantinople and the Aegean through the Bosphorus and the Dardanelles, not only offered splendid wealth and resources from its hinterlands, but also provided links with the Middle and Far East and with the northern steppes and the Baltic.

Under the emperor Justinian, during the mid 6<sup>th</sup> century, key areas of the Black Sea were heavily re-fortified. Abundant archaeological evidence comes from the western coast where, for instance, the port-city of Costanța in present-day Rumania became a prime supply-base for the new defenses along the Danube. Indeed, in Bulgaria, Justinian founded his own city of *Iustiniana Prima* at modern Caricin Grad. Much less is known to western audiences about the northern fringes of the Black Sea, where Byzantine interests were in direct conflict with the steppe peoples such as the Goths. In Crimea, Justinian reorganized the *Klimata* or regions, constructing fortresses and defensive walls in the highlands backing the coast. Magnificent defenses and churches can still be seen in an admirable state of preservation at sites such as Mangup Kale, Chufut Kale and Eskikerman. The design of these defenses was not so much to avoid coastal settlement of the inland tribes, but to protect the Byzantine trading cities or emporia along the coast that also acted as “early warning systems” to inform Byzantium of the changing political situations among the steppe peoples. Pride of place was retained by the Greek foundation of Chersonesos that, in late antiquity and early Byzantine times, witnessed an impressive moment of consolidation and reconstruction. This is best seen in the building of a

number of large basilical churches, at times over 50 meters in length and adorned with imported marble columns and capitals.

The resources poured into Chersonesos by Byzantium helped to consolidate its future as a strategic site and emporium. It was thus able to survive the political and economic troubles of the early Middle Ages, which brought about the decline of many other cities throughout the empire and beyond, and to develop substantially during later medieval times. The chronology and nature of the demise of Chersonesos is still far from resolved. Whether it should be attributed to the Tartars, the Turks, Genovese commercial competition with a failing Byzantium, or a combination of factors, future research should provide an answer.

With this basic historical premise in mind, a team from the University of Lecce gladly joined forces with the Institute of Classical Archaeology of the University of Texas (ICA), the ICA-sponsored teams from Kyiv Mohyla and Taras Shevchenko universities in Kyiv, the National Preserve of Tauric Chersonesos and its collaborators from Kharkiv, Ukraine, as well as additional students from universities in the United States, Sweden and the Czech Republic, to excavate a site within the city walls of ancient Chersonesos. The excavation was directed jointly by Dr. Paul Arthur, Professor of Medieval Archaeology at the University of Lecce, and Dr. Larissa Sedikova, Vice Director for Conservation at Chersonesos, and was supported—scientifically, logistically, and financially—by ICA, whose numerous research projects in Chersonesos, under the direction of Joseph Carter, have been running since 1994.

The site, excavated in June and July 2001, comprises an *insula* of the town, on a high point of the settlement, just within the Roman city walls (figures 2.1 through 2.3). To set the site in context, the first few days were spent cleaning old excavations. These were located to either side of the main public water reservoir or *castellum aquae* and had been conducted by the Russian archaeologists K. Kostsyushko-Valyuzhinich at the turn of the 19<sup>th</sup> century and N. Pyatysheva from 1958 to 1974. This enabled us to examine the imposing walls and a tower, which had been discovered fortuitously in 1855 by Colonel

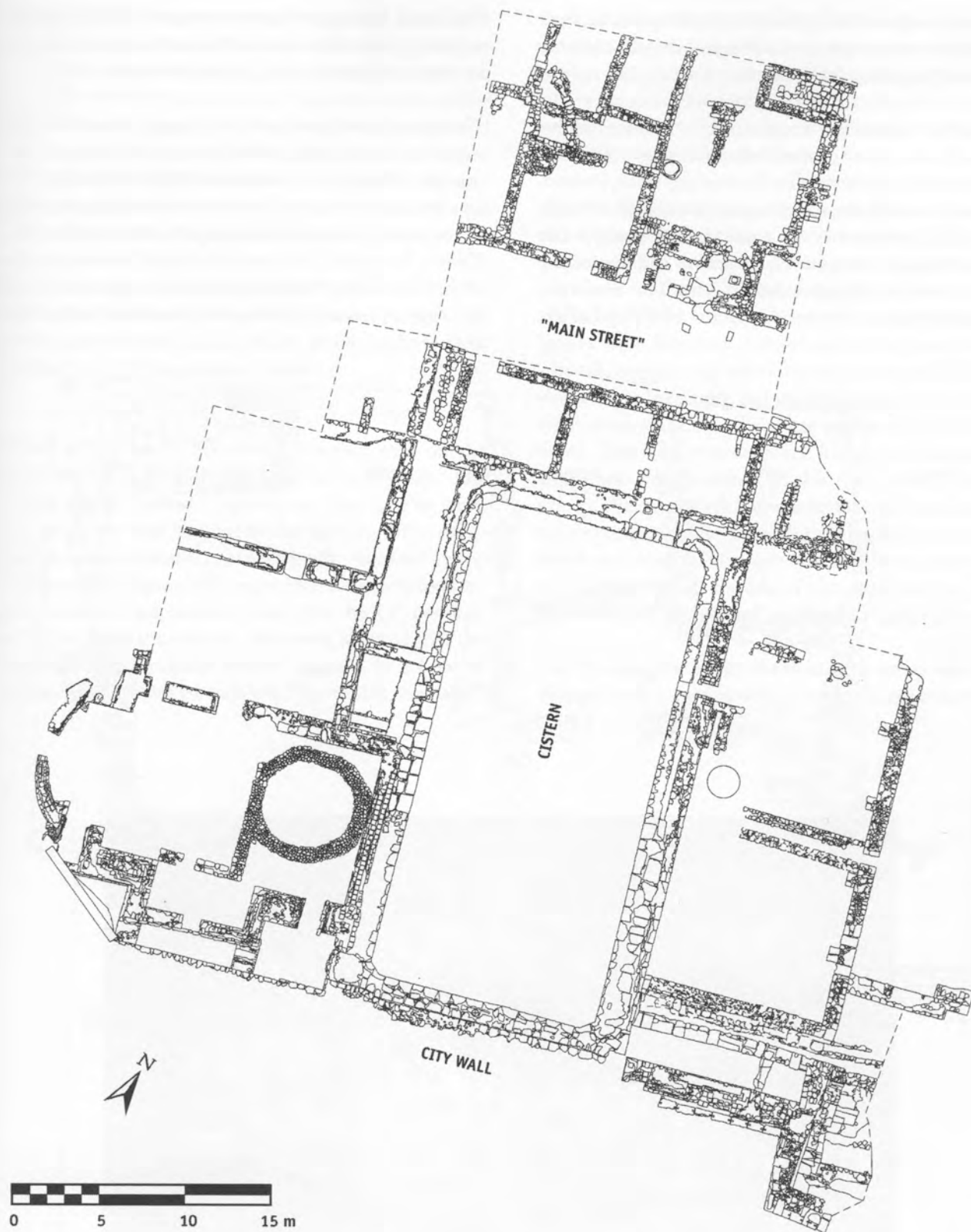


Figure 2.2. Plan of the principal excavation area in the southern sector of Chersonesos. The 2001 campaign centered on the major plateia—"main street"—and the structures to the north of it.

Bertie-Delegard during Russian military works. Furthermore we were able to attempt a certain measure of reinterpretation of the earlier discoveries.

The first construction documented in the area seems to have been a tract of the Hellenistic city walls, built of large ashlar masonry. The Roman city walls, instead, appear to have been constructed around the 3<sup>rd</sup> century AD, presumably as a protection against the Sarmatians, and deviate slightly from the line of the earlier defenses (figures 2.4 & 2.6). The reservoir, which had been excavated during the 1990s by Larissa

Sedikova, appears to have been built slightly earlier over the Hellenistic walls, as its southern side had been incorporated within the Roman defensive wall.

The important group of finds from the cistern fill suggests that it had probably been abandoned during the 9<sup>th</sup> century (Sedikova 1995). Whether this was because the aqueduct was cut during unsettled times, with Khazar difficulties and the growth of the Kievan Rus who had even attacked Constantinople in 860, is still too early to venture. Be that as it may, the abandonment of the reservoir and its successive

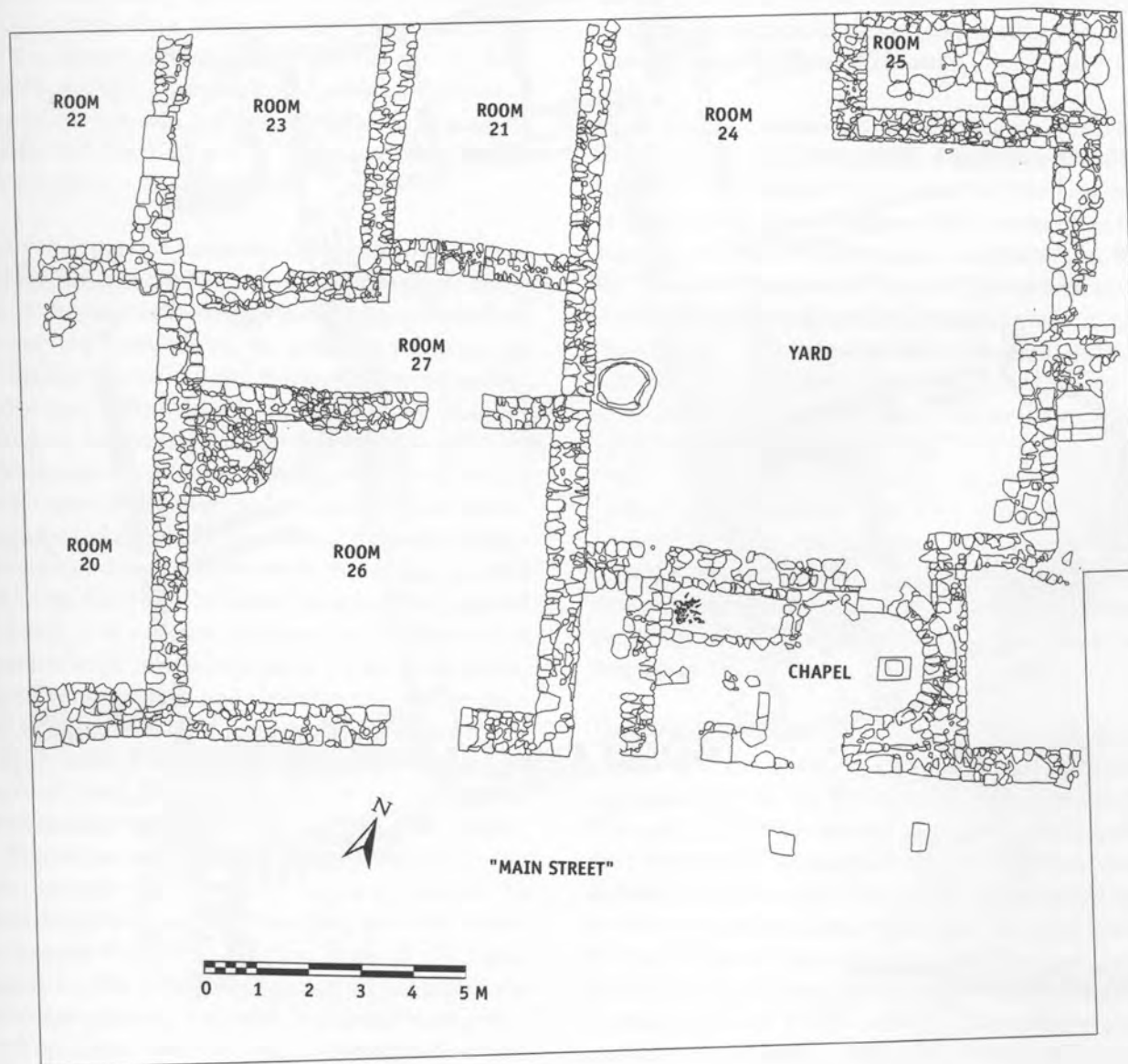


Figure 2.3. Detail plan of the 2001 excavation site.

use as a rubbish dump probably signaled the end of piped water to the city. Preliminary data suggests that wells and cisterns became more common in the town from the 9<sup>th</sup>–10<sup>th</sup> centuries, perhaps to make up for the lost water supply, and two have been recognized in the area. Though we were not able to excavate them to their total depth for reasons of safety, the excavation of the lower levels has enormous potential for recovering rare well-preserved organic remains.

Three contiguous rooms were built against the northern wall of the cistern. They fronted an impressive main street, over 5 meters wide, which was brought to light during the 2001 excavation season.

### The Street

Most of the recent excavation concentrated on the main street and adjoining city block or *insula*. The street, which crossed Chersonesos from east to west, was probably first laid out by the Greeks. After excavation of an extensive rubble deposit—formed by the collapse of adjoining buildings—the latest cobbled surface was revealed, possibly dating to the 13<sup>th</sup> century. A 20<sup>th</sup> century pit, cut into the street, showed that the latest surface lay above earlier surfaces, to a total of about 30 cm down to bedrock. The rubble that over-

lay the street was fairly homogenous, though it contained a fragmentary Byzantine tombstone (Plate I), which was perhaps reused in the buildings. Two small alleys led from the street, one to the church and a yard to the north, and the other to the south, leading to a building west of the reservoir.

A stone block was discovered used as a bench in the road, placed just in front of the main building complex described below, while two stone uprights of uncertain function were found embedded in the street surface in front of the church. A number of human bones were also found scattered in the street by the church, suggesting some sort of over-spill. This is difficult to interpret, but may represent the creation of charnel-pits, once the space within the church was filled. The final street surface, just prior to abandonment, was strewn with animal bones, probably mainly sheep. We do not yet know why, though perhaps animals grazing in the town during its final years were butchered nearby. Through future excavation we hope to be able to chart the life of the street and its abundant reconstruction and patching.

To the north, the street was fronted by a major building complex and a yard in which a church had been built.



Figure 2.4. Aerial view of the site. [J.TRELOGAN]

### The Complex

This is a major complex, probably a house, of which five rooms have been examined, though only two totally un-earthed (figures 2.3 & 2.7). The remainder lies partly outside the excavated area. We cannot yet date the construction phases of this building, though it may have been in existence as early as the 10<sup>th</sup> or 11<sup>th</sup> centuries.

The walls of the largest excavated room (room 26) were found to contain horizontal wooden beams inset on both internal and external faces (figure 2.8), which the paleobotanist Girolamo Fiorentino has identified as deciduous oak with ancient woodworm attack. Room 26 is the only one of the complex that presents this particular construction technique, though it has been identified in other parts of Chersonesos. Furthermore, the walls of the other rooms abut its walls. This demonstrates that room 26 was the first to be built and was, perhaps originally, a free-standing building.

Without excavation of the entire complex it is difficult to understand to what use the various rooms were put. Though there is an entrance to room 26 from the street, perhaps the adjoining room 20 was originally

the main entrance to the building. It also appears to have opened to the street and was longer than room 26. Furthermore, only the rear of room 20 appears to have had a tile roof, while the rest was almost certainly open to the sky, perhaps as a small internal courtyard. Indeed, it was the only room to have yielded decorated stonework, including part of a limestone window frame with interlace ornament picked-out in red, dating to around the turn of the millennium. To the north it opened onto room 22, which, in turn, opened onto room 23. Room 22 had no tile collapse and may also have been open to the sky. Room 23, instead, was clearly roofed and had an opening onto a small corridor, room 27. The latter led back to room 26, as well as to the small room 27, both of which were probably roofed.

Room 26 yielded a large *pithos* upon a stone base in its northwestern corner. Room 21, in particular, contained many smashed amphorae and storage jars or *pithoi*, of a type dated by Yakobson up to the 13<sup>th</sup> century, sealed beneath the collapsed tile roof. This suggests that it was a storeroom. Beneath the smashed pottery was found one of the most spectacular finds of the season, a Byzantine iron *signon* (processional cross), which was carried by the clergy in processions during feasts such as Palm Sunday (see Plate I). The cross will be examined by x-ray, as such objects often bear dedicatory inscriptions. Its presence in the building suggests that it may have been a priest's house. A certain amount of wealth is also indicated by exquisitely decorated pottery, including both the noted Byzantine Zeuxippus ware and a turquoise-glazed bowl with impressed decoration and a pie-crust rim from Syria or Egypt (plate II). Preliminary analysis of the finds suggests that the entire complex was destroyed in the second half of the 13<sup>th</sup> century.

### The Yard

The complex was bordered to its immediate east by a yard. This space was separated from the road by a small church and appears to have been closed to its east by another building, associated with a cellar. The beaten earth surface of the yard presented extensive patches of burnt material, charcoal, and ash. Within the yard was a cistern, constructed of squared stone blocks set in circular rings to form a beehive-shaped cavity. Its fill, which has not yet been completely excavated, has yielded sherds of Glazed White Ware II, a small jug with curious motifs incised prior to firing, and other finds that suggest it was back-filled during the 10<sup>th</sup> century (figure 2.9).



Figure 2.5. Co-Field Directors Dr. Larissa Sedikova and Professor Paul Arthur at the site, June 2001. [K. WARING]



Figure 2.6. City wall and tower (left) with reservoir, background.[PA]



Figure 2.7. Three rooms of the building complex looking towards the street and the reservoir. [PA]



Figure 2.8. Walls of room 26 with *lacunae* from decomposed wooden beams. [PA]



### The Church

Perhaps dating to around the 11<sup>th</sup>–12<sup>th</sup> century, the church was a very small building, with a limestone reliquary box for holy items set within the raised apsidal area and little in the way of decoration, presenting plain whitewashed interior walls (figure 2.9). Two stone-lined tombs were found in the nave, though they appear to have been used as charnel pits, presumably after having served for single inhumation burials. The bones have been left in place for meticulous excavation next season, when we hope to be able to understand the way in which burial took place and try to reconstruct anthropological aspects of the population.

It is likely that the church served the population of the quarter. Chersonesos had such a quantity of small, late Byzantine churches that it would seem that virtually each *insula* or quarter possessed its own. If these churches effectively belonged to each *insula*, we may suspect that they were built from funds provided by all its inhabitants or by one particularly devout and wealthy family. We may take this line of thought a step further and suggest that each church served a localized management of each *insula*. Furthermore, per-

haps the inhabitants were directly concerned with the communal management of their own services, such as water supply, street cleaning, policing, and so forth, possibly under the charge of the priest or of an influential family. A similar system seems to have existed in medieval and modern Naples, which was another provincial Byzantine city with a wealth of small churches. Perhaps the yard bordering the church was also communal.

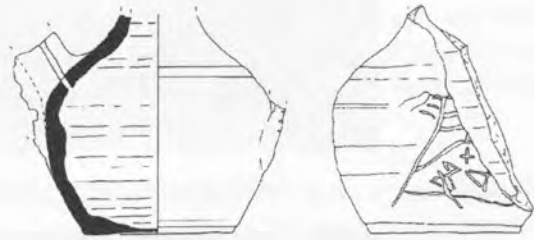


Figure 2.9. 10<sup>th</sup> century pottery from the courtyard cistern and other contexts: small jug with incisions—realized prior to firing—below the handle (PA 112 [153]), height: 8.5 cm.



Figure 2.10. The small church. [PA]

### The Cellar

In another part of the yard was a cellar (room 25) with a paved stone floor (figure 2.11). The upper part of the cellar had probably been demolished, thus providing the rubble and tile fill that sealed a number of smashed but well-preserved objects. These included various pottery vessels (figure 2.12), including a rare Byzantine decorated ceramic cooking stand (plate I). Numerous small fish bones and scales show that fish, among other items, was stored here. The cellar forms part of a building that extends outside of the area excavated. Of this building the western wall seems to be located at the edge of the excavated area, which opened onto the yard and which possessed a staircase that presumably led to a second store.

### Later Occupation

It is too early to decide whether or not the excavated complex, as other parts of the city, was destroyed during a Tatar sacking in the latter half of the 13<sup>th</sup> century. Certainly various contexts dating to the 13<sup>th</sup> century with traces of burning appear to be sealed by



Figure 2.11. The cellar with its paved floor.

rubble, which effectively signals the end of organized occupation of the excavated part of the *insula*. The rubble contained principally 13<sup>th</sup> century ceramics (figures 2.13 & 2.14). Hardly any stone-robbing appears to have taken place, though the church was quite clearly visited and sacked for stone.

Small segments of later stone walls have been found built upon the destruction debris in the yard, while some later pottery has also been found above or within the rubble suggesting the dumping of domestic rubbish from somewhere close by. The pottery (figure 2.14) includes two rather well-preserved vessels, a bowl and a one or two-handled jar, both with similar interior yellow lead glazes, as well as a flagon decorated with finger indentations and gouged lines through a white under-glaze slip. This last vessel may be a 14<sup>th</sup>–15<sup>th</sup> century import from Bulgaria. (We thank Natalia Ginkut for the suggestion. She has identified similar pottery from the excavations at the Genovese castle of Cembalo, Balaclava.) However, the latest coin from the excavation, found within the rubble layer, was a bronze trachy from the Latin Empire of Constantinople (1204–1261).

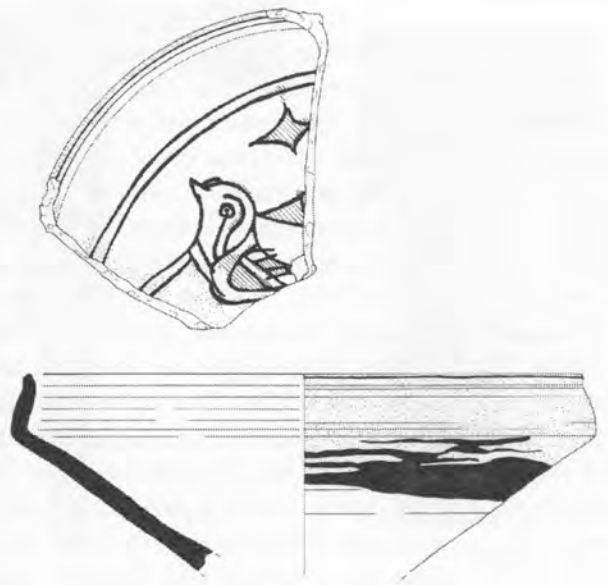


Figure 2.12. Pottery from the cellar: Glazed sgraffito bowl (PA 90 [165]), diameter 24.6 cm. At least three other examples have been found at Chersonesos, where they are assigned to the 13<sup>th</sup> century. (A whole example is on display in the Museum.)

Even these relatively slight traces demonstrate later activity in the southern part of Chersonesos, which must now be added to the evidence presented by Romanchuk for her 1986 excavations in the harbor area overlooking Quarantine Bay.

### Conclusions

Little has yet been identified predating the 13<sup>th</sup> century, and clarification of earlier phases will have to await further excavation. However, it is clear that even in this area urban development was strongly conditioned by the original street plan and by the Roman imperial layout of the area.

Though it would seem that there was a significant phase of activity dating to around the 10<sup>th</sup> century, undoubtedly the majority of finds date to the 12<sup>th</sup> and 13<sup>th</sup> centuries. Whether the church and building complex are of this date, or slightly earlier, will have to be seen. Nonetheless, it is remarkable that a large quantity of the finds, including imported ceramics, belongs to the period of the Latin domination of Constantinople. Afterwards, the archaeological evidence thins considerably and the excavated area appears to have served mainly as a dump for waste, though fragments of 14<sup>th</sup> and, perhaps, 15<sup>th</sup> century pottery have been found in the uppermost layers.

Thus, it may be that occupation at Chersonesos continued down to, at least, the arrival of the Ottoman Turks in the area at the end of the 15<sup>th</sup> century, even if the city was not as densely inhabited as it had been in the 12<sup>th</sup> and 13<sup>th</sup> centuries. This suggests that it may have continued to play at least a minor role as intermediary between Byzantium and the northern peoples right down to the capture of the capital by the Turks in 1453. However, Byzantine coin circulation, according to Alekseenko, appears to have dwindled in the period following the end of the Latin Empire of Constantinople in 1261. This was the time in which Genoa increasingly took over international trade in the Aegean and the Black Sea. Genoa's base was in Constantinople itself, in the Galata region, but colonies were also established around the shores of the Black Sea, including the Crimea, at Sudak, Caffa, Cembalo and Kalamita (Inkerman). They clearly represent a new order in which there was no longer a place for Chersonesos.

Of particular significance in the city's decline may have been the development of the port of Kalamita, northeast of Chersonesos, known since the 14<sup>th</sup> century, when it served both Genoese interests as well as those of the in-

land principality of Feodora, with its capital at Mangup Kale. Excavations should help to prove or refute the idea. In this context, it will be interesting to chart the distribution of Valencian lustre ware, which seems to be a constant find on sites in the Mediterranean and the Black Sea that were occupied by the Genovese or that entered within their trading orbit. Furthermore, it would be interesting to see how much the economic decline of Chersonesos may coincide with the gradual agricultural de-intensification in later Byzantine times recently evidenced by the study of sediment cores from nearby Chernaya Balka (see Paul Lehman and Carlos Cordova in this volume).

The success of the fieldwork season has exceeded our greatest expectations, and it would be a great pity not to build upon the foundations that have been laid. On the archaeological side, the excavation of the entire *insula* or block of the ancient city, which should be defined by four streets, is the primary objective. This means examining all archaeological phases, from the late Byzantine buildings uncovered this year, down to the initial Greek occupation of the site. Once completed, conservation, restoration, and possibly reconstruction can take place so as to present the site to visitors and tourists in an easily comprehensible manner, thus laying bare a slice of the history of Chersonesos.

Alongside modern excavation, a great need is finds analysis using up-to-date and experimental criteria. In particular this concerns the numerous animal and human bones that are being unearthed. Potential information is enormous, regarding the economy, nutrition, the environment, and the state of health of the population. If DNA survives, work can also be performed on genetics and illnesses, many of which leave no osteological traces. Other classes of finds, in particular the pottery, could do with compositional analyses, so as to shed light on provenances and technologies.

However, the importance and novelty of the excavation lies not only in the archaeological results, but in the training and methodology employed and in the creation of a system based on information technology for the recording of excavation data in real-time (see below). In regard to training, the state of the art techniques and methodology employed during the project have not only led to a thorough and efficient recording of the archaeology of part of the ancient city, but have also provided an ideal framework in which to train students of archaeology. A program

PLATE I



Detail of cross showing silver insert. [NPTC]

Top left: Tile with the stamped decoration of a horseman, possibly St. George. Height 16.2 cm. [CW]

Top right: Byzantine tombstone found in the street rubble. Height 21.6 cm. [CW]

Bottom: The iron *signon* or processional cross from room 21, before and after conservation. Height 47.5 cm. [CW; NPTC]

PLATE II

Right, pottery fragments. [cw]

Below, Byzantine ceramic cooking stand, height, 35.5 cm. [cw]



Work at the site, July 2001. [cw]

Figure 2.13. Glazed wares from the abandonment layers:  
Zeuxippus ware dish with a falcon (PA 78[190]),  
diameter 14.8 cm (see plate II).

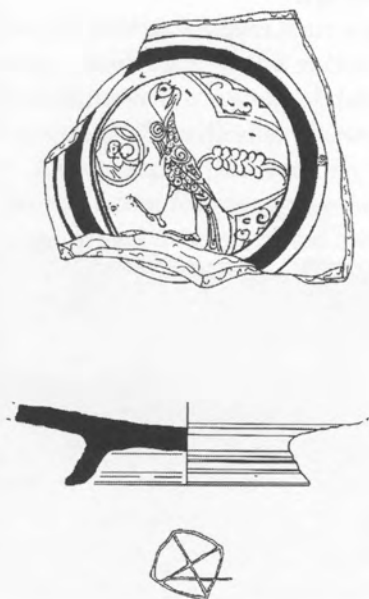


Figure 2.14. Pottery from above the collapsed rubble. From top,  
brownish-yellow glazed bowl (PA 1 [50]), diameter  
12 cm; vessel with an interior brownish-yellow  
glaze (PA 1 [53]), diameter 19.2 cm; brownish-  
yellow glazed jug (PA 2 [38]), overall diameter  
18.8 cm.

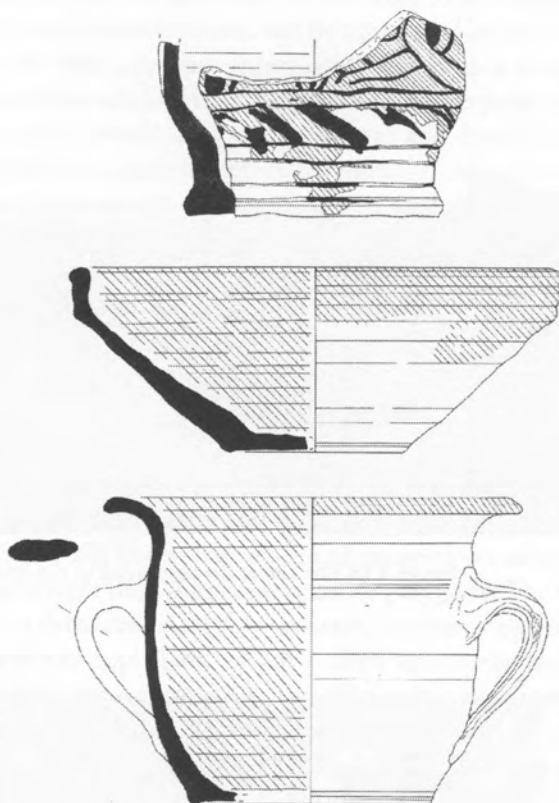
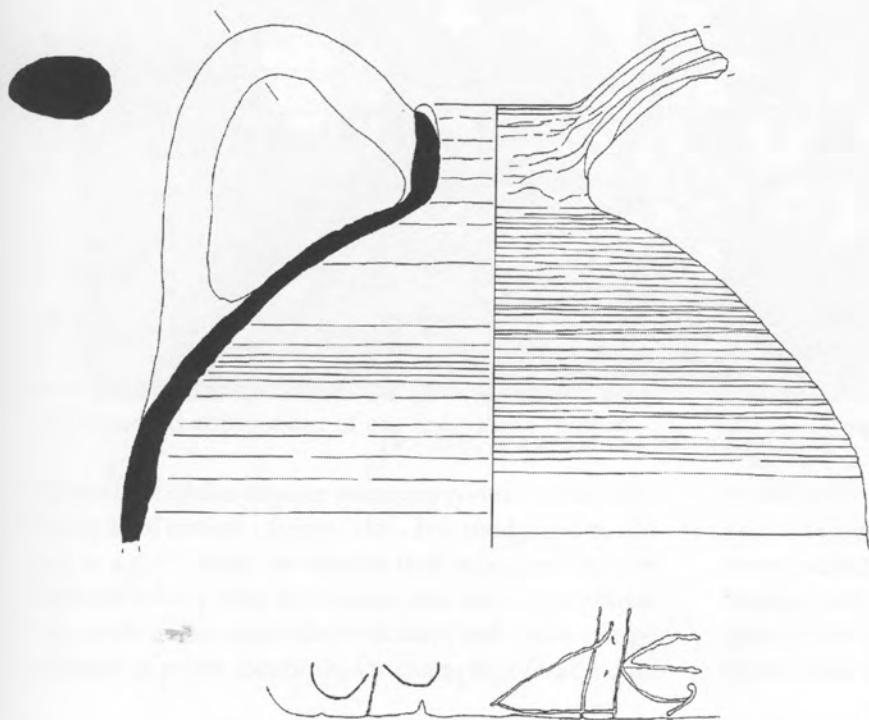


Figure 2.15. Amphora from the abandonment layers with letters scratched  
below handle. Perhaps from the northern coast of Turkey (PA  
18[144] SF43), diameter 33.8 cm.



of workshops by both local and visiting archaeologists was established this season to provide on-site training in excavation methodology and recording. These included demonstrations in the use of the to-

tal station and site GIS and context sheets, as well as seminars on the history of archaeology, on the Harris matrix, on ceramics, and on the significance of soils in archaeology.

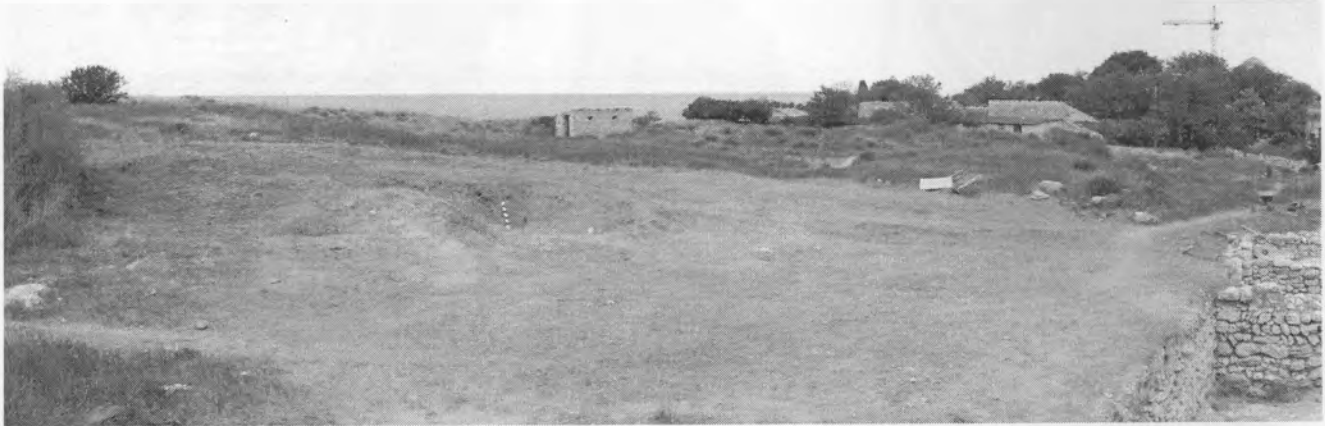


Figure 2.16 The site at the beginning of the season with surface vegetation removed. June, 2001 [A. SOBOTKOVA]



Figure 2.17. The excavation team on site, late July, 2001. [cw]