

CHAPTER THREE

CERAMIC PRODUCTION AND ITS CHRONOLOGICAL AND TYPOLOGICAL CHARACTERISTICS

The greater part of the production of the ceramic centres near Hotnica, Pavlikeni and Butovo is made of fine, well purified clay, while the other part — mainly the coarser kitchen earthenware — is made of clay with sand additives. On the basis of these features, the ceramic production is conventionally divided into two groups: fine thin-walled earthenware and greyish-black earthenware used in everyday life.

I. Fine Thin-Walled Earthenware

Fine earthenware represents the basic part of the production in Pavlikeni and Butovo and a insignificant part of the production in Hotnica. The earthenware was usually either wheel-made or modelled in special moulds and then coated with glaze. Fine earthenware was produced here as an imitation of the red-glaze ceramics which has been widespread during the Roman epoch.

This type of earthenware appeared as early as the mid-2nd century B. C. in Asia Minor and in the Eastern Mediterranean islands. Continuing the Hellenistic tradition, it found its most clear manifestation towards the end of the 1st century B. C. in the production of the ceramic workshops in Arretium, the so-called Arretine-type vessels. These were the standard dinner sets made of fine clay covered with a brilliant reddish-brown glaze, the bottoms of which were very often stamped with the name of the potter or the owner of the potter's workshop. The earthenware richly decorated with relief ornaments and made in moulds, known as *terra sigillata*, are also related to this group.¹

The production of ceramics in Arretium had almost died out towards the end of the rule of Emperor Tiberius — (14—37 A. D.), but new varieties of the ordinary fine earthenware continued to appear. Meanwhile, under the influence of Arretium, production of *terra sigillata* started in many ceramic workshops of the West Roman provinces.² The ceramic centres in Southern Gallia were the earliest 'successors' of the traditions of the Arretine industry.³ Production of this earthenware started in Central and Eastern Gallia⁴, Germania⁵, Britannia⁶, Pannonia⁷ and other Roman provinces.⁸ Moulds for making *terra sigillata* have also been discovered in Bulgaria, which presupposes some local production.⁹

The production of fine earthenware continued in other eastern provinces as well. The closest imitations of the earthenware from Arretium were produced in the workshops of Asia Minor, but none of them bore close resemblance to the Italic relief earthenware.¹⁰ The potters from Asia Minor had adopted only the basic forms of the ordinary fine ware, considerably changing them. They contrasted the earthenware with sophisticated ornamental elements to the simple vessels with a clear shape, and replaced the tall ring-footed sharp-edged base with a wide short foot.¹¹

Instead of the thick glossy glaze, covering the whole surface of the Italic *sigillata* articles, the craftsmen from Asia Minor applied glaze only on the upper part of the earthenware.¹²

The features typical of the earthenware originating from the workshops of Asia Minor are to be seen in the earthenware from the centres explored near

Nicopolis ad Istrum. The shapes here are also rather complicated and not so distinctly enhanced. The bottoms are additionally scrubbed and shaped as a short ring-foot with rounded edges. The glaze is unevenly applied, covering only the visible surface of the vessel and its colour repeats the range of colours found in Asia Minor — light-brown to bark-brown shades on the same vessel, as a result of the abnormal conditions of firing in an ordinary two-chamber pottery kiln.

1. Dishes

The wheel-made, glazed dishes represent a considerable part of the production list of the ceramic centres discovered so far on the territory of Nicopolis ad Istrum. An important and typical feature of most of the dishes is the thinness of their walls, achieved by additional scrubbing with a sharp tool which was on the potter's wheel (Table XLII, 2). In the rich collection of dishes discovered in these centres, one could notice imitation of ceramic forms which had been widespread at that time in the Eastern Greek and Western Roman workshops. The dishes are classified into the following types:

Type 1

In the second half of the 2nd century, the workshops near Hotnica, Pavlikeni and a little later in Butovo started mass production of flat shallow dishes with slightly inclined walls, sharply turning into a vertical rim, enhanced on the outside by double parallel relief lines. The dishes have a tall foot, additionally shaped on the potter's wheel. Their diameter is 16—25 cm and their height — 4—7 cm.

The dishes are to be found in three variants:

Variant **a** (Table XXVI, 1). Two or three circles are drawn on the flat bottom by means of a cogwheel.

Variant **b** (Table XXVI, 2). A footmark is stamped on the bottom encircled with short lines arranged crosswise.

Variant **c** (Table XXVI, 3). Two footmarks (*planta pedis*) are stamped on the bottom, symmetrically located between two circles drawn by means of a cogwheel and a pointed object. This type resembles the shape of the type 21 earthenware in Olbia¹³ and type 7 (M) from Mirmekion, which is dated to the 1st century.¹⁴

T. Knipovitsch refers this earthenware to the third group from Asia Minor, which unifies the ceramic products from different centres in Asia Minor, including the centres in the vicinity of Pergamum.

Actually type 21 from Olbia and type 7 from Mirmekion are considered by Knipovitsch as variants of types 19 (Olbia) and 6 (Mirmekion), respectively. They are completely analogous to the earthenware of type 1, discovered in Çandarlı and dated by S. Loeschke to the period succeeding the rule of Augustus.¹⁵ This type of earthenware represents a remodelling of an earlier type from Asia Minor, made under the influence of Italic models.¹⁶

The names of the manufacturers or the owners of potter's workshops are quite often to be found stamped in Greek on the bottoms of the earlier types from Asia Minor.¹⁷ This tradition continued later as well, then its original function was lost, attaining a purely decorative character. One or two schematic human footprints appeared instead of the names of the owners. At the same time the vessels became deeper, their lower part passing smoothly in a rim which is slightly turned outward. One of these late variants of this type from Asia Minor served as a model to the craftsmen from Hotnica, Pavlikeni and

Butovo. Similar cases are also the earthenware of type 9 (T) and 9A (T), discovered in Tyritake.¹⁸

Fragments of earthenware produced in workshops on the territory of Bulgaria have been found during the archaeological exploration of Novae¹⁹ and Nicopolis ad Istrum.²⁰ Earthenware resembling these in shape have discovered in burials near Sliven (together with coins dating from the time of Emperor Antoninus Pius),²¹ Enija (present-day Mladinovo, near Svilengrad),²² the village of Prosenik, district of Burgas,²³ Svilengrad railway station²⁴ and tumulus No. 1 near Plovdiv.²⁵

Type 2

(Table XXVI, 4)

Shallow dishes are among the most widespread types of earthenware from Hotnica, Pavlikeni and Butovo. Their inclined walls end with a rounded rim, emphasized on the outside with an incised line. The bottom, together with the lower external side, is additionally scrubbed, forming the ring-foot. There is a circle of lines arranged crosswise on the inner surface of the bottom, drawn by means of a cogwheel. The same decoration is also to be found on the rounded edge of some other earthenware. Dishes of this type differ in size. Their diameter varies from 18 to 29 cm. Small dishes were usually produced near Pavlikeni, while the craftsmen in Butovo preferred the large ones. Similar earthenware was found in the barrow graves in the Kalvaka locality, near Butovo, together with coins dating from the time of Antoninus Pius (138—161 A. D.), as well as in Novae, Nicopolis ad Istrum and other ancient settlements in present-day North Bulgaria.²⁶

Similar vessels are discovered in Mirmekion (type 17, drawings 5, 2, 3),²⁷ and in its corresponding type 26 from Çandarlı, dated to the end of the 1st and the beginning of the 2nd century. This is one of the most preferable forms in Çandarlı. S. Loeschke describes the two varieties of this type — an earlier variety (type 26a) and a later one (type 26b).²⁸ There are stamped inscriptions in Greek on the early ceramics and on the later ones there are stamped palmettes, rosettes, concentric circles, etc. After the time of Tiberius, this type underwent a series of alterations. T. Knipovitsch claims firmly that this type belonged to the group from Pergamum.

Type 3

(Table XXVI, 5)

A deep dish was found in the necropolis in the Kalvaka locality, near Butovo. It has a base-ring, a wide bottom and inclined walls, the rim of which is emphasized on the inside by an incised line. The vessel is thick-walled and rough, its bottom being decorated with two circles with incised small lines arranged crosswise. The diameter reaches 16.3 cm and the height 7.4 cm. It was discovered together with coins dating from the mid-2nd century. The production of this type of earthenware has so far been proved only by a few fragments in the ceramic centre near Pavlikeni. Earthenware similar in shape was discovered in the Athenian Agora²⁹ and dated to the 1st century.

This is a very rare type, having remote parallels with the earthenware produced in the West Roman workshops.³⁰

Type 4

Towards the middle of the 2nd century the ceramic centre near Pavlikeni started production of shallow dishes with slightly oblique walls and a wide, arch-shaped edge curving outward and decorated with squirted stylized plant

ornaments. Additional decoration is also to be seen on the bottom and on the inside. According to this, the following four variants are distinguished:

Variant **a** (Table XXVI, 6). A human footmark is stamped on the bottom, encircled by two concentric circles consisting of short lines arranged crosswise, drawn with a cogwheel.

Variant **b** (Table XXVII, 1). In contrast to variant **a**, there are two human footmarks stamped on the bottom and encircled by one concentric circle of small lines arranged crosswise.

Variant **c** (Table XXVII, 2). Four symmetrically arranged 'commas' are additionally squirted on the wide out-turned arch-like rim.

Variant **d** (Table XXVII, 3). The walls are very oblique and three concentric circles consisting of short lines arranged crosswise are drawn on the flat bottom. Four symmetrically arranged 'commas' are squirted on the arch-shaped rim. Dishes of the kind produced in the ceramic centre near Pavlikeni are to be found in the barrow graves in the Kalvaka locality near Butovo, together with coins dating from the time of the Emperors Antoninus Pius and Marcus Aurelius. The diameter of the dishes reached 18 cm and their height 4 cm.

This type of dish is an imitation of the terra sigillata produced in the second half of the 1st and the first half of the 2nd century in the West Roman workshops (Drag. 36).³¹ The only difference is in the base-ring, which is shorter here, massive and with no sharply outlined and pointed edges.

Parallels to this type of earthenware are to be found in Novae,³² Succidava,³³ Singidunum³⁴ and other towns along the middle and lower course of the Danube.³⁵

Similar earthenware is not to be found among the ceramics from Asia Minor.

Type 5

(Table XXVII, 4)

Deeper dishes with flat bottoms were found in the ancient necropolis in the Kalvaka locality near Butovo. They have arched walls, ending in a wide horizontal rim, cut short by a vertical strip on which two small ribbon-like handles are fixed. The lower external side is additionally scrubbed and a small concave foot is shaped. These dishes are made of fine clay, coated with glaze which differs from that in Hotnica, Pavlikeni and Butovo, its colour varying from yellowish-coral to light brown. This colour is typical of the ceramics from Asia Minor. As a result of the additional firing at a higher temperature, the colour of the glaze changed from dark brown, smoky grey to shining black. The diameter of these vessels reaches 18 cm, their height — 3 cm. This type of earthenware is to be found in graves, together with coins dating from the time of Emperor Antoninus Pius.

The production of a similar type of earthenware (significantly larger in size) started in the ceramic centre in Butovo towards the beginning of the 3rd century (Refer to type 6).

Type 6

(Table XXVII, 5, 6, 7; Table XXXVIII, 1)

Mass production of big shallow dishes started towards the end of the 2nd century only in the ceramic centre in Butovo. Their walls rise smoothly and end in a horizontal thickened rim which is sophisticated in shape. The back of the bottom is additionally scrubbed and a short base-ring is formed. Relief rings or

circles made by cogwheel are drawn on the inside of the bottom. Their diameter reaches 33.5 cm and their height — 5.5 cm.

Two symmetrically fixed decorative handles are additionally stuck to the rim with sophisticated shape of most of these vessels. Some of the handles represent folded strips, retouched by hand, while others represent small relief plates, made in single clay moulds. There are also decorative handles, ornamented with relief loops and small centred circles, as well as combinations of floral and figural motifs (cockfight amongst a stylized rosette, flanked by two palm twigs) (Table XXVIII, 2, 3).

The earthenware of this type is a development of type 5. Single fragments are often to be found during the archaeological exploration of Novae,³⁶ and in different sites on the territory of Nicopolis ad Istrum.³⁷

A close parallel is type 4 in Çandarlı, which is related to some of the more recent forms.³⁸

Type 7

(Table XXVIII, 4)

During the second half of the 2nd century production of shallow dishes started in the ceramic centre in Butovo. Their walls rise gradually and end in a slightly out-turned rim. The back side of the bottom is additionally scrubbed and a wide base-ring is formed. The diameter of the vessel reaches 28 cm.

This type is an imitation of the sigillata forms.³⁹ A similar type of earthenware is attributed by J. W. Hayes to the late African ceramics (Form 18).⁴⁰ This is a type which is widespread in Northern Bulgaria⁴¹ and along the Lower Danube.⁴²

Type 8

(Table XXVIII, 5)

Deeper dishes with a thinned rim, slightly curved inwards, were made in the ceramic centres near Hotnica, Pavlikeni and Butovo. The bottom ends in a ring-base which is additionally modelled on a potter's wheel. Their diameter reaches 26 cm. The production of this type started in the second half of the 2nd century. Similar vessels are to be found on the territory of Novae and Nicopolis ad Istrum.⁴³ Earthenware of a similar form is to be seen from Succidava,⁴⁴ although the bottom is not additionally scrubbed. Obviously they originated from some local potter's workshops.

Type 9

(Table XXVIII, 6)

A deep dish-tray with a wide and flatly cut base. The lower part is semiconical and the rim is curved inwards. Its diameter reaches 20 cm, the height 6 cm.

This type of vessel was produced only in Butovo since the second half of the 2nd century. The centres near Hotnica and Pavlikeni produced only imitations in greyish-black. We find close parallels in Germania,⁴⁵ Pannonia,⁴⁶ Moesia Superior⁴⁷ and Dacia.⁴⁸

Fragments of type 9 were also discovered during the archaeological exploration of Novae and on the territory of Nicopolis ad Istrum.⁴⁹

2. Bowls

These are deep vessels of various shapes and sizes. They are made on a potter's wheel, their back part being additionally scrubbed, thus forming the foot. The bowls produced in Hotnica and Butovo have a cylindrical upper part and those produced in Pavlikeni are semispherical in shape.

They are classified into the following types:

Type 1

(Table XXVIII, 7)

One of the most widespread types in the explored ceramic centres are bowls, the lower part of which is conical and the upper part cylindrical, ending with a slightly rounded rim, emphasized on the outside by a deeply incised line. The bottom stands on a wide ring shaped foot. The vessels reach a height of 9—14 cm, their diameter being from 18.5 to 27 cm. Small double arched handles whose upper cylindrical part is appliquéed, are to be found on some of this earthenware.

This type of bowl is to be found on almost all ancient sites in Bulgaria⁵⁰ and along the Danubian *limes*,⁵¹ together with coins dating from the second half of the 2nd to the beginning of the 4th century.

Similar in form is type 29 from Olbia, which T. Knipovitsch included in group 'D' from Asia Minor.⁵² Additional decoration has been applied upon the upper cylindrical part of many earthenware vessels of this type (variant 1 b). Deep vertical furrows, imitating the decoration of terra sigillata, were most often made with a chisel. Bowls with similar decoration were produced during the second half of the 2nd century in the ceramic centres near Hotnica and Pavlikeni (Table XIX, 3, 5). Other vessels were decorated with parallel lines of segments arranged crosswise, drawn with a cogwheel. The small cross-segments in the ceramic centre near Pavlikeni are triangular in shape, while in Butovo they are rectangular (Table XXVIII, 8).

The whole cylindrical part of the third group of earthenware (variant 1 c) is decorated with squirted ornaments: usually alternating ivy-leaves or combinations of leaves and twigs. This type of decoration is more often to be seen on earthenware from the ceramic centre in Butovo and very rarely in Pavlikeni (Table XXIX, 1).

Bowls with additional decoration, produced there, have been found on the territory of Nicopolis ad Istrum, Novae⁵³ and Succidava.⁵⁴ Analogous earthenware with a similar decoration have been found in Serdica,⁵⁵ Emona⁵⁶ and other ancient sites. This is actually a Roman form which is often to be found.⁵⁷

Type 2

(Table XXIX, 2, 3)

Towards the mid-2nd century only the workshops in Pavlikeni started mass production of deep semispherical bowls with a typical out-turned arch-shaped rim, upon which additional decoration of stylized ivy-leaves and twigs was very often squirted. Great variety in size is observed in this type. The diameter reaches up to 42 cm, and the height varies from 9 to 12 cm. Parallel circles incised with a cogwheel are comparatively more rarely drawn on the bowl bottom. Similar decoration is also applied on the out-turned rim (Table XXIX, 4)

This type of earthenware imitates the semispherical bowls of the terra sigillata type⁵⁸ produced in the West Roman provinces, and especially from the workshops in Graufesenque (Southern France).⁵⁹ They are to be found in Novae,⁶⁰ Succidava,⁶¹ Singidunum,⁶² Emona,⁶³ etc., and they are dated to the second half of the 2nd century.

Type 3

(Table XXIX, 5)

Semispherical bowls whose rim is thickened and emphasized on the outside by means of an incised line. The bottom is additionally formed as a low foot-ring. Two 'periwinkles' are squirted on the upper part of the vessel, imitating handles. They were produced only in the ceramic centre near Pavlikeni after the second half of the 2nd century. Fragments of this type are rarely to be found in settlements on the territory of Nicopolis ad Istrum and Novae.⁶⁴

Type 4

(Table XXIX, 6)

Deep semispherical bowls and in-turned rim. They are usually to be found as small bowls whose bottom had additionally been shaped as a grooved foot-ring. Their diameter reaches up to 12 cm. Their production was mastered in the workshops near Pavlikeni during the second half of the 2nd century. Together with these small bowls, larger-sized bowls, up to 22 cm in diameter, were produced in limited quantities.

Semispherical bowls were produced in the Western production centres⁶⁵ already at the time of Augustus, their foot being taller and the edges pointed. The earthenware from Pavlikeni imitates the shapes from Asia Minor and especially those from Çandarlı 20,⁶⁶ Olbia 32,⁶⁷ Mirmekion 13.⁶⁸ On the territory of Bulgaria they are to be found in Novae,⁶⁹ Nicopolis ad Istrum,⁷⁰ etc.,⁷¹ as well as along the Danubian border (*limes*).⁷²

Variant a (Table XXX, 1). Decoration consisting of four symmetrically arranged stylized ivy-leaves is comparatively more rarely squirted on the upper part of the bowls, curved inwards. Vessels similar to those described are not known from other sites for the time being. Apparently, this is a local variant.

Type 5

(Table XXX, 2)

Thin-walled semispherical bowls with a small grooved foot-ring shaped by additional scrubbing. Their diameter reaches up to 15.7 cm, and their height up to 8 cm. They were produced in all the centres discovered so far on the territory of Nicopolis ad Istrum as an imitation of metal vessels. Separate fragments of this type are also known from Novae.⁷³

Type 6

(Table XXX, 3)

By the beginning of the 3rd century, production of semispherical bowls had started only in Butovo. They have a ring-foot, additionally scrubbed together with the lower part of the vessel. The rim is curved outwards and is emphasized by means of a deep incised line. The bowls reach a height of up to 8 cm, their diameter being 12.5 cm.

Type 7

(Table XXX, 5)

These are tall slender bowls with a conical lower part and a cylindrical upper one, standing on a small foot-ring, with their rim thickened and sophisticatedly shaped. Stylized ivy-leaves and twigs are squirted on the cylindrical part of these bowls. Their diameter varies from 17 to 24 cm and their height from 15 to 22 cm.

The production of this type of vessels started in the second half of the 2nd century only in the ceramic centre near Pavlikeni. As far as shape is concerned, these bowls resemble the deep krater-like vessels (Table XXX, 5), as well as the bell-chaped vessels on a high hollow foot.

3. Cups

While studying the ceramic material from the considered area, one is impressed by the great amount of fragments and intact cups of varying shapes

and sizes. These are mainly small vessels, having either a straight rim, curved in the form of an arch, or a rim of sophisticated shape, with a flattened bottom or an additionally shaped concave foot.

The cups are classified into the following types:

Type 1

(Table XXX, 6)

Cone-shaped cups, their bottom and lower part being additionally scrubbed on the potter's wheel. The rim is slightly rounded off. Cups of this type greatly differ in size, reaching a height of 4.1-5 cm and a diameter of 10-11.2 cm. Their production was mastered in all ceramic centres on the territory of Nicopolis ad Istrum. They are to be found in large numbers in the necropolis in the Kalvaka locality, near Butovo, together with coins dating from the time of the Emperors Hadrian and Antoninus Pius, as well as in Novae,⁷⁵ Nicopolis ad Istrum⁷⁶ and on other ancient sites.⁷⁷

Type 2

(Table XXXI, 1)

Cups, similar to type 1, but with slightly concave walls, slightly out-turned rim and emphasized on the inside by an incised line. They reach a height of up to 3.8 cm, their diameter being up to 9.9 cm. The cups were produced in all three centres, together with the cups of type 1. Similar earthenware is discovered in the West Roman provinces.⁷⁸

Two dented handles were very rarely formed by means of a comb on the out-turned rim.

Type 3

(Table XXXI, 2)

The lower semiconical part rises from the flat bottom of the cups of this type, smoothly going outwards in the upper end, forming a bulging edge and passing to the upper cylindrical part to end in a rounded-off rim, emphasized on the outside by means of a small incised line.

This is a simplified variant of a basic type of earthenware produced in early Roman times in the Western workshops for sigillata,⁷⁹ as well as in the Eastern Greek ceramic centres, and in particular on the Island of Samos.⁸⁰ These cups have a small foot-ring which disappeared later and their bottom became additionally smoothed on the potter's wheel. This later variant was still produced and exported at that time.⁸¹ What is more, it was used as a model by many provincial craftsmen.⁸²

The production of cups of this later variant was mastered only in the ceramic centre near Pavlieni towards the mid-2nd century. Their diameter is 8.7 cm and their height is 4.3 cm.

Entirely similar cups are to be found in the necropolis of the Kalvaka locality near Butovo, together with coins dating from the time of Emperor Antoninus Pius (138—161 A. D.).

Similar cups are very rarely to be found on the territory of Bulgaria.⁸³

Type 4

(Table XXXI, 3)

Tall cups with a slightly bulging middle part and a rounded-off rim, emphasized on the outside by one incised line. The vessel stands on a small groove-footed bottom, additionally modelled on the potter's wheel. The production of these cups started in the middle of the 2nd century only in the centre near Pavlieni; they reach a height of 7.7—8.9 cm, their diameter being

from 7 to 8.4 cm. Vessels of this type have not been discovered for the present in other ancient settlements and necropolises.

Type 5

(Table XXXI, 4)

Semispherical cups with additionally modelled groove-foot. The rim is first bent outwards at right angles, after which it turns inwards, forming a vertical, slightly concave band. Two flat strap handles were very often stuck to the vertical rim for decorative purposes. The cups reach a height of up to 4.2 cm, their diameter being up to 9.4 cm. Their production was first mastered only in the ceramic centre near Pavlikeni, but towards the mid-2nd century they began to be produced in Butovo as well. Entirely similar cups are quite often to be found in the ancient necropolis in the Kalvaka locality near Butovo, together with coins from the Emperors Hadrian and Marcus Aurelius.

This type of cup is a variant of the semispherical earthenware, produced at the end of the 1st century in the workshops of Pergamum.⁸⁴

Type 6

(Table XXXI, 5)

Semispherical cups with a out-turned arch-shaped rim. The tall concave foot was additionally modelled on the potter's wheel. The walls are rather massive. These cups are to be found in different sizes, their height varying from 4.1 to 5.1 cm and their lip diameter being from 8.8 to 10.5 cm.

Variant a (Table XXXI, 6). Four symmetrically arranged 'commas' are squirted on the arched rim.

This type of cup is very often to be found in the necropolis of Kalvaka, near Butovo, together with coins starting with emperor Traianus to Marcus Aurelius. Their production was mastered only in the centre near Pavlikeni. They are an imitation of the terra sigillata cups⁸⁵ which, together with the shallow dishes, were produced in the Western sigillata workshops since the second half of the 1st until the middle of the 2nd century. Similar cups have been discovered during the archaeological exploration of Novae⁸⁶ and Succidava.⁸⁷

Type 7

(Table XXII, 1)

Tall slender cups put on a small concave foot, additionally scrubbed on the potter's wheel, originate from the ceramic centre near Pavlikeni. These cups are decorated with incised concentric lines and small elliptic pits cut out with a sharp tool. They are discovered together with coins issued by Emperor Marcus Aurelius in the necropolis of the Kalvaka locality near Butovo. They reach a height of up to 12.7 cm. Similar vessels are discovered along the Danubian border (*limes*)⁸⁸ and in the West Roman provinces.⁸⁹ Big vases resembling this type of cups were also produced in the same centre, but the decoration was more varied: elliptic holes and leafy rosettes alternate between incised lines. This type of earthenware entirely imitates the glass vessels produced at the same time.

Type 8

(Table XXXII, 2)

Two-handled cups are very rare among the ceramic finds from the centre near Pavlikeni. They have a conical lower part and a cylindrical upper one, the walls of which are slightly curved inwards. The rim is slightly rounded off and emphasized on the outside by one incised line. The bottom is concave and

together with the lower part it is additionally scrubbed on the potter's wheel. They reach a height of up to 9.5 cm, their diameter being up to 10.4 cm.

Type 9

(Table XXXII, 3)

One cylindrical fragment has been discovered in the ceramic centre in Butovo, thrown away into a garbage pit as a discarded product. The cup was with a concave foot, additionally modelled on the potter's wheel. The walls are decorated on the outside with ribs, limiting a broad space filled out with relief human figures and rosettes, all made in advance in single moulds. Two figures and one rosette had come off during the firing. The figure of a bearded man in a long garment and one rosette are the only decorations remaining on the earthenware fragment. Most probably, a frieze with a Dionysian scene had been depicted on the cup.

The cup from Butovo was made as an imitation of the cylindrical cups⁹⁰ which had been widespread in the West Roman provinces. However, a different technique was used for making the cup, namely appliquéing of a relief image made in advance and not in a clay mould.

4. Jugs

Clay one-handed jugs are vessels which are most often to be found in the ceramic centres near Hotnica, Pavlikeni and Butovo. They resemble deep cups in shape. Usually they have no decoration, but there are some jugs with Barbotine decoration.

Type 1

(Table XXXII, 4)

Jugs with a spherical body and a small neck, slightly outturned and limited at the base with a plastic ring. Their bottom is flat and additionally smoothed on the potter's wheel. The handle is wheel-made and it has a round section. These jugs are different in size, their height varying from 5.6 to 10.3 cm, and their diameter from 6.6 to 13.1 cm. They are distinguished by the thinness of their walls and by the good quality metallic glaze.

Similar vessels have been discovered in the necropolis of the Kalvaka locality, near Butovo,⁹¹ Nicopolis ad Istrum⁹² and Novae.⁹³ They are dated to the first decades of the 2nd century up to the second half of the 3rd century. The one-handle jugs discovered in ancient necropolises and settlements in Thracia,⁹⁴ Moesia Inferior and Superior,⁹⁵ Dacia,⁹⁷ and Achaia⁹⁸ originated at the same time.

Entirely similar earthenware has been discovered in Olbia (Type 39), which T. Knipovitsch refers to third group E.⁹⁹ They originate from the ceramic workshops of Asia Minor, as well as from the potter's workshops of Pergamum. We should mention as confirmation of this the one-handed jugs discovered in Çandarlı (Type 13)¹⁰⁰ and written about by S. Loeschke.

Variant a (Table XXXII, 5). Additional Barbotine decoration, filling out almost the whole earthenware, was applied on some jugs produced only in the ceramic centre in Butovo since the end of the 2nd century. Squirted cone scales are most often to be found, as well as stylized vine-twigs and ivy-leaves or combinations of pinecone-shaped ornaments and ivy-leaves.

Fragments of jugs with Barbotine decoration similar to those produced in Butovo, are discovered in Nicopolis ad Istrum¹⁰¹ and Novae.¹⁰² Two completely preserved one-handed vessels, decorated with ivy leaves and a pine-cone-shaped ornament, have been discovered near the Roman station Dimum, which is near the present-day Belene.¹⁰³

Type 2

(Table XXXII, 6)

A clay jug from the necropolis of Kalvaka near Butovo has a slender body, a small concave foot and a vertical neck ending with a rounded-off rim emphasized by one incised line. A handle with round section is fixed to the neck base and the middle part of the jug.

The jug is thin-walled, of fine clay and coated with light-brown glaze. It was discovered together with a coin from Emperor Hadrian (117—138 A. D.).

An exact parallel of this type of earthenware has not been found so far in the production centres explored. This proves that it originated from another workshop. It seems that under the influence of this form, towards the middle of the 2nd century the ceramic centre in Pavlikeni started mass production of similar jugs (variant 2 a, Table XXXII, 7). They have a conical lower part and a heavily bulging middle, getting slightly narrower and turning into a neck which is slightly bulging outwards. The vertical rim is emphasized on the outside by one incised line. The small concave foot is additionally scrubbed. An unusual handle is fixed onto the most bulging part designed for hanging up rather than for holding.

Jugs of this type reach a height of 10–12 cm.

Additional Barbotine decoration of stylized ivy-leaves and twigs was applied on the protruding part of some jugs produced in Pavlikeni (variant b (Table XXXII, 8, 9).

Earthenware of this variant is very rarely to be found in the ancient sites on the territory of Nicopolis ad Istrum.¹⁰⁴

5. Pitchers

The District Historical Museum in Veliko Tărnovo possesses a large collection of various shapes and sizes of pitchers. They originate from necropolises and ancient settlements on the territory of Nicopolis ad Istrum. Part of the pitchers were produced in the ceramic centres near Hotnica, Pavlikeni and Butovo, but production of other workshops is also to be found.

Type 1

(Table XXXIII, 1)

Pitchers with a slender body and a wide neck, separately made and additionally fixed together; the rim is thickened and slightly out-turned, the bottom is concave and additionally shaped on the potter's wheel. They are thin-walled, made of fine clay and their upper part is coated with glaze. Their handles are flat and fluted. They reach a height of up to 35 cm. Additionally drawn incised lines or circles, made with a cogwheel, are sometimes to be found on the upper part of the pitchers.

The production of this type was mastered in all three ceramic centres. Similar vessels have been discovered in ancient settlements both in the East¹⁰⁵ and West Roman provinces¹⁰⁶ dating from the end of the 5th century to the Late Antiquity.

Type 2

(Table XXXIII, 2, 3)

A completely preserved pitcher has been found in the necropolis of Kalvaka, near Butovo. Its semi-conical lower part lightly turns into a tall neck with a ring-shaped rim; the neck itself is widened at the base and narrowed in the upper part. The bottom is concave and additionally shaped on the potter's wheel with a relief protuberance. A flat fluted handle is fixed to the neck and the upper part of the body. The pitcher which reaches a height of 38 cm was

made of clay mixed with chamotte of fine sand grains and after firing it acquired a brick-brownish colour. Traces of resinous matter are preserved on the inside of the vessel. The burial in which it has been discovered is dated to the third decade of the 2nd century. Entirely similar pitchers are to be found in the same necropolis: in burials, together with coins dating from the second half of the 2nd century, but now made of fine clay with a glaze. Their production was adopted only in the centre near Pavlikeni. The potters had preserved the old form, but they produced greater variety in size, preferring the smaller pitchers.

Similar earthenware are very often to be found in funerals mainly in Southern Bulgaria: Enija,¹⁰⁷ Gara Svilengrad and Mezek,¹⁰⁸ the village of Sveti Kirilovo,¹⁰⁹ Kadin Most,¹¹⁰ Sliven,¹¹¹ Nova Zagora,¹¹² Serdica,¹¹³ Stara Zagora,¹¹⁴ Čatalka.¹¹⁵ the villages of Prosenik and Gledka, district of Kărdžali.¹¹⁶ The only pitcher made of coarse clay in Northern Bulgaria has been discovered in a burial near the village of Snežina, district of Varna.¹¹⁷ Vessels of the same type filled with resin have been discovered near the city wall of Serdica.¹¹⁸

This type of pitcher is to be found in the towns of the Northern Black Sea area.¹¹⁹ Similar pitchers are not known from the West Roman provinces. All this shows that their origin should be sought in the potter's workshops in Asia Minor. The pitchers were mainly used as shipping containers for carrying olive oil and other oily liquids, remains of which were often preserved in the pitchers (Gara Svilengrad, Brezovo and Plovdiv¹²⁰). Pitchers were also definitely used in the funerary ceremony.

The majority of authors date this type of pitchers to the second half of the 2nd and the beginning of the 3rd century. The find from Kalvaka, which undoubtedly was brought from abroad, is dated two centuries earlier.

Pitchers of fine clay which are entirely similar to those produced in Pavlikeni, have been discovered during the archaeological explorations in Novae,¹²¹ as well as in funerals dating from the second half of the 2nd century in the neighbourhood of Succidava.¹²²

Type 3

(Table XXXIII, 4)

Small one-handed pitcher with a broad foot-ring, additionally scrubbed on the potter's wheel, were found in the necropolis of Kalvaka. The body is tall, slender, gently turning into a narrow neck, which ends with a thickened ring-shaped rim.

This type is a reduced in size variant of type 2, reaching a height of up to 22 cm. The production of this type of pitchers has been established for the present only near Pavlikeni and it is very rarely to be found in other necropolises. Similar small pitchers were discovered in Aquincum, but were made less carefully and are of a rougher fabric.¹²³

Type 4

(Table XXXIII, 5)

The pitcher with a rounded body and a broad foot-ring have been discovered in one of the burials on Kalvaka near Butovo. The neck is rather typical — slightly narrowing near the base and widening upwards, ending with a rounded rim. Incised concentric lines are drawn on the external side of the neck. The handle is flat and fluted. The pitchers are made of fine clay with glaze. They reach a height of up to 21 cm. Separate fragments of this type are to be found only near Pavlikeni, where their production started in the second half of the 2nd century.

Similar earthenware is to be found in the West Roman provinces.¹²⁴

Type 5

(Table XXXIII, 6)

One-handed pitchers were found in the necropolis of Kalvaka. Their body is slender, the bottom being with a foot-ring, additionally modeled on the potter's wheel. The neck is wider at its base and gradually gets narrower in the middle, then widens again and ends with a slightly out-turned rim. There is a relief ring on the narrowest part of the neck. The handle is flat and fluted. The pitchers are made of fine clay and are covered with glaze. Their production started in the centre near Pavlikeni during the second half of the 2nd century.

Similar pitchers with a funnel-like neck have been discovered in Succidava together with coins from the time of Emperor Alexander Severus (222—234 A. D.),¹²⁵ as well as in the West Roman provinces.¹²⁶

Type 6

(Table XXXIV, 1)

One-handed pitchers with a broad foot-ring. The body is slender, the neck is narrow, cylindrical and decorated on the outside with deep concentric furrows. The rim ends with a plastic ring. They are made of fine clay and covered with glaze, reaching a height of 18.6 cm. These pitchers are very rarely to be found, only in the necropolis of Kalvaka near Butovo, together with coins from the time of the Emperors Antoninus Pius and Marcus Aurelius. The production of this type of pitchers was adopted only in the ceramic centre near Pavlikeni.

Type 7

(Table XXXIV, 2)

Around the middle of the 2nd century the workshops near Pavlikeni and a little later in Butovo started mass production of one handled pitchers with broad foot-ring, additionally scrubbed on the potter's wheel. Their body is spherical or slightly elongated, with a small cylindrical neck, and ending with a typical doubly flattened conical rim. Their height varies from 12 to 22 cm.

This type of pitchers is very often to be found in the necropolises on the territory of Nicopolis ad Istrum¹²⁷ and Novae¹²⁸, together with coins from the 2nd- 3rd centuries.

Similar earthenware has also been discovered in other parts of Bulgaria.¹²⁹ The name Pergamion is scratched on a pitcher from Plovdiv, which gives grounds to assume an eastern origin of this type of earthenware.¹³⁰

Pitchers of this type are widespread along the whole Danubian basin. No doubt, some of them originated from the three centres discussed, while the other rougher pitchres, with no additionally shaped foot, were made by local craftsmen.¹³¹

Pitchers with a funnel-like mouth of a more elongated and rough shape were also produced in the West Roman provinces.¹³²

6. Amphorae and Amphora-like Earthenware

A significant part of the production of the ceramic centres near Hotnica, Pavlikeni and Butovo represent the large and small earthenware with a cylindrical neck and two handles.

Usually, the large vessels stand on a concave foot shaped before the complete drying of the vessel, while the small amphora-like earthenware have a broad foot-ring, additionally scrubbed with a sharp tool.

The large earthenware were used in everyday life for storing liquids and the small amphora-like ones were mainly designed for cult purposes.

Type 1

(Table XXXIV, 3)

Two-handled large earthenware, their lower semi-conical part resting on a small concave foot. A cylindrical neck is stuck to the upper bulging part which had been separately made on the potter's wheel. The rim is thickened and slightly turned outwards. Usually the handles are flat, with fluting, although cable-handles with a round section are also to be found. They are of fine clay, their upper part being not covered with glaze and sometimes decorated with deep incised furrows or circles of lines arranged crosswise made with a cogwheel. They are thin-walled and well fired.

Amphorae of this type reach a height of up to 58 cm.

During the second half of the 2nd century their mass production started near Hotnica, Pavlikeni and Butovo.

Similar earthenware were produced in many Roman provincial workshops.¹³³ They are often to be found in the ancient sites on the territory of Nicopolis ad Istrum.¹³⁴ Novae,¹³⁵ as well as throughout Bulgaria in burials from the first centuries A. D.¹³⁶

Amphorae of this type are an imitation of the metal vessels dating from the same era.¹³⁷

Type 2

(Table XXXIV, 4)

Amphora-like earthenware with a slender elongated body, standing on a broad foot-ring. The small cylindrical neck ends with a widened mouth, the rim of which is emphasized with a vertical band. Two small handles are stuck to the upper part of the vessel and the neck. This type of earthenware reaches a height of up to 20 cm and a diameter of 11.5 cm. Their production in large quantities had started already in the first years after the setting up of the ceramic centre near Pavlikeni.

Earthenware entirely similar in shape is discovered in the necropolis of Kalvaka near Butovo, together with coins from the time of emperors Antoninus Pius and Marcus Aurelius.

At the beginning of the 3rd century the production of amphora-like earthenware was mastered by the potters in Butovo as well, but their forms here were slightly changed: the tall elongated body became more rounded and the foot was considerably reduced (variant a, Table XXXIV, 5), there was also a change in the mouth, which was simplified, the vertical band disappeared and the rim was almost straightened or slightly out-turned.

Similar earthenware is often to be found in funerals near Hotnica,¹³⁸ Novae,¹³⁹ Razgrad,¹⁴⁰ Koriten, district of Tolbuhin,¹⁴¹ Aleksandrovo¹⁴² and Măgliž, district of Kazanlăk,¹⁴³ Sliven,¹⁴⁴ Obručište,¹⁴⁵ district of Stara Zagora. The vessels are dated to the first decades of the 2nd-4th centuries.

This type of earthenware spread in the West Roman provinces after the 1st century.¹⁴⁶

Type 3

(Table XXXIV, 6)

An amphora-like vessel with a spherical body, the cylindrical neck of which ends with a widened mouth emphasized on the outside with a vertical band. Two small fluted handles are stuck to the upper part of the vessel and the neck. Incised concentric lines are drawn below them. The bottom is concave with no foot-ring, additionally shaped on the potter's wheel.

The vessel is made of fine clay and covered with glaze. It was found together with a coin from the mid-2nd century in the necropolis of Kalvaka in Butovo. On the basis of the clay composition and its workmanship, one could determine that it belonged to the ceramic production of the centre near Pavlikeni.

Similar earthenware from other ancient production centres and sites are not known and this fact gives grounds to the author to consider this type of earthenware as a local form created in the centre near Pavlikeni.

Type 4

(Table XXXV, 1)

In the last decades of the 2nd century the potters from Butovo gradually abandoned the production of amphora-like earthenware with a widening mouth and a vertical sharply off-set rim, starting mass production of amphora-like earthenware with a funnel-like neck.

This type of vessels is a development of an earlier less elegant type of plain shape and a sophisticated biconical mouth. The shape is rather clear, the workmanship being fine and of high quality. Two variants are to be found. Both of them have a funnel-like neck, an evenly cut off rim and a small foot-ring. Two flat handles are attached to the neck and the upper part of the vessel.

The difference between the two variants is only in the shape of the body. In the first case it is heavily bulging in its lower part and in the second case it is ball-shaped. The two variants are to be found together, made of the same fine purified clay which had acquired a light-brick colour after the firing. In their upper part the vessels are coated with a light-brown glaze which usually oozed down in stripes towards the bottom. They were sold not only on the territory of Nicopolis ad Istrum¹⁴⁷ and Novae¹⁴⁸ but in the neighbouring urban territories¹⁴⁹ as well, even exported to the north of the Danube.¹⁵⁰ A completely preserved earthenware of this type is known from the excavations of the Roman villa near the village of Prisovo,¹⁵¹ discovered together with coins from the mid-3rd century.

Together with the two variants from Butovo, there is also a third variant of two-handled vessels which is to be found on the territory of Nicopolis ad Istrum. These do not differ considerably from the earthenware of the first two variants, only their mouth is slightly widened and ending with a ring-shaped rim. The difference is rather to be noticed in technical execution. The clay is still fine, well purified, but the fineness of the thin-walled, clinking and well fired earthenware from Butovo is lacking; instead of the good-quality, almost transparent light-brown glaze of the pottery made in Butovo, there appears a thick dark-brown layer of fine clay matter. Such vessels have been discovered in the necropolis between Samovodene and Hotnica, together with some materials which bear the marks of an era when ceramic production was already on the decline.¹⁵² Probably they originated from still undiscovered potter's workshops on the territory of Nicopolis ad Istrum.

7. Two-Handled Earthenware

The broad-mouthed and two-handled earthenware (large and small in size) were used for religious purposes, the larger ones especially as urns. They were produced on a large scale in the ceramic centres near Hotnica, Pavlikeni and Butovo, where we found intact vessels and a great amount of fragments.

Type 1

(Table XXXV, 2)

Large vessels with a conical lower part and a cylindrical upper part, ending with a thickened rim sophisticatedly shaped. The fluted straphandles are stuck to the upper part. The bottom ends with a short foot-ring. They reach a height of up to 17 cm, and a diameter of up to 21 cm. This type of ware was produced only in the centre near Pavlikeni and in limited quantities in Hotnica since the middle of the 2nd up to the beginning of the 3rd century.

Variant **a** (Table XXXV, 3). Two-handled earthenware, decorated with vertical lines incised with a flat iron tool. Their production has been established for the present only in Hotnica.

Similar earthenware with incised lines has been discovered in the necropolis near Enija (present-day Mladinovo¹⁵³), Plovdiv,¹⁵⁴ Meričleri¹⁵⁵ and Obručište.¹⁵⁶

Variant **b** (Table XXXV, 4). Earthenware decorated in the Barbotine technique. These vessels were produced in Pavlikeni and were discovered in the necropolis near Butovo, together with coins of the Emperors from Hadrian to Marcus Aurelius.

Variant **c** (Table XXXV, 5). Large earthenware, the upper cylindrical part of which is decorated with appliquéed medallions with mythological and erotic scenes (made in single clay moulds). The appliquéed decoration is usually combined with other ornaments, most often hand-modelled plastic snakes. The snakes are symmetrically arranged on both sides of the earthenware. They entwine the handles several times and come above them. These vessels reach a height of up to 40 cm. Earthenware with a similar type of decoration is known from some ancient sites in Dacia,¹⁵⁷ Pannonia,¹⁵⁸ Gallia,¹⁵⁹ Asia Minor,¹⁶⁰ etc.¹⁶¹

On the handles of some earthenware of the afore-mentioned variants there are tablets in relief, made in advance in single clay moulds as imitation of some metal vessels having similar handles.

Similar pottery is discovered in Novae¹⁶² and Burgas.¹⁶³

Type 2

(Table XXXV, 6)

Two-handled spherical earthenware are very rarely to be discovered in the centres near Hotnica and Pavlikeni. The bottom stands on a ring-foot and the short neck is slightly bulging and decorated on the outside with incised parallel lines. No additional plastic decoration had been applied on this type.

Similar earthenware were used as funerary urns.¹⁶⁴ They are found together with coins dated to the 2nd-3rd century.

Type 3

(Table XXXVI, 1)

A two-handled vessel was found in the necropolis of Kalvaka near Butovo, discovered together with coins of Emperor Marcus Aurelius (161—180 A.D.). The vessel is biconical in shape. The bottom stands on a foot-ring and the rim is sophisticatedly shaped. Two cylindrical protuberances are additionally stuck to the handles. The upper part of the vessel is decorated with furrows made with a flat iron tool. They form stylized coniferous ornaments in combination with vertically arranged lines. This type of earthenware reached a height of up to 18.3 cm. Its production has been established for the present only in the ceramic centres near Hotnica and Pavlikeni, where a great number of fragments have been discovered.

Similar vessels are not known from other sites.

Type 4

(Table XXVI, 2)

Two-handled earthenware with a slender body, the lower part of which is spherical and the upper one cylindrical. The rim is sophisticatedly shaped. The bottom stands on a small foot-ring. The vessels reach a height of up to 18 cm and a diameter of up to 16.7 cm. This type was produced in very small quantities only in Pavlikeni.

Similar earthenware is discovered in Novae,¹⁶⁵ Succidava¹⁶⁶ and Singidunum.¹⁶⁷

Variant **a** (Table XXXVI, 3). There is a relief decoration of stylized ivy-leaves on the upper cylindrical part of the body. Similar to this type is type 39 from Olbia, which is referred by T. Knipovitsch to group E from Asia Minor, the only difference being that the vessel from Olbia is decorated with incised plant ornaments¹⁶⁸ instead of relief ones.

Type 5

(Table XXXVI, 4)

The production of earthenware with a conical lower part and a cylindrical upper one stopped in the first decades of the 3rd century. A new type of earthenware appeared on the market, repeating the earlier shape, but beginning to introduce a new element — the middle bulging part. The mouth is broad, as in the vessels of type 1, the rim being sophisticatedly shaped. The upper part usually has no decoration. These vessels reach a height of up to 18 cm and a diameter of up to 25 cm. On the handles of some of this earthenware, clay tablets, having relief decoration, made in single clay moulds, were additionally stuck (similar to type 1, variant *b*).

This type of earthenware is discovered in necropolises and it was used as a funerary urn.¹⁶⁹ A similar vessel has been discovered in a tumular burial in Čatalka, dated to the end of the 1st century.¹⁷⁰

Type 6

(Table XXXVI, 5)

Two-handled small vessels, the lower semi-conical and upper cylindrical parts of which are identical in size. The rim is emphasized on the outside with an incised line. The bottom is concave, additionally scrubbed on the potter's wheel. They reach a height of up to 7.5 cm and a diameter of up to 9.5 cm. This type was produced on a large scale in the centre near Hotnica. It has been discovered in the necropolis of Kalvaka, together with coins from the Emperors Antoninus Pius and Marcus Aurelius.

Variant **a** (Table XXXVI, 6). Similar earthenware, the upper part of which is larger than the lower one, were produced in limited quantities in Pavlikeni. They reach a height of up to 10 cm and a diameter of up to 10.5 cm. This type is similar to type 37 from Olbia, referred by T. Knipovitsch to Group E from Asia Minor.¹⁷¹

Type 7

(Table XXXVII, 2)

The earthenware of this type is a development of type 6. The border between the two parts is not so distinctly outlined, but it turns smoothly into a line, slightly curved inwards and ending with a thickened and shaped rim. All vessels of this type are additionally decorated on their upper part with squirted plant ornaments. They reach a height of up to 9 cm and a diameter of up to 12.5 cm.

Type 8

(Table XXXVII, 3)

It is represented by small two-handled earthenware. The lower conical part stands on a concave foot. It gradually rises and suddenly becomes narrower, turning into a small vertical neck and a slightly rounded off rim, emphasized on the outside with one insised line. Stylized ivy-leaves are squirted upon the most bulging part of these vessels. They reach a height of up to 9 cm, their diameter being 13.3 cm.

This type was produced only in the ceramic centre near Pavlikeni about the mid-2nd century. A similar type, but with no decoration, is very often to be found in ancient necropolises, especially in Thrace.¹⁷²

Variant a (Table XXXVII, 4). The neck becomes larger and the rim is emphasized on the outside with an incised line. Twisted 'periwinkles' are squirted on the bulging part.

Type 9

(Table XXXVII, 5)

Towards the mid-2nd century the centres near Hotnica and Pavlikeni started mass production of earthenware with a spherical or biconical body, ending with a slightly tilted, almost vertical neck and a straight rim, emphasized on the outside with an incised line. They reach a height of up to 8 cm, and a diameter of up to 12 cm.

This type of earthenware is to be found in the necropolis of Kalvaka together with coins dating from the first three decades of the 2nd century, as well as throughout the country,¹⁷³ along the Lower Danube,¹⁷⁴ the northern coasts of the Black Sea¹⁷⁵ and in Greece.¹⁷⁶

Variant a (Table XXXVII, 6; Table XXXVIII, 1)

The production of earthenware of this type started later in the ceramic centre in Butovo. Stylized pine-cone scales, imbricated or in chess-board order, were additionally squirted on the outer surface of the vessel. These vessels reach a height of up to 8 cm and a diameter of up to 9.6 cm.

This variant is most often to be found in ancient settlements, together with coins from the first half of the 3rd century. A vessel decorated with stylized imbricated ornaments is known from the Roman villa near Prisovo together with coins from the mid-3rd century.¹⁷⁷ Fragments of earthenware with such decoration are very often to be found during excavations in Novae and Nicopolis ad Istrum.¹⁷⁸

Type 10

(Table XXXVIII, 2)

Small two-handled biconical vessels with a short slightly out-turned neck which ends with a rounded rim emphasized with an incised line. Their bottom is small, concave and additionally scrubbed on the potter's wheel. They have two handles with round section and reach a height of up to 8 cm and a diameter of up to 8.1 cm.

This type of earthenware was produced only in the ceramic centres near Hotnica and Pavlikeni. It is very rarely to be found in ancient settlements together with coins dating from the end of the 2nd up to the beginning of the 4th century.

Type 11

(Table XXXVIII, 3)

The earthenware of this type represents a reduced size of type 5 vessels, in which the new element (the middle bulging part) was slightly emphasized at first, while later it occupied a dominating position. Development and improvement are to be noticed in the rim as well, which is slightly in-turned and

sophisticatedly shaped. The small concave foot was formed additionally by scrubbing on the potter's wheel. A great difference in the size of this earthenware is not to be noticed. The height varies from 7.7 to 8.5 cm, and the diameter from 8.6 to 9.3 cm.

The production of this type of small earthenware has been registered for the present only in the centre in Butovo. Entirely similar vessels have been discovered on the territory of Nicopolis ad Istrum and Novae.¹⁷⁹ Similar vessels are to be found in large numbers, together with coins from the 2nd-3rd centuries in Pannonia¹⁸⁰ and Dacia,¹⁸¹ but they are rougher and with no additional bottom scrubbing and shaping on the potter's wheel. This obviously shows that they originated from some local ceramic centres.

Variant **a** (Table XXXVIII, 4, 5, 6, 7). An additional Barbotine decoration was very often applied on the upper cylindrical and middle bulging part — a continuous frieze of stylized ivy-leaves, vine-twigs and grape clusters. Earthenware of this variant was discovered during the archaeological exploration of Novae.¹⁸²

Variant **b** (Table XXXVIII, 8)

One vessel originates from the necropolis of Kalvaka, decorated with stylized ivy-leaves, the middle bulging part of which is still not emphasized. It reaches a height of 9.9 cm, its diameter being 10.5 cm. According to its technological characteristics, it belongs to the production of the ceramic centre near Pavlikeni.

8. Jars

In the second half of the 2nd century the centres near Pavlikeni and Butovo started production of jars of fine clay covered with glaze. Of these, two types are known:

Type 1

(Table XXXIX, 1)

Tall, slender earthenware, the upper part of which is heavily bulging, the mouth being comparatively small and outlined by a massive horizontal rim-ring. The bottom is concave, modelled before the drying of the vessel. The height varies from 22 to 36 cm, and the diameter from 22 to 29 cm.

In a similar jar there was a collective find consisting of 3,727 Roman silver coins, discovered in one of the residential rooms in the ceramic centre near Pavlikeni. The latest coin is of Lucius Verus, joint ruler with Emperor Antoninus Pius in 161—169 A. D.

The type described above was widespread in Roman times and was produced on a large scale in almost all ceramic workshops.¹⁸³

Type 2

(Table XXXIX, 2)

It differs only in the upper part which has a broader mouth, limited by a horizontal rim, slightly projecting outwards. Two small arched handles were usually attached to the upper part and an additional decoration of incised parallel or broken lines was applied. This type varies in height from 27 to 53 cm and in diameter from 25 to 50 cm. Similar earthenware was more rarely found in ancient sites. These vessels were used for storing foods.

9. Lids

(Table XXXIX, 3, 4, 5, 6,)

The jars and the large two-handled earthenware had special lids wheel-made of fine clay. The lids are semi-conical in shape and have a cylindrical top. The base is massive and emphasized on the inside with a massive edge. Most of

them are additionally decorated with squirted stylized ivy-leaves. Their diameter varies from 8 to 16 cm. Lids of fine clay with a plastic decoration were produced only in Pavlikeni and Butovo.

Similar lids have been discovered during excavations in Novae.¹⁸⁴

10. Sifters

An insignificant amount of fragments of special earthenware were found among the ceramic material discovered in Pavlikeni and Butovo, which were used for straining of liquids. They were made only of fine clay. They are deep, perforated in the lower part and coated with glaze. Technically this was achieved after additional processing of the vessel on the potter's wheel, as well as scrubbing and smoothing of the bottom. Small holes were pierced inwards with a sharp awl and arranged in concentric circles from the bottom to the most bulging part of the vessel. The diameter of the holes is from 2 to 3 mm.

Type 1

(Table XL, 1)

Deep dishes with a wide arched out-turned rim, reaching a height of up to 6 cm and a diameter of up to 15.5 cm. The production of this type of sifters was adopted only in the centre near Pavlikeni between the first two decades and the second half of the 2nd century.

Type 2

Deep two-handled vessels. They were produced only in Pavlikeni and Butovo since the second half of the 2nd century, to the first decades of the 3rd century.

They are to be found in two variants:

Variant a (Table XL, 2). Sifters with a smoothly cut-off bottom, a heavily bulging middle part and a small cylindrical neck, ending with a thickened horizontal rim. The two small handles are flat and elliptical in cross-section. They reach a height of up to 10.7 cm and a diameter of up to 19.3 cm.

Variant b (Table XL, 3). Biconical sifters with wide and out-turned rim. The bottom is additionally scrubbed and shaped into a small foot-ring. The two handles have elliptical section. The height is up to 7.5 cm.

Earthenware sifters were made on a potter's wheel as early as the La Tène era. Sifters similar to ours have been discovered near Succidava and dated to the 2nd century¹⁸⁵

11. Censers

The earthenware censers produced in the considered area could be classified into two groups depending on the place and circumstances under which they are discovered in the ancient settlements and necropolises:

A. Censers for Domestic Use

(Table XL, 4)

Medium-sized conical earthenware having a small foot-ring and a conical protuberance on the inside of the bottom. The walls are smooth on the outside, the inside bearing concentric furrows. There are holes drilled on the whole surface of the vessel, 0.5—0.7 cm in diameter and arranged radially in rows from the bottom to the thickened rim which is slightly out-turned. These vessels are made of fine clay which after firing acquired a light-brown colour. The top is coated with glaze, applied irregularly on the upper and middle parts of the vessel. The colour of the glaze varies from light-brown, reddish-brown, brown to dark brown.

The production of censers belonging to this group in the workshops near Hotnica was quite limited, in contrast to Pavlikeni and Butovo, where some of

them were used in the ancient buildings and others were thrown away into the garbage pits as discarded products from the workshops.

Almost all of them are identical in size. Their height varies from 6.8 to 9 cm and the diameter from 13.7 to 14.7 cm.

Three similar vessels have been discovered in one of the rooms of the Roman villa near Prisovo (the beginning of the 2nd century to the mid-3rd century).¹⁸⁶ Coals and pine resin were preserved in one of them which has smoked walls. Traces of smoking have also been discovered on the inside of almost all fragments of similar earthenware found during the excavations of the ancient buildings. This proves that vessels of this type were used as censers in the home altars.

Essential for the complete combustion of the resin in this type of censer were the deep furrows, the conical protuberance and the radially arranged rows of holes. The furrows and the conical protuberance retained the coals and the holes, ensured constant ventilation.

Except on the territory of Nicopolis ad Istrum, fragments of similar censers have also been discovered during archaeological explorations in Novae.¹⁸⁷ This type of small earthenware is very rarely to be found south of the Balkan Mountains — only two of these are known from Kadin Most, district of Kjustendil.¹⁸⁸ T. Gerasimov reports about a similar vessel discovered in Pazardžik.¹⁸⁹

Production of this type of censers is not known in other provincial workshops. This provides grounds to specify them as a local type, developed and improved on the basis of an earlier Thracian form.¹⁹⁰

B. Censers Used in Funerals

Type 1

(Table XL, 5)

In form these vessels resemble the shallow cups with a conical or semi-spherical upper part, to which a tall cylindrical wheel-made foot is additionally stuck.

A characteristic feature of this type of earthenware is their plastic decoration achieved during modelling by carving of deep parallel furrows with sharp edges by pressing with fingers at intervals or cutting with short crosswise lines, drawn with a cogwheel. The rim of the earthenware ending with a vertical or horizontal band was most often decorated in that way.

The production of this type of earthenware near Hotnica and Pavlikeni started towards the mid-2nd century and continued to the beginning of the 3rd century. The shape of the earthenware remained the same, a difference being noted in the size. The vessels reach a height of 15—25 cm and a diameter of 22—35 cm.

This type is less widespread in the ceramic centre of Butovo. Its production started there as late as the second half of the 2nd century and continued to the beginning of the 3rd century.

This earthenware is usually to be found broken and thrown away as discarded products into the garbage pits in the immediate vicinity of the potter's workshops and the pottery kilns. None of them was glazed. It seems that after the firing they were immersed into whitewash, because in the ancient sites they have been found completely coated with a thin layer of lime.

Type 2

(Table XL, 6)

At the beginning of the 3rd century only the centre in Butovo¹⁹¹ started mass production of censers similar to those of the first type. They were also wheel-made, preserving their conical shape and plastic decoration on the upper part, though changing their foot. It became shorter and more solid, being shaped simultaneously with the upper part. The censers of the second type were also made of fine, well-purified clay and were coated with a layer of diluted fine clay instead of lime-wash, which acquired a light-pink colour after the firing.

Censers of both types have been discovered only in burials. Vessels of the first type were found in the tumular necropolis of Kalvaka near Butovo, together with charred fruits (dates, figs, walnuts, hazelnuts, etc.) and coins from the mid-2nd century.¹⁹²

Censers belonging to the second type have been discovered in the necropolis near the post-office in Butovo. The earliest burials here date from the end of the 2nd century and the latest ones from the 4th century.¹⁹³

Vessels with a lime coating, similar to those of the 1st type (produced in Butovo and Hotnica) were mainly discovered in Northern Bulgaria in burials dated from the end of the 1st to the end of the 2nd century,¹⁹⁴ but they were also found to the south of the Balkan Mountains.¹⁹⁵ Two small censers, similar to those of the second type, originated from a burial together with a coin from Caracalla (211—217 A.D.), discovered near the village of Hadžidimitrovo, district of Veliko Tărnovo.¹⁹⁶

The considered vessels of the two types are widespread in the West Roman provinces and the provinces along the middle and lower courses of the Danube.¹⁹⁷ They have been discovered in burials from the 1st to the 4th centuries and are specified as vessels for censuring (*Raucherschalen*), as well as for food, fruit and wine, used in the funeral rite.¹⁹⁸

12. Clay Objects Used in Building

Here belongs the spindle-shaped earthenware with massive walls, roughly shaped solid foot, cut off by means of a thread and a comparatively more carefully smoothed rims. They are made of fine clay, not glazed. Their production has been established for the present only in the ceramic near Pavlikeni and Butovo.

Part of these objects were used in building. They were walled-in and later an iron nail was inserted into them, holding the clay tubula; another part was used as stoppers and the third one is related to the funerary ceremony, if we judge by the presence of some of these objects in the ancient burials.¹⁹⁹

II. Greyish-Black Earthenware Used in Everyday Life

Earthenware of this group is among the most frequent finds on all sites within the Roman Empire. The name derives from the greyish-black colour obtained after their firing. This type of earthenware has usually been neglected by the scholars who, at best, confine themselves to a most general description, without dwelling on separate types and variants. Only in the last years it has found its due place in the works of a number of archaeologists. The work of the Romanian scholar G. Popilian, who explored the ceramics from Oltenia,²⁰⁰ deserves special attention.

Greyish-black ceramics are to be found in large quantities in Bulgaria also: in ruins of ancient towns, settlements and necropolises from the first years of the Roman rule up to the Late Antiquity. The first attempt to explore it was

made by Cvetana Dremsizova who wrote about the greyish-black ceramics from the Roman villa near the village of Madara.²⁰¹ Later, B. Bötger and G. Bokisch studied the Roman ceramics from *Castellum Iatrus* near Krivina, in which they also included pottery of a greyish-black colour.²⁰²

Greyish-black ceramics are in the first place kitchen pottery,²⁰³ closely related to the everyday life of people, as well as to their day-to-day concerns for preparing food. Its basic function posed two very important requirements to the potter producing such earthenware: to resist sharp thermal fluctuations and to hold liquids. In order to meet those two requirements, a special technology was needed, which had to be both quite simple and with a marked economic effect, i. e. to provide products for the market quickly and cheaply.

The greyish-black ceramics, as well as every other type, were made of well purified clay, with added sand and quartziferous grains, 5—7 mm in size, in some of the earthenware, resulting in a rough and uneven surface. The additives served as reinforcement in the clay 'dough' facilitating the process of firing and thus reducing the debris. This pottery was baked at a lower temperature — up to 650°C, in ordinary two-chamber kilns, where it was not necessary to observe the conditions required for the firing of fine ware. Still, this temperature was high enough to burn down all organic components in the clay. The greyish-black pottery was highly porous and this property is contrary to the second requirement: holding of liquids. The potters tried to eliminate porosity by supercharging the vessel walls with carbon. This was achieved already in the pottery kiln before taking out the earthenware, when timber was put into the kiln, discharging heavily smoking substances, which penetrated deep into the wall and filled in the pores.²⁰⁴

If the technological conditions were observed correctly and properly, the whole outer surface of the earthenware acquired a uniform black glossy colour. However, these conditions were usually disregarded one way or another: either the timber was not fed into the kiln in the exact quantity required, or the kiln was not closed tightly enough, which resulted in irregular colouring. The earthenware arranged near the vents for the smoke usually acquired light-brown or dark spots, and the rest — a smoky-mat colour.

In contrast to the fine ceramics, greyish-black earthenware is not so varied in shape. The pottery is classified into several types. The cone and the cylinder, used in combination or separately, are the basic elements of the body. The bottoms are flat, cut off by means of a thread. They are very rarely additionally smoothed on the potter's wheel or have small foot-rings added. The rim is solid, slightly out-turned to fit the lid whose edge is in-turned.

The general impression is that the vessels of greyish-black ceramics imitate the shape of the fine ceramics known in Roman times, although the imitation is rather rough. At the same time, one also notices attempts to copy metal vessels,²⁰⁵ as well as some shapes typical of the local hand-made Thracian ceramics, which existed during the Roman rule as well, i. e. tall cylindrical urns and conical cups.²⁰⁶

Usually the earthenware of greyish-black ceramics has no decoration, and if any — it consists either of incised concentric lines drawn on the upper part of the vessel, or of wide and shallow furrows on the entire outer surface. Under the influence of the fine ceramics, in some of the vessels the decoration is made with a cogwheel.

As a result of his long observations on the greyish-black pottery, the author came to the conclusion that it was rather rough and plain in the first

years of Roman rule. Later its production attracted greater attention, the earthenware became more thin-walled, with mouths of sophisticated shapes and additionally smoothed bottoms, because fine-grained sand was added to the clay. The author finds the only explanation for the improved production quality in the fact that after the disappearance of the fine ceramics which played an important role in the everyday life of people, the deficiency was compensated for by the ordinary greyish-black ware.

1. Dishes

Greyish-black pottery was produced in the ceramic centres near Hotnica, Pavlikeni and Butovo as an imitation of the vessels of fine ceramics. The variety is not great and the pottery lacks any details or additional decoration. Compared with the rest of the material, this type of production represents a small part of the general ceramic production.

According to their shape, dishes are classified in the following types:

Type 1

(Table XLII, 1)

Dishes with a broad bottom smoothly cut off, and walls gently going upwards, then curving inwards and ending with a rounded rim. They reach up to 3.4 cm in height and 21.7 cm in diameter. This type of dish is an exact copy of the dishes of type 9, made of fine clay, and it is often found in the Danubian Roman provinces.²⁰⁷

Variant **a** (Table XLII, 2). Dishes produced in Hotnica, with a smoothly cut off bottom. The walls are first bent outwards, then they become narrower inwards, widening again and ending with an in-folded rim. They are found in large numbers on the territory of Nicopolis ad Istrum and Novae,²⁰⁸ with parallels in the Danubian provinces.²⁰⁹

Type 2

(Table XLII, 3)

Dishes with a conical lower part and a cylindrical upper one, their bottom being flat and additionally smoothed. The production of this type has been known for the present only from the centre near Hotnica, entirely imitating the shape of the deep dishes of fine ceramics, type 8.

Type 3

(Table XLII, 4)

Deep conical dishes having a flat bottom cut off with a thread, the rim being out-turned and decorated with incised parallel lines. This type was also created as an imitation of the fine ceramics. It was produced in Hotnica and Butovo.

Variant **a** (Table XLII, 5). Deep semiconical dishes with evenly cut off bottom, thickened and out-turned rim. They are rather large in size, up to 29 cm in diameter. These dishes functioned as the modern tins. They were used in the ceramic centre near Hotnica²¹⁰ and they also imitated the shape of the fine earthenware. Similar vessels have been discovered in Madara,²¹¹ on the territory along the middle course of the Danube²¹² and the West Roman provinces.²¹³

2. Bowls

(Table XLII, 6)

One of the most widespread vessels produced in Hotnica and Pavlikeni were the deep bowls with an evenly cut off bottom and a biconical body ending with a wide, almost horizontal rim, slightly out-turned. Several concentric lines are engraved on its most bulging part. The bowls are made of clay, containing large-grained grit, and are additionally smoked. Their diameter is up to 23 cm, height — 10 cm.

This type of vessels belongs to the kitchenware, but they were sometimes used as urns as well. An entirely similar vessel to the bowls produced in Hotnica and Pavlikeni was used as urn, discovered together with a coin of Emperor Traianus in the necropolis of Kalvaka.

Similar vessels are often discovered on sites in Northern Bulgaria,²¹⁴ as well as in the Danubian and West Roman provinces, where they are generally dated to the end of the 1st and the mid-3rd century.²¹⁵

3. Pots

Ceramic pots are referred to the basic production of the centre near Hotnica. All pots discovered so far are made of clay containing sand. Prevalent are the tall slender vessels with a thickened rim, slightly out-turned and made in such a way that it could be covered by the lid edge, which is also curved.

The greater part of the pots are rough, their bottom being cut off by means of a thread with no additional smoothing. However, there are well-made pots of clay containing less and smaller sand particles, subjected to additional smoothing of the bottom and the outer surface.

This type of earthenware lacks any decoration, except the single or double incised lines on the upper part of some pots, as well as the deep and shallow furrows on the entire outer surface of the vessel. As regards shape, we cannot find in them any direct imitation of imported models, but rather a revival of earlier hand-made forms, later improved on the potter's wheel.

The production of ceramic pots was mastered in the centres near Pavlikeni and Butovo as well. One could observe in them the same shapes, made, however, with a greater skill and diligence as regards clay processing and modelling of the production.

The rich collection of earthenware of this type comprises pots with no handles, as well as one-handled and two-handled pots. Depending on this, the following types are distinguished:

Type 1

(Table XLIII, 1)

Pots with no handles, having a tall slender body and evenly cut-off bottom. The relatively large mouth is delimited by a thickened rim, slightly out-turned and adjusted so as to be hidden under the folded edge of the lid. These are thin-walled pots, although the clay contains large quartziferous grit, and are additionally smoked, resulting in a glossy black colour. The carbon pilings burn down at a higher temperature and the earthenware acquires a greyish-black colour, varying at places to light-brown. Their height varies from 25 to 55 cm. Some of them have protuberances, probably imitating appliquéd flat handles.

The pots of this type are dated to the first decades of the 2nd up to the middle of the 4th century. The closest parallels are the finds from Prisovo,²¹⁶ Novae²¹⁷ and Nicopolis ad Istrum.²¹⁸ This type is quite often discovered in ancient sites along the lower²¹⁹ and middle course of the Danube²²⁰ and in the West Roman provinces.²²¹

Type 2

One-handled pots. They differ from the pots with no handles in that the rim, which is also thickened and slightly out-turned, is now adjusted for lids with a straight edge. The small strap-handle is below the mouth. This type of earthenware is rather thick-walled and roughly made, reaching a height of 17—38 cm.

Variant **a** (Table XLIII, 2). In the ancient ceramic centre near Hotnica, one-handled pots with a rounded, almost spherical body were also made. They were modelled from better purified clay and their entire outer surface was covered with wide incised furrows. They were not smoked much, as a result of which they are brown in colour.

Variant **b** (Table XLIII, 3). One small pot discovered in Butovo, with biconical body and a rim slightly projecting outwards. The bottom is flat, additionally smoothed and better made, with one strap-handle stuck below the mouth. The vessel is made of clay containing fine-grained grit and it is additionally smoked. After the vessel was modelled, the name Aurelius List was scratched below the mouth. The diameter and the height of the vessel are the same — 17×17 cm.

Type 3

(Table XLIII, 4)

Two-handled pots. They are completely similar in shape to the pots described above, the handles being two small ones instead of one. There is no considerable difference in size, the height being between 11 and 35 cm.

Their production has been established for the present only in Hotnica and Pavlikeni. They are comparatively more rarely found on ancient sites.²²²

Variant **a** (Table XLIII, 5). Low shallow two-handled pots with a biconical shape were produced in the centre near Pavlikeni. Their bottom is evenly cut off and the rim is out-turned. Their upper part is decorated with wide and shallow furrows.

4. Lids

Almost all earthenware were with lids. They are conical in shape, with a cylindrical handle fixed on top. They were cut off from the potter's wheel by means of a thread. The lids were made of the same clay and additionally smoked. There are two types of lids, depending on the earthenware they had been designed for. The first type (Table XLIII, 6, 7; Table XLIV, 1—3) has a straight edge and is adjusted to go into a rim which projects outwards in the case of pots with handles and the deep bowls. The second type has an in-turned edge, designed to cover the rounded rim of the pots without handles (Table XLIV, 4). The sizes of the lids are rather varied, with prevalence of the small ones, their diameter being from 14 to 22 cm and the height from 6 to 9 cm. There are lids for large vessels reaching up to 40 cm in diameter. They have been discovered in large numbers, in all ancient sites on the territory of Nicopolis ad Istrum.²²³ Similar lids are also to be found on other sites, both in present-day Bulgaria²²⁴ and in the other Roman provinces.²²⁵

5. Oenochae from Butovo

(Table XLIV, 5)

Among the varied ceramic material of greyish-black ceramics, there are also vessels with a tall narrow neck ending with a widened trifoil mouth.

Especially typical is a vessel discovered in the ceramic centre in Butovo, its height being 25 cm and its diameter — 17.7 cm. The bottom is evenly cut off, the body is biconical, smoothly turning into a narrow neck and a broad mouth, pinched with fingers. One handle, elliptical in cross-section, is attached to the neck and the middle part of the body.

This type of earthenware is an exact copy of the copper and bronze vessels produced in the same era. The imitation of the metal form is to be felt even in the sharply cut-off line of the vessel. Similar bronze vessels have been discovered in burials in tumulus No. 6 in Čatalka,²²⁶ and copper vessels in the neighbourhood of Stara Zagora,²²⁷ which have been dated to the end of the 1st and up to the beginning of the 2nd century.

6. Earthenware for Religious Purposes

A. Three-Legged Earthenware

(Table XLIV, 6)

An interesting three-legged vessel originated from the ceramic centre near Hotnica. It is wheel-made of clay mixed with fine-grained grit and is additionally smoked. It is bell-shaped, the bottom is flat and additionally smoothed, the rim is rounded and slightly out-turned. Three cylindrical hand-made legs are additionally stuck to the lower part. Other two cylindrical legs, broken off from a similar vessel, have been discovered not far from this find.

In comparison with the other earthenware discovered here, this one differs in its fine workmanship and better clay quality. Together with the legs it reaches a height of 25.5 cm (18.5 cm without the legs), being 25 cm in diameter.

This vessel is a rare phenomenon not only for the ceramic centre near Hotnica, but for the Bulgarian lands in general. Similar three-legged vessels are more often to be found in the West Roman provinces,²²⁸ in the lands along the middle course of the Danube (Aquincum,²²⁹ Emona,²³⁰ Singidunum²³¹). They were placed right into the hearth, the legs replacing the iron tripod, to be used mainly for religious purposes.²³²

B. Kernos

(Table XLIV, 7)

A deep dish with an evenly cut-off bottom and greatly inclined, almost vertical walls originated from the necropolis discovered between the present-day ceramic plant and the courtyard of the cooperative farm in Butovo. Two conical earthenware cups, made on the potter's wheel in advance, were additionally stuck onto the thickened slightly out-turned rim.

The vessel is made of clay containing sand grains and is additionally smoked. The inner part of the bottom is decorated with a spiral of short lines drawn with a cogwheel. The vessel is 19.8 cm in diameter, the whole height being 6.8 cm (3.5 cm without the cups).

Fragments of a similar type of vessel are discovered near Hotnica and Butovo, where their production started. Entirely similar finds are usually to be found either as grave offerings or in the lodgings. They most probably had a religious purpose.²³³ These vessels have been discovered together with coins from 2nd-3rd century.

7. Earthenware for Food and Liquids

(Table XLV, 1)

These are large vessels with an elongated shape, small bottom and a broad mouth, delimited by a massive rim. They are decorated with relief cord-like

ornaments, drawn at intervals on the outside of the vessel. These vessels reach a height of up to 80 cm and a diameter of up to 60 cm. This is an old Thracian form whose manual production had been replaced by the potter's wheel.

Hand-made earthenware of a similar shape existed as early as the La Tène era.²³⁴

8. Hand-made Earthenware and Earthenware Manufactured on the Potter's Wheel

As has been pointed out many times, the ceramic centres near Hotnica, Pavlikeni and Butovo were created over the ruins of older Thracian settlements, some of which had not ceased to exist during the Roman era also. Many finds dating from that era have been discovered, including ceramics, which will be the subject of a special exploration.

Only two ceramic forms are included here, whose production started in the newly-created ceramic centres.

One of the vessels is a deep semiconical cup with one or two vertically fixed handles, the other one is a tall cylindrical urn.

Semiconical cups (Table XLV, 4) are discovered in large numbers in the lands along the Lower Danube and mostly in Oltenia.²³⁵ This has provided grounds for the Rumanian scholars to accept that cup as a local Dacian form, created in the last decades B. C. and remaining in everyday use till the 4th century. A.D.

All earthenware cups discovered on Rumanian territory are only hand-made, the cups from the earliest era being decorated with a relief cord-like ornament, which later is either very rare or has disappeared completely.

This type of cups has not merited much attention in Bulgaria, although they are very frequent finds during archeological excavations.²³⁶

Plenty of cups have been discovered on the territory of Nicopolis ad Istrum.²³⁷

It seems that the demand for such earthenware had been so great that it became necessary for the local potters to start production on a potter's wheel also. This is a fact which has not been established so far to the north of the Danube. Certainly, the production process was rationalized by the potter's wheel, but, on the other hand, with this the form was simplified and formalized, and some additional details disappeared; mostly the relief cord-like decoration. Their height varies from 6 to 9.6 cm, the diameter from 16 to 24 cm (Table XLV, 5, 6).

The second earthenware found together with the cups considered has semiconical lower part which slightly widens upwards, then gently becomes narrower, ending with a slightly out-turned rim.

This type of earthenware is usually decorated with a plastic cord-like ornament and it was used as urns.²³⁸ (Table XLV, 2).

The same hand-made urns have been discovered in the ceramic centre near Pavlikeni, in the same cultural layer as the fine ceramics.

What is more, two earthenware urns were used as supporting pillars in the small kilns designed for preparing the auxiliary materials in the ceramic production.²³⁹

The production of this type of earthenware started only in the ceramic centre near Hotnica. A great collection originated from there, consisting of tall

rough wheel-made earthenware with no decoration, reaching a height of up to 20—22 cm and a diameter of up to 11—12.5 cm (Table XLV, 3)

These types suggest that this pottery cannot be attributed to only one ethnic group, because it has been found on a vast territory, although any particular development was achieved on the territories on both sides of the Lower Danube. The author considers that the influence of the ceramic production from the South had been greater (this is to be noticed in fine ceramics), but he is far from the thought of denying the presence of local production of fine ceramics as well on the territory of present-day Rumania.

The archaeological finds show that a considerable part of the products of these three ceramic centres, together with the articles produced by the West Roman potters, was marketed to the north of the Danube as well. This is very clearly suggested in the study of the ancient ceramics from Oltenia,²⁴⁰ carried out by G. Popilian, with whom the author had the opportunity to work together on the problems of Roman ceramics from Moesia Inferior and Dacia. In the newly created ceramic centres for production of fine ware in *Provincia Dacia* the conventional forms were imitated. They were adopted from abroad in the ceramic centres of Moesia also, but here these forms were additionally decorated, using various techniques, while this phenomenon is very rarely observed on the earthenware produced in the ceramic centres to the north of the Danube.

The influence of earlier Thracian forms on the new production of these centres is also to be seen, as it has already been pointed out, in the large greyish-black ware used for storing food and liquids.

Everything which has been said so far is in support of the author's statement that the tradition in the pottery production created by the local master-potters did not fade, but continued to exist in the Bulgarian land of today²⁴⁷ during the Roman rule as well.

III. Chronological and Typological Characteristics

In order to acquire a comprehensive idea of the overall production in the ceramic centres near Hotnica, Pavlikeni and Butovo in a chronological and typological aspect, it would be expedient to add the most characteristic features of the remaining various ceramic products discovered in the Bulgarian lands to the materials already considered. Only the comparison between finds of imported ware and pottery produced in the considered centres (discovered, however, together with certain dating materials in the different necropolises and ancient settlements on the territory of Nicopolis ad Istrum) allows us to work out an accurate chronological scheme of the overall production, following the stages of its development and improvement, as well as to reveal the process of substitution of the imported goods by local imitations.

The ceramic production considered in the present study and subjected to the specified method of comparison, has shown that the development of the pottery production in the centres near Hotnica, Pavlikeni and Butovo followed four stages, clearly distinguished by the production itself and exactly dated by a great number of coins discovered during the archaeological excavations.

The first stage coincided with the rule of Emperor Hadrian (117—138 A.D.) and continued to the middle of the 2nd century. The second stage began from the last years of the rule of Emperor Antoninus Pius (138—161 A.D.) and ended towards the last decade of the 2nd century.

The third stage is dated to the rule of the Severi and ended one decade after their domination, i. e. about the middle of the 3rd century.

The fourth stage included the second half of the 3rd century.

The ceramic centres near Hotnica and Pavlikeni were set up during the first stage, the ancient settlement in Butovo was already in existence and continued to use the necropolis in the area of Kalvaka. Among the prevalent pottery grave offerings there were products of the East Greek ceramic workshops and imitations of the West Roman sigillata workshops. The most frequently occurring grave offerings were flat dishes (Table XXVI, 2); deep cups and bowls, ending with a rim of sophisticated shape and coated with glaze, typical of the pottery from Asia Minor; semispherical bowls and dishes with a side out-turned rim in the form of an arch, similar in shape to the earthenware produced in the West Roman workshops. Their production started in the ceramic centre near Pavlikeni as early as the mid-2nd century (Table XLVI, 2, 3, 5, 6; XLVII, 1, 2).

From the group of large vessels made of fine clay, deep bowls (Table XLVI, 9), discovered together with coins from the rule of Hadrian, are most often to be found in the necropolis of Kalvaka. Towards the middle of the 2nd century their production started in the ceramic centres near Hotnica and Pavlikeni, and a little later in Butovo as well. Actually, this is one of the most widespread types of earthenware in all centres. Varied decoration has been applied upon the upper cylindrical part of the bowls, using all techniques: stamping, squirting, appriqué, etc.

Deep bowls with embossed decoration, produced in Butovo, are often to be found in Novae, Nicopolis ad Istrum, Succidava and other ancient sites in Northern Bulgaria. Jugs originating from East Greek potter's workshops have been discovered in the ancient necropolis of Kalvaka, together with coins from Antoninus Pius. The production of similar jugs started in the ceramic centre near Pavlikeni as early as the mid-2nd century.

Towards the end of the first stage of the development of the ceramic production, the centres in Hotnica and Pavlikeni started production of censers with a tall cylindrical foot found in large numbers in the necropolis of Kalvaka. Later, censers were also produced in Butovo, the shape being preserved, but using a simplified process. The hollow foot was substituted by a small cylindrical base. This type of earthenware was widespread in the West Roman provinces and on the territories along the lower course of the Danube. For the present it is difficult to find out under whose influence their production had started in these ceramic centres. Similar censers are often to be found on the territory of Nicopolis ad Istrum and Novae. Their presence is less frequently established in Southern Bulgaria.

In connection with the funerary cult, mass production of jugs with a spherical body and a typical double conical mouth started towards the end of the first stage (Table XLIX, 9). This is a type of earthenware frequently found within the whole Roman Empire, especially in its Western provinces and along the Middle and Lower Danube. They are more rarely to be found in Southern Bulgaria. The production of jugs of this type had started initially only in the ceramic centre near Pavlikeni and a little later in Butovo as well; they are to be found in large numbers in burials on the territory of Nicopolis ad Istrum and Novae.

Deep greyish-black earthenware for everyday use were produced during the first stage in Hotnica and Pavlikeni, used as urns in the necropolis of Kalvaka. Mass production of one-handled jugs had started by that time in Hotnica and Pavlikeni, and a little later in Butovo as well (Table XLVII, 8, 11).

They are an imitation of the jugs produced by the ceramic centres in Asia Minor, part of them being additionally decorated with Barbotine ornaments. They were marketed on the territory of Nicopolis ad Istrum and Novae. The production of amphora-like earthenware started at the same time in Pavlikeni. These were jugs with a cylindrical neck and a broadened mouth emphasized with a vertical band (Table XLIX, 3).

The production of semiconical cups and tall greyish-black earthenware for everyday use also started towards the end of the first stage near Hotnica and Pavlikeni, imitating the hand-made earthenware cups and stoups (Table L, 7) and found in large numbers to the north of the Danube.

Clay lamps are often to be found in the ancient necropolis of Kalvaka as grave goods. Part of them, discovered in the earlier burials together with coins from Emperor Traianus (98—117 A. D.), belonged to the so-called '*Firmalampen*', and originated from the Western workshops, another part being undoubtedly of Eastern origin (Table LII, 2).

Towards the end of the first stage the production of lamps started in the ceramic centre near Pavlikeni and a little later in Butovo, using imported clay moulds for the purpose. Thus both imported lamps and lamps produced by the local potters using imported moulds have been discovered in the burials in Kalvaka. Gradually the import of clay lamps and lamp moulds stopped and was substituted by locally produced lamps and moulds (Table LII, 1, 3—12).²⁴²

The second stage of the development of the ceramic centres is related to the final consolidation of ceramic production on the territory of Nicopolis ad Istrum. A ceramic centre was created in Butovo, but it still had limited potentialities. Its production was marketed in the neighbourhood. At the same time, the ceramic centre in Pavlikeni flourished, but towards the 'seventies of the 2nd century it had endured certain cataclysms connected with the invasions of the Costoboci, which had an adverse effect on its further development.

The ceramic centre near Hotnica continued to produce ordinary pottery used in everyday life. A certain improvement was noticed in the quality of production. The earthenware became more thin-walled and the sand grains were finer. Traces of additional smoothing and scrubbing of the bottom on the potter's wheel are seen on some of the vessels.

The imported ceramic material used for cult purposes in the burials in Kalvaka almost disappeared during the second stage. Only earthenware produced in our ceramic centres were found here. These are mainly two-handled krater-like vessels, with a conical lower part and a cylindrical upper one, decorated with incised and relief plant ornaments (Table XLVIII, 9). Produced in the ceramic centre near Pavlikeni, they were used as urns on the territory of Nicopolis ad Istrum and Novae. Jugs with a spherical body and a typical semi-conical neck were produced at the same time. Their production started in Pavlikeni and was also found in burials on the territory of Nicopolis ad Istrum and Novae, together with coins from Marcus Aurelius (161—180 A. D.) (Table XXXIII, 5).

All techniques for applying additional decoration on the wheel-made earthenware were used on a mass scale during this stage: incised ornaments, Barbotine decoration, cogwheel and especially the appliquéed decoration. Appliquéed vessels are typical of the production near Pavlikeni and Butovo, but they were not produced in large numbers in the ceramic centre in Hotnica. The additional decoration was most often applied on the upper cylindrical part of the deep bowls or two-handled krater-like ware, as well as on the flat bottom of the shallow dishes.

Technology of ceramic production was improved in Butovo towards the end of the second stage. Side by side with the small two-chambered round kilns, there appeared large rectangular ones, their grates being supported by two pillars. This increased the production which gradually gained reputation on the markets in Novae, Succidava and other urban centres along the Lower Danube. The production of deep bowls, cups, one- or two-handled jugs continued: they became more thin-walled and their glaze was of better quality. An improvement is noticed in the ceramic production itself. Additional processing of the vessels on the potter's wheel was used more often. Decoration became more varied, the Barbotine technique being preferred to older techniques. The small one- or two-handled vessels, designed for religious purposes, were mainly decorated with ivy-leaves and vine-twigs, the former being most frequent on the territory of Nicopolis ad Istrum, Novae, Succidava, etc. (Table XLVIII, 5, 6, 8, 12).

Towards the end of the second stage, mass production started of clay lamps using moulds made by the craftsmen themselves. The models for the clay lamps were wheel-made and additionally decorated by means of various tools (Table LII, 10).

The third stage of development of the ceramic centres generally included the rule of the Severi and was related to the highest achievements in pottery production in Butovo. At the same time, the ceramic centres near Hotnica and Pavlikeni continued to function. The centre near Hotnica still produced earthenware used in everyday life, for the needs of those working in the stone quarries, for the neighbouring settlements, as well as fine ceramics, although the latter were inferior to the fine earthenware produced in Nicopolis ad Istrum and did not compete successfully on its market.

The ceramic centre in Pavlikeni also produced greyish-black ware for everyday use. Apparently the old craftsmen had thus found a way to challenge the competition of the ceramic centre in Butovo whose basic production consisted of fine ceramics.

The production in Butovo expanded and all existing techniques for applying additional decoration were being used. However, the craftsmen definitely preferred the Barbotine technique and the cogwheel. Stylized ivy-leaves and vine-twigs were still squirted on the earthenware, and successfully imitated pine-cone scales also appeared, used separately or in combination with other ornaments (Table XLVIII, 6, 8).

The cogwheel which had been used quite sparingly until then for drawing narrow stripes of short lines arranged crosswise, began to be used quite often, the short lines arranged crosswise occupying both the outer and the inner side of many vessels. Relief ornaments were also appliquéd, made in advance in single clay moulds. This type of decoration became more varied. Side by side with the erotic scenes and the image of Dionysus, other representatives of the Greek-Roman pantheon also appeared: Zeus, Hermes, Artemis, Kybele, Orpheus, etc. (Table XXIV, 1—7).

During the third stage the necropolis near the present-day post office in Butovo began to be used, in which ceramic burial finds have been discovered, produced exclusively in this ceramic centre.

During the third stage the centres in Hotnica, Pavlikeni and Butovo started production of semiconical earthenware, the walls of which were radially pierced with holes. This type of earthenware was designed for domestic censers. This is a local form, unknown in the other Eastern and Western production centres (Table L, 4).

Meanwhile, only Butovo started to produce large shallow dishes with sophisticatedly shaped rim, on which decorative handles had been appliquéed. These dishes were found in Novae, as well as in the ancient sites around Nicopolis ad Istrum. They are an imitation of earlier forms from Asia Minor (Table XXVIII, 1, 2, 3).

At the beginning of the 3rd century the ceramic centre in Butovo started production of earthenware trays for religious purposes, made in single clay moulds, modelled by the craftsman himself. The rim and the handles were decorated with relief plant and animal ornaments. Round, elliptical and rectangular, they are a barbarized imitation of the expensive metal vessels with embossed decoration rather than an imitation of the West Roman terra sigillata. Exact parallels to our trays have been discovered in Novae,²⁴³ Succidava²⁴⁴ and other towns along the Danubian border (*limes*).²⁴⁵ To the east they have been traced as far as the village of Gorsko Ablanovo, district of Tăgrovîște²⁴⁶ (Table LI, 1, 2, 3).

During the third stage the centre in Butovo started mass production of terracotta and votive tablets made by hand in clay moulds. They copied some monument or imported marble statuettes. Prevalent among the statuettes are figures of Venus, busts of soldiers, figures of foals, kids, etc., the votive tablets bearing the images of Dionysus, Heracles, Zeus, etc.²⁴⁷ (Table LI, 4, 5, 7).

For the requirements of construction, the centre in Butovo started producing special cylindrical objects used in the sophisticated vaulted constructions and tubulae, designed for the heating systems (Table XLI, 1—6).

The fourth stage is related to the invasions of the Goths which did not interrupt life in the ceramic centre in Butovo, but nevertheless dealt a serious blow to it. Production continued, though on a more limited scale. The products became coarser, the glaze lost its quality and turned into a dark-brown turbid mass. The earthenware was no longer subjected to additional processing.

The ceramic centre in Pavlikeni stopped its production.

The ceramic centre near Hotnica also restricted to a minimum the production of pottery for everyday use.

The attempt of the potters from Hotnica to adopt the production of fine ceramics remained a sporadic phenomenon — a moment of its development.

It is evident from what has been set forth so far that the ceramic centres near Hotnica, Pavlikeni and Butovo started to manifest an activity as late as the second half of the 2nd century, reaching their culmination by the beginning and in the first three decades of the 3rd century, after which they gradually began to decline and stopped functioning one after the other in the course of less than 70 years.

Thus the situation described fully corresponds to the economic development in the area between the Danube and the Balkan Mountains during the 2nd-3rd centuries.

Towards the end of the 2nd century the ceramic centres near Pavlikeni and especially in Butovo turned into large-scale producers of Roman provincial ceramics, which gradually established itself on near and distant markets in Moesia and Dacia, whereas Hotnica remained a small-scale producer of greyish-black ceramics for everyday use for the requirements of the neighbouring populace.

The production of Butovo was in great demand in Novae. These ancient settlements were in close economic relations, which are evidenced not only archaeologically but in epigraphic records as well. The production of Butovo is

quite often to be found along the Lower Danube from Succidava to Transmarisca. Earthenware from Butovo is comparatively more rarely found in the eastern half of the territory of Nicopolis ad Istrum, as well as in the town itself. Most probably the reason for this should be sought in the greater initiative and competitive power of the local craftsmen.

The production of Butovo has not been found in Thrace. Other earthenware of a similar shape has been found there, altogether different in the manner of execution and clay composition. Most of the vessels lacked additional stylized decoration. If there was decoration, it consisted of incised stylized geometrical and plant ornaments. It is obvious that the pottery south of the Balkan Mountains was supplied from the Eastern workshops, as well as from local centres, created later and substituting the import by local imitations. Such centres had existed near Cabyle and probably near other urban centres as well.

NOTES TO CHAPTER THREE

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- ⁵⁹ VERNHET A., Op. cit., pl. VI, A/1,2
- ⁶⁰ Unpublished materials from archaeological explorations
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- ⁶² BOJČOVIĆ Dr., Op. cit., T. XXXVIII, 339—340
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- ⁶⁴ Unpublished materials for the archaeological map of the District of Veliko Tŕrnovo
- ⁶⁵ DRAGENDORF H., Op. cit., T. III, 40
- ⁶⁶ LOESCHKE S., Op. cit., 371, T. XXVIII, 20
- ⁶⁷ KNIPOWITSCH T., Op. cit., 32—33, T. 32c
- ⁶⁸ КНИПОВИЧ Т., Op. cit., 303, тип 14, рис. 3, 6
- ⁶⁹ Unpublished materials from archaeological excavations
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- ⁷¹ БОТУШАРОВА Л., 1960, 173—174, обр. 4 и 5; ВЕЛКОВ Ив., 1927, обр. 18; ГЕРАСИМОВ Т., 1946, 182, обр. 67
- ⁷² POPILIAN, Gh., Op. cit., T. LXV, tip 6 (794—799)
- ⁷³ Unpublished materials from archaeological explorations
- ⁷⁴ Unpublished materials for the archaeological map of the District of Veliko Tŕrnovo
- ⁷⁵ Unpublished materials from Novae
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- ⁷⁷ ДРЕМСИЗОВА-НЕЛЧИНОВА Цв. и Ив. БАЛКАНСКИ, 1973, 59, обр. 4, 7
- ⁷⁸ GOSE E., Op. cit., T. 17, 254
- ⁷⁹ DRAGENDORF H., Op. cit., T. II, 26
- ⁸⁰ KNIPOWITSCH T., Op. cit., T. I, 4; IV, 2
- ⁸¹ КНИПОВИЧ Т., Op. cit., 296—297, рис. 1, 4
- ⁸² ПАК ТАМ, 321—322, рис. 15
- ⁸³ ИВАНОВ Т., 1963, 794, табл. 136
- ⁸⁴ KNIPOWITSCH T., Op. cit., T. II, 30
- ⁸⁵ DRAGENDORF H., Op. cit., T. II, 35
- ⁸⁶ Unpublished materials
- ⁸⁷ POPILIAN Gh., Op. cit., T. XIII, 193
- ⁸⁸ IBIDEM, T. LX, 740—742
- ⁸⁹ GOSE E., Op. cit., T. 17, 255
- ⁹⁰ DRAGENDORF H., Op. cit., T. II, 30
- ⁹¹ In the necropolis in the Kalvaka locality, small jugs are to be found, made in the Butovo ceramic centre; they are dated in the second half of the 2nd century.
- ⁹² ИВАНОВ Т., 1952, 233, обр. 218
- ⁹³ In the stores used by the archaeological expedition on the site of Novae, there are more than twenty intact or fragmentary one-handed small jugs.
- ⁹⁴ ГЕТОВ Л., 1969, 36—39, обр. 3; ТАБАКОВА-ЦАНОВА Г. и Л. ГЕТОВ, 1969, 35, обр. 18a; БАЦОВА-КОСТОВА, Е., 1970, фиг. 17a
- ⁹⁵ ТОНЧЕВА Г., 1962, 5, обр. 16; АНТОНОВА В., 1963, 30, обр. 17; СТАНЧЕВ Ст., Й. ЧАНГОВА и Хр. ПЕТКОВ, 1961, 39, обр. 4/7; БАЛКАНСКА А., 1964, обр. 5e; ПИСАРЕВ Ат., 1977, 203, обр. 5; МИЛЧЕВ Ал. и П. ГЕОРГИЕВ, 1979, 108, табл. XV, 2 и XVIII, 1; ТОДОРОВИЧ-ВУЧКОВИЧ Д., 1961, 268—269, рис. 21
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- ⁹⁹ KNIPOWITSCH T., Op. cit., T. III, 38
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- ¹⁰¹ Jugs decorated in Barbotine technique are seldom found in the environments of Nicopolis ad Istrum; the same could be said about Novae.
- ¹⁰² Unpublished materials from archaeological excavations; Cf. also ДИМИРОВ Д. П. et al., 1964, 231, рис. 19
- ¹⁰³ СТЕФАНОВ Ст. 1932—33, 396—397, рис. 151
- ¹⁰⁴ Unpublished materials for the archaeological map of the District of Veliko Tŕrnovo
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- ¹⁰⁶ GOSE E., Op. cit., T. 29, 360; SENECHAL R., 1975
- ¹⁰⁷ МИКОВ В., 1932—33, 113, обр. 100
- ¹⁰⁸ ВЕЛКОВ Ив., 1932—33, 158, обр. 147, 8
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- ¹¹⁰ ИВАНОВ Й., 1910, 179, обр. 32
- ¹¹¹ ВЕЛКОВ Ив., 1928—29, 31, обр. 34

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- ¹³⁰. БОТУШАРОВА Л., 1956, 121—123, T. I/2а, б, в и III/3
- ¹³¹. POPILIAN Gh., *Op. cit.*, Pl. XLVII, tip. 7 (497—508)
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- ¹³³. IBIDEM, T. 34/395
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- ¹³⁵. Unpublished materials from Novae
- ¹³⁶. ДРЕМСИЗОВА-НЕЛЧИНОВА Цв. и Ив. БАЛКАНСКИ, *Цит. съч.*, 58, обр. 4/1
- ¹³⁷. Similar bronze vessels were found in some interments in Tumulus No. 6 in Čatalka near Stara Zagora, as well as in its environs. Cf. also НИКОЛОВ Д. и Хр. БУЮКЛИЕВ, *Op. cit.*, 21, обр. 28а, б, в
- ¹³⁸. Unpublished materials from the District Historical Museum in Veliko Tŕrnovo
- ¹³⁹. Unpublished materials from Novae
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- ¹⁴¹. ТОНЧЕВА Г., *Op. cit.*, 58, обр. 11а
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- ¹⁴³. ПАК ТАМ, 44, обр. 19
- ¹⁴⁴. БАЦОВА-КОСТОВА Е., 1970, 27, обр. 10
- ¹⁴⁵. БУЮКЛИЕВ Хр., 1962а, 50—51, обр. 46 и 54, обр. 14а
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- ¹⁴⁷. СУЛТОВ Б., 1968, 41 сл., T. I
- ¹⁴⁸. More than fifty amphora-like, two-handled small vessels come from the necropolis of Novae, lying south, west and east of the town, as well as from its more distant territories. In general, they are dated from the end of the 2nd to the mid-4th century. A significant part of these finds was made in the Butovo workshops, while the rest is the product of some other craftsmen — Unpublished materials from Novae. Cf. also ВЪЛОВ В., 1965, 29, обр. 7
- ¹⁴⁹. ВЕЛКОВ Ив., 1940-42, 214
- ¹⁵⁰. The author has had the opportunity to get acquainted with most of the ceramic material found on the territory of Succidava and Romula. Among the other finds there are some made in the Butovo workshops.
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- ¹⁵². СУЛТОВ Б., 1968, 48—49
- ¹⁵³. МИКОВ В., *Op. cit.*, 116, обр. 103а
- ¹⁵⁴. БОТУШАРОВА Л., 1956, 122, табл. IV, 1 и V, 7
- ¹⁵⁵. АЛАДЖОВ Д., 1965, 95, обр. 15/6 и Т. А. III, 4/1
- ¹⁵⁶. БУЮКЛИЕВ Хр., 1962а, 54, обр. 14
- ¹⁵⁷. BENEА D., 1977, 161—168
- ¹⁵⁸. KUZSINSZKY B., *Op. cit.*, 218—245, fig. 231—249
- ¹⁵⁹. VERTET H., 1969, 124—126
- ¹⁶⁰. LOESCHKE S., *Op. cit.*, 385 ff.
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- ¹⁶². Unpublished materials from archaeological excavations

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164. БУЮКЛИЕВ Хр., 1973, 42 обр. 14; 1962а. 52, обр. 86; ГЕТОВ Л., *Op. cit.*, 42, обр. 13 и 44, обр. 18
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166. POPILIAN Gh., *Op. cit.*, 92, Nos. 399—407
167. BOJOVIĆ Dr., *Op. cit.*, Т. XXXV/317
168. KNIPOWITSCH T., *Op. cit.*, Т. III/39
169. БУЮКЛИЕВ Хр., 1962а, обр. 116 и 12
170. НИКОЛОВ Д. и Хр. БУЮКЛИЕВ, *Op. cit.*, 1967, 14, обр. 116
171. KNIPOWITSCH T., *Op. cit.*, Т. III/37
172. БУЮКЛИЕВ Хр., 1962а, обр. 2 и 6а, и 8а; 1973, обр. 14
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174. POPILIAN Gh., *Op. cit.*, 108, tip. 1, Pl. LVIII (685—687)
175. КНИПОВИЧ, Т. *Op. cit.*, 304, тип 16 /M/, рис. 5, 1
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178. Unpublished materials;
179. Unpublished materials for the archaeological map of the District of Veliko Tŕnovo
180. RÓCZY K. Sz., *Op. cit.*, Т. X, 1—5
181. POPILIAN Gh., *Op. cit.*, 109, Nos. 698—699
182. Unpublished materials; Cf. also ДИМИТРОВ Д. П. et al., 1964, 231, рис. 19
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185. POPILIAN Gh., *Op. cit.*, 125—126, Pl. LXXI, 882
186. СУЛТОВ Б., *Op. cit.*, 1968, 55, обр. 9г
187. Unpublished materials from archaeological surveys
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189. ГЕРАСИМОВ Т., Annual report on the archaeological exploration in the District of Pazardŕik, presented at the 6th Annual Conference of the Institute of Archaeology in 1960
190. Cf. hand-made and wheel-made vessels in the text
191. Production of this type of ware has not been established yet for the centres near Hotnica and Pavlikeni
192. Unpublished materials from the District Historical Museum in Veliko Tŕnovo
193. СУЛТОВ Б., 1972, 179, сл., обр. 3, 4 и 5
194. ВЪЛОВ В., *Op. cit.*, 33, обр. 106; a similar vessel, found in Gigen village (=the ancient Oescus) is now in the District Historical Museum in Plevan
195. According to the information, kindly given by our colleague H. Bujukliev, similar vessels are found in Augusta Traiana and are now kept in the District Historical muzeum in Stara Zagora
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197. GAVELLE R., 1952, 17 ff.; KUZSINSZKY B., *Op. cit.*, fig. 339; VOJOVIĆ Dr., *cit.*, Т. LIX, L (525—538); POPILIAN Gh., *Op. cit.*, Pl. LXI, LXII (748—760)
198. Rarely the bottom of some vessels is pierced with holes for ventilation. A similar vessel is found in Nicopolis ad Istrum — Unpublished materials.
199. БУЮКЛИЕВ Хр., 1962б, обр. 3; MAJEWSKI K. et al., 1962, 108, rys. 97; KUZSINSZKY B., *Op. cit.*, 344, fig. 353
200. POPILIAN Gh., *Op. cit.*,
201. ДРЕМСИЗОВА-НЕЛЧИНОВА Цв., 1971, 21—30
202. БЪОТТЕР Б., 1978, 26—32
203. HILGERS W., 1969
204. PICON M., 1973, 55 sqq.
205. СУЛТОВ Б., 1980, 384, fig. 11с
206. IBIDEM, fig. 11д
207. RÓCZY K. Sz., *Op. cit.*, Т. IV, 18; BOJOVIĆ Dr., *Op. cit.*, Т. XLIII, 395—397; POPILIAN Gh., *Op. cit.*, Pl. LXIX (848—849)
208. СУЛТОВ Б., 1964, 53—54, обр. 7, 3; Unpublished materials from the District Historical museum in Veliko Tŕnovo.
209. POPILIAN Gh., *Op. cit.*, tip. 5 (850—855), Pl. LXIX
210. Cf. Tabl. XXVIII, 6
211. ДРЕМСИЗОВА-НЕЛЧИНОВА Цв., *Op. cit.*, 22—24, обр. 2, 1
212. RÓCZY K. Sz. *Op. cit.*, Т. IV, 19
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214. ДИМИТРОВ Д. П. et al., 1964, 229, рис. 17; ДРЕМСИЗОВА-НЕЛЧИНОВА Цв., *Op. cit.*, 22—24, обр. 1,1 и 2,6

- ²¹⁵. GOSE, E., Op. cit., T. 48/501: PÓCZY K. Sz., Op. cit., T. IV, 1; POPILIAN Gh., Op. cit., Pl. LXV (787-792)
- ²¹⁶. СУЛТОВ Б., 1964, обр. 7и.
- ²¹⁷. Unpublished materials from archaeological excavations.
- ²¹⁸. Unpublished materials from archaeological excavations
- ²¹⁹. POPILIAN Gh., Op. cit., tip 4 (344—346), Pl. XXXV
- ²²⁰. PÓCZY K. Sz., Op., cit., T. V, 11
- ²²¹. GOSE E., Op. cit., T. 53/532
- ²²². Author's personal observations
- ²²³. СУЛТОВ Б., 1964, 54, обр. 9а as well as unpublished materials for the archaeological map of the District of Veliko Tŕnovo
- ²²⁴. ДРЕМСИЗОВА-НЕЛЧИНОВА Цв., Op. cit., обр. 3, 14, 15
- ²²⁵. GOSE E., Op. cit., T. 57/555—565; BOJOVIĆ Dr., Op. cit., T. LXXI, 621—636; POPILIAN Gh., Op. cit., Nos. 898—936
- ²²⁶. НИКОЛОВ Д., и Хр. БУЮКЛИЕВ, 1967, обр. 9а и 25в
- ²²⁷. БУЮКЛИЕВ Хр. 1973, 42, обр. 15
- ²²⁸. HILGERS W., Op. cit., 82, fig. 74, 75
- ²²⁹. PÓCZY K. Sz. Op. cit., Abb. 10/7,8
- ²³⁰. PLESNIČAR-GEC L., Op. cit., T. 7 (19—21)
- ²³¹. BOJOVIĆ Dr., Op. cit., T. III, 470
- ²³². Cf. supra note 228
- ²³³. ЯВАШОВ Ан., Op. cit., 56, фиг. 50,2; ПЕТРОВ Т., 1950, 251, обр. 188; ВЕЛКОВ Ив., 1940-42, 214—215, обр. 306; ГЕОРГИЕВА С., 1952, обр. 261; МАШОВ Сп., 1975, 44—46, обр. 7 а-6; ОБЧАРОВ Д., 1979, 42, обр. 116.
- ²³⁴. In the ceramic centre near Hotnica hand-made vessels with a cable-like ornament were found.
- ²³⁵. CRIŞAN I. H. 1969, 153—161, Pl. XLVI—XLVII, fig. 66—68; POPILIAN Gh., Op. cit., 133, Nos. 937—942; BABEŞ M., 1980, 7—23
- ²³⁶. Four cups are kept in the Museum in Svišov. They have been found during archaeological excavations of the local *kale* (fortress), near the present-day town, as well as in Novae. Only one of these has been published. One small cup has been found on the Carevec hill in Veliko Tŕnovo — unpublished. Cf. also ТОНЧЕВА Г., 1962, 56—57, обр. 7а; ОБЧАРОВ Д., 1965, 35—36, обр. 3
- ²³⁷. Unpublished materials
- ²³⁸. In the stores of the Museum in Svišov some intact as well as fragmentary vessels of this type are kept, discovered during archaeological explorations of the fortress and on the site of Novae — unpublished.
- ²³⁹. BLÜMNER H., 1879, 95—96, Fig. 16, 17
- ²⁴⁰. POPILIAN Gh., Op. cit., 23, ff. 56ff.
- ²⁴¹. SULTOV B., 1984, 184—190
- ²⁴². Unpublished materials;
- ²⁴³. ДИМИТРОВ Д. П. et al., 1965, 43 ff., рис. 15; IDEM, 1974, 168—169, обр. 35 as well as unpublished materials from Novae.
- ²⁴⁴. POPILIAN Gh., Op. cit., 23 sqq.
- ²⁴⁵. Fragments of similar ware are found in the ancient Transmarisca, near the present-day town of Tutrakan. Unpublished materials. The author is obliged to his colleague Račo Zmееv for this information.
- ²⁴⁶. ОБЧАРОВ Д., 1972, 47, обр. 4,5
- ²⁴⁷. Unpublished materials

CONCLUSION

The main task set in the present dissertation work was to explore the ceramic production on the territory of Nicopolis ad Istrum on the basis of complex archaeological explorations in the ceramic centres near Hotnica, Pavlikeni and Butovo, discovered by the author during the last two decades. Research has proved that the appearance of the ceramic production was closely connected with the setting up of Nicopolis ad Istrum and coincided with the general economic upsurge in the area between the Danube and the Balkan Mountains, which set in after the wars of Emperor Traianus against the Daci at the beginning of the 2nd century and continued for more than 150 years.

The three ceramic centres were built over the ruins of older Thracian settlements, some of which continued to exist after the coming of the Romans, expanding into bigger settlements. This is confirmed by the concrete historical material discovered in the older necropolises of Pavlikeni and Butovo, which had still been used by the native Thracian populace after the establishment of Roman rule.

The location of the ceramic centres was propitiously chosen in the vicinity of large consumer settlements, near important roads and in the presence of all necessary conditions for creating a reliable production, i. e. water sources, deposits of good-quality clay and forest massifs.

The three ceramic centres did not function simultaneously. The centre near Hotnica was established first, prompted by the growing demands for pottery used in everyday life, which was necessary for those working in the quarries of Nicopolis ad Istrum. Meanwhile the ceramic centre near Pavlikeni was also created on the site of the villa of a rich landowner. Limited production of fine earthenware started there as an imitation of the ceramic production imported at the time from other workshops. Most probably the fine ceramics quickly gained popularity, which necessitated the search for new methods to facilitate its mass production. Attention was directed towards the rich deposits of clay near Butovo, where a big ancient settlement — Emporium Piritensium — had already existed. Separate potters' quarters were set apart in its southern outskirts, some of which (later destroyed) were included in the settlement after its new expansion.

On the basis of the archaeological exploration and the investigation of the available comparative material, the intricate mechanism and the technology and organization of ceramic production were clarified in the discovered centres, with no claim that the problems have been completely exhausted.

Many potter's workshops, together with the tools of the ancient craftsmen, were discovered during the long archaeological excavations. The workshops were usually small buildings (consisting of one to three rooms), detached or forming a part of the potters' lodgings. The space which seems small at first sight was used very rationally. The potter's wheel was mounted in the most suitable place in the southern part of the workshop, the shelves for drying the ceramic production were arranged along the walls. The roofs were supplied with special ventilating facilities. The presence of a pottery kiln for firing the new production in the workshop is not a rare phenomenon.

Archaeological explorations revealed the structure of the pottery kilns in detail, as well as the stages of their construction and improvement; they

supplied the basis for the typology of the different kilns proposed here. According to it, the basic structure of the pottery kilns is the same: they are two-chambered and do not differ from other kilns known in Antiquity. Most preferred kilns were the small ones, having a round grate and one supporting pillar, because of their easy maintenance, large capacity and more adequate use of the thermal effects. However, kilns with a round grate are to be found, typical only of the Roman provinces of Moesia Inferior and Thracia, as well as kilns with a rectangular grate and two supporting pillars which, according to the author, had been created under the influence from Asia Minor.

Out of the 102 kilns discovered, 86 have one supporting pillar, four have one tongue-shaped pillar and five have two supporting pillars.

It was established that the kilns had not functioned simultaneously; earlier kilns have been found, destroyed already in ancient times; some of them were turned into garbage pits, new ones being constructed over others. The kilns with a tongue-shaped supporting pillar are the earliest and therefore imperfect ones, the latest being the kilns with two supporting pillars. The latter have been found mainly in Butovo and are connected with the improvement in pottery production, caused by the growing demand for cheaper production, accessible to the populace.

One to three kilns were usually used in the production of one workshop. As a rule, several kilns with different capacities were grouped around a common working platform. These kilns served for firing earthenware of different sizes and amounts. This testifies to a rational use of the labour and to a striving for better organization.

Through the brief survey of the technology of pottery production, an attempt was made to clarify fully some already known or poorly studied aspects of the intricate technological process, connected with the additional processing and decoration of the earthenware, as well as the manner of arrangement of the raw production for firing in the kiln.

The ceramic material and its archaeological context of discovery also give grounds for the statement that a specialized production of terracotta, lamps and trays existed in many potter's workshops, as well as production of moulds for their making. The clay moulds were an object of trade not only in the ceramic centre in Butovo, but in other ancient centres as well, e. g. Romula in Dacia.

The detailed study of the ceramic material and of the character of the pottery production gives grounds to speak of some differentiation of labour in the potter's workshops. According to the author, several people worked in a workshop: a master-potter and 2 or 3 assistants, but in different moments more people became also involved, most probably members of the craftsman's family. The sophisticated operations: modelling, additional processing, decoration, arrangement and firing, were performed by the master, the secondary ones: clay kneading, glazing, engobe and keeping up the fire, were done by his assistants. The appearance of many fingerprints on the earthenware and mainly on the articles made in moulds suggests that the labour of children and women was used in their production.

The complex consideration of the ceramic material from the explored centres and the material imported before their setting up, allowed to follow the intricate mechanism in the substitution of the imported goods for local imitations, which did not happen at once, but in the course of a comparatively long period of time. At first, ordinary ceramic articles were substituted and their

import was stopped after their production by the local masters started; thus, local imitations completely substituted the imported goods.

A great variety of shapes and decorations used by the ancient craftsmen can be found among the ceramic material. Side by side with the forms proper to the Asia Minor traditions in pottery, others are also to be seen, originating from the West Roman workshops, which had not some directly but through mediation from Asia Minor. Some western forms are also to be found here, directly adopted by the local craftsmen, especially specimens from the production of the workshops in Southern Gallia. This means that after the decline of the Arretine production centres, their former markets were conquered by the products of the ceramic centres in Southern Gallia, whose production is to be found not only in the West Roman provinces, but also in the regions of the East Mediterranean to the Northern Black Sea towns. This production, modern for those times, became a target for imitation in our ceramic centres as well, and especially in Pavlikeni. The stylistic analysis of the ceramic material has revealed that the craftsmen were not only ordinary imitators or executors of already popular forms; they manifested artistic understanding and created forms typical only of our centres.

The various production discovered contains both fine and greyish-black ware. The former includes earthenware made of fine clay with a glaze cover, belonging to the red-glazed ceramics, widespread in Roman times. These are vessels mainly used as grave goods and for the cult of Dionysus, which was particularly popular in this area.

The pottery of the first group represents the basic production of the centres near Pavlikeni and Butovo. Deep bowls were mainly produced in Pavlikeni, as well as two-handled urns, amphorae and censers. The production list of Butovo is characterized by a greater variety. Shapes were more sophisticated there and with additional details. Shallow dishes were prevalent, as well as the small two-handled earthenware and the amphora-like jugs with the typical funnel-like mouth. A significant part of this pottery was additionally decorated by stamping, appliquéing and squirting.

The second group includes the pottery for everyday use — kitchenware (*Vasa coquinarie*) made of clay, mixed with sand and additionally smoked.

The ceramic material, classified into types and accurately dated, discovered in chronologically distinguishable context in homogeneous ensembles, could be used for comparisons in the study of similar ceramic finds.

The creators of this production, mainly craftsmen from Asia Minor, were part of the general stream of settlers who found favourable grounds for making a living in the newly-created Roman provinces on the Balkans. As has already been noted, their presence is registered epigraphically. They had to establish a new production which was to change and at the same time to compete with other goods, taking into account the taste of the native population. This is most clearly manifested in the varied production of the ceramic centre in Butovo.

The author is deeply convinced that one should not consider the role of the settlers from Asia Minor to be absolute and eliminate the participation of the local Thracian craftsmen. Quite natural in this connection is the question: who supplied the native populace with ordinary ceramics for everyday use before these ceramic centres were set up? However, the existence of earlier Thracian production is confirmed by the kiln for firing grey Thracian pottery, discovered not far from the Roman quarries near Hotnica. The fact that all ancient centres, discovered so far, lie over the ruins of earlier Thracian settlements and that a

great amount of grey Thracian ceramics has been discovered under debris from Roman times, which in its fineness, wall thinness and complex technological processing is not inferior to the Roman pottery, makes us think over whether the creators of this ceramics had ceased their production after the coming of the Romans or had joined the stream of craftsmen immigrating from the other Roman provinces.

The author accepts that the ancient Thracian craftsmen had not ceased working, but had simply reorganized their production according to the 'fashion' of time; and if this reorganization is most clearly to be noticed in the fine earthenware where one clearly feels the general tendency to imitate the Roman ceramics, the ordinary ceramics for everyday use reveal a sort of transference of the Thracian forms, made by hand on the potter's wheel. The time and the demand for cheaper goods compelled the potters to 'rationalize' the ceramic production and at the same time to simplify the earthenware, hand-made until that time with great diligence and in many respects with a marked artistic taste.

The ceramic production was designed in the first place to satisfy the needs of the populace from the neighbouring area. A considerable part of it had been marketed in more distant settlements. This refers mainly to the production of Butovo and partially to that of Pavlikeni, which is to be found in many ancient sites on the territory of Nicopolis ad Istrum, Novae and to the north of the Danube.

During the Roman era the potters were tradesmen at the same time, because the practice was to sell the goods where they were produced. Most probably markets for exchange and sale of goods were periodically set up near these centres. The great amounts of stored ceramic production confirm this assumption of the author, as well as the remains of cartwright's/smitheries and cattle-sheds in Pavlikeni and Butovo, and the vast vacant meadows around the ceramic centres.

The exploration of the ceramic production near Hotnica, Pavlikeni and Butovo is an important moment for throwing light over the economic life and development of the crafts in the Bulgarian lands during Antiquity, as well as upon the economic history of the Roman Empire within whose borders these centres existed — the unique for the present, comparatively well-preserved and explored producers of pottery within its eastern part during those times. And if the West Roman ceramic centres have been explored for more than a century now, and a number of scientific works have been written about them, the present study is only a modest contribution to the Eastern production group.

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Един нов епиграфски паметник от Дискодуратера (A new epigraphical monument from Discoduraterae) — ИОМВТ I

СУЛТОВ Б., 1962в

Принос към античната история на Павликенския край (Contribution to the ancient history of the Pavlikeni area) — ИОМВТ I

СУЛТОВ Б., 1964

Една *villa rustica* край с. Присово, Великотърновски окръг (One *villa rustica* near Prisovo village, Veliko Tŕrnovo District) — ИОМВТ II

СУЛТОВ Б., 1968

Антични гробни находки от Великотърновски окръг (Ancient grave-finds from the District of Veliko Tŕrnovo) — ИОМВТ IV

- СУЛТОВ Б., 1969a Новооткрит керамичен център при с. Хотница от римската и старобългарската епоха (One newly-found ceramic centre near Hotnica village, from Roman and Mediaeval times) — Археология XI, 34
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- СУЛТОВ Б., 1972b Производството на релефна керамика в Долна Мизия (Production of relief earthenware in Moesia Inferior) — ИОМБТ V
- СУЛТОВ Б., 1976 Античные центры керамика в Нижней Мезии (Ancient ceramic centres in Moesia Inferior) — София
- СУЛТОВ Б., 1977 Павликенският край през античността (The Pavlikeni area in Antiquity) — Сб. Павликени и Павликенският край, София
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Т. ОВЧАРОВА, 1976 *Villa rustica* край Казанлък (*One villa rustica near Kazanlak*) ИМЮБ — I
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ABBREVIATIONS

- ГМПО — Годишник на музеите в Пловдивски окръг
- ГМСБ — Годишник на музеите в Северна България
- ГНМ — Годишник на Народния археологически музей, София
- ГПНМ — Годишник на Пловдивския археологически музей
- ГПНБМ — Годишник на Пловдивската народна библиотека с музей
- ГСУФИФ — Годишник на Софийския университет. Философско-исторически факултет
- ГСУФФ — Годишник на Софийския университет. Филологически факултет.
- ИАИ — Известия на Археологическия институт при БАН
- ИБАД — Известия на Българското историческо дружество
- ИБАИ — Известия на Българския археологически институт
- ИВАД — Известия на Варненското археологическо дружество
- ИМСЗБ — Известия на музеите от Северозападна България
- ИБЮБ — Известия на музеите от Южна България
- ИНМВ — Известия на Народния музей в Варна
- ИОМВТ — Известия на Окръжния музей във Велико Търново
- ИНМК — Известия на Народния музей в Коларовград /Шумен/
- ИНМР — Известия на Народния музей в Русе
- ИПр. — Исторически пеглед
- ИОМТ — Известия на Окръжния музей в Търново /само т. I/
- ИРАИК — Известия руского археологического института в Константинополе
- МАДАРА — Сб. Мадара. Разкопки и проучвания
- МИА — Материали и исследования по археологии СССР
- МПК — Музеи и паметници на културата
- МСб — Сборник за народни умотворения, наука и книжнина
- ОБАД — Отчет на българското археологическо дружество
- РП — Разкопки и проучвания
- СА — Советския археология
- ТВПИКМ — Трудове на Великотърновския педагогически институт „Кирил и Методий“

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ABBREVIATIONS

AAHung	Acta Archaeologica Academiae Scientiarum Hungaricae
An. Brit. Sch. Rome	Annal of the British School at Rome
AM	Mitteilungen des Deutschen archäologischen Instituts
BCH	Bulletin de Correspondance Hellénique
BJ	Jahrbuch des Vereins von Altertumsfreunden im Rhinland
Bon Jahrb	Bonner Jahrbücher
CRTGR	Centre de recherches sur les techniques gréco-romaines. Université de Dijon, Faculté des sciences humaines
FA	Folia archaeologica
Intercisa II	Archaeologia Hungaricae. Disertationes Archaeologicae Musei Nationalis Hungarici
RE	Raul-Wissowa Rael-Encyclopädie der classischen Altertumswissenschaft
OCAM	
RCRF	Rei Creatiae Romanae Fautorum
SCIV	Studii și �er�et�ari di istorie veche
ZFA	Zeitschrift f�r Arch�ologie