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ECONOMY AND SOCIAL ORGANIZATION OF NORTHERN PONTIC STEPPE — FOREST-STEPPE PASTORAL POPULATIONS: 2750–2000 BC (CATACOMB CULTURE)

The rising of producing economy was the main factor of the common progress. It proved to the creation of the first states in the valleys of rivers in the Near East, then on the more wide territories. Productive forces of the agricultural and stock-breeding societies were not enough developed to housekeeping of specialized agricultural or stock-breeding branch of production. Only complex economy was possible. Nomadism appeared as a result of economical differentiation on the outlying areas of states and adaptation to environment.

Exploitation of the steppe areas by nomads at first give more economic effects than agricultural economy. Prerequisite of success of nomadism was existence of wide areas with good grass, water, small forests suitable for mobil stock-breeding. Climate changes in the beginning of the Subboreal period lead to the extension of the steppe areas in the southern part of Ukraine and all Eurasian steppe zone.

With the appearance of the wheel transport and horse domestication appeared the possibility to rule more large herds, increased the mobility of the steppe population. Work of the herdsman became easily than work of the farmer. The important factors were availability of yurt (nomad tent), which gave the possibility for nomadism [Artamonov 1947; Vaynshteyn 1971 and other]. According to A. Khazanov instead yurt may be used tent and striups were not so important [Khazanov 1975; Cradin 1992: 46].

The nomadic societies were dependent on farmers, because they have not developed craft and production of agriculture. So nomadism appeared as satellite of the agriculture. Incapable for the further development it belonged to the type of stagnated societies and according to A. Toynbee it has fate to disappear with rising of capitalism [Toynbee 1934: 21).

Ukrainian steppes have good conditions for the development of stock-breeding. Valleys of the large rivers, such as Dnieper, Danube, Dniester and Southern Bug were suitable for whole-year grazing of herds. The appearance of the four-wheeled ox-drawn vehicle and chariot solved transport problems for the Catacomb population. This population, may been connected by its origin with Near East, had developed practical knowledge of the stock-breeding. Stock-breeding economy and early-class tendentions in the social organization were the main factors, which determined the special features of the Catacomb culture society.

Analysis of records give the possibility to assert that nomadic structure of life was not alien to the many groups of the Catacomb population, especially to the highest social strata of society. Investigation of the nomadic population life process is very hard, especially only with using of archaeological materials from the rare settlements, character of which is unknown (were it long-lasting settlement or season caravan site). Now we have some materials from such settlements, but it is not enough.

All it must been accounted during the reading of our article, devoted to the reconstruction of the economy and social organization of the Catacomb society. It was society, which created original type of half-nomadic economy, when the one part of population in the long-lasting settlements ensured another people with production of craft and agriculture. Another part of population — connected with stock-breeding migrated with herds some part of the year. This type of the economy received in literature name "trans-humans" [Adrianov 1985].

## 1. THE ARCHAEOLOGICAL SOURCES

To receive a good reconstruction in prehistory you must have a good records. Any exception to the rule is the Catacomb culture. We shall use only selected part of the archaeological sources, especially of Catacomb graves. The selective method is some statistical observation in order to receive representative result [Druzhynin 1970: 7]. In archaeological research all records, which we have, in other hand, are the selection from all existed remains [Bunyatyan 1982: 80]. So we can say that it is accidental selection. Archaeology have only fragmentary material for the sociological reconstructions. It is why we must have different archaeological sources. The main of them are data from the cemeteries, settlements and caravan sites.

Criterion to the selection of burials was the complex of indications, which determined its Catacomb origin, two of them: 1. catacomb grave; 2. position of deceased.

More than 1200 burials from the territory of the Southern Bug, Northern Crimea, Lower Dnieper, North of Azov region, Orel-Samara region, Lower Don and Northern Donets were used for the statistics calculations. Preddonets, Donets, Srednedonets, Manych and the Ingul type burials were distinguished here by specialists. All the conclusions, connected with the ethnic and social structure of Catacomb population of the Northern Pontic area are on the base of this selection.

We must note that there are many ground cemeteries in Northern Pontic region, only on Lower Dnieper near 30. But they all were not excavated.

1.1.1. CATACOMB HERD

Bones of animals were in 15,6% of graves [Pustovalov 1992a: 125]: sheep — 4,8%; horse — 1,6%, cow — 5,4%, indeterminated bones — 3,8%.

1.1.2. CRAFT SPECIALIZATION.

## A. Burials of metalworkers

Most full description of craftsman's burials is in the article by A. Nechytailo and A. Kubyshev. Today we know more than 20 complexes in which were artifacts, connected with metalwork [Nechytailo, Kubyshev 1991: 6-21]:

- 1. Pavlovka (Nikolaev region) mound 27, grave 20: burial chamber oval in plan, with circular entrance well, inhumation in supine position. In burial were: two clay tayeres, one of them with ornament, stone anvil, shell "Unio" and one pot (Fig. 1).
- 2. Novokrivorozhski GOK (Dnipropetrovsk region), quarry 3 from destroyed mound we have one ornamented clay tayere (now in museum of Krivoy Rog).
- 3. Kamenka (Dnipropetrowsk region), mound 2, grave 7: burial chamber oval in plan, inhumation of adult man in supine position with SE orientation. Near the left femur was clay conic tayere, h=5,6 cm, diam. 2,2-3,4 cm. On the sternum of

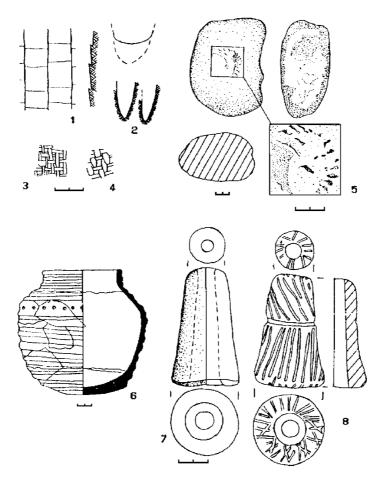


Fig. 1. Complex of founder from the Pavlovka, mound 27, grave 20.

deceased was red ochre paint. To the right of inhumation — skull of a child (Fig. 2: 1-2).

- 4. Velika Krinica (Zaporozhye region), mound 4, grave 7: clay casting spoon, triangular in plan with droplets of bronze slag; two stone tools, shell "Unio" and plate of wild boar fang.
- 5. Vasilivka (Zaporozhye region), mound 1, catacomb 20 (excavated by A.G. Pleshivenko in 1989): two clay tayeres, two clay casting spoons, stone anvil and other articles.
- 6. Pervomayevka (Kherson region), mound group 1, mound 2, catacomb 1. The burial chamber oval in plan, entrance well circular in plan, inhumation in supine position, with SE orientation. In burial were: casting spoon with traces of bronze two clay tayeres, one of them ornamented, clay mould for trapezial in plan ingot, repeatedly used, pot, sandstone abrasive, stone pestle and anvil, flint scrapper.

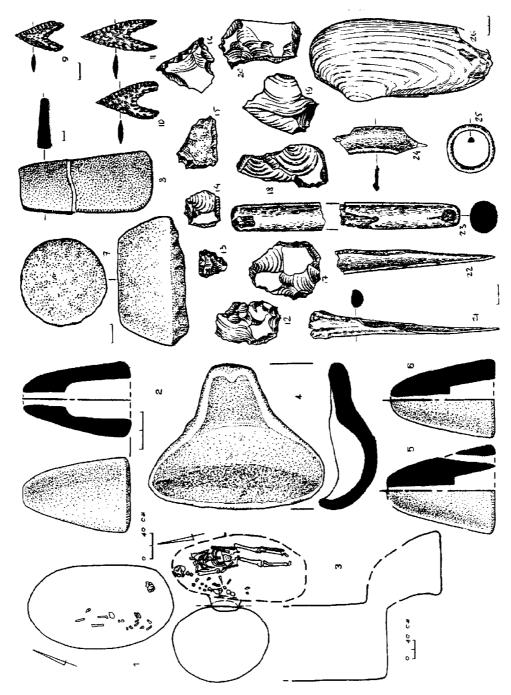


Fig. 2. Complex of founder from: 1-2 — Kamenka, mound 2, grave 7; 3-26 — Gromovka, mound 1, grave 7.

- 7. Kairy (Kherson region), in burial: two casting spoons, mould for ingot, stone anvil and other tools.
- 8. Gromovka (Kherson region), mound 1, grave 7. Burial chamber oval in plan, entrance well circular in plan, inhumation in supine position, orientation to N. In grave were 25 different tools. They were to the right of deceased, from humerus to femur (Fig. 2: 3). Among the finds were: (a) the clay casting spoon with haft (Fig. 2: 4), 4,5x9cm, d. 2,5cm, l.of the haft — 3cm, cubic capacity — 18cm (142,7 g of bronze); (b) two conic clay tayeres; their height — 5,4-5,6 cm, diam. of holes from 2 — 2,2 to 0,6 cm; the colour of the tayeres is grey; clay with admixture of the fine sand, grey in cross-section; tayeres were with the traces of scale on surface (Fig. 2: 5-6); (c) anvil from the metamorphic limestone, conical in form, height — 3,5 cm; top of the anvil circular in plan, diam.4,5 cm, with the plain surface (Fig. 2: 7); (d) broken sandstone abrasive, with traces of long-time using, rectangular in plan, 13,5 cm long, 3,3 cm wide, thickness — from 1 to 2 cm (Fig. 2: 8); (e) four flint arrowheads, triangular in plan with notches in founding, height from 2,5 to 4 cm (Fig. 2: 9-11); (f) none flint flakes without retouch (Fig. 2: 12-20); (g) two bone awls from bead bones, 8,5 and 10 cm long, end of one broken off (Fig. 2: 21-22); (h) antler pressure flaking tool, fragmented, 11 cm long, circular in cross-section, diam. 1,2 cm (Fig. 2: 23); (i) broken plate from wild boar fang (Fig. 2: 24); (j) bone ring for archer, diam. 2,4 cm, th. 0,5 cm (Fig. 2: 25); (k) four shells "Unio" (Fig. 2: 26).
- 9. Voskresenka (Kherson region), mound group 1, mound 3, grave 3. Burial chamber oval in plan, inhumation with NE orientation. Near the left foot was clay casting spoon and tayere, near the right foot stone pestle. Under the skeletal remains here were white decay, under the skull and in the north part of chamber traces of ochre paint (Fig. 3: 1-4). The clay casting spoon or crucible had form of oval-triangular cup with deep spout and small thick haft (Fig. 3: 2). On the surface traces of chalk and droplets of oxidized bronze. Crucible was grey, clay with fain sand. Its volume 65 cm, probable weight of metal 515,4 g. Clay tayere conical in form, h = 4,5 cm; diam. of the hole from 2 to 0,8 cm (Fig. 3: 3). Stone pestle truncated cone in form, h = 13,3 cm, d = 4,5-5,5 cm (Fig. 3: 4).
- 10. Kalinovka (Kherson region), mound 1, grave 4. Burial chamber oval in plan, flexed inhumation on left side, SE orientation, one hand under the face, another on the pelvis. In the grave were: broken tayere, sheep astragali, leaf-like flint arrowhead h = 6 cm. Clay tayere had form of truncated cone, h = 4 cm, d/of hole/ = 1,6-0,5 cm (Fig. 3: 5).
- 11. Mala Ternivka (Zaporozhye region), mound 2, grave 2. Burial chamber oval in plan, circular well, inhumation in supine position, with S-SE orientation. To the right of the skull and near the pelvis spot of red paint. In the SW corner of the chamber were: six different clay crucibles or casting spoons, two conic tayeres, eight

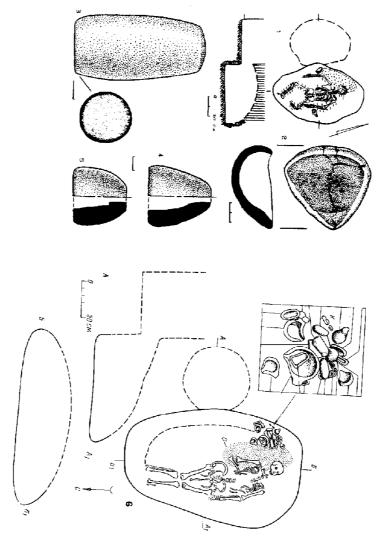


Fig. 3. Complex of founder from: 1-4 — Voskresenka, mound 3, grave 3; 5 — Kalinovka, mound 1, grave 4; 6 — Mala Ternivka, mound 2, grave 7.

moulds for 13 tetrahedral or pyramidal ingots, pieces of chalk and green clay, horn of the animal (Fig. 3: 7) [Kubyshev, Chernyakov 1985].

- 12. Davydivka (Kherson region), mound 1, grave 5. Burial chamber oval in plan, circular, inhumation on the right side, flexed. In the burial were: two bronze leaf-like knives, awl with wooden haft, bone pressure flaking tool, three arts from boar fangs, two flint arrowheads, three abrasive and fragment of one pot.
  - 13. Novoye (Kherson region), in catacomb grave one broken clay tayere.
  - 14. Krasnovka (Crimea), mound 36, grave 20. Catacomb grave, inhumation

flexed on the back. Near — casting spoon, two tayeres, clay moulds for axe and oval ingots, stone anvil and abrasive.

- 15. Prishib (Lugansk region), mound 1, grave 9. One ornamented clay tayere, truncated cone in form, moulds for pyramidal ingot and shaft-hole axe; part of the pot and flint flake.
- 16. Lugansk (Lugansk region), mound 3, grave 16, catacomb oval in plan. In burial were: cup-crucible with spout, oval in plan, two clay crackled tayeres, clay mould for axe of Kolontayev-type, shell "Unio", shoulder-blade of a sheep with traces of working, pot.
- 17. Shakhtarsk (Donetsk region), mound 2, grave 5. Chamber oval in plan, inhumation flexed on the right side with SE orientation. In SE part of the burial chamber was find one clay crucible half-round cup, h = 4.5 cm, d = 22.3 cm, thickness of walls 1.5 cm (Fig. 4: 1-3).
- 18. Kramatorsk (Donetsk region), catacomb grave excavated in 1938. Clay crucible, and mould with clay core for shaft-hole axe were find there. Crucible clay cup with spout,  $9 \times 10.8$  cm, h = 4 cm (Fig. 4: 5-13).
- 19. Pokrovka (Donetsk region) burial with two flexed inhumations. With them were find: clay crucible, casting spoon, three tayeres, mould of axe, stone tools, pieces of chalk and clay, pots (Fig. 5).
- 20. Novoalekseyevka (Donetsk region) in catacomb burial were two tayeres, three moulds for ingots, clay models of ingots, pot (Fig. 6).
- 21. Lakedemonowka (Rostov region), mound group 1, mound 1, grave 12. In chamber with divided skeleton were clay crucible crackled half-round cup, d = 14.2 cm, deep 1.8 cm, thickness = 1 cm.
- 22. Varenovka (Rostov region), mound 4, grave 5. Flexed inhumation in right side. In burial was find part of the crucible. It was a cup (diam. 22,0 cm, deep 2 cm, thickness of walls = 2,2 cm) with slag on the surface and charcoal inside. In grave also were stone mace, pot and piece of red paint.
- 23. Korotayevo (Rostov region), in catacomb grave, flexed in the right side inhumation, orientation to S. Near the skull was find ornamented pot. In the legs was crucible a crackled cup with slag on the surface.

## B. Burials of weapon-makers

Besides the graves with the bronze casting and metalwork articles there are burials with instruments for other crafts, among them of weapon-makers.

1. Vladimirovka (Kherson region), in oval chamber with circular well were skeletons of the adult man and a child. Near the man were the bowl and little bundle of arrows with flint arrowheads. Near his head was the wooden box with tools. In this box were: bone and wood pressures, five abrasive, two flint heads to dart, 33 flint articles (flakes, scrappers, cores); shafts of arrows, shell, tooth of animal, bronze nail, two bone tools.